

THE ROLE OF TRADE POLICY IN ENABLING ACCESS TO COVID-19 VACCINES

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ABSTRACT

The aim of this paper is focusing on the role of the trade policy measures in managing the faster and more successful allocation of specific products such as vaccines in the midst of the COVID-19 pandemic. The analysis particularly points at the specifics of the pandemic, and their impact on the choice of trade policy measures. The priority was given to the decrease of non-tariff measures in relation to tariffs by creators of the trade policy. After the invention of the COVID-19 vaccines, the possibility to distribute them to all parts of the world without barriers and obstructions was significantly hindered in a several ways. The role of international trade in that process could have been jeopardized by many barriers in trade. The first notable barriers were tariffs as the best-known trade policy measures. Very soon they were followed by Non-tariff Measures which have become more recognizable and frequent. One part of these barriers is related to numerous logistical obstacles as well as to the elimination of administrative non-tariff barriers caused by inefficient work of customs authorities and related inspectorates.

Keywords: vaccines, trade policy, tariffs, Non-tariff Measures, Trade Facilitation Agreement, green lanes, distribution

JEL: F10, F13

DOI: 10.5937/intrev2304219P

UDC: 339.564:615.371

339.542.2

COBISS.SR-ID 133936905

INTRODUCTION

The global outbreak of the Corona virus, known as Pandemic in 2020, caused the world trade to be faced with the deepest global recession since the Second World War and the decrease of the world trade with the sharpest decline of nearly 16 percent during the second quarter of 2020 [1]. It was even more intensive than the effect of the global financial crisis. The world trade suffered the collapse in world services more obvious than the world trade in goods.

The COVID-19 crisis had a strong impact on bilateral trade flows, particularly stressed for countries which had been members of regional trade agreements during pre-Pandemic period. The negative impact was proven concerning governmental actions and the highest negative impact was noted in the case of exports between high-income countries as the example of countries with the similar income levels [2]. The COVID-19 crisis has provoked high level of the overall uncertainty, which was reinforced by the speed of the onset of the crisis itself [3]. These authors followed intensity of the economic uncertainty` increase during the first few weeks after the Crisis started its spreading. About a half of the output contractions during very short period at the start, reflected a negative effect of that uncertainty which was provoked by COVID-19.

There are some opinions that real depth of the global crisis was concealed by government interventions [4]. These interventions in the trade flows had numerous effects, positive and negative. One part of the trade costs was provoked by trade policies at the national levels, mostly presented by tariffs and Non-tariff Measures (NTMs). Although the trade costs recorded sharp decline during last two and a half decades, they became higher in a moment of the pandemic outbreaks. Comparing trade costs in advanced economies in 1995 and 2018, they were decreasing gradually and one-quarter lower in 2018 [1]. However, the Pandemic provoked new rises of trade costs.

The fact that there was a discrepancy between the number of countries exporting and countries importing vaccines and the elements needed to produce them, put the trade in the focus of many research papers. First of all, the focus was on possibilities of trade policy to accelerate the distribution of vaccines and their components around the world in a short period. Trade policy instruments used in that period were oriented towards market access improvements by reducing tariffs and with fostering activities at-the borders.

After the beginning of the complex vaccine manufacturing process and especially after the vaccines trade has started, the World Trade Organization (WTO) has noticed two issues that could be the frame for the main characteristics of these products further production and trade. The first issue was oriented towards tariff barriers in production of vaccines, because it was obvious that many inputs necessary for the vaccines production process had been burdened with higher tariff rates than 5%. The WTO expressed concern that these high tariffs as trade barriers could slow down the production process, increasing the costs of vaccines production and they could impede even the trade flows of these components and finished products over the borders [5]. Members of the WTO were asked to cooperate and to give a support for inputs tariffs decreasing, or their elimination. The other issue refers to the problem of the vaccines trade all over the world, because these specific products and their components faced many bottlenecks in trade, caused by the implementation of the heterogeneous group of NTMs. One of the possible solutions was seen in the implementation of the latest WTO Trade Facilitation Agreement [6]. Only the TF Agreement with its provisions could change these problems scope and that role of this Agreement and the whole TF Process were recognized by the WTO.

