TALLINN UNIVERSITY OF TECHNOLOGY School of Information Technologies



Roman Rozbroj 184730IVGM

THE UPCOMING EU 2021 VAT E-COMMERCE PACKAGE FROM CONSUMER PERSPECTIVE

Master's thesis

Supervisors

Ingrid Pappel, Assoc. Prof. Dr Markko Liutkevicius, Msc, MA

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Author's declaration of originality

I hereby certify that I am the sole author of this thesis. All the used materials, references to the literature and the work of others have been referred to. This thesis has not been presented for examination anywhere else.

Author: Roman Rozbroj

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Abstract

As cross-border e-commerce has gained a significant share in global trade, governments have started paying attention to the financial flows and the VAT gap. The EU wants to tackle the 4-7 billion EUR VAT fraud and aims to ensure fair market conditions for businesses operating in the European Single Market. The upcoming renewal of VAT rules including e-commerce package will enter into force in 2021 and will not only abolish the current VAT thresholds on low-value goods imported from third countries to the EU but will also enable sellers to charge VAT at the point of sale and remit the tax in one member state using an Import One Stop Shop (IOSS) simplification scheme. This paper looks at the trend of VAT abolishment in both EU and non-EU countries by conducting a quantitative survey to foresee the impact on the shopping behavior of European customers. The study shows that as most of the EU consumers will be deterred by the abolishment of the VAT thresholds, international online sellers may retain their EU customers by using the IOSS scheme.

This thesis is written in English and is 88 pages long, including 6 chapters, 12 figures and 15 tables.

List of abbreviations and terms

AUD	Australian dollar
B2B	Business-to-business
B2C	Business-to-customer
CZK	Czech koruna
EU	European Union
EUR	Euro
GDP	Gross domestic product
GST	Goods and services tax
IOSS	Import one-stop-shop
MOSS	Mini one-stop-shop
MSI	Member state of identification
OECD	Organisation for Economic Co-operation and
	Development
OSS	One-stop-shop
PLN	Polish złoty
RMB	Renminbi
SEK	Swedish krona
UK	United Kingdom
UPU	Universal Postal Union
USA	United States of America
USD	United States Dollar
VAT	Value-added tax
WCO	World Customs Organization
WTO	World Trade Organization

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1 Introduction

The global e-commerce market has been growing and bringing new opportunities and challenges to both buyers and sellers. One of the upcoming challenges is the European Union and other countries endeavouring to combat VAT fraud and to ensure fair competition for all participants. The European Commission aims to do so in the Single Market and for this purpose has introduced new VAT obligations, which will impact all the stakeholders involved in e-commerce cross-border trade, including e-commerce merchants and marketplaces such as Amazon, Alibaba and eBay. Most of the regulatory changes should enter into force as of 1st January 2021, but some countries have already partially implemented the new VAT rules (European Commission, 2020). European Commission's main motivation is to tackle the 5-7 billion EUR e-commerce VAT gap and help member states to collect VAT on imported goods from third countries (European Commission, 2019).

The main change of the new VAT rules is to tackle the abolishment of the VAT exception threshold. Unlike today, when buyers and sellers enjoy the VAT-free e-commerce transactions if the goods are valued at 22 EUR or below, consumers will be charged local VAT. It is expected that the abolishment of the VAT exemptions which compells non-EU sellers and marketplaces to collect VAT on orders starting from the first cent, will have a strong impact on the e-commerce market and its stakeholders. Moreover, this regulation should ensure a fair competition environment, as both EU- and non-EU sellers will charge the same VAT rates.

The goal of this thesis is to understand the current trends of VAT abolishment in various countries and foresee the changes in consumer behavior once those changes enter into force. It is to be answered whether the new rules will make EU consumers stop buying from sellers based in non-EU countries and what solutions would keep them shopping.

The thesis is structured into six chapters that start with an introduction, motivation for the research, and problem statement. The second chapter describes the methodological approach, followed by background and theoretical framework, in which crucial terms, concepts, and the upcoming VAT changes are explained. This part includes also a literature overview. The fourth section presents examples of VAT abolishment in several countries and puts special focus on Sweden, including a practical example of cooperation between a postal operator and an e-commerce marketplace. The final part utilizes information collected from the previous chapters and analyses the outcome of quantitative research and explains the key expected changes in consumer behavior.

1.1 Motivation for the research

As most of the EU countries will implement the VAT changes as of 1st January 2021, the effects of those changes are not yet evident. Not only do the effects remain unclear, but it is not even apparent how the stakeholders will approach this complex issue, as it is influenced by many miscellaneous factors such as international postal union rules, decisions of local tax authorities, internal processes at local customs boards, and individual agreements with marketplaces and e-commerce retailers. This complexity is the fundamental reason for the magnitude of these upcoming changes. The resulting impact of the VAT changes is possible to be seen in many areas, but the consumer's point of view and actions are crucial, as they are the decision-makers where and how to spend their money.

Furthermore, the author's experience in the field of international trade, curiosity in human nature, interest in public services, and passion for e-commerce make a good disposition for this thesis. Moreover, the author's working experience in both the e-commerce field as well as in tax regulation plays a significant role and helps to understand the context of the related issues.

The main audiences that benefit from this research are e-commerce sellers, who may be interested in prediction of development of their sales in the EU market, consulting companies and statistic bureaus, who may come to a better understanding of the context from the consumer perspective and get relevant data for their future studies.

Furthermore, the other potential beneficiaries are most likely e-commerce consumers and enthusiasts, who will get insight into the upcoming changes as well as postal companies and operators who may find some useful data and information, as their activities are closely related to e-commerce environments and processes, which also includes tax and customs boards.

1.2 Problem and research questions

For a long time now, it has not been clear how the upcoming VAT changes implemented by the member states of the European Union and their local tax and customs authorities will be, hence it has been difficult to project the consequences and the impact on various stakeholders. However, as both EU- and non-EU countries have already started to implement such changes, there is more information available, which provides an insight to better understand the upcoming changes and the possible effects on the stakeholders.

How these changes will be implemented and managed depends on the countries and relevant organizations, such as tax and customs authorities, postal and carrier companies, as well as operating sellers and platforms. Nonetheless, it is important to understand the end-consumer perspective, as they are the ones that makes purchase decisions.

Therefore, this thesis focuses on the customer perspective and aims to understand the impact on the shopping behavior of customers from the European Union. It attempts to ascertain the consequences of the new VAT rules in the EU and it maps out the consumer perspectives and preferences when shopping from outside the EU. The goal of this research is to determine how the VAT regulatory changes will influence the online shopping spending of EU consumers and whether they will reduce their online shopping from non-EU countries. This will be accomplished by understanding and analyzing the situation in countries that have already made these or similar VAT changes in order to create a basis for the anticipated regulatory as well as behavioral changes. Subsequently, surveying preferences of Czech consumers and analyzing the expected changes in their

shopping behavior allows to development of an outlook for future impact and answer the following research question:

RQ: How will EU consumers react to the de minimis abolishment on low-value parcels imported from non-EU countries?

To answer the main research question, three sub-questions are formulated in Table 1. In order to perform the quantitative analysis in Chapter 5 and answer the research question, the sub-questions of the research are transformed into the following hypotheses that will be confirmed or refuted.

SQ	Sub-question	Hypothesis		
1.	What are the key preferences of	One of the main preferences to buy low-		
	shoppers when buying from a non-	value goods from non-EU countries is the		
	EU country?	low-price level.		
2.	Will the de minimis abolishment	The imposition of VAT and handling fees		
	deter e-commerce consumers from	on imported low-value goods will reduce		
	buying?	buying from non-EU sellers."		
3.	How would the simplification of	Collection of the handling fee and VAT at		
	the VAT collection at the point of	the point of sale could reduce the outflow of		
	sale influence the behavior of e-	the EU buyers, as it could improve and		
	commerce consumers?	fasten the payment and customs processes.		

Table 1 Sub-questions and hypotheses

Based on the answers to the sub-questions, the thesis aims to understand the current situation of the VAT taxation in cross-border e-commerce, and focuses to project an outlook for consumer spending behavior influenced by the upcoming VAT changes that will to be implemented in all EU member states as of 1st January 2021.

2 Research methodology

The goal of this chapter is to provide an overview of the methodological approach that would assist in answering the research question by proposing reasons for the chosen research methods.

In order to understand and project the impact of the VAT regulation on low-value goods imported from non-EU countries and the related consumer behavior, the research consists of two main components. Firstly, it aims to understand the concept of the upcoming changes and research the countries where such changes have been at least partially implemented. This overview serves as the basis to navigate the practical research in the second part, which aims to examine consumer behavior in a country that will implement these rules, specifically focusing on the Czech Republic as an EU member state.

The first component of the research enables us to understand the current situation of the implementation progress in the VAT regulation in multiple countries. This is done by collecting secondary data, mainly from other studies and reports. Understanding the current situation and existing impact of the VAT changes especially in countries of the European Union, such as Sweden, but also non-EU countries such as Norway and the United States. This serves as a foundation for surveying consumers in the Czech Republic, a member state of that has not yet abolished the de minimis rate. The first part of the paper should contribute to creating a basis for answering the three stated sub-questions of the research, which are to be evaluated and confirmed or refuted in the practical part. Ultimately, this enables the understanding and envisaging of the intended VAT regulatory changes in the EU and to prepare the basis and relevant background for the second component.

The second part of the paper focuses on collecting primary data using a survey as a quantitative research method. Using the data and information collected in the first section, a questionnaire is conducted among consumers in the Czech Republic. To comprehend the consumer behavior and changes in online buying from the non-EU-based e-shops and platforms, a questionnaire allows us to refute or confirm the proposed hypotheses about the expected impact on their future shopping behavior (Duke University, 2020). To gather

the data from a group of relevant respondents and ensure a valid outcome, respondents must have met several logical requirements. Most importantly, they must be residents of the researched country – the Czech Republic, and have also made at least one purchase from a non-EU seller in the past year.

The questionnaire consists of closed single and multiple-choice questions in various forms, as well as rating scale questions. To make the questionnaire interactive and engaging, a digital tool, Typeform, was used, whereas the statistical data analyses of the results were done using Microsoft Office Excel and SPSS by IBM. The list of the questions is rewritten and attached in Annex 1. The questionnaire was distributed in relevant social media groups to target as many respondents as possible, and participation in the survey was voluntary. Moreover, to increase the response rate, the layout of the surveys was tailored and localized to the target audience, so that it was easily understandable, entertaining and educational at the same time. The educational element provided informational value as a quid pro quo for taking part in the survey (Cambridge Dictionary, 2020).

The main reasons for choosing all the above-mentioned methods and tools come from both following established practices and the author's best knowledge and experience. Other methods, such as interviews, would not allow for the collection of enough data in a meaningful amount of time and a limited monetary budget. At the same time, choosing an online survey as a method is a suitable choice, as it is efficient, relatively inexpensive, directly collects the data, and enables us to reach wide groups of respondents. This helps to collect enough relevant data to understand consumer expectations in order to map out the prospective changes in their online shopping behavior.

3 Background & theoretical framework

This chapter contains an overview of the e-commerce scene, actors, and key terms related to it, intending to understand the background and context of the research. The second part of the chapter deals with the theoretical framework of the research and looks for possible theories that concern price and tax changes and consumer behavior. The last subchapter includes a literature overview and describes the current research stage.

3.1 Key stakeholders in the e-commerce

This subchapter describes main stakeholders and their activities in the e-commerce field according to the OECD report (OECD, 2015), that are relevant to this thesis. It includes six groups of key stakeholders: buyers, sellers, e-commerce platforms, transporters, financial intermediaries, and customs and tax administrations.

Buyers, also termed as consumers, purchasers, and customers initiate the purchase, confirm the order and make payment to the seller (vendor or intermediary). Buyers may not always have the best up-to-date knowledge of their rights and responsibilities concerning taxes and duties, and an unexpected claim of import taxes and duties can lead to the refusal of delivered goods and denial of the payment (Wigand, 1997).

Sellers, also described as vendors or suppliers, are the ones who provide the goods to the buyers. However, the way of connecting these two actors is not always clear and straightforward, as the sale can be done on a seller's website, through a "transparent" third-party website, or a "non-transparent" third-party website, usually marketplaces. Suppliers can face tax and customs obligations, depending on the jurisdictions of the countries where the buyers are located (OECD, 2015).

E-commerce platforms – marketplaces, enable suppliers to design their shop pages and products and connect them with buyers, who can benefit from additional features provided by the platform, such as simple dispute resolution processes. Marketplaces charge a fee for this mediation, which may vary, e.g. a monthly fixed fee, a fee per order, or a commission from the sale. Often, they also provide additional services, e.g. warehousing (fulfillment services), advisory, and customer support (Linnworks, 2020).

In the case of the "transparent" marketplaces, buyers usually can understand who is the final seller (vendor), while the marketplace is not involved in the shipment process, and its only role is to connect customers with sellers (OECD, 2015). These multi-sided marketplaces enable customers or groups to interact directly, usually buyers and sellers, where each group are considered customers, and the platform facilitates the interaction between these groups (OECD, 2019). Some of the most popular marketplaces are AliExpress, Amazon, and eBay (OECD, 2015). One of the main reasons for the success of marketplaces is the impact of network effects that make the platform more valuable to both supply- and demand-side, as more buyers and sellers engage (NFX, 2020).



Figure 1 Comparison between the traditional retail and platform business model (Handelsrådet, 2019)

Figure 1 shows the main difference between the traditional retailer model and the platform model, where the platform enables direct contact between the buyer and the seller while both are connected to the platform (Handelsrådet, 2019).

The two most important types of transporters are postal operators and express carriers. Postal operators' activities are regulated by the Universal Postal Union (UPU), which strongly differentiates postal operators and express carriers. For example, postal operators usually do not handle the tax and customs clearance, but the recipients are responsible for paying the taxes and duties related to the shipment. Express carriers usually provide doorto-door services, conduct the transport from the supplier to the buyer. They also handle tax and customs clearance as well as other related services that provide global reach, reliability, transparency, speed, and security. The market is dominated mainly by companies such as DHL, FedEx and UPS (OECD, 2015), (OECD/European Union Intellectual Property Office, 2019).

Financial intermediaries manage the payment transfer from the buyer to the seller. They provide various payment solutions, such as bank transfers and card payments, and reduce the risk of the buyer, as the sellers' reputation can be unknown to the buyer.

Customs and tax administrations are responsible for collecting information about crossborder trade for the local government, protecting the border of the country by detecting and preventing the importation of dangerous and regulated goods, and collecting taxes and duties at importation (OECD, 2015).

International e-commerce trade is also governed by regulators and policy-makers, which negotiate not only on the level of the European Union, but also in organizations such as Universal Postal Union (UPU), World Customs Organization (WCO) and the World Trade Organization (WTO) (OECD/European Union Intellectual Property Office, 2019).

All the participating actors can improve their operations and enhance partnerships with each other by effectively implementing a data exchange layer as a crucial component between systems both in private and public sector (Pappel, et al., 2018). This can be seen in Estonia, where most of the bureaucracy is digitalised and documents in public agencies are exchanged in a digital way (Pappel, et al., 2017). Correspondingly, such digitalized partnerships should be made in the field of cross-border e-commerce that would interconnect the stakeholders from both public and private spheres.

3.2 Value Added Tax

Value-added tax (VAT) is an indirect general consumption tax, usually charged on top of products and services. It is a financial liability collected by a governmental agency, typically by a tax authority. The basis for the VAT is "value-added" by a market agent. For example, a company purchases bike parts for 1000 EUR and transforms them into a final product that is sold for 1500 EUR. The 500 EUR difference is the value-added in

the production cycle (Frunza, 2019). Historically, these multi-stage taxes were levied on the real value of output at each stage of the productive process, however, it was difficult to determine the amount of tax included in the final price of a product. Today's version of VAT allows for certain that exports are tax-free, and no country can accidentally or deliberately subsidize their exports by overestimating the refundable taxes (European Commission, 2020).

Consumers usually do not pay the VAT directly to the tax authority, but the tax is collected initially by a company that is registered as a VAT payer and acts as an intermediary. Such a company collects and remits the VAT to the local tax authority, mostly on a quarterly basis (Frunza, 2019).

