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U.S. & China Approaches to Global Internet Governance: "New Bipolarity" in Terms of "The Network Society"[1, 2]

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Abstract

From the perspective of power transition theory, the international relations system is gradually entering a phase of power transition, in which the United States, as a global hegemon, seeks to maintain the existing world order, while China seeks to establish alternative international mechanisms to reorganize the system of international relations and strengthen its own structural power. Cyberspace and the technological sphere are becoming the fields for non-violent competition between states, which makes the study of the global governance of cyberspace critical to the understanding of the outlines of the new bipolarity.

The analysis in this article is focused on U.S. and Chinese approaches to global governance of cyberspace through the prism of Manuel Castells' theory of network society. The authors assess the directions of U.S. and Chinese policy across four types of power in cyberspace: networking power, network power, networked power, and network-making power.

The authors conclude that the United States plays a crucial role across the four types of power at the expense of a decentralized model of Internet governance, which is based on the idea of "multi-stakeholderism." Non-governmental organizations (NGOs) and other entities play a decisive role in such a model. Nonetheless, China has already developed the necessary tools to reform the present system of global governance of cyberspace, based on a centralized model with a leading role for the United Nations (UN) as an international governance organization and with the state as the basic actor. The main beneficiaries of the centralized model are developing countries, which are unable to influence the global governance of cyberspace under the dominance of private companies based in the developed countries.

Keywords: U.S., China, global governance, cyberspace, "network society", "new bipolarity"

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Introduction

With the formation of a new bipolarity between China and the United States, issues of global governance gain new impetus. Nuclear deterrence has gradually reduced the relevance of hard power confrontation, and in this context new global political spaces are becoming increasingly important as arenas of geopolitical confrontation. Cyberspace is one such political dimension. It takes on special significance in view of the accelerated digitalization process against the background of COVID-19. The U.S. and China, as primary poles of power, promote their own approaches to global cyberspace governance to manage information flows and develop intergovernmental technological ecosystems. Global Internet governance is an important area of global governance. Cyberspace governance achieves its purpose by means of the production of global public goods to address failures in governments and other networks. The driving force of cyberspace refers to the principal promoter of the global governance of cyberspace or the main provider of public goods in cyberspace [Yan, 2019].

In the framework of power transition theory, the world is undergoing a power transition where China, as a revisionist emerging power, is challenging the U.S. as the dominant state [Chan, 2019; Degterev, Ramich, Cvyk, 2021]. In this article, the U.S.-China competition for the role of *rule maker* of global cyberspace governance is examined. This analysis of the U.S.-China rivalry draws on power transition theory according to which states compete to be the main provider of international public goods [Kugler, Organski, 1980; Organski, 1958]. Currently, the U.S. forms the core of the liberal world order and is the main provider of international public goods. However, growing dissatisfaction with the international system among developing states and China's potential reluctance to maintain the liberal world order in the event of a successful power transition create uncertainty about the future of the international system [Nye, 2020].

The two most relevant approaches to global Internet governance are, first, multistakeholderism, that is, a decentralized model of governance led by non-governmental organizations (NGOs) [Carr, 2015; Hofmann, 2016; Kleinwächter, 2007; Mueller, 2020; Strickling, Hill, 2017; Vasilkovsky, Ignatov, 2020] and second, a centralized model of governance with the leading role played by a state [Arsène, 2016; Bi, 2020; Cai, 2021; Galloway, Baogang, 2014; Hong, Harwit, 2020; Zeng, Stevens, Chen, 2017]. The former model is supported by the U.S. and other developed states, while the latter is encouraged by China and developing states. Various studies have extensively reviewed the principles and foundations of these two approaches. However, insufficient attention has been paid to the practical and theoretical aspects of the two countries' rivalry for leadership in global cyberspace governance.