LITERATURE REVIEW

Although it was not expected that the Crisis period would start with the protectionism increase [7], some elements could be found as parts of the trade policy and its applied instruments. Some authors found that during Pandemic, border controls on agricultural trade increased [8]. They found the cause of that situation in the lack of the formal coordination between the World Health Organization (WHO) and the WTO, concerning their intention to prevent the cross-border transmission of the virus. At the very beginning of the Pandemic, during short period from March to July 2020, even 90 countries implemented strict measures for pandemic related goods [9]. The source of the problem was not only their restrictiveness, with the aim to prevent the virus spreading, but the fact that they were uncoordinated in implementation process, too.

The role of trade during this Pandemic crisis and especially when vaccines appeared should not be observed as the problem, but as the solution, or at least, the part of the solution [10]. The COVID-19 crisis has provoked adjustments for all levels: multinational, regional, national and even for trade companies all over the world. These companies recorded serious problems, but trade companies selling food products achieved opposite, positive results [11]. During the COVID-19 Crisis were implemented numerous trade measures, consisting of tariffs and NTMs. The effects of their implementation were both, facilitating and restricting too.

At the very start of the COVID-19, instruments of trade policy became important response to the health crisis, used dominantly for Medical supplies and Food. This could be considered as trade policy activism, although these instruments were used differently, showing great heterogeneity across countries. The aim of their implementation in some countries was the exports restriction, as well as imports facilitation. Some countries implemented only instruments for one of these aims` achievement. There are also even countries implementing no instruments of trade policy [12].

After the outbreak of the Pandemics, until August 2020, it was implemented 384 trade measures as the response of trade policy to Pandemic. But, between these measures, NTMs were dominant with the number of 283. Some of these NTMs had the facilitating character, only 104 of them, but the other 179 NTMs, had the restricting impact and they were dominant. Quite the opposite character was the use of tariffs — they were mostly Trade Facilitating with the number of 97 and only 4 Trade Restricting [13]. Some of these Trade Facilitating measures were applied mostly on imports of goods, in the form of tariffs exemptions, easing non-automatic licensing and the Sanitary and Phytosanitary requirements for Food and Medical Supplies, among which were vaccines and components for vaccines production. At the contrary, the Trade Restricting measures mostly were implemented towards exports with the aim to prevent shortages [13].

One of the many ways to reduce these barriers in trade was the introduction of e-certification of SPS measures. In many countries the SPS approach achieved its acceleration using digital technologies for exchange of the SPS electronic certificates and for the verification of SPS compliance [14]. Individual solutions mitigated the consequences of increased restrictions. At the start of the Pandemic, seeing the negative effects especially at the border crossings, “green lanes” were established, as the contribution for expediting the Essentials movement [15]. The CEFTA 2006 economies established CEFTA Coordination Body, including CEFTA Contact Points, to establish “Green priority corridors” and “Green priority border/common crossing points” [16]. The “Green priority corridors” had the aim to give the priority for Essentials, mostly Food and Medical supplies.

Trade is seen as the opportunity to start the recovery after the COVID crisis, especially on the Emerging markets and Developing economies. However, the increase of the trade`s role could be burdened by very high trade costs, observed in recent few decades. The main trade costs are caused by the transport and logistics at one side and cumbersome at-the border procedures [1]. Broadly defined trade costs are all costs caused by the transportation of goods, both, freight and time costs, trade policy barriers both, tariffs and non-tariff barriers, information costs, costs provoked by the usage of the different currencies, legal and regulatory costs and local distribution costs as wholesale and retail [17]. The existence of national border is the source of high trade costs, reducing the trade between industrialized countries by 20-50 percent [18].

THE MULTIFUNCTIONAL ROLE OF THE TRADE IN VACCINES

Trade has the dominant role in enabling access to COVID-19 vaccines, because the production of them is not organized in all countries in the world. On the contrary, only a few producing countries are the source of vaccines all over the world.