The European version of VAT was firstly introduced in France in 1954, but the initial test of the VAT system was conducted in the Ivory Coast, a then French colony. Since that time, it has rapidly spread throughout the entire European continent. In Australia, New Zealand, India, and Canada, an equivalent of the VAT is Goods and Services Tax (GST). The USA has not adopted a unified federal tax, but the tax system is in control of the states and cities, that set the sales taxes and rates (Frunza, 2019).

VAT has become globally one of the main sources of income of the governments across the world, and the tax rates range between 5 - 27%. By the EU law, the minimum VAT rate of an EU member state is a 15% standard rate and a reduced rate of 5% (European Commission, 2020). VAT rates across EU member states, as well as different types of products, can vary, with the lowest standard rate of 17% in Luxembourg and the highest rate of 27% in Hungary (European Commission, 2019). Also, an application of the tax law and local processes in each member country can be different as well (European Commission, 2020).

Table 2 includes a list of VAT rates applied in the EU member countries, as of 1st July 2019.

Member States	Code	Super-reduced Rate	Reduced Rate	Standard Rate	Parking Rate
Belgium	BE	-	6/12	21	12
Bulgaria	BG	-	9	20	-
Czech Republic	CZ	-	10/15	21	-
Denmark	DK	-	-	25	-
Germany	DE	-	7	19	-
Estonia	EE	-	9	20	-
Ireland	IE	4.8	9/13.5	23	13.5
Greece	EL	-	6/13	24	-
Spain	ES	4	10	21	-
France	FR	2.1	5.5/10	20	-
Croatia	HR	-	5/13	25	-
Italy	IT	4	5/10	22	-
Cyprus	CY	-	5/9	19	-
Latvia	LV	-	5 / 12	21	-
Lithuania	LT	-	5/9	21	-
Luxembourg	LU	3	8	17	14
Hungary	HU	-	5/18	27	-
Malta	MT		5/7	18	-
Netherlands	NL	-	9	21	-
Austria	AT		10/13	20	13
Poland	PL	-	5/8	23	-
Portugal	PT	-	6/13	23	13
Romania	RO	-	5/9	19	-
Slovenia	SI		9.5	22	-
Slovakia	SK	-	10	20	-
Finland	FI	-	10/14	24	-
Sweden	SE	-	6/12	25	-
United Kingdom	UK	-	5	20	-

Table 2 VAT rates applied in the EU (European Commission, 2019)

3.3 VAT fraud

Technology and the internet have had a strong impact on the way of trading in three main aspects. First, it eliminated the need for physical human interaction, making it possible for a product or a service to be sold remotely, without a physical signature or agreement, which leads to a higher potential volume of the trade. Secondly, the internet has made it possible to connect traders globally, accelerating the shift of commerce from local to global. Also marketplaces act as intermediaries, creating a source of trust for bringing two unknown trading parties together (Frunza, 2019). Marketplaces have enabled buyers and sellers to connect and trade internationally, while the EU has left the VAT and duties threshold regime loosely regulated. This can lead to VAT fraud in the shadow economy, where businesses deliberately do not declare their trades of goods and services and avoid paying the VAT. Another VAT fraud could be done by misrepresenting the types of goods

and their values, aiming to keep the VAT liability as low as possible (Fletcher, et al., 2004), (Frunza, 2019), (EuroCommerce, 2019).

Many countries apply an exemption from VAT on low-value goods imported from third (non-EU) countries because the administrative costs of collecting the VAT would be higher than the potential income. VAT threshold, also called de minimis – from Latin expression "*de minimis non curat lex*" meaning "*the law does not concern itself with trifles*" (Black & Garner, 1999), varies across countries. Based on the European Council Directive 2009/132/EC, member states of the EU can set their thresholds for imported goods of total value (including shipping costs) of more than 10 EUR but not exceeding 22 EUR (Council of the European Union, 2009), which means that imported goods valued below these thresholds have an exemption from duties and import VAT. Customs duty threshold was established at 150 EUR by Directive 274/2008 (Council of the European Union, 2008), whereas the de minimis concept was designed in 1983 (European Commission, 2016).

However, many countries have experienced significant growth in the volume of imported low-value goods that are exempt from VAT, which results in decreased tax revenues and unfair competition with local retailers who collect VAT on their domestic transactions. This creates an opportunity for many businesses to structure and organize their processes so they can take advantage of these low-value thresholds (OECD, 2015).

In the case of the current EU de minimis threshold on shipments from non-EU countries, some of the VAT fraud actors could aim to keep the values of their consignments artificially low to avoid declaring and remitting the VAT. Some examples of VAT frauds in online commerce include undervaluing the imported item below their real value, e.g. declaring an electronic tablet to be valued at 12 EUR; declaring non-existent or other company's VAT number; and dispatching a big consignment into smaller packages to keep each item under the VAT threshold. As for high-volume orders, online sellers tend to use fulfilment warehouses based in the EU which are operated by the marketplaces, and from which the goods are delivered directly to the consumers (European Court of Auditors, 2017).

In 2015, The Guardian reported (Bowers, 2015) that a number of Chinese sellers who used marketplaces were declaring their shipped parcels to the EU as undervalued to avoid VAT liability, while in fact, the consumers paid a higher price. For example, consumers paid 100 EUR for the item, but the declared value was 20 EUR or identified as a gift.

Several marketplace operators repeatedly declined their responsibility for verifying the compliance of the underlying sellers concerning VAT payments and said that they are just matchmakers between buyers and sellers, with no VAT liability whatsoever (Spiegel, 2018), (Bowers, 2015). The fulfillment houses could be considered as a solution to the non-EU retailers and marketplaces, as they store the imported parcels and then deliver them to the consumers. These fulfilment houses, operated by marketplaces like Amazon, eBay, and Alibaba, significantly contributed to the estimated lost VAT in the UK reaching 1-1,5 billion GBP in 2016, according to HM Revenue and Customs (HM Revenue and Customs, 2018). European Commission estimated the lost VAT to be between 5-7 billion EUR annually in 2016 (European Court of Auditors, 2017).

Table 3 includes various estimations of the VAT loss due to non-compliant sellers and marketplaces by different studies and authorities.

Study	Est. VAT loss	Scope
	(billion EUR)	
Copenhagen Economics – UPS (2015)	1,05	EU
European Commission - EY (2013)	0,5	EU
HMRC (2016)	1,65	UK
European Commission (2015)	1	EU
European Commission (2016)	5-7	EU
Sweden (2018)	0,056 - 0,112	SWE

Table 3 Estimated VAT loss due to non-complaint sellers and marketplaces (Frunza, 2019), (Basalisco, etal., 2016)

3.4 Major VAT changes in EU e-commerce

In the area of tax policies, lawmakers have been failing to keep pace with the accelerating economy and society and struggled to ensure that tax collection is handled efficiently and fairly. In other words, companies and technologies have changed, but policies have stayed the same and left too much space for fraudulent activities. The reason that the issue of taxation the digital economy has not been sufficiently solved is mainly due to a lack of consensus among countries and the complexity of this issue. (European Commission, 2017)

In 2003, the OECD issued E-commerce Guidelines (OECD, 2005) and recommended a mechanism that would allow suppliers from third countries to register, collect, and submit VAT according to the regulation of the consumer country's jurisdiction. However, without a proper collection mechanism in the consumer jurisdiction, it is unlikely that the VAT would be paid. At the same time, overseeing and regulating the compliance of such mechanisms by non-resident suppliers is limited by difficulties of enforceability.

The main reason for the problem is the absence of a system that would simplify compliance by non-resident suppliers and a very limited international cooperation between jurisdictions, which makes it difficult to audit and sanction the suppliers (OECD, 2015). There are three main motivation factors for the European Union to implement new rules. Firstly, to ensure fair competition between the EU and non-EU businesses, as the current system enables non-EU based businesses to import VAT-free goods into the EU. Secondly, the current VAT system is too complex and costly, and businesses spend on average 8000 EUR per year to comply with VAT rules for every EU country which a business imports to. Also, the lost tax revenues and VAT fraud caused by the low-value consignment exemption is significant (European Commission, 2016).

On 7th April 2016, the European Commission presented four pillars of the Action Plan on VAT, which included initiation of removing obstacles to e-commerce in the Single Market. The simplification and modernization of VAT for cross-border e-commerce include implementation and extension of the one-stop-shop mechanism for both EU and non-EU based businesses; simplification by introducing a common VAT threshold for EU-based start-ups; an introduction of home country checks and audits, and the

abolishment of the VAT exemption for imports of small parcels from non-EU based companies (European Commission, 2016).

On 5th December 2017, the European Council adopted new rules taking effect partly from 1st January 2019 and partly from 1st January 2021 (European Commission, 2017). Also, the VAT changes are based on the OECD guidelines and recommendations (European Commission, 2016).

This work is focused mainly on the abolishment of the VAT exemption threshold on small consignments of up to 22 EUR and its effects from a customer perspective. Although the new regulation should enable a simplified way for businesses to charge and declare VAT, tax and customs authorities, as well as postal operators, will need to find the right technological solutions and methods to improve their processes to detect the real value of imported goods in case of deliberate under-valuations (European Commission, 2018). The main new rules taking effect as of 1st January 2021 that are relevant to this thesis are described in the following subchapters.

3.4.1 De minimis VAT abolishment

The main upcoming change in the EU is the abolishment of 10/22 EUR VAT exemption thresholds, meaning that from 1st January 2021 all imported low-value goods from non-EU countries will be subject to VAT irrespectively of their value In practice it means that based on the "destination principle", consumers will be charged the local VAT rate of the destination country (European Commission, 2020).

The VAT de minimis threshold was designed in 1983 to simplify the processing of the low-value goods, as collecting VAT on all low imported consignments would be very time consuming and would not make economic sense. However, the growth of e-commerce significantly contributed to an estimated 144 million parcels imported in 2015 that benefited from the de minimis threshold. The EU expects to reduce the VAT fraud and collect 4-7 billion EUR to the states' budgets. Also, it should ensure a fair competition environment, as both EU- as well as non-EU sellers, will charge their customers the same VAT rates (European Commission, 2016).

3.4.2 Marketplaces deemed sellers

Marketplace (platform) operators such as Amazon or eBay will be deemed sellers for VAT. That means that they will be liable for collecting and remitting VAT on sales to the EU. A company is found liable to VAT, if it controls the terms and conditions of the sale process, charges the payment on behalf of the supplier, or takes part in the fulfilment or delivery process (Bloomberg Tax, 2020). However, the underlying sellers remain responsible for all other essentials, such as consumer protection or logistics. This obligation will also apply to the sellers holding their stocks in warehouses in the EU, using so-called "fulfilment centers", e.g. service Fulfilment by Amazon (FBA) (European Commission, 2019). Also, they will be obliged to keep records of purchases of goods and services made on the platform (European Commission, 2019). Some EU countries have already partially implemented these rules, e.g. Germany (Deutscher Bundestag, 2020) and France (Bloomberg Tax, 2019).

3.4.3 OSS and IOSS

The current mini one-stop-shop (MOSS) system will be turned into a one-stop-shop (OSS), a new way to submit a VAT return. This will allow both EU and non-EU businesses to report their pan-EU sales in one EU country they choose, unlike under the current MOSS system, where sellers are obliged to submit VAT returns in each country they import to (European Commission, 2018).

For this paper, the upcoming change of a new import one-stop-shop (IOSS), that will enable sellers to collect VAT at the point of sale, declare it and remit it to a tax authority in the IOSS is most important. After the implementation of the IOSS, the collected tax will be distributed to the other EU tax authorities based on where the products were imported. Sellers can register only in one EU state (a member state of identification – MSI), where they will declare all their imports in the EU. The IOSS number should be included on the label of the parcel so that it can be checked by customs authorities against the dataset which is sent with the electronic declaration before the importation takes place. However, sellers can use the IOSS only if the value of the item does not exceed 150 EUR and the goods are not subject to excise duties such as tobacco or alcohol, otherwise they will follow the current procedure (VAT Expert Group - European Commission, 2018), (Commerce Logistics Specialists, 2019).

When a seller decides to use the IOSS, if the place of sale of goods is located in the EU, then the importation of the goods is exempted from VAT and no VAT is due at the point of import so that double taxation is avoided. The seller submits IOSS return on a monthly basis for all the goods sold to the EU and makes a monthly payment to the state authority in the MSI – a country where the seller registered for the IOSS. Also, sellers must keep records of the IOSS sales for 10 years for possible VAT audits by EU authorities. The simplified process is presented in Figure 2 (VAT Expert Group - European Commission, 2018), (Commerce Logistics Specialists, 2019).

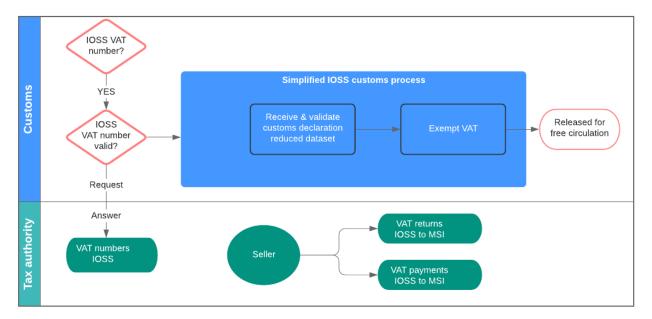


Figure 2 Simplified IOSS customs process (Commerce Logistics Specialists, 2019)

Meanwhile, from a postal operator perspective, the process starts by receiving a dataset which includes consignment information. The customs declaration is saved, the IOSS number is validated and the imported goods are released for free circulation.

However, if sellers will not use the IOSS simplification, the importation process will be the same as today. In that case, only standard VAT rate will be charged and collected by the customs declarant (express courier, postal operator) upon importation, which will be later paid to the customs board on a monthly basis. This system is more burdensome to the consumers (European Commission, 2019).

3.5 Consumer behavior theory

As European consumers enjoy the benefits from cross-border e-commerce, they are driven primarily by the low prices, especially those who like buying from Chinese sellers. Moreover, low prices are important regardless of how developed the e-commerce market is (PostNord, 2020).

The importance of price is supported by some other studies that examined the drivers in e-commerce consumer behavior. For example, a paper published by Chiao-Yun Connie Chang (Chang, 2009) analyzed how price influences online consumer behavior, and concluded that price is a relatively more powerful factor than quality or brand image and is central to consumers' decision-making. Another study (Kamarulzaman, 2011) researched the e-commerce shopping experience of consumers in the UK and concluded that online buyers are becoming very price-sensitive, but trust of brands remain the center of attention.

Online buyers, who are usually price-sensitive, can enjoy the benefits of the e-commerce marketplaces. As Bakos (1997) argued, marketplaces reduce search costs that possibly lead to lower prices and increased competition among sellers, which may be one of the reasons for marketplaces' strong position in the market. Based on the previous statement, we may assume that there is some level of correlation between the marketplaces and price-sensitive buyers, as marketplaces can benefit from the increased competition among sellers and provide buyers products and services at favorable prices.

As it is clear from previous studies that price influences consumer behavior, it is now important to understand the role of VAT and its impact on the e-commerce consumer price sensitivity. The VAT rate in the EU countries is usually around 20%, making a considerable part of the final price consumers pay. Hence, consumers make purchase decisions based on the final price they pay, regardless of the tax rate imposed on the purchased goods, while an increase in taxes and other fees reduce consumer shopping spending, ceteris paribus (Ramsey, 1927).

Another paper (Goolsbee, 2000) analyzed data on the purchasing behavior of 25 000 online users in the USA and examined the effect of local sales taxes, which is the US

equivalent of VAT, on internet e-commerce. It showed that consumers based in locations with high sales taxes are more likely to shop online to avoid paying high sales taxes on orders in their home states. It also concluded that applying local sales taxes to e-commerce would reduce the number of buyers by 25% and the amount spent by more than 30%. To a comparable conclusion came a research that analyzed eBay data. The study proved that buyers' purchase decision changes significantly once they express interest in a product, and based on the seller's location the applicable tax rate is revealed. It reduces the likelihood of purchase and shifts future purchases toward out-of-state sellers. Moreover, the study also showed that a 1% increase in sales tax leads to increased online purchases by 2% and decreases online purchases from in-state sellers by 3-4% (Einav, et al., 2014).

Finkelstein (2009) studied the impact of the adoption of electronic toll collection on toll rates and concluded that drivers who pay tolls online are less aware of toll rates than drivers who pay with cash. The adoption of the electronic system made driving less elastic. The author estimated that tolls were 20-40% higher than they would have been with a manual collection.

