Abstract

The aim of the study is to present the premises that make it difficult to reach a multilateral agreement on electronic commerce in the World Trade Organization. Electronic commerce at the end of the second decade of the 21st century is an inseparable element of international trade, as a result of the digital revolution leading to lower costs when companies enter the global market. They often take into account the digital revolution of the state when creating new business models, especially in China, which has obtained the world's leading position in the field of digital services export. Increasing competition in the field of digital services, in the absence of regulations on electronic commerce in the WTO, will increase the interest of developed countries, including Australia, the United States, the European Union, Japan, African countries to solve the subject of e-commerce in regional integration agreements. The problems with reaching an agreement on electronic commerce in the WTO result not only from the specificity of trade in electronic form but from the general strategy of trade liberalization in other sectors.

Keywords: International trade; Electronic trade; E-commerce; World Trade Organization; Digital economy.

1. Introduction

Electronic trade at the end of the second decade of the 21st century is an inherent element of international trade and is becoming increasingly important for businesses operating in the face of the growing importance of the digital economy. It is estimated that after 2020 there will be a rapid increase in e-commerce transactions that enterprises will use. Electronic commerce is conducive to economic development, thanks to the increase in employment, which is why there is a great interest in this type of exchange for developing countries. New digital technologies, including the development of the Internet of Things, allowing the connection of devices using...
a computer network, as well as the dissemination of Big Data, allow the development of industry infrastructure, health care, agriculture (UNCTAD, 2018). Thanks to these technologies, new business models are created, as well as the method of trade exchange in goods and the flow of services.

The aim of the study is to present the premises that make it difficult to reach a multilateral agreement on electronic commerce in the World Trade Organization. The analysis starts in point 2, in which the role of e-commerce in international trade is presented. The following section 3 refers to regulating e-commerce in the WTO. Finally conclusions, regarding the study goal are drawn.

2. The importance of e-commerce in international trade
All inventions and new technologies have always changed the way of exchange in international trade over the years, in the 20th century mainly thanks to containers, inventions in transport, and in the XXI due to the digital revolution, especially the development of the Internet. The digital economy, mainly via the Internet, allows the customer to contact the seller in the short term, often using electronic platforms.

The concept of digital economy, which Don Tapscott distributed in his book entitled "The Digital Economy: Promise and Peril in the Age of Networked Intelligence" covers the issues of dissemination of knowledge as a basic element of the national economy, by digital means (Tapscott, 1995). In the digital economy knowledge will be transferred using digital devices as well (Rupali). The development of the digital economy radically changes the activities of companies on the market. Companies will be forced to change the business model in the modern global economy (Harvard Business Review, 2017). New inventions in digital technologies change production processes in the industry sector, services (mainly financial and telecommunications). Electronic commerce leads to lower information costs due to the lack of the need to be present on the local market (Freund, Hufbauer, and Jung, 2016).

The operation of the digital economy favors the defragmentation of production between countries, and the separation of the traditional value chain into the whole world, which then translates into the operation of the global value chain (Ravenhill, 2017). Enterprises, unlike the traditional business model, do not deal with the whole of the tasks in the value chain, but they only play a specific role and perform selected tasks. In business models that allow the introduction of new technologies, companies use new forms of searching for distribution channels and customer acquisition as well as increasing productivity (Gassmann, Frankenberger, and Csik, 2013). Innovations, technologies and Internet development force the creation of various new forms of business models, so that enterprises can increase profits from global operations and gain a competitive advantage over other companies. Along with the trade of products having a material nature, there was also the exchange of computer software and the use of online platforms.

With electronic commerce it is much easier to conduct foreign trade transactions, due to the creation of a new supply chain that differs from traditional international trade (International Trade Centre, 2017). Companies do not have to be located in a given geographic market, because information about a product or services is found on the Internet. Advertising costs may be reduced. The great importance of the digital revolution, very fast technological changes and e-commerce transactions lead to lower information costs, market entry for companies, and new opportunities for profit and acquisition of outlets. they are conducive to the development of international trade.

In the terminology of the World Trade Organization (WTO), the concept of electronic commerce, popularly referred to as e-commerce, concerns the digital exchange of goods and services, mainly using the Internet or computer networks (World Trade Organization, 2015a).
Thus, the concept of electronic trade and e-commerce can be used interchangeably. Electronic commerce includes the exchange of goods that subscribe to both material nature and digital goods in a way that enables "access to products" for consumers (business to consumer) and for entrepreneurs.