The issue of vaccines distribution in the moment they have appeared, provoked other issues and implications for public policies and governments of many countries. Global distribution of vaccines could be monitored from three aspects concerning three mutually competing distribution strategies: vaccine nationalism, vaccine diplomacy and global initiative [19]. Some authors have documented the existence of the small club of vaccine`s producers, caused by their production delays at the beginning of the 2021. This had the consequences in forms of Vaccine Nationalism, such as export curbs which should be decreased, or minimized by policies which should enable more production, fluent distribution of vaccines and all ingredients necessary for their production and other items important to deliver

vaccines [20]. The term vaccine nationalism could take the form of obvious export bans or any forms of limits, with the aim to increase domestic availability of vaccines at the expense of foreign supply [20].

Almost all countries in the world were importers of vaccines, 208 of them, but the number of exporting countries was only 90. The production of vaccines was geographically very concentrated in a few countries. Regarding the export value, the biggest exporters, the first ten of them, were exporting the value of vaccines of about 93%, or 80% of volume [21]. Only one country, as the top exporter, Ireland, exported 28% of global vaccines export value. The side of top importers, although not concentrated as previous one, also was pointing a few significant importers, as USA with 24% of global imports [21].

The importance of the trade role is reflected not only in the distribution and warehousing of already made vaccines, but also in the distribution of inputs, as well as in the primary and secondary packaging that has come from different sides. These inputs and elements needed for the vaccines production, preservation and distribution, are very heterogeneous: stabilizers, preservatives, antibiotics, freezers, cold boxes, vaccine carriers, dry ice, etc.

These vaccine inputs have the origin from a very small number of countries. At least, we can conclude that global markets for inputs are highly concentrated. Only five exporters of these inputs, the EU, USA, Singapore, China and United Kingdom, provided as much as three-quarters of them, during the period 2017-2019. If the inputs for boosting the immune system are added, then the 80% of their origin is concentrated on only a five countries: USA, EU, United Kingdom, China, and Japan [20]. These facts point out the importance of normal producer supply chains functioning.

The trade in vaccines was faced with many obstacles which had to be eliminated, or at least diminished during a short period because all these obstacles could endanger the health of people around the world. The first item was connected with tariffs as the basic element of the trade policy measures, but the challenge of applying NTMs was far more confusing, considering their heterogeneity. And at the end, the logistical barriers, firmly connected with low level of trade capacity in many countries, reflected in the work of customs authorities and related services.

The following data and examples explain the impact and indication of the broad range of measures which could be used by the trade policy to prevent more dramatic consequences, especially during increasingly frequent crises in last few decades.

TARIFFS AS BARRIERS IN VACCINES TRADE

The first element in the creation and trade policy measures implementations certainly are tariffs. During the second half of the XX century, tariffs ceased to be a limiting factor for trading. The trade costs decrease is one of the trade growth's sources. According to some opinions, trade costs make the cross-borders traded goods twice as expensive as domestic goods. And this is not due to high tariffs, because tariffs have the share of only one-fourteenth of average trade costs [1].

During the COVID-19 crisis it was expected that tariffs on vaccines would not have intensive impact on trade decrease. The simple average tariff level for vaccines was only 0.76%, while the average tariff in overall trade was 7.1%, approximately ten times higher. If we add the fact that even four-fifths of 183 countries did not apply tariffs on vaccines imports, then the conclusion that tariffs did not represent a significant barrier was proved [21].

But, there are some differences. Tariffs on vaccines are not the source of important barriers, comparing to tariffs for the import of inputs necessary for the vaccine's production, distribution and administering. Tariffs on inputs created obstacles in trade and became a source of pressure on world prices' increase. Average world tariffs ranged between 2.6-9.4% for numerous vaccines inputs, as stabilizers, antibiotics, preservatives [21]. The average tariff level between 4.4-4.5%, for syringes and needles was implemented for the category of vaccines administering. And for the distribution of vaccines and packaging, high tariffs of even 12.7% stand out [21].