The presented studies and theories suggest that more factors influence consumer shopping behavior. Sales tax, or VAT, being added to the price paid by a consumer, may play a crucial role in a consumer's decision-making process when online shopping. Online buyers also react sensitively to the tax changes, but when the tax is presented and charged inconspicuously, buyers might react positively and reduce their response to tax increase. This supports, to some extent, the scheduled VAT changes in the EU, according to which marketplaces and other online sellers will charge VAT at the point of sale, which should improve the declaration and delivery process.

3.6 Literature overview

The following chapter explains the current state of research in the area of VAT regulation on low-value parcels. As this field is relatively extensive and contains many adjacent fields such as e-commerce, consumer behavior, and taxation, it brings up key findings and data needed for further analysis of the consumer behavior impacted by VAT change. Since the e-commerce VAT regulation in the European Union is a very recent issue, there has been very little research on this topic. However, some research materials analyzing VAT regulation on e-commerce exist, but none of them focus on the customer's point of view. That being said, the change of buyer's behavior impacted by the VAT regulation in the European e-commerce market has not been covered in any way, at least to the author's knowledge. Previous studies elaborated mainly on the regulatory changes, potential scenarios and strategies, and challenges for companies and public authorities to handle the declaration processes.

A study conducted in 2014 (Hintsa, et al.) researched the question of economic consequences of the existing VAT thresholds on low-value goods and analyzed the possible consumer behavior shifts caused by the threshold changes. The main research question was focused on the economically optimal VAT and the de minimis duty levels on imports to the EU. The study concluded that the de minimis threshold should be increased from 22 EUR to 80 EUR, because the costs of collecting are higher than the revenues collected, and it would not influence buyers, as quality and reputation of the seller are more important factors. Also, it suggested that the duty threshold should be at the current level of 150 EUR. Although the research was substantially related to this work's theme, it focuses mostly on finding the right economical balance, disregarding the upcoming regulatory changes. On top of that, the conclusion, suggesting an increase VAT threshold is contradictory to the upcoming VAT regulatory changes in the EU.

In a study conducted by Copenhagen Economics (Næss-Schmidt, et al., 2017) for its client, PostEurop – an association of European public postal operators (PostEurop, 2020) – researched and analyzed the effects of the abolishment of the VAT de minimis on ecommerce imports. The study was primarily focused on the cost-benefit analysis from a business perspective – an analysis that compares the costs and revenues of the projects to decide whether they should be undertaken (UC Berkeley, 2020). The main conclusion was that the abolishment of the VAT de minimis would increase operational costs of the delivery companies (especially postal operators), customs administrations, as well as online sellers. The incurred increased costs could be caused by additional administration of the VAT and customs handling. It showed that the additional VAT revenue could reach 0,3 - 0,6 billion EUR per year, which would be significantly smaller than the additional processing costs of 0,7 - 1,9 billion EUR, which already considers the OSS simplification.

Also, it concluded that the VAT de minimis removal would cause significant loss due to higher prices, less choice and less efficient markets for European consumers. This research also concluded and assessed the removal of the VAT threshold as useless and uneconomic for the partaking stakeholders. (Næss-Schmidt, et al., 2017)

Since the previous studies took into consideration that tax and customs authorities will charge only remaining VAT, leaving out the handling fee, proved that it would not make economic sense to the EU state budgets. Therefore, it is expected that postal operators and carriers in close cooperation with public authorities will also charge a handling fee on imported low-value goods. Another indication of the imposed handling fee is the current administrative fee collected by PostNord in Sweden, as well as other processing fees in countries that have implemented similar rules and abolished the VAT de minimum rule. In the context of the Czech Republic, Czech Post expects to collect the handling fee as well, known as a declaration fee (iDnes.cz, 2020).

Another study (Basalisco, et al., 2016) analyzed the efficiency of VAT and customs clearance and compared performance between postal and express operators, as they both play a crucial role in the VAT and duty collection. According to the study conducted in 2015, there was a big difference in customs clearance depending on whether a shipment was imported via postal service providers (national postal operators) or express carriers (companies such as DHL, DPD, UPS). In the analyzed spectrum, postal operators collected VAT on 35% of imported items, and import duty on 47% items. In the case of express carriers, VAT was collected on 98% items and import duty in 99% cases. Therefore, the study suggests that VAT and import duties are less likely to be declared and collected when shipments are shipped via postal operators, instead of express carriers. Based on this contribution, it is possible to emphasize the importance of the ineffective role of postal operators as the VAT and duty collectors.

Focusing on the topic of tax fraud, another paper (Pope, et al., 2014) researched the correlation between the de minimis on import to the EU and the tendencies to undervalue goods shipped to the EU. The analysis concluded that there is no correlation between the import tax and duty de minimis level and the undervaluation by foreign sellers.

4 De minimis abolishment in cross-border e-commerce

This chapter describes the trend of the VAT exemption threshold abolishments in the EU as well as non-EU countries. The latter subchapters deal with the role of China in crossborder e-commerce.

4.1 VAT changes in selected countries

This subchapter describes the situation in several countries that have started to implement the expected VAT changes in cross-border e-commerce. The list of selected countries includes several EU states as well as non-EU countries. A special focus is put on Sweden, as it presents the main model for the main upcoming changes in the EU as of 2021.

4.1.1 Sweden

Even though the regulatory changes will apply as of 1st January 2021, some countries have already started implementing the VAT changes partially, and Sweden is one of them, as it has taken the first steps towards some of the changes.

From March 1st, 2018 the local VAT tax rate (standard rate 25%) is levied on all letter and parcel post items imported from outside the European Customs Union. These changes are executed in cooperation with the state-owned postal company PostNord (PostNord is a holding company jointly owned by Swedish and Danish states). In order to cover operational costs related to the processing of the significant amount of low-value items, PostNord charges an administration (handling) fee of 75 SEK on consignments with a value below 1500 SEK and 125 SEK on orders valued over 1500 SEK. Both VAT and administration fees are paid by the consumer on top of the order to the postal operator. The main argument for the implementation is that the Swedish state had been losing up to SEK 1 billion (ca 100 million EUR) annually in missing VAT (PostNord, 2020).

To support the challenging task of handling and processing a large number of small items, PostNord decided to cooperate with PayGround, a Swedish fintech company focusing on logistical processing of low-value items and tax and duty collection. After integrating with PayGround, the process works as follows (PostNord, 2020), (Trezek, 2019):

- Swedish customer makes an online order from outside the EU, regardless of the value of the goods and shipping costs,
- all the necessary data are collected digitally by the seller,
- goods are packed and labeled, including unique consignment identification, and content information,
- after arrival to Sweden, a consignment is scanned by PostNord using optical character recognition (OCR), (more than 65% of small parcels is successfully screened and read by the OCR system),
- a payment file, which includes taxes, duties and PostNord's fee (75/125 SEK), is created and sent to PayGround,
- PayGround initiates the payment collection via SMS or letter,
- when the amount is paid, goods are released. If a customer refuses to pay or doesn't pay within the specific timeframe (usually up to 30 days), the package is returned to the sender or destroyed,
- PayGround settles the payment and sends the files and invoices to PostNord and Swedish Customs.

In order to eliminate the amount of manually processed consignments and reduce the workload of PostNord and Swedish Customs, PostNord made a partnership with Wish – a US-based e-commerce marketplace. It is one of the steps towards the upcoming EU regulatory changes, as it integrates the VAT collection at the point of sale and expedites the customs processing. As of June 14th 2018, PostNord acts as a fiscal representative for Wish and provides direct settlement of duties and VAT with Swedish Customs on behalf of Wish. Wish sends PostNord the VAT due, plus the small service fee PostNord charges for the services conducted. The process overview works as follows (PostNord, 2020), (Trezek, 2019):

- Wish collects Swedish VAT and a processing fee upon purchase, which depends on the number of parcels imported (SVT, 2018),
- after the purchase, Wish sends necessary data via a Chinese designated operator to PostNord,

- every parcel has a special label, which was jointly designed by Wish, a Chinese designated operator, China Post, and PostNord,
- after arrival to Sweden, PostNord identifies each postal item via OCR, parcel's data are checked against the data provided in advance, and the taxes and duties already collected at the point of sale are settled with the Swedish authorities accordingly.

That results in a relatively fast and frictionless delivery process, as the taxes and fees are pre-paid, and buyers do not have to pay the VAT and fees in a separate payment. Between 1st March and 30th November 2018, more than 1 million parcels were imported using this channel, representing around 35% of all low-value parcels from outside the EU to Sweden. In 2019 around 30% of the surveyed Norwegian and Swedish online buyers have shopped at Wish (Postnord, 2020). In June 2018, PostNord declared (Breakit.se, 2018) that the cooperation with Wish has been fruitful and that the import of the low-value parcels will likely increase again, also due to the simplified pre-paid solution. This approach is significant because it is similar to the upcoming IOSS scheme where VAT is collected by the seller at the point of sale.

Therefore, PostNord has currently two ways to declare imported goods to Swedish customs: the non-prepaid and the prepaid Wish-like solution. As for the moment, it is unknown how many platforms and sellers will be integrated for the prepaid solution.

According to Statistics Sweden (Swedish Statistical Office, Table 4), in 2018, 5.28 million Swedish consumers aged between 16 and 85 made at least one purchase online, and in 2019 it was 5.81 million – a 10% year over year increase. Even a higher increase was among buyers who shopped in other EU-countries (18%), but the number of consumers who purchased in non-EU countries decreased by 1% in 2019 (Statistics Sweden, 2020).

Swedish online buyers by geographical	2018	2019	Y-0-Y
area of e-retailer			change
Sweden (in-state purchase)	5 277 200	5 814 200	10%
Other EU-countries	2 104 000	2 491 900	18%
Non-EU countries	1 593 100	1 582 500	-1%
Unknown/not sure	484 800	501 200	3%

Table 4 Number of people aged 16-85 by geographical area of the e-retailer (Statistics Sweden, 2020)

The Swedish e-commerce market is the largest in the Nordic region, as Swedish consumers spent 42,6 billion SEK during the first half of 2018. The most popular platforms and e-stores among Swedish consumers are Zalando, Wish, eBay, Amazon and AliExpress/Alibaba. Those who shop abroad in 2018, did so mainly from Germany (28%), UK (27%), China (26%), USA (15%) and Denmark (7%), whereas in 2019 the most popular destinations for shopping abroad were Germany (26%), UK (26%), China (20%), USA (13%) and Denmark (10%). Here we can see a decrease in orders from China and the USA, which might have been caused by the imposition of VAT and handling fees collected by PostNord (PostNord, 2018), (Postnord, 2020).

Since the Swedish government implemented the VAT changes and started declaring all the imported parcels from the first cent, between March and December 2018 the number of declared parcels delivered to private persons by PostNord, reached around 4 235 000, whereas in 2017 in the corresponding period it was just 335 000, an increase by 1164%. In 2017, VAT added on top of the declared imported goods was around 79 million SEK, and in 2018 the VAT increased by almost SEK 58 million and amounted to just over 136 million SEK. As we can see in Table 5, the sum of declared VAT increased by 72%, but the average declared VAT per mailing decreased by 86%. Considering the standard Swedish VAT rate 25% to be the only charged rate, we can assume that the average value of the parcel in 2017 was around 943 SEK, whereas in 2018 it was 128 SEK. The obvious reason for this change is the new VAT rules implemented in March 2018, as Swedish

Customs was forced to process all the orders, starting from the first cent (Tullverket, 2019).

	2017 (March-	2018 (March-	YoY
	December)	December)	change
declared mailings to private	335 000	4 235 000	1164%
individuals			
declared VAT in SEK	79 000 000	136 000 000	72%
average declared VAT in SEK	236	32	-86%
average value of the declared	943 SEK (89.2 EUR,	128 (12 EUR,	
orders (considering standard	exchange rate as of	exchange rate as	
rate 25% VAT)	11.02.2020)	of 11.02.2020)	

Table 5 Declared mailings and VAT paid processed by PostNord (Tullverket, 2019), author's calculations

Overall, in 2018 Swedish Customs encountered about 70 000 companies and private individuals who imported their orders from non-EU countries, and nearly 50% of the total import value accounted for 50 companies. The total import value in 2018 was just over 468 billion SEK, which is an increase of SEK 65 billion compared with the previous year. The value-wise largest imports came from Norway and China, from which comes the highest number of import declarations (Tullverket, 2019).

Before the regulatory changes went into force, the number of low-value parcels to Sweden was around 150 thousand per day, but as the changes were implemented on March 1^{st,} 2018, the number of parcels decreased significantly. On April 15^{th,} 2018 SVT News reported (SVT Nyheter, 2018) that PostNord had to send around 400 000 packages back to senders from outside the EU, as the consignments hadn't been picked up by the buyers, and the number of the low-value imported parcels was just 15 thousand that month (Tradetaxport, 2020). According to the author's calculations based on the official data issued by Swedish Customs (Tullverket, 2019), between March and December 2018 the average number of declared parcels daily processed by PostNord was around

14 thousand. In mid-June 2019 the number of imported low-value goods to Sweden grew to around 25 thousand a day (Omni, 2019).

The Swedish Customs Board estimated the VAT loss to be between 0,6 - 1,2 billion SEK annually before the VAT imposition. After PostNord introduced the handling fee and Swedish Customs began to collect VAT, and the daily shipments decreased, the VAT gap decreased sharply. Swedish Government expects in 2021 the number of shipments will reach 8,8 million, and the estimated VAT collected is 32 SEK per consignment, just as it was in March – December 2018. This should contribute to the Swedish state budget of around 280 million SEK annually (Government Offices of Sweden, 2020).

4.1.2 Norway

One of the next countries that are planning to abolish the exemption of the low-value consignment threshold is Norway. Currently, Norwegian customers are not obliged to pay VAT and duties if the value (including freight and insurance) of the imported consignment does not exceed 350 NOK (~ 33.67 EUR – conversion rate on 02/03/2020). If the value of the shipment exceeds the 350 NOK threshold, the consumer is obliged to pay 25% VAT (Norwegian Customs, 2020). Similarly to the Swedish case, a handling fee is usually charged by the postal company – the main postal service state-owned Posten Norge AS (Norwegian Customs, 2020).

Several changes will apply as of 1st April 2020, as Norway will abolish this limit. To manage the upcoming changes effectively, Norway is preparing a one-stop-shop-like solution – a VOEC scheme, that should simplify the registration process, and improve VAT collection and remittance to the Norwegian tax authorities. This should simplify the customs clearance of the low-value consignments. Other EU VAT regulatory similarities of the upcoming regulatory changes in Norway tackle also the marketplaces such as Amazon, that will be deemed seller and therefore VAT-liable. Also, suppliers will collect VAT at the point of sale on transactions below 3000 NOK, instead of consumers paying the VAT at the point of importation. Concurrently, the customs duty threshold is increased to 3000 NOK (KPMG, 2019), (Norwegian Customs, 2020).

In practice, when a Norwegian customer places an order from a foreign supplier and the value is below 3000 NOK, the consumer also pays the VAT (standard rate 25%), and the supplier acts as a collector. Then, the supplier declares the sale through the new simplified registration scheme VOEC (VAT On E-Commerce), (Norwegian Tax Administration, 2020). Moreover, the customs clearance fees also apply, if the postal company handles the declaration. Norwegian state-owned company Posten charges 299 NOK per consignment (~29 EUR – exchange rate on 02/03/2020) for a customs declaration service, and 149 NOK for simplified customs declaration, according to the official Posten's pricelist (Posten, 2020).

4.1.3 Australia & New Zealand

From 1st July 2018, Australian consumers have to pay 10% GST (goods and services tax) on all goods imported from overseas, as the GST exemption on goods valued below 1000 AUD has been abolished. A simplified, OSS-like system has been created for e-retailers and marketplaces where they can register, declare, and pay the GST. The GST registration turnover threshold is 75 000 AUD annually. Also, marketplace operators are liable for collecting and declaring the tax to the Australian Tax Office (Australian Taxation Office, 2020). The GST income exceeded the government's projections, as it collected over 250 million AUD in the first nine months, and outstripped forecasts by expected 70 million AUD in a full year (Australian Taxation Office, 2019).

Similarly, in New Zealand, where consumers are obliged to pay GST on all imported goods. The regulation went into force as of 1st December 2019 and abolished the exemption of the de minimis threshold of 1000 NZD (New Zealand Inland Revenue, 2020). The government expects these changes to bring in additional tax revenue of 218 million NZD by 2022 (Satherley, 2019).

