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Regulation of International Trade in the Digital Economy: a New Regulatory Paradigm

This study systematizes the main development trends and regulatory challenges of international exchange in the context of digitalization and the continuing change in the structure of cross-border digital trade. The article establishes the need to improve international trade regimes regarding cross-border exchange of data. The paper also shows the undeniable benefits of digitalization for the further development of international trade, but further work is needed at the multilateral level to harmonize national standards for cross-border data exchange, export regimes for digital goods and services, as well as data privacy and security.

Key words: *cross-border data transfer*, *digitalization*, *international trade*, *digital services*, *harmonization*, *WTO*.

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Introduction

The uneven technological development of individual countries of the world and the liberalization of international trade are both parallel and contradictory processes. In the traditional economic literature [1] the problems of liberalization were considered mainly in the context of the evolutionary changes that encompassed international trade in the emerging system of multilateral regulation under the World Trade Organization (hereinafter — WTO). The development of the Internet, as well as unlinked cross-border data flows between countries, has led to a change in approaches to traditional industry barriers to market entry and forms of cross-border technological exchange, which were used previously [2]. For ex-

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ample, the use of customs duties for electronic transactions, for which a moratorium was introduced in 1998 and is still in force, has been brought up to date within the WTO.

Digitalization Trends and the Regulation of International Trade

The need to develop new approaches to regulating international trade in a digitalized environment is due to market failures as the digital economy evolves. In particular, market distortions can occur due to the abuse by technology giants and global digital platforms (hereinafter — GDPs) of their monopolistic market position, their use of unfair trading practices, and their focus on mergers and acquisitions with traditional market players. Therefore, the elimination of market distortions requires the development of internationally coordinated competition policies, which, however, may increase protectionism in international trade and lead to the exacerbation of trade conflicts between countries.

With digitalization, strategic investment and trade policy becomes a critical issue for leading countries. As new disruptive business models emerge, countries are seeking to strengthen their competitive advantage by increasing public investment in the digital sphere, primarily due to the rapidity of technological change, which significantly shortens the return on investment. In addition, the GDPs pose new challenges to state tax policy, as they conduct tax optimization in a digital environment, which leads to a reduction in state revenues. Finally, in addition to economic issues, digital colonialism is an important problem, where uncertainty with the degree of the digital readiness of a developing country leads it to the most disadvantageous parts of the global value chains (hereinafter — GVCs).

We point out that the growing digital gap between developed and developing countries is causing the latter to become mere rent payers and "performers" for the developed countries, which have taken a dominant position in the digital economy. Therefore, the development of a new system of multilateral regulation, in addition to new rules for cross-border electronic commerce, which should certainly take into account the need to protect the rights of consumers (with asymmetric information and greater awareness of companies, not consumers, about their goods) must also take into account the choice of developing countries of their foreign partners.

An important barrier to building an adequate system of regulation of international trade is also the problem of disclosure by global platforms, which leads to new problems of statistical accounting, taxation and regulation of international competition.

The digital transformation of the world economy widely described in the literature of recent years[3, p. 7; 4], has led to the mainstreaming of new issues of intel-

lectual property rights protection under the WTO, in particular those related to data ownership, patentability and patent protection of databases. Differences in the interpretation of various WTO provisions aggravate trade disputes between countries, especially considering that, as the digital divide widens, the differentiation of conditions for the protection of intellectual property rights in individual countries is also increasing. In this context, the Agreement on Trade-Related Aspects of Intellectual Property Rights (hereinafter — TRIPS) is no longer as effective as it once was.

Overall, the revolutionary changes in technology and the multi-sectoral reach of the digital economy require a review of relevant trade and investment policies that will enable specific companies in different countries, especially developing ones, to take greater advantage of digitalization.

Directions for Regulation of International Service Trade in the Context of Digitalization

The dynamic development of global services markets has led to problems of their classification and evaluation, which is exacerbated in the context of digitalization, since, for example, electronic content from one country reproduced in another country from a digital platform would be considered international service trade. Or let us consider engineering services that provide foreign production and take part in the global commodity trade. In recent years, there has been a serious blurring of the boundaries between service and production activities [5], because, for example, automobile manufacturers often offer additional services, such as after-sales service. In turn, new 3D printing technologies have contributed to the emergence of new hybrid products that are difficult to classify as services and as goods, but this intertwining of the two undoubtedly drives productivity growth.