Applied high tariffs for inputs also remained and it was registered by the WTO, during the autumn 2021. However, the WTO attitude mostly was oriented towards TF Agreement provisions, with the aim to remove some of NTMs as important barriers to trade in vaccines. Tariffs in modern times are not any more observed as barriers to trade with hard impact [22].

Non-tariff Measures

Besides its specifics, pointing its uniqueness, the Crisis has shown some similarities with other economic crisis, especially by analyzing the NTMs. They are a part of the broader group called trade policy measures, which includes this heterogeneous group, as well as tariffs. These trade policy measures have been implemented mostly on Essentials, but even on a small group of non-essential products. These Essentials were Food and Medical Supplies.

After the outbreak of the Pandemic, it was noticed that over 280 NTMs were in use in even 140 countries. Their number was increasing during the time and during the springtime 2021, their number was even 323 [23]. These barriers had different effect on trade. Mostly, they have been trade restricting, with numerous export restrictions with the aim of preventing shortages of Essentials at domestic markets. Their trade restrictive character was supplemented by the implementation of very strict Sanitary and Phytosanitary Measures. These Measures were implemented with the aim to prevent the entrance of the goods of inadequate quality and degree of safety. However, these export restrictions, impeded access to vaccine inputs and could endanger the export of already finished vaccines.

Export measures were dominantly export restrictions oriented towards constraints of the export quantity with more than 95% [24]. In recent economic history, during the Crisis with commodity prices increases during 2006-2008, the export restrictions didn't provide the reduction of prices on domestic markets as potentially positive result. They only raised the level and vulnerability of world prices, and the aim of achieving security on their markets was questionable. The Global Trade Alert's advice is oriented towards narrowing the gap which could be created in the situation like this, between supply and demand for these products, instead of finding solutions in imposing export cubs [25].

Some of NTMs had a trade facilitating impact, expediting trade flows of Essentials and they are connected with many initiatives of the international institutions and with the implementation of the TF Agreement of the WTO. This Agreement was adopted by the members of the WTO in 2013 and entered into force in 2017. It is a result of a long negotiating process focused on the simplification, modernization and harmonization of export and import procedures and processes. For its implementation the main pillar are customs administrations all over the world and their mutual coordination and cooperation with the aim to expedite the movement, clearance and release of goods in trade [26].

Although many steps were taken, UNCTAD estimated that until the March 2021, many restricting NTMs were not any longer implemented, but with the increasing vaccines trade, some new NTMs have appeared, concerning the vaccines trade [23].

Data from March 2021 indicated the expected reaction of Developing countries, which were uniformly interested in a distribution of the produced vaccines (Fig. 1). Measures they were implementing, proved to be only Trade facilitating. Opposite to them, developed countries were primarily focused on obtaining vaccines for their own markets, implementing some of the trade restrictive measures.