The U.S. occupies a key role in cyberspace governance for several reasons. First, it was in the U.S. that the first protocols for the functioning of the Internet were established. Second, an Internet governance system is already in place in the U.S. – the Internet Corporation for Assigned Names and Numbers (ICAAN), a non-profit organization, was registered in California in 1998 [Demidov, 2017]. When ICAAN was established, it signed a memorandum of understanding with the U.S. Department of Commerce, which enshrined several functions within the jurisdiction of ICAAN; ICAAN remained accountable to the government of the U.S. [Vasilkovsky, Ignatov, 2020, p. 16] until 2016, when the management of top-level domain (TLD) and IP addresses came under its jurisdiction [ICAAN, 2016]. The primary objectives of the U.S. model are the function of management of critical infrastructure in hands of private companies and the development of an inclusive process of Internet governance with the participation of ICAAN and other NGOs.

A crucial contribution, which defined the basis of global Internet governance, was made during the World Summit on the Information Society (WSIS), held in two phases in 2003 and 2005. The term "global internet governance" was defined during the WSIS to mean that both

governmental and non-governmental actors, including public organizations and the scientific and technical community, can participate in the process of global governance. The key result of the summit was the creation of the Internet Governance Forum (IGF), which became a coordinating and advisory body [Van Eeten, Mueller, 2013, p. 724]. As a result of the WSIS, the principles and characteristics of a model that considers the perspectives of all interested parties – multistakeholderism – were shaped [Carr, 2015]. With the renewal of the IGF's mandate in 2015 the multistakeholder model with the participation of all interested parties was preserved for another 10 years [Yakushev, 2016].

China offers an alternative approach to global cyberspace governance. This approach is based on the principle of state sovereignty in the context of internal Internet governance. It limits the technological influence and role of non-state actors in cyberspace governance. From this point of view, the basis of global governance is the United Nations (UN) system and the decision-making process involves states on equal terms, while NGOs play advisory roles [Zinoveva, 2015, p. 116; Wang, 2020]. The principle of sovereignty in cyberspace, that is, control over the internal segment of the Internet, takes the central place in this approach. The foundation of China's approach is the idea of a community of common destiny for mankind in the network society based on "four principles" and "five suggestions" offered by Xi Jinping during the 2nd International Conference on Global Governance in 2015 [Li, Tang, 2020, p. 27].

In this article, we investigate the question of global cyberspace governance in the context of the theory of network society. In the network society, the main function of a government is to maintain control over the telecommunications industry and information flows. The methodological basis for this analysis is M. Castells' network society theory. The U.S. and Chinese approaches to global Internet governance are discussed and compared in relation to practical activity in the context of their strategic rivalry. The article concludes with a summary table that compares characteristics of the two approaches and an explanation of the new bipolarity concept in the context of global Internet governance.

Global Internet Governance Through the Prism of Network Society Theory

The methodological foundation of this analysis is the theory of network society described by M. Castells in *Communication Power* [2009]. The establishment and administration of power and power relations within a country has changed with the appearance of communication technologies. The basis of power, excluding violence and fear, is the control over minds and perceptions in a society. Such control is implemented through the construction of the image of the state, the meaning of power, and power relations in the consciousness of society. The key idea of the theory is that power is based on the control of communication and information, which embraces a "network society" [Castells, 2007].

The development of technologies promotes the development of global and state network societies. In the framework of network society theory, all nodes establishing a network are interconnected. In its turn, communication is managed by networks that include programmed values and protocols of communication.

Castells described four forms of power that explain the management of power in the global network society. The first is *networking power*, which refers to the power of the actors and organizations included in the networks that constitute the core of the global network. This form of power operates by exclusion/inclusion [Castells, 2011]. For instance, by developing social networks, information technology (IT) corporations maintain their power in the global network society. It allows them to use gate-keeping strategies to exclude users who do not accept values and protocols of communications programmed in that society.

The second form of power is *network power* constructed through the development of standards and protocols of communication. According to Castells, network power is constituted through the popularity of standards and rules of communication and the elimination of alternatives. This form of power operates by establishing global communication standards that are accepted by the majority of actors or nodes in a society [2011]. An example of this is the technological leadership of the western countries in the development of e-commerce services and technological standards. The main point of this leadership is the establishment of a western approach to global cyberspace governance. In fact, large IT companies form a single technological ecosystem offering many IT services with a view to limiting a user's ability to choose another technological ecosystem.