In Australia and New Zealand, as of 1st July 2018, and as of 1st December 2019 respectively, the online marketplace Wish is obliged to collect VAT/GST and sales taxes on behalf of the merchants (Wish Inc, 2020).

4.1.4 United States of America

The state-by-state tax differences in the e-commerce sector are visible also in the USA, where out-of-state sellers are responsible for setting the right state's VAT rate and collecting it. This practice became popular since June 2018, when the Supreme Court of the United States made a decision on the dispute between South Dakota and Wayfair, Inc – an e-commerce marketplace, and ruled in favor of South Dakota. Since then, states are authorized to impose a tax on remote sales, and other nexus obligations (Streamlined Sales Tax Governing Board, Inc., 2020). Economic nexus is a tax obligation imposed on sellers, who deliver products and services to consumers based in different US states, and after they reach some certain threshold of sales or transactions, it makes them responsible to collect and remit taxes in these states of import. The economic nexus laws are currently spread throughout 43 US states. Moreover, so-called marketplace laws, that shift the tax obligation from the third-party sellers to the marketplaces to collect the sales tax, is currently a norm in 39 US states. (Avalara, Inc., 2020), (Supreme Court of the United States, 2018)

Similarly to the EU's OSS and Norway's VOEC systems, where remote sellers and marketplaces can declare their sales, 33 US states participate in Streamlined Sales Tax program (SST), which allows businesses to collect, declare and remit sales tax in a simplified manner. However, the registration requirements and thresholds vary by state (Streamlined Sales Tax Governing Board, Inc., 2020). Also, some non-participating states like Pennsylvania allow marketplace facilitators and remote sellers to declare sales taxes directly to the Department of Revenue via their own digital solutions (Pennsylvania Department of Revenue, 2020).

4.1.5 Croatia

Similarly to Sweden, in 2018 Croatia started to charge a handling fee on parcels from non-EU countries. The fee of 4,5 HRK (~ 0,6 EUR as of 09/03/2020) was paid by final receivers to Hrvatska Pošta (Croatian Post) and was supposed to ensure fairness of the delivery costs and partially cover the costs related to the processing of low-value parcels (EuroCommerce, 2019). However, on 18th September 2019, the Croatian Regulatory Authority for Network Industries issued a statement claiming that it is not legally possible to collect this fee. In late 2019, Hrvatska Pošta ceased charging this fee (Starčić, 2019).

4.1.6 Poland

On 23rd April 2018, the Polish Ministry of Finance made a statement that mail orders are not exempted from VAT, but all the orders from non-EU countries are subject to VAT, irrespective of the value of the goods - i.e. from PLN 0.01 (Ministerstwo Finansów, Rzeczypospolita Polska, 2018). In October 2018, Poczta Polska (Polish Post) imposed a handling fee on parcels from non-EU countries, nonetheless, the VAT has been charged in only 10% cases of the imported parcels (Czubkowska, 2020). However, due to the ineffectiveness of the VAT collection system, it is estimated that Poland is losing up to 1 billion EUR per year (Rosiński, 2019).

4.1.7 Turkey

Turkey is another country that abolished the low-value consignment VAT relief, as it withdrew the 22 EUR exemption. As of June 2019, Turkey imposes tax all incoming packages ordered online at a rate of up to 20% (Reuters, 2019).

4.2 VAT location dependency on Wish example

This subchapter practically demonstrates the location dependency based on a customer's delivery location when buying from Wish, which results in different tax charges and the total price.

The marketplace Wish is already liable for VAT collection in several countries. The following case demonstrates location dependency in countries where Wish is liable for the VAT collection at the point of sale. However, price differences may be influenced by many factors and pricing strategies, such as an additional mark-up charged by Wish on orders from certain locations.

The chosen product for this case was an anti-pollution respirator that was priced below 22 EUR, including shipping costs. Figure 4 shows the shopping cart with the item description, shipping details, and price break down, with Sweden as the selected delivery location and the total price of 9,65 EUR.

			Order Summary	
m, Sweden, 113 24		edit	+ Apply a coupon	
			Item Total	€6.65 EUR
				€3.00 EUR
Unisex Anti Pollution Mask Dust Respirator Washable Reusable Masks for Allergy/Asthma/Travel/ Cycling		0.770		€9.65 EUR ded where applicable
Shipping: €3 EUR (Great value shipping straight to your door)			Chec 30 Day Free Return a	
	Unisex Anti Pollution Mask Dust Respirator Washable Reusable Masks for Allergy/Asthma/Travel/ Cycling Shipping: €3 EUR	n, Sweden, 113 24 Unisex Anti Pollution Mask Dust Respirator Washable Reusable Masks for Allergy/Asthma/Travel/ Cycling Shipping: €3 EUR	Unisex Anti Pollution Mask Dust Respirator Washable Reusable Masks for Allergy/Asthma/Travel/ Cycling Shipping: €3 EUR	m, Sweden, 113 24 ✓ Edit Lonisex Anti Pollution Mask Dust Respirator Edit Unisex Anti Pollution Mask Dust Respirator Edit Shipping Order Total Unisex Anti Pollution Mask Dust Respirator Edit Shipping: E3 EUR (Great value shipping straight to your door) Check

Figure 3 Shopping cart - order summary at Wish

The table below presents the costs of the product with detailed tax rates, based on a delivery country. This exercise was conducted on 6^{th} March 2020, and the default currency rate was euro.

Country	Wish obliged	Taxes & fees	Possible	Product	Shipping	Total	% price
	to collect VAT	collected (EUR)	mark-up	price		price	difference
				(EUR)			
Czech	No	N/A		0,95	1,00	1,95	0%
Republic							
Germany	No	N/A		0,95	1,00	1,95	0%
Sweden	Yes (if shipped	PostNord variable	Depends	6,65	3,00	9,65	395%
	through	fee + VAT 25%	on the fee				
	PostNord)						
Australia	Yes	GST 0,195 (10%)	0,76	1,90	1,00	2,90	49%
New	Yes	GST 0,293 (15%)	1,61	2,85	1,00	3,85	97%
Zealand							
USA,	Yes	Local sales tax		0,95	1,00	2,06	5,5%
Nebraska		0,107 (5,5%)					
USA,	Yes	Local sales tax		0,95	1,00	2,12	8,875%
New		0,173 (8,875%)					
York							
USA,	No	N/A		0,95	1,00	1,95	0%
Florida							

Table 6 Prices and costs dependency on the delivery country

The first selected delivery countries are the Czech Republic and Germany, where the de minimis exemption threshold of 22 EUR has not been abolished, and Wish does not charge any additional fees or taxes. Based on that, it is considered that the standard price of the product is 0,95 EUR and the shipping costs 1 EUR.

In the case of Sweden, Wish is obliged to collect and remit the fees and taxes, only if the products are shipped through PostNord. The price of the item is 6,65 EUR and shipping costs 3,00 EUR, making the total price of 9,65 EUR, which is 395% higher than the total price when delivering to the Czech Republic or Germany. However, it is impossible to assess the amount of the handling fee that is remitted to PostNord, since it is confidential information agreed between PostNord and Wish, therefore the amount of Wish mark-up remains uncertain.

Consumers based in Australia and New Zealand must pay additionally the GST of 10% and 15% respectively. On top of that, there is an unspecified fee or mark-up charged by the marketplace or the seller, which might be part of the location-based pricing strategy.

Since the Wayfair vs South Dakota Supreme Court decision, most of the states have made the marketplace operators liable for collecting and remitting the sales taxes. As of 1st February 2020, the online marketplace Wish is obliged to collect VAT/GST and sales taxes in 39 US states (Wish Inc, 2020). Buyers from Nebraska have to pay the local sales tax of 5,5% (Nebraska Department of Revenue, 2020), and consumers from New York are obliged to pay 8,875% as the sales tax (NYC Department of Finance, 2020). Customers based in Florida are not obliged to pay any additional taxes, as the state of Florida has not adopted a law requiring out-of-state sellers and marketplaces to collect and remit sales tax (Avalara Inc, 2019).

Table 7 includes a list of the prices of the respected product and selected delivery countries, with a share of the taxes and fees of the total price. In the case of Sweden, the taxes and fees comprise up to 80% of the total price, while in the US states of Nebraska and New York the added costs represent solely the local sales taxes with no additional fees.

Country	Total price	Taxes & fees	Tax & fee % of the price
Czech Republic	1,95	- €	0%
Sweden	9,65	Up to 7,70 €	80%
Australia	2,90	0,95 €	33%
New Zealand	3,85	1,90 €	49%
USA, Nebraska	2,06	0,11€	5,5%
USA, New York	2,12	0,17 €	8,875%

Table 7 Tax and fee share of the total price

The share of taxes and fees on the total price is depicted on the following graph (Figure 7), where the left vertical scale represents the total price in EUR, while the share of the taxes and fees is shown on the right vertical scale.

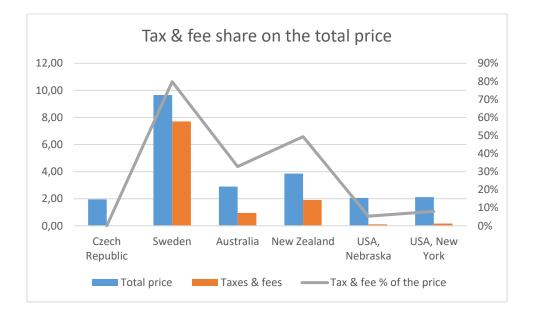


Figure 4 Tax and fee share on the total price

As observed, the price varies across the selected countries and can have a strong influence on the total price paid by the customer. However, due to the confidential amount of the handling fee charged by PostNord, it is impossible to assess the fee and the potential mark-up charged by Wish.

4.3 Role of China in global e-commerce

World Bank estimated the global GDP to be at 85,91 trillion USD in 2018 (World Bank, 2020), while global retail sales hit 20,31 trillion USD that year (Digital Commerce 360, 2019). Consumers spent on online shopping 2,93 trillion USD worldwide, making 14,5% of global retail sales. The share is expected to grow in the coming years, making the importance of the global e-commerce market even more significant. The cross-border B2C consumer market amounted to 562 billion USD in 2018 (Zion Market Research, 2019), indicating that consumers spent every fifth US dollar on goods from outside their country.

China is the biggest importer to the European Union, and the main categories of imports are industrial goods, consumer goods, and machinery-related equipment. B2C e-commerce is also a significant part of the Chinese economy, and Chinese cross-border e-commerce trade reached around 135 billion RMB in 2018 and grew at a rate of around 20-30% annually (EU SME Centre, 2019).

As cross-border online shopping becomes increasingly popular, a survey (International Post Corporation, 2020) conducted in 2019 showed that 39% of EU consumers ordered parcels from China, which is the most popular destination for online shopping. Moreover, according to the survey, 44% of the orders were valued below 25 EUR and 63% of them enjoyed free delivery. The most popular e-retailers that year were platforms such as Amazon, Alibaba/AliExpress, eBay and Wish. Among Swedish customers, when surveyed, the most recent purchase was made at Chinese e-seller (32%), followed by orders from the UK (19%) and Germany (15%), while Estonians made their recent orders from the same countries, with a significant share of purchases from China amounting to 58%, 8% from the UK and 8% from Germany. The survey also asked respondents about the expected impact of the new VAT rules and higher delivery costs that may increase the price by 10 EUR per item. The majority of the respondents (41%) claimed they would buy slightly less from China and 36% said they would stop buying from China.

Another report conducted by PostNord (PostNord, 2020) revealed that low prices are the main driver that attracts shoppers from abroad, while other reasons like the range and uniqueness of products are secondary. The main destination for these price-oriented shopping activities is China, as more than 60% of European consumers who have shopped

online from abroad in 2019, bought products from there, while in 2014 it was just around 13% (PostNord, 2020). The trend of digital marketplaces such as Amazon, Wish, eBay, Alibaba, and Allegro is also constantly growing, and European consumers enjoy a wide range of products at relatively low prices, caused by stiff competition between sellers.

The strong appetite for Chinese products is still visible by European consumers, as we can see in Table 8. In 2019, China dominated as the most favorite shopping destination across many European countries. Only Belgian customers preferred to shop in the Netherlands rather than in China (PostNord, 2019). In Table 7, the Nordic region refers to Sweden, Denmark, Norway and Finland.

	UK	Belgium	Netherlands	Italy	Poland	Nordic
						region
1st	China	Netherlands	China (32%)	China	China	China
	(30%)	(39%)		(28%)	(26%)	(30%)
2nd	USA	China	Germany	UK	Germany	UK (25%)
	(18%)	(19%)	(17%)	(23%)	(14%	
3rd	Germany	Germany	USA (11%)	German	UK (11%)	Germany
	(8%)	(16%)		y (21%)		(22%)

Table 8 Favourite shopping destinations of European consumers (PostNord, 2020)

Figure 5 charts the most favorite online shopping destinations of e-commerce consumers from twelve European countries. It shows that the number of people who ordered online goods from China grew from 38,7 million in 2017 to 54,6 million in 2018. The data are based on interviews with 10000 consumers, published by PostNord in the report "E-commerce in Europe 2018" (PostNord, 2019).

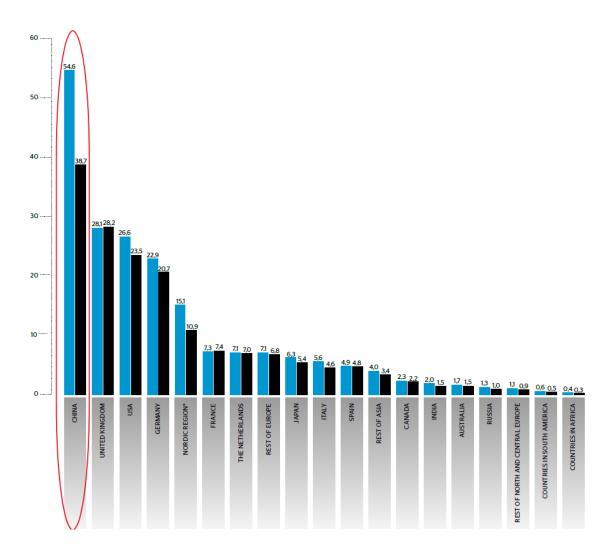


Figure 5 Number of Europeans who shopped online by destination countries (PostNord, 2019)

One of the most popular Chinese e-commerce platforms is AliExpress, which belongs to Alibaba Group that operates various businesses in fields of e-commerce marketplaces, online tools, and cloud computing services. AliExpress was launched in 2010 and connects manufacturers and distributors with consumers via its e-commerce platform, and acts just as a facilitator, without selling products directly. AliExpress distinguishes from Alibaba by its B2C model, while Alibaba is B2B focused (Alibaba Group, 2020). Another popular B2C e-commerce platform is Wish which operates as a facilitator and connects mostly Chinese businesses with consumers. It was founded in 2011, and stands out with its mobile app that enables simple product discoverability (LinkedIn, 2020).

In response to the upcoming VAT changes, the e-commerce platforms operators Amazon and Alibaba have been opening new logistics centers in the EU. These logistic parks are usually used as fulfillment centers that allow shipping parcels from a warehouse based in the EU, so the VAT and customs are avoided. At the same time, rail freight is becoming popular for Chinese suppliers to bring the goods to their European warehouses and business partners (Railfreight.com, 2019), (ERR.ee, 2018). The EU intends to take action against these practices and aims to impose taxes also on these goods, but admits that it might be difficult to do so (European Commission, 2019).