The concept of e-commerce covers both technological equipment, infrastructure, and information transmission processes. E-commerce applies to the entire industry sector, individual industries, producers and users, information exchange and business operations on the global market via the Internet (Mann, Eckert, and Cleeland Knight, 2000). There is a rapid development of the computer industry, which will have an impact on changes in the structure of the industry.

As part of e-commerce, the most common transactions are in the form of business to business (B2B), business to consumers (B2C), and have a small share in e-commerce, replacing customers to customers and business to government (UNIDO, 2018).

In the first research on the interdependence of using e-commerce and the productivity of companies, it was noted that companies that conducted online business decreased the transaction costs of their operations. The results of scientific research, which included companies from the European Union conducting business activity via e-commerce, showed that online exporters are more efficient, thanks to mainly improved stock policy (Duch-Brown and Martens 2018).

Such a fast growth in e-commerce is possible thanks to the development of the Internet, various forms of electronic payments. In the last twenty years, access to the Internet has increased on a global scale from 4% to 40% of the total population in the world (OECD, 2017). Electronic commerce accounted for almost 17% of total retail sales in China, while in the United States almost 9%. Investments in the development of financial technologies in China allow Internet users to use e-commerce. The largest e-commerce companies in China have created various forms of electronic payments (Chorzempa, 2018). For companies, the largest companies in the electronic commerce in the world Alibaba Group in China created services in the form of advertising.

Trade exchange involves various difficulties for companies related to the creation of a virtual store or online platform, and the preparation of this platform from the technical side, i.e. coding and editing images.

The most important part of e-commerce are the electronic transactions occurring between enterprises, which in 2015 reached the level of almost 90%, while transactions between enterprises and consumers account for only about 10% of the total e-commerce (Figure 1), (UNIDO, 2018). Electronic commerce in the form of transactions occurring between enterprises is many times higher than in the form of electronic transactions between enterprises and consumers.

According to UNIDO and International Trade Center, e-commerce accounts for around 12% of all international trade (UNIDO, 2017). The United States plays the leading role in e-commerce transactions, which reached USD 6.4 trillion in 2015, and China's transactions with enterprises worth almost USD 620 billion in 2015 ranked highest in the case of transactions between enterprises and consumers. The United States is one of the largest countries with the share of e-commerce transactions in the economy, in which the value of transactions amounted to over 7 trillion dollars in 2015. In e-commerce transactions, the forms of business to business exchange prevail. In Japan and in South Korea the share of business to business in total e-commerce amounted to 96% in 2015, 91% in the United States, 91% in Germany, 90% in Spain, 90% in Canada, 89% in France, and 87% in Australia, 76% in the UK, 69% in China (Figure 2).
The importance of emerging economies in e-commerce is growing. China occupies the largest number of people using the Internet (Pencea, Balgar, 2016). In China there is a rapid growth in retail sales over the Internet, innovations allow the use of more and more new forms of business. China is also one of the most important exporters of digital goods as well as services. In 2013, China's share in online sales in the world was 35%.
Such a large share in e-commerce in the world strengthens state policy in China in promoting e-commerce throughout the country, with particular emphasis on rural areas (Couture, Faber, Gu, and Liu, 2018). The share of e-commerce in China in GDP is the highest among countries in the world and amounted to 7.05% in 2015, followed by the following countries: Great Britain (6.12% of GDP); South Korea (4.7%); United States (3.32% of GDP); France (2.97%); Japan (2.77%); Canada (2.3%); Germany (1.97% of GDP); Australia (1.8% of GDP); Spain (1.68% of GDP) (Figure 3).

Figure 3 – The share of e-commerce in GDP in countries with the greatest importance of e-commerce

To measure the intensification of business to consumer transactions on the Internet, UNCTAD has developed an e-commerce index. The UNCTAD index contains the degree of security of conducting electronic transactions, which must be secured due to payments and personal data necessary to deliver goods or services, access to the Internet because the transaction is carried out online and digital products are also delivered electronically (UNCTAD, 2017).