With international service trade annually outpacing international commodity trade by 4.6 per cent during 2005–2017, the WTO predicts that services will account for up to one-third of international trade as early as 2040. And among other GATS trade regimes, commercial presence and cross-border delivery account for 58.9% and 27.7%, respectively, of all international exchange of services[6, pp. 14; 22–25]. Significant growth in service trade in recent years is due to the fact that, in a digitalized environment, there is no need for physical convergence between producers and consumers of services.

Increased competition in international service trade through the involvement of large developing countries leads to a revision of the rules of trade by developed countries. This is often motivated by the opening of borders for the exchange of services, as evidenced by the new United States-Mexico-Canada Trade Agreement (hereinafter — USMCA) involving the prohibition of duties on imports of products in electronic form. In turn, developing countries, such as India, impose restrictions on the goods that global online platforms can sell domestically. Develop-

ing countries want to increase their share of global services markets, and negotiating appropriate trade agreements is complicated by the lack of consensus between developed and developing countries (and even within a developed country group).

An important factor for the development of international service trade is the assessment of trade costs, which are twice as high as in trade in goods, due to both the complex trade policy regimes applicable to service trade and the need to ensure constant contact between consumers and service providers. Cross-border delivery reduces trade costs and allows for the export of more services, which is especially important for small and medium-sized enterprises in developing countries.

In addition, although new barriers for the export of services have emerged in the digital sphere in a number of service sectors, trade policy reforms in recent years have generally helped to reduce barriers to international service trade and restrictions on cross-border investment in digital infrastructure. Digitalization has led to the export of previously non-traded services, which are now delivered remotely over long distances, and some services have now become "hyper-traded" in international exchanges due to the gradual reduction of trade costs (education, medicine, business outsourcing, retail, etc.).

Models of international service trade have also changed under the influence of digitalization. Online sales, mobile and e-banking are becoming increasingly influential, so the role of overseas divisions in providing some services is declining, and the importance of cross-border online sales of services is increasing. These changes bring up new regulatory challenges for the international exchange of services, such as the need to liberalize cross-border data flows (hereinafter — CBDF), since protectionism in this area slows down international trade as a whole. The importance of barriers to international service trade has caused countries to open their markets to competition from foreign service providers in recent years. However, the unilateral opening of such markets has proven ineffective, so international cooperation in this area allows for convergent binding of countries in trade agreements while guaranteeing the openness of global services markets. So far, we have not seen any positive shift in cooperation within the WTO, as the level of market opening in member countries remains low. In contrast, however, regional trade agreements have worked out a broad range of market access to services.

The WTO is gradually adapting trade policy, and in 2019, 76 member countries launched negotiations on cross-border e-commerce, maintaining the priority of the tariff moratorium on electronic transactions by the United States of America and developed countries of the European Union (hereinafter — EU), which was established back at the WTO Ministerial Conference in 1998 and has been repeatedly renewed, being actively disputed at the same time. The position of net exporters of digital goods and services was that the moratorium should apply to all digital content, be permanent, and such an approach would reduce structural distortions in the market. Leaders of developing importing countries believed that

the moratorium should apply only to electronic media and that it should be temporary. The position of developing countries was that the permanent nature of the moratorium would reduce their ability to protect domestic markets for goods/services sold on the Internet.

At the same time, tariff rates in developing countries — net importers — are much higher than in developed countries. WTO estimates point to a global loss of tariff revenues of more than $750 million a year, while more than 90 per cent of that loss will occur in developing countries [7]. The UN Conference on Trade and Development (hereinafter — UNCTAD) methodology covers a broader range of digital goods and services than the WTO one, and in this case developing countries lose $8 billion (for reference: developed countries lose 212 million U.S. dollars) [8, p. 72].