4.3.1 E-commerce and steel market analogy

An analogy to e-commerce and the upcoming tax imposed on the low-value goods can be drawn from the steel industry. Chinese steel producers have been accused of using subsidies from the government (De Nederlandse Grondwet, 2016), cheap loans, and tax breaks to boost its steel overproduction, flooding the European and US markets with its cheap steel. In 2018, China produced 923 million metric tons of steel, making more than half of the world steel production. This overproduction led to a price drop of steel prices by 57% from 2011 to 2017 (The Wall Street Journal, 2020), (European Parliament, 2018). The similarity between the e-commerce market and steel industry can be seen in the unfair advantage not only in the governmental subsidies but also in allowances of CO2 emissions, which create a significant share of costs for European steel companies (Steel Union, 2018). However, the EU announced first steps towards so-called carbon import tax, that would reduce imports from countries with relaxed climate policies, such as China, and at the same time shield the European steel industry (Time.com, 2020), (Reuters, 2019)

4.3.2 UPU postal rules

One of the key components prevalent in Chinese exports of low-value goods is the postal advantage that was formed under the auspice of the Universal Postal Union (UPU). Founded in 1874, with a goal to create a single territory for exchange of postal correspondence, it operates a collective fund that monetarily supports developing countries in managing their postal services. This system has been criticized by several governments and companies, as some countries excessively benefit from having their postal operations subsidized, within the cooperation of the Universal Postal Union. The country that has been blamed for its "unfair advantage" is China. As the e-commerce sector is growing, Chinese subsidies of free or very cheap deliveries from marketplaces like Alibaba has become visible and questioned (Financial Times, 2019). The main dissatisfied party has been Trump administration, which finds the system as supporting the Chinese advantage in cross-border e-commerce and parcel shipments, especially the low-value and low-weight parcels, since packages weighing under 4.4 pounds (~ 2 kg) are shipped usually at lower rates than domestically. The reason for it is that UPU considers China as a developing country, and all countries from that category can benefit from the same advantages, just like smaller and poorer developing countries (Supply Chain Dive, 2019). One of the options that had been considering by the Trump administration was to leave the UPU, but that could mean disruptions in the international mail delivery system (Financial Times, 2019). The Trump administration's criticism of the UPU system was supported by some European countries, such as Sweden, Finland, Norway and Iceland. Stefan Kvarfordt, head of the Swedish Trade Federation, castigated the current system, saying "We are subsidizing the most competitive e-commerce market in the world: China" (Politico.eu, 2019). This is supported by a study conducted by Copenhagen Economic (Okholm, et al., 2019), which proved that Sweden and Finland are losing 10 million EUR every year in subsidies. Also, the study found that the negative net financial transfer comes from trade with countries of the Asian-Pacific region.

At the UPU Congress in September 2019, many representatives expected the Chinese postage advantage to be reduced. The United States decided to remain in the UPU, as they gained permission to set its own postal rates (The American Society of International Law, 2020). The main reason for US postal rate autonomy was an argument that the US Post Office has been subsidizing Chinese sellers, who export the big volumes of bulky letters and small parcels generated by e-retailers and marketplaces (AP News, 2019). The new system allows the USA to raise prices for consignments from other countries in exchange for voluntary support to the fund of UPU. Postal service operators in the destination (import) countries will have the possibility to set the level of remuneration for the final delivery, within certain boundaries. Nonetheless, according to some observers, changes in the system do not affect the large shipments by private-sector carriers. Experts also expect more frequent UPU negotiations taking place in the future (South China Morning Post, 2019), (Joc.com, 2020).

5 Analysis of de minimis abolishment impact

In the first part of the paper, the concept of the upcoming changes was presented using secondary data. The second part is based on primary data, sourced from a conducted survey to understand the expected consumer behavior and project the possible influence by the upcoming VAT changes in cross-border e-commerce. For this purpose, the research is focused on analyzing consumers based in the Czech Republic. As a member state of the European Union, it is going to implement the changes as of 1st January 2021.

5.1 Declaration fee

This study expects that the implemented changes will be similar to those implemented in Sweden and other EU countries – i.e. postal operators in cooperation with tax and customs authorities will be charging not only VAT on all imported parcels from non-EU countries, but also a processing fee that should cover the costs of postal operators. As it was shown, not charging the fee would have dramatic financial and operational consequences on postal operators. Moreover, Česká Pošta (Czech Post) also claimed that all imported parcels will be subject to customs declaration, and not only VAT but also a declaration fee will be charged (iDnes.cz, 2020).

On 1st April 2011, a VAT change went into force in the Czech Republic and reduced the VAT-free threshold for imported parcels from 150 EUR to 22 EUR (Czech Post, 2020), even though the European Union recommended implementing the rule as of 1st January 2011. However, the amount of the imported parcels valued under 150 EUR grew rapidly within the first three months of 2011, as consumers rushed to avoid paying the taxes and declaration fees (Vylet'al, 2011). Since the rule was implemented, Czech consumers receiving parcels valued over 22 EUR and under 150 EUR (including shipping costs) are obliged to pay the local VAT (21%) and the declaration (handling) fee to the Czech Post, which currently starts at 103 CZK (~ 3.7 EUR) (Czech Post, 2020).

It is not known yet whether the amount of the handling fee on the low-value parcels will be changed. Considering the Swedish example, PostNord charges a declaration fee of 75 SEK (~ 6.8 EUR) on parcels valued under 1700 SEK (~ 150 EUR), and therefore it is expected that Czech Post will keep the fee on a similar level. Ultimately, as taxes and fees

are inherently part of the final price paid by a consumer, this assumption is critical for further surveying the expected behavior of Czech online shoppers.

5.2 Survey assumptions

The goal of the survey was to understand and describe how will the upcoming VAT changes influence the shopping behavior of online buyers. It provides in-depth information about their shopping activities and their attitude to the scheduled changes. Eventually, the collected data enabled us to project the expected changes in ordering low-value goods from non-EU countries.

For this purpose, a questionnaire was created, targeting Czech online buyers. The survey questionnaire included questions that were defined and identified beforehand, based on the data and information collected in the previous chapter, which enabled to understand the VAT changes in other countries, especially Sweden, and foresee the implementation of the anticipated changes in the Czech Republic.

The previous part of the paper that researched the implemented changes in other countries led to several conclusions and the formation of key assumptions, which were used as a foundation for the survey. The sub-questions of the research were transformed into the following hypotheses that are examined in the quantitative analysis.

1. One of the main preferences to buy low-value goods from non-EU countries is the lowprice level.

2. The imposition of VAT and handling fees on imported low-value goods will reduce buying from non-EU sellers.

3. Collection of the handling fee and VAT at the point of sale could reduce the outflow of the EU buyers, as it could improve and fasten the payment and customs processes.

5.3 Results

The questionnaire was displayed to 247 people and collected 193 responses, from which 37 did not pass the screening question of having made an online purchase from a non-EU seller in the past year, leaving 156 responses (80,8%) for further analysis. The questionnaire had 19 questions, with one "logic-jump" question dependent on the

respondent's previous answer. The majority of the respondents were females (63,5%) while males represented 36,5%. Most of the respondents (86%) were in the age group between 18 and 30 years, 7% were aged between 30 and 45, and 45-65-year olds represented 5% of the pool.

5.3.1 Hypotheses

The results of the survey were supposed to confirm or refute the hypotheses established in the first part of the paper, and to draw a conclusion for the research question.

1. One of the main preferences to buy low-value goods from non-EU countries is the lowprice level.

This hypothesis was confirmed with the average rating 4.3 of importance, with 5 being the top priority, while the delivery time was rated at 2.7, implying that the respondents are willing to wait for their items to be delivered from abroad, but stay price sensitive. This fact is presented in Figure 6, comparing the price and delivery time importance, where 5 is the highest priority and 1 the lowest. More than 50% of the respondents rated the price importance at 5, whereas the delivery time importance was more distributed among the group, with most respondents (37%) rating the delivery importance at a rate of medium importance (3).

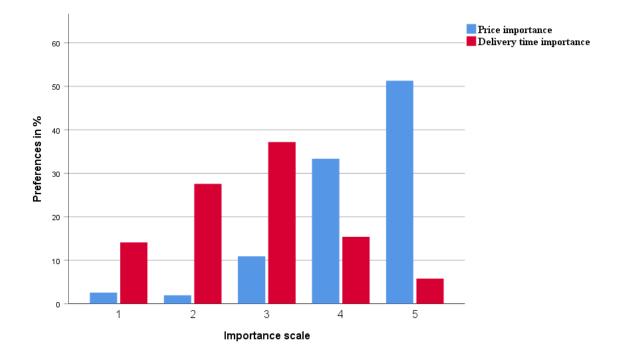


Figure 6 Importance scale of price and delivery time

2. The imposition of VAT and handling fees on imported low-value goods will reduce buying from non-EU countries.

Most of the respondents (68%) were not aware of the upcoming VAT changes. After being introduced to the basic overview of these changes, respondents rated the upcoming changes at an average rate of 1.9 (out of 5), suggesting their discontent over the new regulation.

The envisaged handling fee of 100 CZK charged by the Czech Post would deter 60% of respondents from buying, while 30% were hesitant, and less than 10% would buy despite the 100 CZK handling fee. However, after presenting a sample 300 CZK purchase that would be impacted by the changes, 84% of respondents claimed they would not proceed with the order. However, after getting familiar with the upcoming changes, 62% of all respondents expect to reduce their online shopping outside the EU as soon as the changes come into effect, as depicted in Figure 7. Therefore, this hypothesis was confirmed and is further analyzed later part.

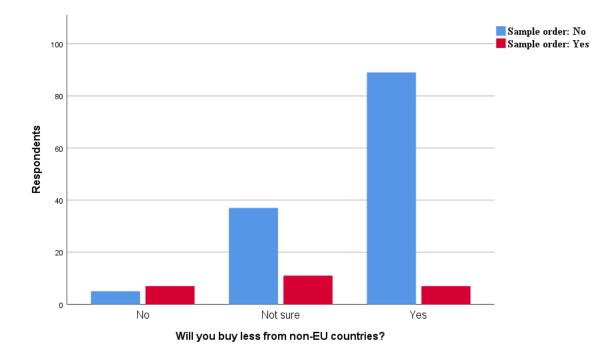


Figure 7 Expected shopping reduction from outside EU

3. Collection of the handling fee and VAT at the point of sale could reduce the outflow of the EU buyers, as it could improve and fasten the payment and customs processes.

Respondents, who claimed they would not proceed with the sample order because of the imposed VAT and handling fee, were asked a follow-up (logic-jump) question, exploring their susceptibility to changing their mind. After explaining the process, suggesting that if the handling fee and VAT were collected at the point of sale, it could lead to a smoother delivery and customs process, thus sweeten the customer experience, 60% of them would change their mind and eventually proceed with the order. Hence, this hypothesis was confirmed as well.

Those who claimed, based on the question with a sample order, that they would not mind paying VAT and handling fee and subsequently responded that the upcoming changes will not affect their shopping behavior, made 4,5% of all respondents. By contrast, those who would not proceed with the sample order and at the same time expect to reduce their shopping in non-EU countries represented 57% of all respondents. This demonstrates that the shopping behavior of most of the respondents will be impacted by the changes to some extent, while only 4,5% are expected to stay unaffected.

This process is depicted in Figure 8, evaluating buyers' favor with a smoother process and the potential impact of the point of sale collection.

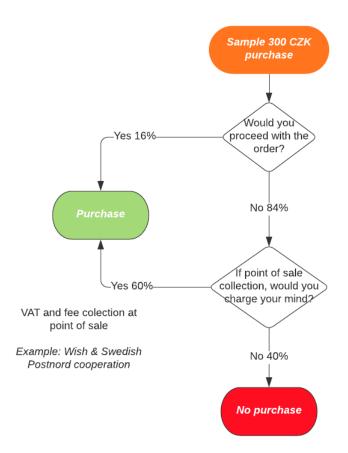


Figure 8 Logic jump question evaluating collection at the point of sale impact

5.4 Survey findings analysis

Some questions ascertained other related data, such as the awareness of the current VAT and duty thresholds, where 45% responded that they know the thresholds and usually adjust their purchases to them, while 39% do not know the limit values, and 16% are aware of them but make their online purchases irrespectively of them.

In the question screening popularity of the platforms and shops, AliExpress was chosen as the most favorite platform among the respondents (81%), followed by eBay, Amazon and Wish.

Most of the respondents (59%) usually buy goods valued under 550 CZK (~ 22 EUR), and 34% spend usually between 550 and 2000 CZK per order. The average shipping costs paid by 56% of respondents are under 50 CZK, 18% pay 100-150 CZK for delivery,

12,5% pay more than 150 CZK and 13% could not answer. As shown in Figure 9, those who pay lower shipping costs tend to buy cheaper goods.

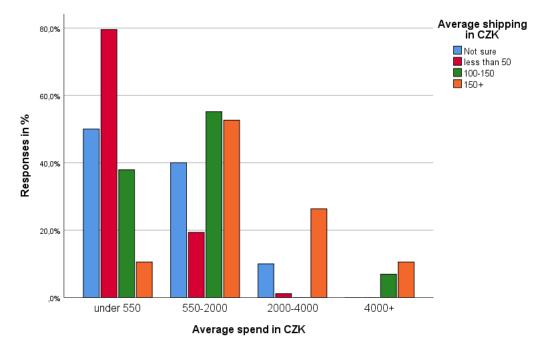


Figure 9 Shipping costs and average purchase values

In the following subchapters, hypotheses 2 and 3 are researched more thoroughly using statistical methods, to better answer the research question. Firstly, it is to find out who will be affected the most by the upcoming regulatory changes, and secondly, what group of buyers is more likely to change buy from sellers who collect the tax and fees at the point of sale.

5.4.1 Buyer segments affected by the upcoming changes

This part puts focus on analyzing the most impacted group of the upcoming regulatory changes. For this purpose, four variables from the collected data were selected: expected shopping reduction, shopping frequency, and average spending.

Those who shop more than 5 times per year tend to be more confident about reducing their online shopping activities outside the EU. As can be seen in Figure 10, 74% of those who shop more than 10 times annually expect to reduce their shopping abroad. A similar trend is visible in Figure 11, which represents the group of those who shop 5-10 times per year. Also, these frequent shoppers are more relatively expect to spend less in the future.

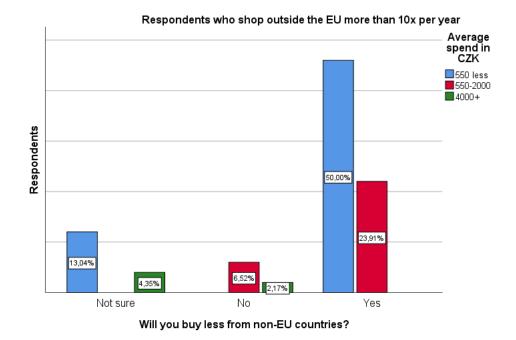
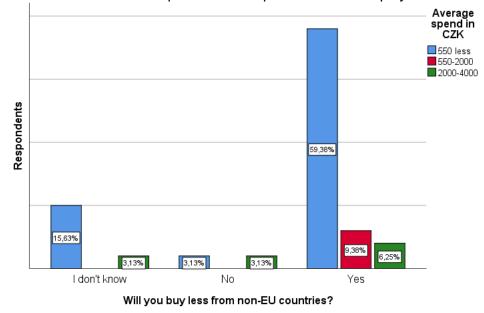


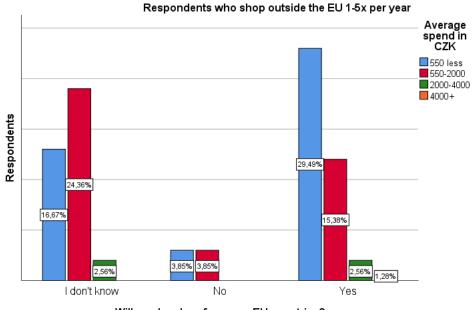
Figure 10 Respondents who shop outside the EU more than 10x per year



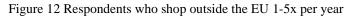
Respondents who shop outside the EU 5-10x per year

Figure 11 Respondents who shop outside the EU 5-10x per year

Contrarily, less frequent shoppers who shop 1-5 times per year are more likely to be hesitant -44% of them stated that they don't know whether they will reduce their shopping or not. This could signify that those who shop frequently low-value goods are more likely to be affected by the changes, whereas those who shop sporadically are hesitant about it and may stay relatively less affected.



Will you buy less from non-EU countries?



To understand the targeted group of buyers and the relationship with the expected changes in their shopping behavior, a crosstabulation between the two variables was created (Table 9), where buyers were sorted out based their average spend in two groups: "550 CZK (~22 EUR) and less", and "more than 550 CZK", so we could understand the potential impact of the upcoming regulation.