The third form of power is *networked power*. According to Castells, networked power, especially in a dominant network, is relational. A dominant actor exercising the most power seizes an opportunity to impose its will. This power is constructed through dominant mechanisms [2011]. It is worth mentioning that the U.S. uses this form of power to attach its rules and principles to the development of the Internet. International organizations such as ICAAN, the IGF, the WSIS, and the Internet Engineering Task Force (IETF), follow key principles of the U.S. approach.

The fourth form of power is *network-making power*. This power is based on the operation of two mechanisms: programming the goals of the network and managing mass communication. Programming provides an opportunity to define the goals, values, and ideas of a network. It is an essential part of the network because values and goals are products of a network's culture and are used in the process of communication. Network programming is about developing an identity and an ideology [Castells, 2011]. This type of power was applied in 2008 during Barack Obama's election campaign, the basis of which was communication through the Internet.

According to the theory, control over communication in the network society is an inherent attribute of state power, through which the image of the state itself is constructed. Power in the network develops at the individual, national and global level. The reason for technological decoupling between states is the dominance of several approaches in the framework of global governance, similar to the division of users choosing network ecosystems within a national market for technological solutions.

The U.S. Approach to Global Internet Governance: A Multistakeholder, Decentralized Model

As the country in which the Internet was born, the U.S. plays a crucial role in global Internet governance. The first time the U.S. expressed its views on global Internet governance was in the Statement of Policy on the Management of Internet Names and Addresses issued by the Department of Commerce in 1998. The Statement asserted that governance functions should be under the jurisdiction of private companies because the Internet is a decentralized system with respect to human rights and without supervision by any state [NTIA, 1998]. Thus, global cyberspace governance initially was seen as a decentralized system based on private companies and non-profit organizations.

The international strategy for cyberspace released by the Obama administration in 2011 followed the principle of freedom of the Internet, promoting a multistakeholder model of Internet governance within a non-state framework. According to the U.S. approach, the flows of information on the Internet cannot be limited and controlled by other states. The issue of critical resource management should have a multistakeholder decision-making process involving private organizations to ensure the stability and security of critical Internet infrastructure [The White House, 2011].

Cyberspace governance is based on a decentralized architecture consisting of non-governmental organizations and companies such as the IGF, ICAAN and the IETF [Strickling, Hill, 2017, p. 299]. ICAAN and the IETF are responsible for the technical aspects of governance. For example, the IETF is responsible for developing and updating basic technical standards for the Internet. All interested parties can participate in the organization. In the IGF, states are on an equal footing with other actors, leading to an erosion of the line between rule-makers and rule-takers in cyberspace [Hofmann, Katzenbach, Gollatz, 2017, p. 1410]. In the context of the theory of network society, these organizations constitute the third form of power – networked power. The activities of the IGF, the IETF, ICAAN are based primarily on the principle of multistakeholder participation, which contributes to the recognition of the U.S. approach.

A separate aspect of U.S. power in the network society is the administration of critical Internet resources. Governmental organizations, private companies, NGO, universities, and Internet providers are all actors that exercise the administration of critical Internet resources, including domain name system (DNS) root servers. The operators of 10 root servers are the U.S. Army, the U.S. Department of Defense (Network Information Center of Defense Information Systems Agency), NASA (Ames Research Center), the University of Southern California, the University of Maryland and NGO and Internet providers such as VeriSign, Cogent Communications, ICAAN, and the Internet Systems Consortium [IANA, 2021]. With such access to the administration of critical resources, the U.S. gains the power to develop and define rules of inclusion and other standards of the Internet.

In its 2018 National Cyber Strategy, under "Principle IV. Promoting American Influence" the U.S. condemns attempts to control the domestic Internet in violation of the principle of freedom on the Internet [Department of Defense, 2018]. This makes it possible for foreign telecommunications companies to penetrate domestic networks and extend foreign influence into a country's society. In its cyber strategy, the U.S. promotes the multistakeholder model of Internet governance and resists the development of a state-oriented model of cyberspace governance which seeks to maintain control over the Internet [Department of Defense, 2018].