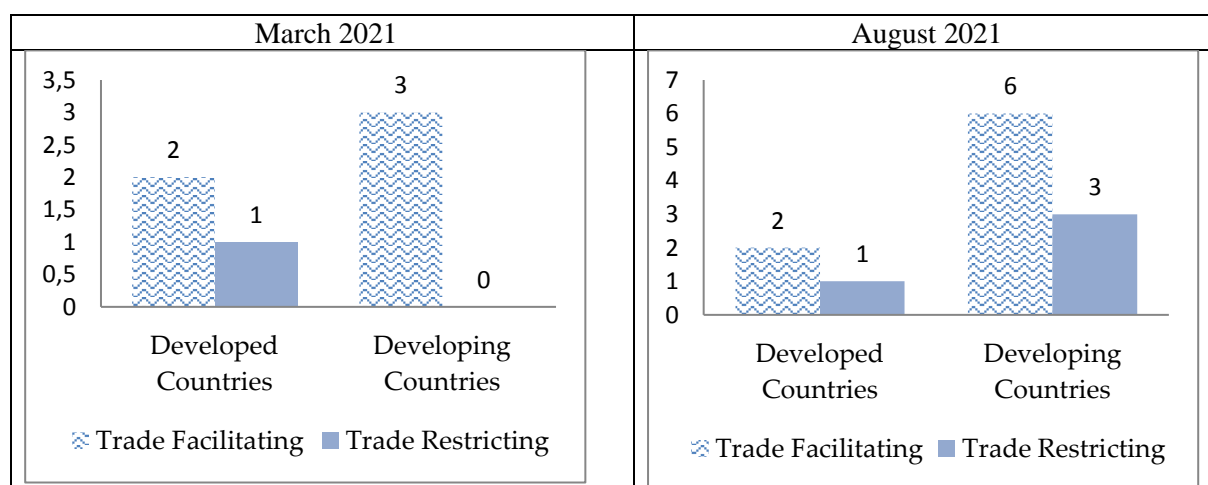


Figure 1. Non-tariff Measures on COVID-19 Vaccines

Source: UNCTAD, COVID-19 and NTMs, Internet, <https://unctad.org/topic/trade-analysis/non-tariff-measures/covid-19-and-ntms>, (27.03.2021.), p. 1.

But the situation was changed during the time, from March until August 2021 and with the spread of produced vaccines. Developing countries showed more interest in distribution of vaccines, as well as keeping already produced and acquired vaccines. That fact explains the appearance of the Trade restricting NTMs in Developing countries, too.

Bottlenecks in cross-borders movement of already completed vaccines and their inputs have different base. The position of completed vaccine in trade is not the same as the position of their inputs, which is unfavorable. If the subject of trade were already completed vaccines, then the border clearance conditions were favorable. The vaccines deliveries became even a media event, but the equipment necessary for administering of vaccines became a source of obstacles, especially for the syringes, refrigerators and other instruments, as a part of the cold chain equipment. In regard to trade in already produced vaccines, their inputs were not subjects of trade using the concept of “green channels”, or other simplified procedures concerning transit, or import and export procedures [22].

Many relevant international institutions have implemented joint initiatives to create a single platform and conditions for the uninterrupted transport of vaccines in the world. When the first information about vaccines appeared, the World Customs Organization (WCO) had the task to support the COVID-19 vaccines distribution by expediting cross-border procedures, as well as to provide the necessary protection against dangerous, or counterfeit vaccines, stating provisions of the recently adopted WTO TF Agreement. At the beginning of the 2021, came the period when WCO, in collaboration with the WHO, prepared the HS classification reference for vaccines and the medical consumables necessary for the vaccination process, with the equipment for storage and transportation of vaccines [27].

During October 2021, the WTO published the revised “Indicative List of Trade-Related Bottlenecks and Trade-Facilitating Measures on Critical Products to Combat COVID-19”, firstly published in July 2021. This List included almost all predictable measures which could be the source of barriers. According with the TF Agreement measures, it gave the recommendations to eliminate, or at least to diminish these barriers impact. The Document identified numerous products, even 83 of them, with important role for manufacturing, distributing and administering vaccines against COVID-19 [22]. These were active and inactive ingredients, even some instruments, bags and equipment. This Document also recognized numerous groups of Trade-Related Bottlenecks: Bottlenecks in the cross-border movement of vaccine inputs, Bottlenecks stemming from vaccine regulatory approval, distribution of finished vaccines and immunization supplies, trade in pharmaceuticals, diagnostics and other medical devices [22]. The List should make it easier to identify this vulnerable product group and allow the implementation of the TF Agreement which accelerates trade flows even under normal conditions. Successfully applied provisions of this Agreement for these defined categories could become an unavoidable instrument during the Pandemic.

CONCLUSION

Trade policy has the dominant role in enabling manufacturing and after that, distributing and administering already produced vaccines and their inputs, too. The new Pandemic situation has brought many challenges, including the strong change of the trade policy measures. Besides tariffs as the most known measures, international trade faced numerous NTMs, provoked by export restrictions and logistics barriers and cross-border trade activities. This paper analyzed numerous instruments of trade policy, whose characters were both, facilitative and restrictive, and which significantly influenced the speed of the COVID-19 vaccines distribution.