The countries with the fastest development of business to consumer are Luxembourg, South Korea, and Japan. In these countries, the majority of consumers made purchases via the Internet. Electronic commerce in the form of business to consumer is possible due to the access of consumers to the Internet (Figure 4).
With the increase in the importance of e-commerce, countries are adapting their economic policy to the new conditions of conducting international trade. The European Union has adopted a policy of creating a digital single market (European Commission, 2015).

One of the most important issues in the regulation of e-commerce is the issue of collecting personal data through digital networks. A proposition to create the so-called digital sovereignty of persons and Digital Freedom Pass for the security of providing internet services (Snower, 2018). Along with the flow of digital services, the importance of the provisions on the protection of personal data has increased, in particular, the document of the Council of the European Union of 2018. General Data Protection Regulation (GDPR) (Mattoo and Meltzer, 2018). E-commerce leads to increased trade, and the flow of services, some countries around the world. The United States, the European Union and Canada are increasing the possibilities of access to Internet services while maintaining data security (Aaronson, 2012).

3. Electronic trade in the WTO
The exchange via electronic transmissions concerns goods and services; therefore, it is regulated in both the GATT 1994 and the GATS. The dilemmas associated with regulating the issue of e-commerce in the WTO forum concerned the question of qualifying digital goods in terms of goods or services. Panagariya proposed the definition of electronic transmission as a flow of services because there is no exchange of goods at the border (Panagariya, 2000). The issue of e-commerce was not included in the negotiation topics of the Doha Development Round, whose negotiations began in 2001 (Wunsch-Vincent, McIntosh eds., 2004).

In 1998, the definition of e-commerce covering both production as well as distribution and marketing activities on the market, i.e. sales and delivery of goods, as well as services by electronic means, was adopted in the work on regulations regarding e-commerce in the WTO (World Trade Organization, 1998). WTO activities for foreign trade regulation concerned the infrastructure necessary for the development of e-commerce. WTO activities in the field of international services were to cover the scope of the flow of services, i.e. the mode of delivery.
of services from one country to the other, or through commercial presence (Article I of the GATS), most-favored-nation clauses (Article II of the GATS), transparency (art. II GATS), increasing the share of developing countries in international service flows (Article IV of the GATS), national regulations and standards (Article VII GATS) and competition (Article VIII, Article IX of the GATS).

In terms of trade in goods, issues of market access, rules of origin and standards were discussed. In the case of intellectual property protection in e-commerce, protection and enforcement of copyright, trademarks, new technologies and access to technology. The WTO was to draw up a program on the impact of e-commerce on the economic development of developing countries.

The moratorium on the non-application of duties in e-commerce was agreed in the form of a decision of the Geneva Ministerial Conference of 1998 and was subject to renewal at the next WTO Ministerial Conferences every two years. In December 2017, the WTO members adopted a declaration on e-commerce. At the eleventh Ministerial Conference of the WTO in Buenos Aires, there were problems with the renewal of the moratorium on the non-application of customs duties in the case of electronic transmissions.

In the case of decisions on the work on e-commerce, a draft decision was prepared to extend the decision (World Trade Organization, 2017a) on the non-imposition of customs duties for electronic transmissions to the next ministerial conference in 2019. The attempts to renew the mandate are contained in document WT/L/274.

WTO member states concentrated in the African Group, which is formed by a group of countries at the World Trade Organization multilateral trade negotiations, recognized that the renewal of the moratorium should be subject to discussion, and states should have the right to establish national regulations and data protection and security of electronic transactions (World Trade Organization, 2017b). Proposals for e-commerce were submitted by countries such as Japan, Russia, the European Union, Costa Rica, Singapore, China, Bangladesh, India, and the African Group.

In the next WTO documents, the decision was made not to introduce duties on "electronic transmissions" until 2017 (World Trade Organization, 2015b). Progress in regulating e-commerce has not been achieved at the Ministerial Conference in Buenos Aires in December 2017. India, in retaliation for the lack of concessions from the United States in agricultural trade, has not signed a moratorium on the collection of customs duties for electronic transmission (Shawn, 2017). Due to the lack of arrangements for the adoption of an agreement in the field of e-commerce, some countries such as Australia, the United States, and the European Union have decided to draw up regulations in this area according to national regulations or in several-party agreements. Work on e-commerce is important for high-tech companies like Apple or Google.