During a U.S. House of Representatives hearing in 2012, representatives put forward a resolution concerning an alternative, state-oriented model of global Internet governance. The resolution stated that the model led by the International Telecommunication Union (ITU) would increase state control of global governance and the multistakeholder model promoted by the U.S. would lose force [U.S. Congress, 2012]. As a consequence of transferring administration rights to the ITU, one state would have one vote to express its will on issues of global Internet governance [DeNardis, 2014, p. 33].

The group of IT corporations known as GAFAM (Google, Apple, Facebook, Amazon, and Microsoft) plays a crucial role in the network power of the U.S. and the maintenance of its international leadership status in cyberspace. GAFAM leads the world in search services, social networking, e-commerce services, and operating system production [Moore, 2016, p. 15]. These companies have established an ecosystem of services that is used by states and societies. Google controls more than 60% of the world's search engine market [GlobalStats, 2021] while Facebook has 70% of the world's social media market, second only to social networks in a number of countries [GlobalStats, 2021a]. In turn, Apple, Google, Microsoft control more than 70% of the global operating system market [GlobalStats, 2021b].

Telecommunication companies conduct research and develop technical protocols for communication and operation of the social services on the Internet. In that way, technological corporations form a global network of influence on both the security of states and global society as a whole [Slaughter, 2009, p. 98]. A significant example of private companies' power is the case connected with the intelligence programme PRISM. The U.S. carried out PRISM with the participation of Google, Apple, Skype, Facebook and other big tech companies [Hill, 2014,

p. 87]. In the view of network society theory, IT corporations' monopolistic position is the basis for the first form of U.S. power – networking power.

The decentralized model and open cyberspace are preferred by the U.S. because they promote the expansion of U.S. influence in the context of technological dependence and information influence on cyberspace. The mass media, tech companies, and private companies managing information flows on the Internet are permanent tools for maintaining power in the network society.

The Budapest Convention on Cybercrime is among the strategic documents that serve as the basis of the U.S. model. The Convention not only works to harmonize the signatories' legislation but also establishes the right to collect and use data across borders without notifying relevant states. The Convention was ratified mainly by the countries with high gross national incomes, whereas developing states or countries of the Global South have largely refrained from ratification. With limitless access to data, developed states are obtaining data processed by AI algorithms that reveal weaknesses in developing states' technology companies. In this way, technology company leaders, receiving flows of processed information, can influence the competitiveness of national companies in particular and the development of the state as a whole.

Other international documents corresponding to the U.S. model of global governance include the WSIS Declaration of Principles [UN, 2003] and the Tunis Agenda for the Information Society [UN, 2005]. Both documents laid the foundation for the current system of global governance. Market forces are driving the development of the Internet. The Internet is recognized as an open space, and global governance is exercised with the participation of all interested parties.

The Global Multistakeholder Summit on the Future of Internet Governance, held in Brazil in 2014, adopted a document that included basic principles for multistakeholder governance and a road map for Internet governance [NETmundial, 2014]. Unlike the WSIS declaration, the final document of the Brazil summit dealt with national and regional Internet governance issues.

Thus, the U.S. implements its approach through multistakeholder organizations. It is responsible for adopting protocols and developing the Internet architecture. Finally, multistakeholder organizations are fora in which non-state actors participate on an equal footing with government representatives. The main functions of Internet governance are controlled by U.S.-registered non-profit organizations. The U.S. preserves the state system of global Internet governance and its influence within the system using the mechanisms listed above.

China's Approach to Global Cyberspace Governance: A Multilateral, Centralized Model

An examination of the Chinese approach to this issue must begin with the principles of domestic or national network regulation. While the development of the Internet and the information and communications technology (ICT) sphere has resulted in an increase in the role and influence of non-governmental actors on world politics and the national security of individual states, the issues of information and cybersecurity have become a priority for China. In China's 2010 White Paper the governance of the Internet is considered an important element of national security, and the infrastructure facilities, Internet sites, and the Internet in general located within the territory of China are under Chinese jurisdiction [PRC, 2010]. China's approach to cyberspace governance is based on maintaining legitimacy and economic growth [Jiang, 2010, p. 72].