Will you buy less from non-EU								
				countries?				
			Not sure	No	Yes	Total		
Average	550 less	Count	24	4	65	93		
spend in		Expected count	28,6	7,2	57,2	93,0		
CZK		% within average	25,8%	4,3%	69,9%	100,0%		
		spend						
	more than	Count	24	8	31	63		
	550	Expected count	19,4	4,8	38,8	63,0		
		% within average	38,1%	12,7%	49,2%	100,0%		
		spend						
Total		Count	48	12	96	156		
		Expected count	48,0	12,0	96,0	156,0		
		% within average	30,8%	7,7%	61,5%	100,0%		
		spend						

Table 9 Crosstabulation: average spend and expected shopping reduction

Based on the crosstabulation of the two variables, a chi-squared test of independence was selected as the statistical hypothesis testing method, where the hypotheses were stated as follows:

H0 (null hypothesis): *Expected shopping reduction is not dependent on the average spend.*

H1 (alternative hypothesis): *Expected shopping reduction is dependent on the average spend.*

The Chi-square test score was calculated at 7.898, with 2 degrees of freedom and a P-value of 0.019 at a significance level of 0.05. Thus, a P-value of 0.019 < 0.05 (alfa), provides strong evidence against the null hypothesis (H0) and suggests that there is a statistically significant relationship between the average spend amount and the expected shopping reduction.

Chi-Square Test					
			Asymptotic		
			Significance		
	Value	df	(2-sided)		
Pearson Chi-Square	7,898	2	,019		
Likelihood Ratio	7,861	2	,020		
Linear-by-Linear	4,898	1	,027		
Association					
N of Valid Cases	156				

Table 10 Chi-Square test of independence between average spend and expected shopping changes

To measure the importance of the ascertained relationship, Cramer's V test of importance was used and reported at value 0.225, implying a moderate relationship between the average amount spend and expected shopping reduction.

Symmetric Measures				
			Approximate	
		Value	Significance	
Nominal by Nominal	Phi	,225	,019	
	Cramer's V	,225	,019	
N of Valid Cases		156		

Table 11 Cramer's V measure of association between the variables

Therefore, it is statistically proven that the upcoming regulatory changes are more likely to affect those who spend less per order and shop more frequently, than those who shop less often and spend more.

5.4.2 Preferences for point of sale collection

Those who would refuse to proceed with the sample order under the new rules (84% of all respondents), were presented an explanation of the collection at the point of sale, and after that 60% of them changed their mind if the payment was collected by the seller or platform, assuming that it would fasten the overall delivery process. Analyzing this phenomenon more deeply, 64% of those who changed their mind about proceeding with the order still expected to reduce their shopping outside of the EU. That implies that platforms and sellers who will collect VAT and handling fee at point of sale may retain 60% of the customers who would otherwise be deterred by the fragmented payment process, while 64% of the potentially retained customers are still expecting to reduce their overall shopping outside the EU. This suggests that these platforms could also gain a competitive advantage against the sellers who will not collect the tax and fee, as costumers will flee towards the platforms or shop elsewhere in the EU.

To understand the group of retained customers who claimed to change their mind if the seller provides simplified collection at the point of sale, it is desirable to analyze whether there is an association between this group and the variables of average spend and shopping frequency. In other words, this part examines this group of respondents and seeks a possible correlation to their spending and the shopping frequency. Therefore, for this analysis, only those who responded that they would not proceed with the order under the new rules were selected (84%), while those who would proceed with the order were filtered out (16%).

The first test explored the relation of the purchase decision under the simplified system with point of sale collection and the average spend. Similarly, a crosstabulation was created (Table 12) and the chi-square test (Table 13) was performed.

If VAT and fees were collected at the point of sale, would you proceed with the order?

			No	Yes	Total
Average	550 less	Count	34	49	83
spend in		% within average spend	41,0%	59,0%	100,0%
CZK	more than 550	Count	19	29	48
		% within average spend	39,6%	60,4%	100,0%
Total		Count	53	78	131
		% within average spend	40,5%	59,5%	100,0%

Table 12 Crosstabulation: purchase decision under simplified collection and the average spend

For this test, the following hypotheses were stated:

H0: Purchase decision under the simplified VAT and fee collection at the point of sale is not dependent on the average spend.

H1: Purchase decision under the simplified VAT and fee collection at the point of sale is dependent on the average spend.

The chi-square was calculated at 0,024, with 1 degree of freedom and a P-value of 0.877. Because P-value of 0.877 > 0.05 (at 5% significance level), there is no statistically significant relationship evidence of the relationship between the two variables, and the H0 is correct. Thus, there is no association between making a purchase decision under the simplified point of the sale collection system and the average spend.

Chi-Square Test					
			Asymptotic		
			Significance		
	Value	df	(2-sided)		
Pearson Chi-Square	,024	1	,877		
Continuity Correction	,000	1	1,000		
Likelihood Ratio	,024	1	,877		
Linear-by-Linear	,024	1	,877		
Association					
N of Valid Cases	131				

Table 13 Chi-Square test of independence between purchase decision under simplified collection and the average spend

A similar test was conducted for the variables of the purchase decision and shopping frequency. Following hypotheses were tested:

H0: Purchase decision under the simplified VAT and fee collection at the point of sale is not dependent on shopping frequency.

H1: Purchase decision under the simplified VAT and fee collection at the point of sale is dependent on shopping frequency.

			If VAT and fees w point of sale, would		
			the o	rder?	
			No	Yes	Total
How	1-5x	Count	24	39	63
frequent		% within how frequent	38,1%	61,9%	100,0%
	5-10x	Count	11	17	28
		% within how frequent	39,3%	60,7%	100,0%
	10x+	Count	18	22	40
		% within how frequent	45,0%	55,0%	100,0%
Total		Count	53	78	131
		% within how frequent	40,5%	59,5%	100,0%

Table 14 Crosstabulation: purchase decision under simplified collection and shopping frequency

The chi-square was calculated at 0,505, with 2 degrees of freedom and a P-value of 0.777. Since the P-value of 0.777 > 0.05, there is no statistically significant relationship evidence of the relationship between the two variables. Therefore, H0 is confirmed, and there is no association between making a purchase decision under the simplified point of the sale collection system and shopping frequency. It is possible to state that there is no association between the tendency to make shopping decisions because of the simplified tax and fee collection and average spend and shopping frequency.

			Asymptotic Significance
	Value	df	(2-sided)
Pearson Chi-Square	,505	2	,777
Likelihood Ratio	,502	2	,778
Linear-by-Linear	,455	1	,500
Association			
N of Valid Cases	131		

Chi-Square Test

Table 15 Chi-Square test of independence between purchase decision under simplified collection and shopping frequency

5.5 Summary of the analysis

The analysis researched all three stated hypotheses and confirmed that customers are more price-sensitive than to delivery time when shopping low-value goods from outside EU. Secondly, it was confirmed that the abolishment of VAT de minimis will reduce buying from non-EU countries. However, collection of the handling fee and VAT at the point of sale can reduce the outflow of the EU buyers, as it could improve and fasten the payment and customs processes.

It was statistically proven that buyers who shop more than 5 times per year and buy goods of relatively low value are more likely to reduce their online shopping spending in non-EU countries. If online sellers used the simplification scheme, they could retain 60% of their EU customers. Nonetheless, 64% of these buyers still expect to reduce their overall shopping outside the EU.

6 Conclusion

As the world has become globalized and brought buyers and sellers closer together, both parties started enjoying the benefits of cross-border e-commerce, but some related issues have emerged as well and authorities and governments have started to pay attention. The abolishment of the VAT threshold exemptions on low-value goods has started to be implemented around the world, including the EU that wants to combat VAT fraud and ensure fair market conditions for all stakeholders. The implementation of the IOSS will enable sellers to collect VAT at the point of sale and make the process convenient for the final consumer. Because there are several ambiguities of the implementation processes and technicalities, it was important to comprehend the trends around the world and understand the issue from a consumer perspective and how will they react to these changes once the regulation is implemented.

In the first part, the thesis presented several cases in different countries where governments abolished the VAT threshold. In many cases, not only the VAT but also the handling fee is charged by postal operators to cover the expenses related to the customs declaration processing. In the Swedish case, we could see an attempt to automate the processing of low-value goods and making partnerships between the e-commerce marketplace Wish and postal operator PostNord. The effects of the Swedish restrictions were significant and the number of imported goods decreased significantly. However, implementing the simplified solution of point of sale collection, enabled Wish to lower the handling fee for its customers. The satisfactory outcome for both Wish and PostNord could be seen also from numbers, as the initial decrease of imported items was followed by incremental growth.

China plays a very important role in global e-commerce trade, and as most of the lowvalue goods to the EU come from China, it is one of the main actors in the e-commerce chain described in this thesis. Chinese suppliers are facing some major changes, such as the VAT imposition on all the consignments, and higher shipping costs amended by the UPU agreement that will play an important role and presumably impact consumer demand. Both reasons can lead to a decrease in Chinese imports of low-value goods to the EU. However, e-commerce marketplaces are already trying to find new ways how to avoid those restrictions, especially by investing in the fulfillment houses which serve as warehouses for European markets.

The second part of the thesis was based on the findings in the first part, and researched consumer behavior using a quantitative research method, confirming all three subquestions of the research as valid. Consumers from the EU find price as the main motivation for buying from non-EU countries, while the delivery time is relatively less important. It proved that VAT and other related taxes and fees could significantly deter buyers and influence their shopping behavior. The key finding is the fact the most affected consumer group are those who shop relatively frequently low-value goods, and that if the VAT and handling fees were collected at the point of sale, such as in the Swedish case, 60% of buyers could be retained. Therefore, this simplification of the point of sale collection can strongly influence and retain the consumers. Yet, to make partnerships between postal operators and sellers, fair market conditions must be ensured, so it is not just large companies that get a partnership agreement with postal companies, while small sellers remain disproportionately disadvantaged. Thanks to the IOSS scheme, this should be available to all sellers to the EU. By choosing this simplification method, sellers can charge VAT at the point of sale and remit it via IOSS in the MSI, while retaining the majority of their customers, even when postal operators charge a handling fee. Thus, it is the author's recommendation for international sellers to use the IOSS scheme to simplify the payment and delivery process to retain customers.

To answer the research question, it is clear, that most of the EU consumers will be deterred by the imposition of VAT as well as the handling fees collected by postal operators. However, by implementing the IOSS and other automated solutions, similar to the partnership between PostNord and Wish, customers can be retained and enjoy simple payment and delivery process, as the burden to deal with two separate bills and stakeholders would disappear. This can be done using the simplification schemes, which have been offered in most of the countries that have abolished the de minimis thresholds. Provided that both sellers and shippers will be acquainted with these changes as soon as possible and make use of them to benefit all the involved stakeholders, we can assume a beneficial outcome of the upcoming changes.

6.1 Future work

Future research should be done on a technical solution to tackle the VAT fraud and deliberate undervaluation that is possible to continue under the new rules. Also, postal companies and customs in the EU will face challenges with screening big amounts of low-value goods, therefore an automatization of customs declaration process needs to be analyzed. Another study might investigate how the enhancement of existing e-commerce marketplace solutions could fit into the IOSS scheme.

References

Adamson, S., 2018. *New rules on VAT will simplify e-commerce*. [Online] Available at: <u>https://www.grantthornton.ee/en/insights1/new-rules-on-vat-will-simplify-e-commerce/</u>

Alibaba Group, 2020. *OUR BUSINESSES*. [Online] Available at: <u>https://www.alibabagroup.com/en/about/businesses</u> [Accessed 22 February 2020].

AP News, 2019. *China says postal fees to rise after US complaint*. [Online] Available at: <u>https://apnews.com/1e7020752c854accb3279aaba52cfb14</u> [Accessed 6 March 2020].

Australian Taxation Office, 2019. *GST on low value goods measure continues to exceed* expectations – ATO considers it a very successful initiative. [Online] Available at: <u>https://www.ato.gov.au/Media-centre/Articles/GST-on-low-value-goods-</u> <u>measure-continues-to-exceed-expectations/</u> [Accessed 3 March 2020].

Australian Taxation Office, 2020. *GST on low value imported goods*. [Online] Available at: <u>https://www.ato.gov.au/Business/International-tax-for-business/GST-on-low-value-imported-goods/</u> [Accessed 3 March 2020].

Avalara Inc., 2019. 2021 e-commerce EU VAT reboot. [Online] Available at: <u>https://www.avalara.com/eu/en/learn/whitepapers/2021-ecommerce-eu-vat-reboot.html</u>

Avalara Inc, 2019. *Will 2020 be the year Florida taxes remote sales?*. [Online] Available at: <u>https://www.avalara.com/us/en/blog/2019/10/will-2020-be-year-florida-taxes-out-of-state-sellers.html</u>

[Accessed 7 March 2020].

Avalara, Inc., 2020. *State-by-state guide to marketplace facilitator laws*. [Online] Available at: <u>https://www.avalara.com/us/en/learn/guides/state-by-state-guide-to-marketplace-facilitator-laws.html</u>

[Accessed 4 March 2020].

Bakos, Y. J., 1997. Reducing Buyer Search Costs: Implications for Electronic Marketplaces. *Management science*, 43(12), pp. 1609-1755.

Basalisco, B., Wahl, J. & Okholm, H., 2016. *E-commerce Imports Into Europe: VAT and Customs Treatment*. [Online]
Available at:
<u>https://www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/8/3</u>
<u>48/1462798608/e-commerce-imports-into-europe_vat-and-customs-treatment.pdf</u>
[Accessed 9 March 2020].

Black, H. & Garner, B., 1999. Law Dictionary. In: *Black's Law Dictionary*. St. Paul: West Publishing, p. 443.

Bloomberg Tax, 2019. *INSIGHT: France—Major Anti-VAT Fraud Measures*. [Online] Available at: <u>https://news.bloombergtax.com/daily-tax-report-international/insight-france-major-anti-vat-fraud-measures</u>

[Accessed 19 April 2020].

Bloomberg Tax, 2020. *INSIGHT: EU 2021 E-Commerce VAT Package—Making Compliance Easier and Fraud Harder*. [Online] Available at: <u>https://news.bloombergtax.com/daily-tax-report-international/insight-eu-</u> <u>2021-e-commerce-vat-package-making-compliance-easier-and-fraud-harder</u> [Accessed 13 March 2020].

Bowers, S., 2015. UK losing millions in VAT from non-EU sellers on Amazon and eBay. [Online]

Available at: https://www.theguardian.com/business/2015/nov/01/uk-losing-millions-

vat-non-eu-sellers-amazon-ebay

[Accessed 9 March 2020].

Breakit.se, 2018. *Postnord om avtalet med Wish: "Vi är jätteglada"*. [Online] Available at: <u>https://www.breakit.se/artikel/13900/postnord-om-avtalet-med-wish-vi-ar-jatteglada</u> [Accessed 7 April 2020].

Cambridge Dictionary, 2020. *quid pro quo*. [Online] Available at: <u>https://dictionary.cambridge.org/dictionary/english/quid-pro-quo</u> [Accessed 15 April 2020].

ClearvAT, 2019. *ClearVAT*. [Online] Available at: <u>https://www.clearvat.com/</u>

Commerce Logistics Specialists, 2019. *Developments regarding the implementation of the EU VAT.* s.l.:s.n.

Council of the European Union, 2008. *Council Regulation (EC) No* 274/2008 of 17 *March 2008 amending Regulation (EEC) No* 918/83 setting up a Community system of *relief from customs duty*. [Online] Available at: <u>https://eur-lex.europa.eu/legal-</u> <u>content/EN/TXT/?uri=CELEX%3A32008R0274</u> [Accessed 14 March 2020].

Council of the European Union, 2009. *Council Directive 2009/132/EC of 19 October 2009 determining the scope of Article 143(b) and (c) of Directive 2006/112/EC as regards exemption from value added tax on the final importation of certain goods.* [Online] Available at: <u>https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009L0132</u> [Accessed 14 March 2020]. Czech News Agency, 2020. *Drobné zásilky z čínských e-shopů příští rok zřejmě zdraží*. [Online] Available at: <u>https://www.ceskenoviny.cz/zpravy/drobne-zasilky-z-cinskych-e-shopu-pristi-rok-zrejme-zdrazi/1854118</u> [Accessed 25 March 2020].

Czech Post, 2020. *Advice and info*. [Online] Available at: <u>https://www.ceskaposta.cz/rady-a-navody/ocekavate-zasilku-ze-zahranici</u> [Accessed 25 March 2020].

Czech Post, 2020. *Frequent questions: Customs clearance*. [Online] Available at: <u>https://www.ceskaposta.cz/en/sluzby/celni-rizeni/faq-caste-otazky-k-celnimu-rizeni</u> [Accessed 25 March 2020].