The moratorium threatens fair competition between domestic and foreign digital service providers, with domestic providers, and especially small digital start-ups, being discriminated against to a greater extent by the fact that they pay domestic consumption taxes, while foreign providers pay no such taxes. The consequence is the foreign offshoring of domestic digital startups, reducing both the number of jobs and domestic tax revenues. Therefore, the moratorium in question should be supplemented by provisions on taxation (the constructions of the moratorium are obsolete precisely because of the tax aspects, although the WTO has nothing to do with domestic consumption taxes). The new agreement should clearly define a flexible and amenable to permanent changes list of digital products for which zero duties apply.

With digital technology leading to the expansion of international service trade, its liberalization is a significant challenge, because regulatory measures for the export of goods are much simpler than those for the export of services, which are more sensitive to other economic policy issues. At the same time, significant progress in the regulation of international service trade (WTO Agreement on Financial Services, 1999; WTO Agreement on Telecommunications Services, 1998; the General Agreement on Trade in Services (GATS), following the Uruguay Round negotiations) was made in an environment where there were no global digital platforms and no Internet. The new system of regulation of international service trade under the conditions of digitalization must take into account that under the influence of digital technologies a significant reduction of trade costs in the international exchange of services is achieved, the boundaries between services and goods are erased and new opportunities for firms to outsource their services activities abroad arise.

Solution to the Problem of Market Openness in International Trade in Digital Goods and Services

Achieving market openness is one of the key challenges of regulating and further developing international digital trade. As data-driven business models evolve, in-

ternational trade is expanding, but it is also becoming more complex[9, p. 35]. Liberalization of trade regimes is necessary to reap greater benefits from digital trade but in a slightly different context. Data moves barrier-free on the Internet and reaches consumers globally, so companies of all sizes and types have new opportunities to enter new markets and create new products. However, to access these markets and consumers, products/services face several requirements (consumer protection, security and privacy requirements, compatibility of electronic payment systems, technical requirements, etc.).

The approaches of countries to the regulation of these aspects are differentiated, and to reduce the degree of heterogeneity in regulation, harmonization is necessary, which will ensure the compatibility of different approaches. Meanwhile, even at the WTO level, there is no consensus on which aspects of international digital trade regulation are the most significant. So, there is a dilemma about what objects should be covered by negotiations — only goods sold online or also digital services. We should also note the limitations of the GATS agreement on the regulation of data flows that enable digital commerce, because it is still not clear how to classify some new digital services — for example, cloud computing.

Many WTO members, within 70 free trade agreements have already made some digital trade commitments to improve market access for services, intellectual property protection, and data openness. The most recent known agreements — USMCA, CPTPP — have separately spelt out obligations not to require localization of cross-border data flows, which is significant progress, but they are insufficient due to the regulatory heterogeneity in cybersecurity and data privacy we mentioned above. The dominant regulatory position remains that domestic regulatory objectives will be undermined if data leaves their jurisdiction, so governments will seek to limit cross-border data flows and seek to apply for exemptions in this area. Therefore, alternative strategies that take into account the motives of countries to limit cross-border data flows need to be developed within the framework of the WTO.

Non-discrimination as a basic principle of international trade should ensure equal opportunities for companies in international digital trade regardless of the country of origin. Also, non-discrimination should involve treating digital and traditional commerce alike, but it is increasingly difficult to determine whether a product/service is digital (for example, it is difficult to determine whether a ride using the Uber taxi aggregator is an intermediary or a transportation service). Since the principle of non-discrimination is interpreted differently with respect to services and goods, the obligations to apply national regime may also vary.

The most important aspect of regulating international digital trade is to ensure the compatibility of individual countries' technologies, as well as their approaches to regulation. Open and interoperable platforms lead to increased competition and innovation, they promote consumer welfare, but the openness of GDPs also reduces the ability of companies to develop new products and, therefore, access to

them by consumers. However, it is still necessary to follow the path of international harmonization of national standards to remove barriers to cross-border data transfer and ensure the spread of smart factories and the sustainability of digital GVCs.