The technological basis is an important element for the implementation of domestic policy in the information space. In 2016, China adopted the National Informatization Development

Strategy, which outlines several stages in the development of China as a "strong cyber power." According to this strategy, China intends to improve the competitiveness of Chinese technology companies in the global market and the development of an advanced mobile communications network, functioning on Chinese software and network applications, by 2025 [Ponka, Ramich, Yu, 2020, p. 385].

The domestic network is based on an ecosystem of applications from Chinese telecommunications companies. China's domestic companies (Alibaba, Tencent, Baidu, Huawei and China Mobile) are the pillars of public power, as they provide the search engine (Baidu), the social networks (Tencent), e-commerce (Alibaba), manufacturing of telecommunication equipment (Huawei), and mobile communications (China Mobile). These companies form the core of China's national network and have regulatory functions. As such, the Chinese government gets access to the management of the national segment of the Internet and, in terms of theory, regulates the communication networks. Thus, the state gains control over the technical functions of managing the Internet and provides social management in society based on the regulation of the content of information flows.

One aspect of sovereignty in cyberspace is the independence of the state from the products and services of foreign companies and the development of national telecommunications companies and infrastructure, including the development and use of national software, building a system of fiber optic cables, and data localization [Couture, Toupin, 2020, p. 56]. Moreover, the management of the Internet is aligned with social management and public administration traditions. With the development of ICTs, the social management system has been transformed from police surveillance and harsh repressive policies to the systemic ideological shaping of society to maintain the Party's credibility. Such policy results in controlling the Internet through blocking, censorship, and filtering on the one hand, and by disseminating ideological information on the other [Yang, 2014, p. 111]. Thus, China uses a state-oriented model of domestic Internet governance to maintain stability and produce ideas and images for transmission to society through communication networks.

The principles of administration of the domestic Internet are transmitted to the international level in China's strategies for global cyberspace governance. The theoretical basis of China's global governance is the "theory of a harmonious world" proposed by Hu Jintao and the concept of a "community with a shared future for mankind" proposed by Xi Jinping. The theory of a harmonious world considers the development of a society of states based on cooperation to ensure common development and security. According to this theory, the priority in resolving international disputes is given to the UN [Grachikov, 2020, p. 140]. At the same time, attention to the formation of a community with a shared future in cyberspace intensified during the pandemic, when people around the world began to spend most of their time online [Cai, 2021].

China's general framework for the policy in cyberspace is the Strategy for International Cooperation in Cyberspace [Ministry of Foreign Affairs of China, 2017]. The document notes the main principles of China's policy in cyberspace according to which it is necessary to ensure peace and security and to prevent an arms race and conflicts in cyberspace. A principle of sovereignty that includes the right to choose the model of network governance and the model of public policy on the Internet has a significant role in the Strategy. Additionally, the Strategy highlights shared governance of cyberspace as a principle in which the UN represents a key management tool. The conclusion highlights the principle of inclusive access, aimed at bridging the digital divide between developed and developing states. In the context of the network society theory, the network power of the Chinese government, realized through the activities of national telecommunication companies, is the main means of maintaining social stability and economic growth.

China's approach to global governance of cyberspace is characterized by the tasks set out in the Strategy, among which are the recognition of state sovereignty in information space, non-interference in the internal affairs of the state, and the establishment of a code of rules and principles of behaviour for states in cyberspace. Regarding the U.S., Chinese experts believe that developed countries led by the U.S. are pursuing a policy of network hegemony, establishing conditions in which developing countries are not involved in the global governance of the Internet [Li, Li, 2018, p. 15]. Under these conditions, developed countries and their technology corporations can control cyberspace within the framework of the multistakeholder model.

China defines global cyberspace governance as a multilateral, transparent system of Internet governance that operates within the UN system. In such a system, states play a defining role and non-state actors and stakeholders are given an advisory role. The distribution and co-management of critical information infrastructure, such as Internet root servers, is an important aspect of Internet governance [Li, Li, 2018, p. 18].

China's model of global Internet governance involves extending and applying international rules to the administration of cyberspace. A key role in such a model is given to states that have sovereignty over the internal segment of the Internet. The decision-making process takes place within the framework of the ITU and the UN system, in which developing and developed states can participate equally.