Czubkowska, S., 2020. *Coraz więcej paczek z chińskich sklepów. A co z VAT-em?*. [Online] Available at: <u>https://wyborcza.pl/7,156282,25654034,coraz-wiecej-paczek-z-chinskich-sklepow-a-co-z-vat-em.html?disableRedirects=true</u> [Accessed 9 March 2020].

De Nederlandse Grondwet, 2016. *Thousands protest Chinese steel dumping, urge EU to act.* [Online] Available at: <u>https://www.denederlandsegrondwet.nl/id/vk1lrdczc6zm/nieuws/thousands_protest_chinese_steel_dumping?ctx=vg9pijs4vzzn&start_tab0=20</u> [Accessed 17 April 2020].

Deutscher Bundestag, 2020. *Deutscher Bundestag*. [Online] Available at: <u>http://dipbt.bundestag.de/extrakt/ba/WP19/2385/238517.html</u> [Accessed 13 March 2020].

Digital Commerce 360, 2019. *Global ecommerce sales to reach nearly \$3.46 trillion in 2019.* [Online]

Available at: <u>https://www.digitalcommerce360.com/article/global-ecommerce-sales/</u> [Accessed 14 February 2020].

Duke University, 2020. *Qualitative Research: Surveys*. [Online] Available at: <u>https://guides.library.duke.edu/c.php?g=289813&p=1934017</u> [Accessed 22 March 2020].

Einav, L., Knoepfle, D., Levin, J. & Sundaresan, N., 2014. Sales Taxes and Internet Commerce[†]. *American Economic Review*, 104(1), pp. 1-26.

Ernst & Young, 2018. *New EU VAT rules simplify VAT for e-commerce*. [Online] Available at: <u>https://www.ey.com/gl/en/services/tax/international-tax/alert--new-eu-vat-rules-simplify-vat-for-e-commerce</u>

ERR.ee, 2018. Estonian company signs contract to bring railway route from China to Muuga. [Online] Available at: <u>https://news.err.ee/825123/estonian-company-signs-contract-to-bring-railway-route-from-china-to-muuga</u> [Accessed 18 April 2020].

EU SME Centre, 2019. *Guideline on Cross-border E-Commerce in China (2019)*. [Online] Available at: <u>https://www.eusmecentre.org.cn/report/guideline-cross-border-e-</u> <u>commerce-china-2019</u> [Accessed 4 July 2020].

EuroCommerce, 2019. *Creating a level-playing field for retail in Europe*. [Online] Available at: <u>https://www.eurocommerce.eu/media/171066/Level%20playing%20field-</u> <u>FINAL%20EC%20final%20(002).pdf</u> [Accessed 9 March 2020].

European Commission, 2016. *Impact Assessment - Modernising VAT for cross-border B2C e-Commerce*. [Online] Available at: <u>https://eur-lex.europa.eu/legal-</u>

content/EN/TXT/?uri=SWD:2016:0379:FIN

[Accessed 12 March 2020].

European Commission, 2016. *Proposal for a Council Directive*. [Online] Available at: <u>https://eur-lex.europa.eu/legal-</u> <u>content/en/TXT/?uri=CELEX%3A52016PC0757</u> [Accessed 12 March 2020].

European Commission, 2016. *Towards a single EU VAT area - Time to decide*. [Online] Available at: <u>https://ec.europa.eu/taxation_customs/sites/taxation/files/com_2016_148_en.pdf</u> [Accessed 12 March 2020].

European Commission, 2017. A Fair and Efficient Tax System in the European Union for the Digital Single Market. [Online] Available at: https://ec.europa.eu/taxation_customs/sites/taxation/files/communication_taxation_digit al_single_market_en.pdf [Accessed 9 March 2020].

European Commission, 2017. VAT on electronic commerce: New rules adopted. [Online] Available at: <u>https://www.consilium.europa.eu/en/press/press-releases/2017/12/05/vat-on-electronic-commerce-new-rules-adopted/</u>

[Accessed 12 March 2020].

European Commission, 2018. Accompanying the document Proposal for a Council Directive amending Directive 2006/112/EC. [Online] Available at: https://ec.europa.eu/taxation_customs/sites/taxation/files/impact_assessment_payment_s ervice_providers_2018_812_en.pdf

[Accessed 12 March 2020].

European Commission, 2019. *Commission welcomes agreement on new rules paving the way for better VAT collection on online sales*. [Online] Available at: <u>https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1595</u> [Accessed 12 March 2020].

European Commission, 2019. *Commission welcomes agreement on new rules paving the way for better VAT collection on online sales*. [Online] Available at: <u>https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1595</u> [Accessed 2 February 2020].

European Commission, 2019. *Commission welcomes agreement on new rules paving the way for better VAT collection on online sales*. [Online] Available at: <u>https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1595</u> [Accessed 18 April 2020].

European Commission, 2019. *EU customs procedures and import VAT: On the way to 2021*. [Online] Available at: <u>https://www.wik.org/fileadmin/Konferenzbeitraege/2019/18th_Koenigswinter_Seminar/</u> <u>S2_1_Nagy.pdf</u> [Accessed 20 April 2020].

European Commission, 2019. VAT rates applied in the member states of the European Union. [Online] Available at: <u>https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/vat/how_vat_works/rates/vat_rates_en.pdf</u> [Accessed 8 March 2020].

European Commission, 2020. *Buying goods online coming from a non-European Union country*. [Online]

Available at: <u>https://ec.europa.eu/taxation_customs/individuals/buying-goods-services-online-personal-use/buying-goods/buying-goods-online-coming-from-a-noneu-union-</u>

country_en

[Accessed 9 March 2020].

European Commission, 2020. *Modernising VAT for cross-border e-commerce*. [Online] Available at: <u>https://ec.europa.eu/taxation_customs/business/vat/modernising-vat-cross-border-ecommerce_en</u>

[Accessed 2 February 2021].

European Commission, 2020. *Taxation and Customs Union*. [Online] Available at: <u>https://ec.europa.eu/taxation_customs/business/vat/what-is-vat_en</u> [Accessed 8 March 2020].

European Commission, 2020. *What is VAT?*. [Online] Available at: <u>https://ec.europa.eu/taxation_customs/business/vat/what-is-vat_en</u> [Accessed 15 April 2020].

European Court of Auditors, 2017. *Import procedures: shortcomings in the legal framework and an ineffective implementation impact the financial interests of the EU.* [Online] Available at: <u>https://www.eca.europa.eu/Lists/ECADocuments/SR17_19/SR_CUSTOMS_EN.pdf</u> [Accessed 9 March 2020].

European Parliament, 2018. *Parliamentary questions*. [Online] Available at: <u>https://www.europarl.europa.eu/doceo/document/E-8-2018-001426_EN.html</u> [Accessed 17 April 2020].

European Union, 2015. *The basic EU VAT rules for electronically supplied services explained for micro businesses*. [Online] Available at: <u>https://ec.europa.eu/taxation_customs/sites/taxation/files/information_microbusinesses_</u> <u>euvat_2015_en.pdf</u> [Accessed 7 December 2019]. European Union, 2019. [Online] Available at: <u>https://ec.europa.eu/taxation_customs/business/vat/digital-single-market-modernising-vat-cross-border-ecommerce_en#heading_0</u> [Accessed December 2019].

European Union, 2019. Commission welcomes agreement on new rules paving the way for better VAT collection on online sales. [Online] Available at: <u>https://ec.europa.eu/commission/presscorner/detail/en/IP_19_1595</u> Financial Times, 2019. Change the unfair international postal rate system now. [Online] Available at: <u>https://www.ft.com/content/b839d856-d3ac-11e9-8d46-8def889b4137</u> [Accessed 4 March 2020].

Finkelstein, A., 2009. E-ztax: Tax Salience and Tax Rates. *The Quarterly Journal of Economics*, 124(3), pp. 969-1010.

Fletcher, R., Bell, J. & McNaughton, R., 2004. International E-business Marketing. In: *International E-business Marketing*. Padstow: Thomson, pp. 229-232.

Frunza, M.-C., 2019. Introduction to the mechanism of VAT fraud. In: *Value Added Tax Fraud*. New York: CRC Press, pp. 1-2.

Frunza, M.-C., 2019. Markets and VAT fraud. In: *Value Added Tax Fraud*. New York: CRC Press, pp. 9-30.

Goolsbee, A., 2000. In A World Without Borders: The Impact Of Taxes On Internet Commerce. *Quarterly Journal of Economics*, 115(2), pp. 561-576.

Government Offices of Sweden, 2020. Ändrade mervärdesskatteregler vid e-handel mellan företag och konsumenter. [Online] Available at: https://www.regeringen.se/48fa03/contentassets/686198da0fbe457fa3b168eae3fe4587/a ndrade-mervardesskatteregler-vid-e-handel-mellan-foretag-och-konsumenter.pdf [Accessed 7 March 2020].

Handelsrådet, 2019. *Digital marketplaces and e-commerce platforms*. [Online] Available at: <u>https://handelsradet.se/wp-content/uploads/2020/04/Digital-marketplaces-and-e-commerce-platforms_EN2B.pdf</u>

[Accessed 7 April 2020].

Hintsa, J. et al., 2014. *The import VAT and duty de-minimis in the European Union* – *Where should they be and what will be the impact?*. [Online] Available at: <u>http://www.euroexpress.org/uploads/ELibrary/CDS-Report-Jan2015-publishing-final-2.pdf</u> [Accessed 13 March 2020].

HM Revenue and Customs, 2018. *HMRC calls on online marketplaces to sign agreement tackling VAT fraud*. [Online] Available at: <u>https://www.gov.uk/government/news/hmrc-calls-on-online-marketplaces-to-sign-agreement-tackling-vat-fraud</u> [Accessed 9 March 2020].

Chang, C. C.-Y., 2009. Does Price Matter? How Price Influences Online Consumer Decision-Making. *Japanese Journal of Administrative Science*, 22(3), pp. 245-254.

iDnes.cz, 2020. Drobné zásilky z čínských e-shopů zdraží, skončí jim osvobození od DPH. [Online]

Available at: <u>https://www.idnes.cz/ekonomika/domaci/evropska-unie-cla-dph-zbozi-</u> zasilka-e-shop-cina-gerlach-celni-sluzby-euro.A200213_130744_ekonomika_maz [Accessed 19 March 2020].

International Post Corporation, 2020. *IPC Cross-border E-commerce Shopper Survey*, Brussels: International Post Corporation. Joc.com, 2020. *New era dawns for Universal Postal Union*. [Online] Available at: <u>https://www.joc.com/regulation-policy/new-era-dawns-universal-postal-</u>

union_20200108.html?destination=node/3624416

[Accessed 6 March 2020].

Kamarulzaman, Y., 2011. E-Consumer Behaviour: Exploring the Drivers of E-Shopping. *European Journal of Social Sciences*, 23(4), pp. 579-592.

King's College London, 2020. *UK in a Changing Europe*. [Online] Available at: <u>https://ukandeu.ac.uk/fact-figures/is-norway-in-the-customs-union/#</u> [Accessed 2 March 2020].

KPMG, 2019. *EU: Implementing new VAT collection rules for online sales*. [Online] Available at: <u>https://home.kpmg/xx/en/home/insights/2019/03/tnf-eu-implementing-new-vat-collection-rules-for-online-sales.html</u>

KPMG, 2019. Norway: New VAT registration process proposed, online retailers and marketplaces. [Online] Available at: <u>https://home.kpmg/us/en/home/insights/2019/08/tnf-norway-new-vat-registration-process-proposed-online-retailers-and-marketplaces.html</u> [Accessed 19 August 2020].

Kreos, K., 2018. *Reducing Barriers in Cross-Border E-Commerce through an Automated VAT Declaration System*. [Online] Available at: <u>https://digi.lib.ttu.ee/i/?10950</u>

LinkedIn, 2020. *Wish - LinkedIn Profile*. [Online] Available at: <u>https://www.linkedin.com/company/contextlogic/about/</u> [Accessed 22 February 2020].

Linnworks, 2020. A List Of eCommerce Fulfilment Services Across The Globe. [Online] Available at: <u>https://blog.linnworks.com/ecommerce-fulfilment-services-list</u> [Accessed 10 March 2020].

Ministerstwo Finansów, Rzeczypospolita Polska, 2018. Letter - Ministerstwo Finansów. [Online] Available at: <u>http://orka2.sejm.gov.pl/INT8.nsf/klucz/658C47F2/%24FILE/i21003-01.pdf</u> [Accessed 9 March 2020].

Næss-Schmidt, S., Sørensen, P., Gårdebrink, J. & Basalisco, B., 2017. *Effects of Removing the Vat De Minimis on E-commerce Imports*. [Online] Available at: <u>https://www.copenhageneconomics.com/publications/publication/effects-of-removing-the-vat-de-minimis-on-e-commerce-imports</u> [Accessed 18 March 2020].

Nebraska Department of Revenue, 2020. *Local Sales and Use Tax Rates*. [Online] Available at: <u>https://revenue.nebraska.gov/businesses/local-sales-and-use-tax-rates</u> [Accessed 7 March 2020].

New Zealand Inland Revenue, 2020. *GST on low value imported goods*. [Online] Available at: <u>https://www.ird.govt.nz/gst/gst-for-overseas-businesses/gst-on-low-value-imported-goods</u> [Accessed 3 March 2020].

NFX, 2020. *The Network Effects Manual: 13 Different Network Effects (and counting)*. [Online] Available at: <u>https://www.nfx.com/post/network-effects-manual/</u> [Accessed 13 March 2020].

Norwegian Customs, 2020. *Online shopping*. [Online] Available at: <u>https://www.toll.no/en/online-shopping/</u> [Accessed 2 March 2020].

Norwegian Tax Administration, 2020. *VAT On E-Commerce - VOEC*. [Online] Available at: <u>https://www.skatteetaten.no/en/business-and-organisation/vat-and-duties/vat/foreign/e-commerce-voec/</u> [Accessed 2 March 2020]. NYC Department of Finance, 2020. *New York State Sales and Use Tax*. [Online] Available at: <u>https://www1.nyc.gov/site/finance/taxes/business-nys-sales-tax.page</u> [Accessed 7 March 2020].

OECD/European Union Intellectual Property Office, 2019. *Misuse of Small Parcels for Trade in Counterfeit Goods*. Paris: OECD Publishing. OECD, 2003. *Taxation and Electronic Commerce*. [Online] Available at: <u>https://www.oecd.org/tax/administration/20499630.pdf</u> [Accessed 10 March 2020].

OECD, 2015. Addressing the Tax Challenges of the Digital Economy, Action 1.[Online]Available at: Addressing the Tax Challenges of the Digital Economy[Accessed 10 March 2020].

OECD, 2019. *The Role of Digital Platforms in the Collection of VAT/GST on Online Sales*. [Online] Available at: <u>http://www.oecd.org/tax/consumption/the-role-of-digital-platforms-in-the-collection-of-vat-gst-on-online-sales.pdf</u> [Accessed 13 March 2020].

Okholm, H. et al., 2019. *International delivery prices: effects on national post and e-commerce*. [Online] Available at: <u>https://www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/4/4</u> <u>84/1552461314/copenhagen-economics-international-delivery-prices.-effects-on-national-post-and-e-commerce.-impact-of-upu-terminal-dues-in-finlandsweden.pdf</u> [Accessed 7 April 2020].

Omni, 2019. *Efter avgifterna: Nu köper vi mer prylar från Kina igen*. [Online] Available at: <u>https://omni.se/efter-avgifterna-nu-koper-vi-mer-prylar-fran-kina-igen/a/EWBeEo</u> [Accessed 18 April 2020]. Papis-Almansa, M., 2019. VAT and electronic commerce: the new rules as a means for simplification, combatting fraud and creating a more level playing field?. *ERA Forum*, 20(2), pp. 201-223.

Pappel, I., Pappel, I., Tepandi, J. & Draheim, D., 2017. Systematic digital signing in
Estonian e-government processes: influencing factors, technologies, change
management. In: A. .. Hameurlain & e. al., eds. *Transactions on Large-Scale Data- and Knowledge-Centered Systems*. Berlin: Springer, pp. 31-51.

Pappel, I., Vainsalu, H., Draheim, D. & Paide, K., 2018. On the systematic exploitation of the Estonian data exchange layer x-road for strengthening public private partnerships. *Proceedings of the 11th International Conference on Theory and Practice of Electronic Governance*, April, pp. 34-41.