The growing importance of e-commerce has led to the inclusion of this topic in the work of the World Trade Organization. These works began in 1998 at the Second Ministerial Conference in Geneva (World Trade Organization, 1998). During the Second Ministerial Conference, the states accepted the commitment to develop the WTO program on the development of electronic commerce in the world, in particular taking into account the economic interests of developing countries and not to introduce tariffs for electronic transmissions.

The WTO consultation process with countries on regulating e-commerce at the multilateral level has begun. The proposals of Russia, Japan, the European Union, Singapore, China, Bangladesh, and India have influenced. The issues of e-commerce were included in Agenda 2030, as an objective 9 for innovation, due to the great importance of e-commerce in the economic development of countries.
The skeptical approach to regulating the issue of e-commerce in the WTO results from worries of developing countries about the deterioration of their competitive position in international trade due to the poor infrastructure in these countries.

UNCTAD data shows that companies in most of the developing countries do not use the opportunity to sell on the Internet. The developed countries and emerging economies, China and Russia play the most important role in e-commerce. Internet trading platforms can play a large role in accessing international global trade. Amazon, Alibaba and eBay platforms offer companies from developing countries the opportunity to register as part of a given platform and provide services (UNCTAD, 2015).

Developing countries in the WTO forum, thanks to the need to renew the moratorium on e-commerce, want to gain greater market access to developed countries for other products. The issue of supporting the moratorium on e-commerce by developing countries depends on equipping these countries with technological factors, as well as resources in the form of knowledge capital to service a variety of technical devices.

The rapid development of e-commerce requires increased digital security related to the appeals procedure securing consumer interests as well as the quality of goods. Digital technologies lead today to changes in business models. The functioning of the digital economy requires multilateral regulation in the WTO.

Trade in the form of e-commerce still requires regulation on a global scale at the World Trade Organization (WTO). The development of the digital market, however, is very diverse between developed and developing countries. The fast growth of digital connections is observed in Africa, South America.

With the skeptical attitude of developing countries to regulating e-commerce in the WTO and retaliatory actions in multilateral trade negotiations resulting from the lack of concessions in the liberalization of agricultural trade for developing countries, the importance of bilateral agreements is growing. Interest in regional agreements also results from the development of the digital revolution (OECD, 2017). In many regional agreements, provisions have been made on e-commerce and digital services. In the first regional trade agreements, starting from 2001, they contained provisions on electronic commerce (e-commerce). Issues of e-commerce are provided for in contracts such as TPP, which have not yet entered into force.

The provisions on e-commerce were included in the European Union's trade agreements with Singapore (Chapter 8) and Vietnam (Chapter 8). The Free Trade Agreement with Singapore was signed on 19 October 2018, with particular emphasis on data protection. These provisions apply to digital trade. In the case of the Framework Agreement on Partnership and Cooperation between the EU and Vietnam, signed on June 27, 2012, the provisions of the agreement concerned the issues of electronic signature, rules for storing information, consumer protection in e-commerce. The conclusion of the provisions on e-commerce was a priority for developed countries. In 2008, the European Union signed the Cariforum agreement, which included provisions on e-commerce. The decision on e-commerce was not included in agreements signed by Least Developed Countries.

4. Summary and Conclusions

Electronic commerce in the WTO forum was regulated in the form of a decision of the Ministerial Conference in Geneva in 1998, called a moratorium in which there was a commitment not to set tariffs on electronic transmissions. This moratorium has been subject to renewal every two years at successive ministerial conferences since 1998. For the first time, such important difficulties in extending the moratorium at the ministerial conference in Buenos Aires resulted from the difference of views of WTO member countries on the further liberalization of international trade, in particular, agricultural trade. Developing countries, in
particular India, are using the possibility of blocking work on regulating e-commerce in the WTO in order to strengthen their role in negotiating other issues in multilateral trade negotiations. The increase in the importance of e-commerce cannot mean the exchange of goods and services with poor regulation of the security of personal data being transferred. Furthermore the development of e-commerce cannot mean an offering in the sale of products exclusively by electronic means, as the consumers are also accustomed to traditional methods of sales and payments when exchanging goods and services.

References


17. Rupali B., The Digital Economy: Promise and Peril in the Age of Networked Intelligence by Don Tapscott Reviewed by Rupali Babu, Retrieved from https://pdfs.semanticscholar.org/a832/0ab8d4a6c0a1d0578c6e01288b03cb00de4a.pdf.