China's presence in the ITU is remarkable in terms of the broad participation of government, business, and the academic community [Negro, 2020, p. 109]. The Chinese government is represented by the Ministry of Industry and Information. More than 40 Chinese telecommunications companies represent the position of private organizations. The academic community is represented by more than 20 technical universities [ITU, 2021].

To achieve its goals, China develops cooperation within bilateral and multilateral fora, promotes the involvement of less developed states in the formation of global cyberspace governance, and builds coalitions of states.

In 2011, members of the Shanghai Cooperation Organization (SCO) ratified the Agreement on Cooperation in Ensuring International Information Security, defining such principles as non-interference in other states' information resources and the internationalization of global Internet governance [MFA Russia, 2009]. The Agreement marked a major step forward in the development of a common position of states, as the document established a regulatory framework of concepts defining key terminology for cyberspace, the identification of threats and risks, and consolidated the information sphere as a state jurisdiction area.

Moreover, the position of China on the establishment of a common legal regulation is similar to that of the Russian Federation. An agreement on cooperation in the field of international information security was signed between the governments of these two states [Government of the Russian Federation, 2015]. Russia has proposed two conventions to regulate the information space, observing the principles of sovereignty and the model of state management of the national segment of the Internet. The first is on Ensuring International Information Security [MFA Russia, 2011] and the second concerns the institutionalization of the safe operation and development of the Internet on the basis of equal participation of the international community in global Internet governance [Minkomsvyaz Russia, 2017] – both have been proposed in the UN.

The basic principles of the proposed conventions were taken into consideration in the SCO's submission of the International Code of Conduct for Information Security to the UN [Suvorov, 2020]. The adoption of unified codes of conduct within the UN would transform cyberspace from a "grey zone" of international politics into a comfortable legal field, which would avoid the consequences of geopolitical confrontation between the largest technological actors [Chen, 2020, pp. 95–7]. China and Russia prioritize collective regulatory mechanisms such as

the UN system and the ITU in global cyberspace governance. The UN is the central platform for the development of the International Information Security (IIS), the ITU is an alternative institution of cyberspace governance offering more sovereign control over the national segment of the Internet [Larionova, Shelepov, 2021].

Established by Beijing in 2014, the World Internet Conference in Wuzhen provided a forum for the exchange of views among states and participants looking for a revision of the current global governance paradigm. In 2015, Chinese leader Xi Jinping noted that the Internet should be regulated in accordance with the same principles as other areas of international interaction, thereby insisting on the key principles of China's policy on the issue. On the agenda for the 2019 and 2020 summits was the initiative to "build a community of shared future in cyberspace" [WIC, 2020]. This initiative focused on both economic and technological cooperation, including the dissemination of 5G technologies, and joint Internet governance, with the UN playing a leading role [WIC, 2020]. It aimed to unite developing countries to oppose the model of global cyberspace management based on U.S. principles [Hong, Harwit, 2020, p. 3].

China implements the objectives established in this approach through international governmental organizations as well as consultative and advisory platforms. Such fora coordinate a unified position on global cyberspace governance and the development of the Internet. As a result of the work of the above-mentioned multilateral mechanisms, a joint draft UN convention, SCO and BRICS (made up of Brazil, Russia, India, China and South Africa) declarations on IIS were adopted, as well as bilateral agreements on the establishment of codes of conduct in cyberspace.

Thus, the model of global cyberspace governance promoted by China is based on the principles of sovereignty, equal participation of all states in the decision-making process, and the leading role of the UN in the administration of critical infrastructure and cyberspace. Such a model of governance complies with China's state-level policies.

The accelerating pace of digitalization makes it necessary for China to simultaneously address several challenges: to shape an image of a responsible state in the international arena, to promote its technology companies in the global market, to improve cyberspace management at the national level, and to create a favourable environment for development at the international level [Zhu, Liu, 2021].

The Practical Aspects of U.S.-Chinese Rivalry in Cyberspace

Cyberspace has become one of the key fields of strategic rivalry between the U.S. and China. Telecommunication corporations play an important role in the struggle for leadership in cyberspace, as they are also drivers of economic development and core actors in cyberspace [Danilin, 2020, p. 109]. Thus, the U.S. and China both pursue policies that limit the influence of telecommunications companies due to threats posed to national security. Within the framework of the theory of the network society, the state seeks the consolidation of control over the flow of information and communication protocols between network nodes.