Pennsylvania Department of Revenue, 2020. *Certified Service Providers*. [Online] Available at: <u>https://www.revenue.pa.gov/GeneralTaxInformation/Tax%20Types%20and%20Inform</u> <u>ation/SUT/OnlineRetailers/Pages/Certified-Service-Providers.aspx</u> [Accessed 4 March 2020].

Politico.eu, 2019. Nordics rally to Trump over postal rules and Chinese e-commerce. [Online]

Available at: <u>https://www.politico.eu/article/nordics-rally-to-trump-over-postal-rules-and-chinese-e-commerce/</u>

[Accessed 7 April 2020].

Pope, S., Sowiński, C. & Taelman, I., 2014. World. World Customs Journal, 8(2), pp. 75-93.
Posten, 2020. New prices from 1st January 2020. [Online]

Available at: <u>https://www.posten.no/en/price-list</u>

[Accessed 2 March 2020].

PostEurop, 2020. *About Us.* [Online] Available at: <u>https://www.posteurop.org/aboutus</u> [Accessed 21 March 2020].

PostNord, 2018. *E-commerce in the Nordics*. [Online] Available at: <u>https://www.postnord.com/globalassets/global/english/document/publications/2018/e-</u> <u>commerce-in-the-nordics-six-month-report-2018-pdf</u> [Accessed 11 February 11].

PostNord, 2018. *PostNord and Wish in cooperation for smoother e-commerce*. [Online] Available at: <u>https://www.postnord.com/en/media/press-</u> <u>releases/postnord/2018/postnord-and-wish-in-cooperation-for-smoother-e-commerce/</u> [Accessed 6 February 2020].

PostNord, 2019. *E-commerce in Europe 2018*. [Online] Available at: <u>https://www.postnord.com/en/media/publications/e-commerce/e-</u> <u>commerce-in-europe-2018/</u> [Accessed 9 March 2020].

PostNord, 2020. *Allt du behöver veta om Kinapaketen och avtalet med Wish*. [Online] Available at: <u>https://www.postnord.se/vara-losningar/artiklar2/allt-du-behover-veta-om-kinapaketen-och-avtalet-med-wish</u> [Accessed 7 April 2020].

PostNord, 2020. *E-commerce in Europe 2019*. [Online] Available at: <u>https://www.postnord.com/contentassets/f1c34a0cd6b04ff591b2199de13f3986/e-handel_europamaster_0910-en_us_final.pdf</u> [Accessed 15 February 2020].

PostNord, 2020. *E-commerce in Europe 2019*. [Online] Available at: <u>https://www.postnord.com/contentassets/f1c34a0cd6b04ff591b2199de13f3986/e-</u> handel_europamaster_0910-en_us_final.pdf [Accessed 23 March 2020].

Postnord, 2020. *E-commerce in the Nordics*. [Online] Available at: <u>https://www.postnord.com/contentassets/9e5ef8a408834cb982f30f145a6b2208/en_e-handeln-i-norden_halvar_2019_highres.pdf</u> [Accessed 2 March 2020].

PostNord, 2020. *Frågor och svar om avtalet med Wish*. [Online] Available at: <u>https://www.postnord.se/ta-emot/hamta/fran-annat-land-import/information-om-moms-pa-importforsandelser/faq-om-avtalet-med-wish</u> [Accessed 7 April 2020].

PostNord, 2020. *Information om moms på importförsändelser*. [Online] Available at: <u>https://www.postnord.se/ta-emot/hamta/fran-annat-land-import/information-om-moms-pa-importforsandelser</u> [Accessed 7 April 2020].

PostNord, 2020. VAT-information on import items. [Online] Available at: <u>https://www.postnord.se/en/receiving/collect/from-another-country/vat-information-on-import-items</u> [Accessed 5 February 2020].

Railfreight.com, 2019. *Alibaba sends e-commerce goods to Belgian Liege by train.* [Online] Available at: <u>https://www.railfreight.com/beltandroad/2019/10/10/alibaba-sends-e-commerce-goods-to-liege-by-train/?gdpr=accept</u> [Accessed 18 April 2020].

Ramsey, P. F., 1927. A Contribution to the Theory of Taxation. *Economic Journal*, 37(145), pp. 47-61.

Reuters, 2019. *Explainer: What an EU carbon border tax might look like and who would be hit*. [Online] Available at: <u>https://www.reuters.com/article/us-climate-change-eu-carbontax-</u> <u>explainer/explainer-what-an-eu-carbon-border-tax-might-look-like-and-who-would-be-</u> <u>hit-idUSKBN1YE1C4</u> [Accessed 17 April 2020].

Reuters, 2019. *Turkey to charge customs tax for small e-commerce packages*. [Online] Available at: <u>https://www.reuters.com/article/turkey-trade-tax/turkey-to-charge-customs-tax-for-small-e-commerce-packages-idUSL5N22R2AO</u> [Accessed 4 March 2020].

Rosiński, K., 2019. *Tanie przesyłki z AliExpress. Klienci nie chcą zmian, a państwo na tym traci.* [Online] Available at: <u>https://www.money.pl/gospodarka/tanie-przesylki-z-aliexpress-klienci-nie-chca-zmian-a-panstwo-na-tym-traci-6432836329814145a.html</u> [Accessed 9 March 2020].

Satherley, J., 2019. *How new GST rules will increase your online shopping bill.* [Online] Available at: <u>https://www.westpac.co.nz/rednews/business/how-new-gst-rules-could-affect-your-online-shopping-bill/</u> [Accessed 2 December 2019].

South China Morning Post, 2019. US global postal rate deal will have limited impact on Chinese exporters, observers say. [Online] Available at: <u>https://www.scmp.com/economy/article/3030513/us-global-postal-rate-deal-will-have-limited-impact-chinese-exporters</u> [Accessed 4 March 2020].

Spiegel, 2018. *Wie im Onlinehandel täglich Steuern hinterzogen werden*. [Online] Available at: <u>https://www.spiegel.de/wirtschaft/unternehmen/amazon-wish-die-taegliche-steuerhinterziehung-im-onlinehandel-a-1244670.html</u>

[Accessed 13 March 2020].

Starčić, B., 2019. Hrvatska pošta više ne može naplaćivati 4,5 kune za uručenje malih paketa. [Online]
Available at: <u>https://www.tportal.hr/biznis/clanak/hrvatska-posta-vise-ne-moze-naplacivati-4-5-kune-za-urucenje-malih-paketa-20190927</u>
[Accessed 9 March 2020].

Statistics Sweden, 2020. Purchased / ordered goods / services via the internet by geographical area, gender and accounting group. Year 2018 - 2019. [Online] Available at: <u>http://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START_LE_LE0108_LE0108G/ LE0108T24/</u> [Accessed 15 February 2020].

Steel Union, 2018. *The Emission Allowance Price Flies Upwards, the Ceiling is Out of Sight*. [Online] Available at: <u>https://www.ocelarskaunie.cz/the-emission-allowance-price-flies-upwards-the-ceiling-is-out-of-sight/?lang=en</u> [Accessed 17 April 2020].

Sterling, L. S., 2009. The Art of Agent-Oriented Modeling. London: The MIT Press. Streamlined Sales Tax Governing Board, Inc., 2020. Remote Sellers. [Online] Available at: <u>https://www.streamlinedsalestax.org/for-businesses/remote-seller-faqs</u> [Accessed 4 March 2020].

Streamlined Sales Tax Governing Board, Inc., 2020. *South Dakota v Wayfair*. [Online] Available at: <u>https://www.streamlinedsalestax.org/for-businesses/remote-seller-faqs/scotus-ruling---south-dakota-v-wayfair</u> [Accessed 4 March 2020].

Supply Chain Dive, 2019. US will remain in Universal Postal Union after compromise vote. [Online]

Available at: https://www.supplychaindive.com/news/universal-postal-union-vote-

down-proposal-shipping-rates/563667/

[Accessed 5 March 2020].

Supreme Court of the United States, 2018. *Certiorari to the Supreme Court of South Dakota*. [Online] Available at: <u>https://www.supremecourt.gov/opinions/17pdf/17-494_j4el.pdf</u> [Accessed 4 March 2020].

SVT Nyheter, 2018. *Postnord tvingas sända tillbaka 400 000 paket*. [Online] Available at: <u>https://www.svt.se/nyheter/inrikes/postnord-tvingas-sanda-tillbaka-400-000-paket</u> [Accessed 7 February 2020].

SVT, 2018. *E-handelsjätten och Postnord överens – så ska de lösa avgiftsstrulet.* [Online] Available at: <u>https://www.svt.se/nyheter/inrikes/postnord-mildrar-avgiften-pa-kinapaket</u> [Accessed 18 April 2020].

The American Society of International Law, 2020. United States Remains in the Universal Postal Union, Rescinding Its Notice of Withdrawal. *American Journal of International Law*, 114(1), pp. 128-132.

The Wall Street Journal, 2020. *How China Built a Steel Behemoth and Convulsed World Trade*. [Online] Available at: <u>https://www.wsj.com/articles/how-china-built-a-steel-behemoth-andconvulsed-world-trade-11545668295</u> [Accessed 24 December 2018].

Time.com, 2020. *How Europe's Border Carbon Tax Plan Could Force the U.S. To Act on Climate Change*. [Online] Available at: <u>https://time.com/5793918/european-union-border-carbon-tax/</u> [Accessed 17 April 2020]. Tradetaxport, 2020. *The impact of the 2021 VAT Import scheme on postal & express couriers*. [Online] Available at: <u>https://www.tradetaxport.com/news/the-impact-of-2021-vat-import-scheme-postal-express</u> [Accessed 13 February 2020].

Trezek, W., 2019. *Preparation for the 2021 VAT de minimis removal: Sweden case*, s.l.: s.n.

Tullverket, 2019. *Swedish Customs Annual Report 2018*. [Online] Available at: <u>https://www.tullverket.se/download/18.2894757916870c7915cb47/1553165050813/%C</u> <u>3%85rsredovisning_2018.pdf</u> [Accessed 11 February 2020].

Tullverket, 2020. Swedish Customs - Ordering goods online. [Online] Available at: <u>https://www.tullverket.se/en/private/receivingorsendingagift/orderinggoodsonline.4.792</u> <u>224361590183a4d34492.html</u> [Accessed 5 February 2020].

UC Berkeley, 2020. *Cost-Benefit Analysis*. [Online] Available at: <u>https://eml.berkeley.edu/~saez/course131/costbenefit_ch08.pdf</u> [Accessed 18 March 2020].

VAT Expert Group - European Commission, 2018. *VAT e-commerce package of 5 December 2017: The Import scheme*. [Online] Available at: <u>https://circabc.europa.eu/sd/a/893ec555-e6ac-4458-8cf9-</u> <u>30f100ca5f2d/VEG%2026%20February%202018%20Import%20scheme.pdf</u> [Accessed 20 April 2020].

Vyleťal, M., 2011. *Snaha neplatit DPH vyhnala nákupy v zahraničí k rekordu*. [Online] Available at: <u>https://www.lupa.cz/clanky/snaha-neplatit-dph-vyhnala-nakupy-v-</u> zahranici-k-rekordu/

[Accessed 25 March 2020].

Wigand, R., 1997. Electronic Commerce: Definition, Theory, and Context. *The Information Society*, March, pp. Electronic Commerce: Definition, Theory, and Context.

Wish Inc, 2020. *Wish Customer Tax Policy*. [Online] Available at: <u>https://www.wish.com/tax_policy</u> [Accessed 7 March 2020].

Wish Inc, 2020. *Wish Merchant Tax Policy*. [Online] Available at: <u>https://merchant.wish.com/tax/policy</u> [Accessed 7 March 2020].

World Bank, 2020. *World GDP*. [Online] Available at: <u>https://data.worldbank.org/indicator/NY.GDP.MKTP.CD</u> [Accessed 14 February 2020].

Zion Market Research, 2019. *Cross-Border B2C E-Commerce Market By Category*. [Online] Available at: <u>https://www.zionmarketresearch.com/report/cross-border-b2c-e-</u> <u>commerce-market</u> [Accessed 14 February 2020].

Appendix 1 – Questionnaire

Note: The questionnaire was conducted using Typeform tool, which enabled a dynamic and seamless experience of answering the questions. The questions and answers are translated from Czech to English and rewritten for convenient browsing. The first question is a screening question to filter the relevant respondents. If this question was answered "No", the questionnaire is over, as the respondent has not made any purchase from a non-EU country in the past year.

Is it the end of bargain online shopping abroad?

Introduction – welcome page

From January 2021, all imported goods from outside the EU will be subject to VAT and probably also fees for customs handling, which may exceed the price of the goods themselves. The EU wants to increase VAT collection by up to \notin 7 billion a year. The questionnaire is to receive feedback from customers who occasionally buy cheap products (up to 22 euros) abroad, from platforms such as the Chinese AliExpress. By completing the short questionnaire (3 min) you will learn more about the planned VAT changes. The answers are anonymized and are used for thesis research at the Tallinn University of Technology in Estonia.

- 1. A few quick questions about shopping. Have you made a purchase from an e-shop or platform from outside the EU in the past year? (e.g., AliExpress, Wish, Amazon (non-EU seller)
 - Yes
 - No

2. When shopping online from outside the EU, how important is the price to you?

opinion scale: 1-2-3-4-5

3. What about shipping costs? opinion scale: 1-2-3-4-5

4. And how important is the time of delivery for you?

opinion scale: 1-2-3-4-5

5. How important are the VAT, customs and other related charges and fees?

opinion scale: 1-2-3-4-5

- 6. Do you know from when do you pay (what are the thresholds) VAT and customs duties when importing goods from outside the EU?
 - Yes, I adjust my purchases to that
 - Yes, but it is not crucial to me
 - No

After answering the question 6, a note is presented: "Let's be clear about this. You do not pay VAT or customs duties up to \notin 22. Between \notin 22 and \notin 150 you only pay VAT. From 150 euro you pay VAT and duty."

- 7. How many times a year do you buy from e-shops and platforms outside the EU? (including platforms such as Amazon, Wish, AliExpress, when the seller is from a non-EU country)
 - 10 and more
 - 5 -10x
 - 1 5x
- 8. What is your average online value when shopping from a non-EU platform/e-shop?
 - More than 4000 CZK
 - 2000 4000 CZK
 - 550 2000 CZK
 - Under 550 CZK
- 9. How much on average do you pay for postage (shipping costs) when purchasing from outside the EU?
 - More than 150 CZK
 - 150 100 CZK
 - Under 50 CZK
 - I don't know

10. Some of your favorite e-shops and platforms?

- Amazon
- AliExpress

- eBay
- Wish
- DealExtreme
- Add others
- 11. Chinese platforms such as AliExpress and Wish offer very cheap shipping. What postage price would already discourage you from buying?
- 50 CZK
- 100 CZK
- 150 CZK
- I don't know
- 12. Today, when shopping online, you do not pay VAT or customs duties for purchases from outside the EU that which value is up to 550 CZK (~ 22 euro). This will change from 2021 and VAT will be collected from the first cent. Had you been aware of these changes?
 - Yes
 - No

13. How do you rate these changes?

opinion scale: 1-2-3-4-5

After the question 13, a note is presented: "These changes require additional work by the authorities and transporters to process and collect the VAT. It is likely a customs declaration fee will be charged on every parcel, estimated price is currently at 100 CZK."

14. Would such a fee (100 CZK) deter you from buying?

- Yes
- No
- I don't know
- 15. For example, when buying an item at a price of 300 CZK, including shipping, you will pay 300 CZK + 63 CZK (VAT) + 100 CZK (handling fee). Instead of paying 300 CZK (today), you would pay 463 CZK. Would it be acceptable for you?
 - Yes
 - No

- 16. If the seller charged the entire amount, including VAT and other fees, this could lead to faster clearance and delivery. Would you change your mind and buy? (note: this question was asked if the respondent selected "No" in the previous question. If the question 15 was answered "Yes", this question is skipped and question 17 comes after)
 - Yes
 - No
- 17. Do you expect these changes to affect your spending and make you buy less from outside the EU?
 - Yes
 - No
 - I don't know
- 18. Are you a woman or a man?
 - Woman
 - Man

19. What is your age?

- 18 or less
- 18 30
- 30 45
- 45 65
- 65 and more