The aim of this paper is to point out the numerous trade policy measures that could be used to achieve the goals of faster and more effective distribution of particularly important products in a very short period of time. It also points out that these measures are very numerous and heterogeneous.

Tariffs, as barriers to trade, were not pointed so intensively concerning the import of vaccines themselves, but concerning the reduction of tariffs for the import of numerous elements, or inputs of the vaccines, or accompanying products required for their exchange. For fast distribution of vaccines, it was not enough to simply abolish tariffs on the import of vaccines, but a combination of trade policy instruments that would be applied for both, trade in vaccines and trade in inputs necessary for their production. This paper indicates the specific role of non-tariff measures in vaccines trade, mostly restrictive by its nature and explains many ways for solving that problem. The main contribution for the NTMs decrease is expected from the WTO initiative for the Trade Facilitation and the implementation of the TF Agreement.

REFERENCES

- [1] World Bank. (2021). *Global Economic Prospects, June 2021*. Washington, DC: World Bank. doi:10.1596/978-1-4648-1665-9. License: Creative Commons Attribution CC BY 3.0 IGO.
- [2] Barbero J, de Lucio JJ, Rodríguez-Crespo E. (2021). Effects of COVID-19 on trade flows: Measuring their impact through government policy responses. *PLoS One*. Oct 13; 16(10):e0258356. doi: 10.1371/journal.pone.0258356. PMID: 34644312; PMCID: PMC8513914.
- [3] Baker, S. R., Bloom, N., Davis, S. J., & Terry, S. J. (2020). *Covid-induced economic uncertainty* (No. w26983). National Bureau of Economic Research, Cambridge.
- [4] Gavrilović, K., & Vučković, M. (2020). Impact and consequences of the COVID-19 virus on the economy of the United States. *International Review*, 3-4, 56-64. <https://doi.org/10.5937/intrev2003056G>
- [5] WTO (2021a). *WTO Issues Papers on Vaccine Inputs Tariffs and Bottlenecks on Critical COVID-19 Products*, 8.10.2021, Retrieved: https://www.wto.org/english/news_e/news21_e/covid_08oct21_e.htm, (18.01.2022.)
- [6] WTO (2012). Agreement on Trade Facilitation Ministerial Decision of 7 December 2013, WT/MIN (13)/36 WT/L/911
- [7] Baldwin, R. & Evenett, S. (2020). Introduction. In: Baldwin, R. & Evenett, S. (Eds.) *COVID-19 and Trade Policy: Why Turning Inward Won't Work* (pp. 1-19). London: Centre for Economic Policy Research.
- [8] Chen, Kevin Z.; and Mao, Rui. (2020). Fire lines as fault lines: Increased trade barriers during the COVID-19 pandemic further shatter the global food system. *Food Security* 12: 735–738. <https://doi.org/10.1007/s12571-020-01075-2>
- [9] Trade Facilitation Agreement Facility and World Trade Organization. (2020). *The Covid-19 Crisis and Trade Facilitation*. Results of WTO/ICC/Global Alliance for Trade Facilitation Survey. July 2020. Geneva.
- [10] Stellinger, A., Berglund, I. Isakson, H. (2020). How trade can fight the pandemic and contribute to global health. In: Baldwin, R. & Evenett, S. (Eds.) *COVID-19 and Trade Policy: Why Turning Inward Won't Work* (pp. 21-30). London: Centre for Economic Policy Research.
- [11] Staletović, M., Stevanović, M., & Gavrilović, M. (2022). The economic analysis of the business operation of trade companies in the Republic of Serbia during the Covid-19 pandemic. *International Review*, 1-2, 66-70. <https://doi.org/10.5937/intrev2202077S>