ICAAN plays a key role in global cyberspace governance. U.S. and Chinese representatives are actively involved in the activities of this NGO. Among the 75 companies accredited as generic top-level domain (gTLD) registrars[3], 46 are U.S. companies [ICAAN, n. d., a]. The government advisory committee includes three representatives from the National Telecommunications and Information Administration and two experts from the U.S. Department of Commerce. The Root Server System Advisory Committee, which also participates in shaping NGO

[3] gTLD is one of the categories of top-level domains (TLDs) maintained by the Internet Assigned Numbers Authority (IANA) for use in the Domain Name System of the Internet.

policy, includes representatives of the root server operating companies [ICAAN, n. d., c]. On the other hand, eight Chinese companies are accredited by ICAAN [ICAAN, n. d., a]. There are four representatives from the Ministry of Industry and Information Technology of China and two researchers from the Chinese Academy of Information and Communication Technology on the Government Advisory Committee [ICAAN, n. d., c.]

As part of its information security system, China applies information flow filtering and bans foreign companies. The key element of such a system is a firewall, the purpose of which is to provide protection from external threats [Ponka, Ramich, Yu, 2020]. The ban covers such companies as Facebook (including Instagram, WhatsApp, Messenger), Google (including all Google services), Twitter, Snapchat, Dropbox, and others. Other corporations are forced to comply with a rigid system of application rules. For example, Apple had to exclude a number of applications from the AppStore due to their impact on the national security of China, including HKMap Live, Quartz, and Clubhouse. The first two apps were used by protesters in 2019 in Hong Kong. In addition to limiting foreign influence within its information space, China has restricted the use of Windows software in government computer systems, where the alternative is Ubuntu Kylin, based on the Linux OS. China is developing Harmony OS as an alternative software for mobile devices. Thus, China limits the influence of social networks, news agencies, and foreign IT companies on its society and bans the use of applications, software, and equipment that collect and process user data and can influence social attitudes in society.

In return, during the trade war, the U.S. banned applications, social networks, e-commerce services, and the use of equipment of Chinese companies that had links to the People's Liberation Army (PLA) due to the threat to U.S. national security. The policy of sanctions and blocking against Chinese companies began in 2018 in the first phase of the trade war, when the U.S. Department of Commerce adopted a ban on the export of component parts and software needed for ZTE's telecommunications equipment [BIS, 2018]. In addition, the U.S. Department of Defense has published a list of companies that directly or indirectly interact with the PLA [Department of Defense, 2021]. The list includes Huawei, China Telecom, China Mobile and Xiaomi. This was the reason for sanctions against Huawei on the export of components and the use of services of the Google ecosystem in devices manufactured under the company's brand. Huawei was banned from deploying its hardware in the U.S., mainly for 5G infrastructure and video surveillance. On the same basis, the U.S. Federal Communications Commission rejected China Mobile's application to provide mobile telecommunications service in the U.S. [FCC, 2019]. In January 2021, Xiaomi was added to the blacklist of Chinese companies cooperating with the PLA. This, in turn, led to a ban on the export of technology of American companies and investments. In March 2021, Xiaomi was able to successfully appeal the blacklisting of the company and thus succeeded in getting the investment restrictions lifted [Xiaomi, 2021]. The appeal was the first such precedent in the U.S.-China trade war.

In addition to the above-mentioned restrictions on the activities of Chinese technology giants, the U.S. has banned the operation of Chinese e-commerce services, applications and social networks. In the first phase, the social networks WeChat (Tencent) and Tiktok (ByteDance) were banned by the decree of U.S. president Donald Trump [Executive Office of the President, 2020]. The capitalization of the companies fell by $100 million [Dmitriev, 2020, p. 72]. Similar measures were applied to the non-bank payment systems Alipay, CamScanner, QQ Wallet, SHAREit, Tencent QQ, VMate, WeChat Pay and WPS Office [Executive Office of the President, 2021]. In both cases, sanctions against applications were justified on the grounds that telecommunications companies could collect and process vast amounts of user information (big data) as well as impose censorship on political content posted by users. Chinese experts have described the ongoing rivalry in the technology space as a "digital cold war," the

outcome of which will determine which approach will dominate global Internet governance in the coming decades [Xu, 2021].