Improvement of Multilateral Regulation of Cross-Border Data Transmission

Nowadays, huge amounts of data are transferred between GDP users in different countries, and in recent years the trend of CBDF growth in the world has been increasing (in 2005–2017 cross-border data flows increased from 5 to 704 terabytes per second, and it is estimated that in 2021 they will reach 2 thousand terabytes [10, p. 35]). However, little internationally comparable or empirical information on the extent of CBDF yet exists, so the analysis becomes more complicated. Traditionally, the state accounts for cross-border transactions in the balance of payments and customs, but when data cross borders, the concepts of jurisdiction and territorial sovereignty are not obvious, as are data rights, access, and control, which are largely concentrated on global platforms with no explicit national ownership. The GDPs avoid the impact of national regulations and minimize their costs through data [11].

CBDF has a significant transformative effect on international trade by enhancing international e-commerce opportunities, enabling growth and new types of digital services, facilitating the digitization of manufacturing enterprises and accelerating the product life cycle, increasing the participation of countries and companies in the GVC, and thus simplifying business practices in general.

Businesses can use data to increase the value-added, and cross-border data transfer will facilitate this, so CBDF promotes economic activity. At the same time, there is considerable uncertainty at the present stage about the regulation of CBDF. We have already pointed out that different countries develop their data security and privacy policies, resulting in substantial regulatory heterogeneity. In turn, blocking off the CBDF by some countries is a form of protectionism, which leads to economic costs in international trade, as well as the "balkanization" of the Internet. In turn, data protectionism measures involve restrictions on cross-border e-commerce and online payments, barriers to cryptocurrency trading, restrictions on the use of artificial intelligence, and blocking companies from analyzing and aggregating global data [12, p. 4].

It is worth noting that the openness of the CBDF will largely determine the degree of impact of digital technology on international exchange. So far, there are no multilateral rules on CBDFs, although there is much progress on these issues at the level of regional agreements. The difference in the approaches of individual countries to CBDFs stems from the fact that these approaches were once developed to ensure confidentiality, financial stability and consumer protection. There-

fore, we should not expect serious progress in CBDF harmonization in the coming years, but the global digital economy should not be allowed to become unnecessarily fragmented.

As we pointed out earlier, the strategy of data localization, i.e. limiting it within national borders has become widespread in CBDF regulation. The increase in the cost of CBDF, as well as its complication and reduction worsens the competitive market environment, especially the position of small and medium-sized businesses and foreign companies in the domestic market. Such "digital protectionism" leads to significant costs for the economy, as evidenced by the experience of countries with active data localization policies (China, India, Brazil, Republic of Korea, EU countries). These countries are guided by considerations of "digital mercantilism," which suggests the positive role of data localization in the development of high-tech industries. This approach is mainly due to the complexity of traditional tools of trade protectionism.

One of the problems with CBDF multilateral regulation is the lack of an international agreement to recognize ownership of data because the departure of data from jurisdiction makes the concept of ownership meaningless. Often this aspect is the reason for the localization of data by many countries. However, proponents of CBDF liberalization believe that localization is a barrier to economic growth and business innovation and increases the cost of doing business because businesses are forced to make investments in local digital infrastructure. But developing countries are reluctant to relinquish control of CBDFs, with no additional competitive advantage in the face of digitalization and the low prevalence of the latest digital technologies in their domestic markets.

Conclusion

Thus, important aspects of multilateral regulation in the current environment are as follows: the need to negotiate with global digital platforms, which will help create competitive digital industries in developing countries; the desire for equitable distribution of the benefits of CBDF among different groups of countries; the development of a special agreement on CBDFs; the encouragement of individual countries to abandon data localization strategies by developing and implementing alternative regulatory strategies on the WTO platform.

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Регулирование международной торговли в условиях цифровой экономики: новая парадигма регулирования

Данное исследование систематизирует основные тенденции развития и проблемы регулирования международного обмена в контексте цифровизации и продолжающегося изменения структуры трансграничной цифровой торговли. В статье обосновывается необходимость совершенствования режимов международной торговли в отношении, в частности, трансграничного обмена данными. В работе также выявлены неоспоримые преимущества цифровизации для развития международной торговли. Однако необходима дальнейшая работа на многостороннем уровне для согласования национальных стандартов трансграничного обмена данными, режимов экспорта цифровых товаров и услуг, а также конфиденциальности и безопасности данных.

Ключевые слова: *трансграничная передача данных*, *цифровизация*, *международная торговля*, *цифровые услуги*, *гармонизация*.

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