- [12] Evenett, S., Fiorini, M., Fritz, J., Hoekman, B., Lukaszuk, P., Rocha, N., Ruta, M., Santi, F., Shingal, A., (2020). "Trade Policy Responses to the COVID-19 pandemic crisis: Evidence from a New Dataset," *RSCAS Working Papers 2020/78*, European University Institute.
- [13] Lee, S. & Prabhakar, D. (2021). *COVID-19 Non-Tariff Measures: The Good and the Bad, through a Sustainable Development Lens*, (UNCTAD/SER.RP/2021/3 Research Paper No.60), Geneva: UNCTAD
- [14] OECD (2021a). *Digital Opportunities for Sanitary and Phytosanitary (SPS) Systems and the Trade Facilitation Effects of SPS Electronic Certification*, OECD Food, Agriculture and Fisheries Paper, March 2021, No. 152.
- [15] OECD (2020). *COVID-19 and International Trade: Issues and Actions*. Paris: OECD.
- [16] Bjelić, P., Popović Petrović, I. and Kastratović, R. (2020). "Foreign Direct Investment Patterns in CEFTA 2006: Perspectives and Impact of COVID-19 Pandemic", *10th SCF International Conference: The Institutional, Economic and Social Impacts of the Globalization and the Liberalization*, University of Usak, 8-11.10.2021, Antalya, Turkey. pp. 45-61.
- [17] Anderson, E. James and Eric van Wincoop. (2004). Trade Costs. *Journal of Economic Literature*. Vol. XLII (September 2004). pp. 691-751.
- [18] Anderson, E. James, and Eric van Wincoop. (2003). "Gravity with Gravitas: A Solution to the Border Puzzle." *American Economic Review*, 93 (1): 170-192.DOI: 10.1257/000282803321455214
- [19] Amankwah-Amoah, J., & Hinson, R. E. (2022). COVID-19 pandemic, vaccine nationalism and counterfeit products: Discourse and emerging research themes. *Thunderbird International Business Review*, 64(6), 595–604. <https://doi.org/10.1002/tie.22302>
- [20] Evenett, S., Hoekman, B., Rocha, N., Ruta, M. (2021). The Covid-19 Vaccine Production Club: Will Value Chains Temper Nationalism? *EUI Working Paper RSC 2021/36*. European University Institute: Robert Schuman Centre for Advanced Studies.
- [21] OECD (2021b). *Using trade to fight COVID-19: manufacturing and distributing vaccines*, 11 February 2021, Tackling coronavirus (COVID-19)- Contributing to a global effort. Paris: OECD.
- [22] WTO (2021b). *Indicative List of Trade-Related Bottlenecks and Trade-Facilitating Measures on Critical Products to Combat COVID-19* (Document Paper, 8.10.2021), Geneva: WTO Secretariat.
- [23] UNCTAD (2021a). COVID-19 and NTMs. Retrieved: <https://unctad.org/topic/trade-analysis/non-tariff-measures/covid-19-and-ntms>, (accessed: 21.03.2021. and 13.03.2022.)
- [24] UNCTAD (2021b). Impact of the COVID-19 pandemic on trade and development—Recovering, but unevenly—Situation as at 31 March 2021, Retrieved: <https://unctad.org/programme/covid-19-response/impact-on-trade-and-development-2021#aTradePolicy>, (accessed: 14.03.2022.)

- [25] GTA (2020). *Tackling Covid-19 Together: the Trade Policy Dimension*. St. Gallen: Global Trade Alert/ University of St. Gallen.
- [26] WTO (2009). *Trade facilitation*, Retrieved: https://www.wto.org/english/tratop_e/tradfa_e/tradfa_e.htm, (accessed: 10.03.20022.)
- [27] WCO (2021). *COVID-19 vaccines distribution across borders*, Retrieved: <http://www.wcoomd.org/en/topics/facilitation/activities-and-programmes/natural-disaster/covid19-vaccines-distribution.aspx>, (accessed: 4.03. 2021).

Article history:

Received 6 April 2022

Accepted 21 September 2023