Another relevant issue in the U.S.-China rivalry is the competition between technological companies for the distribution of 5G technologies. The leaders in the deployment of 5G equipment are Huawei, ZTE, Ericsson and Nokia. For example, Huawei technology is used and tested in 68 countries, while another Chinese company, ZTE, provides its 5G equipment to 28 countries. On the other hand, European companies Ericsson and Nokia cooperate with 42 and 46 countries, respectively. Although U.S. companies are not directly involved in the global race to deploy 5G networks, the U.S. supports European partners through sanctions pressure on Chinese companies, acting as a united front of developed countries.

In August 2020, competition between companies intensified after Mike Pompeo announced the implementation of the Clean Network Initiative, the key goal of which is to limit the activities of Chinese companies in five areas – provision of ICT services, installation and use of Chinese software applications, storage and processing of cloud data, and building a fiber-optic cable system [Department of State, 2020]. Countries that join this initiative are reducing the presence of Chinese telecommunications companies in their markets and rejecting Chinese 5G technologies. According to the U.S. Department of State, about 53 states have joined the programme, including North Atlantic Treaty Organization (NATO) and European Union (EU) states and members of the Five Eyes alliance [Department of State, 2020]. The digital cold war between the U.S. and China began with the adoption of this programme [Xu, 2021, p. 19].

The adoption of the programme has had an impact on the activities of Chinese companies in the world. In 2019, Huawei was developing 5G networks in Greece and had planned to launch commercial use of the networks in 2020 [Michalopoulos, 2019]. But in September 2020, after Pompeo's visit, Greece joined the programme and opted for Ericsson [Department of State, 2020]. A similar situation can be observed in many of the states that have joined the U.S. programme. In addition, the EU has developed a 5G security toolbox, which defines standards and security criteria for 5G networks [EC, 2020]. This will give Ericsson and Nokia an advantage in the European 5G market. The programme identifies companies that offer services and equipment that do not threaten the security of the state; it also outlines the criteria and security measures to prevent the entry of high-risk suppliers into the market.

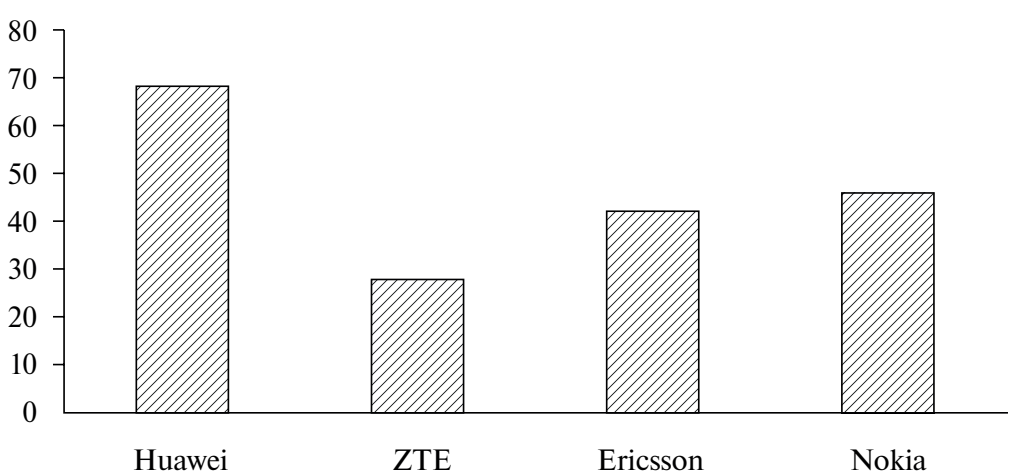

Fig. 1. Number of Countries That Have Signed 5G Agreements

Source: [Ericsson, 2021; Huawei, 2021; Nokia, 2021; ZTE, 2021].

Thus, the problem of cyberspace management in the framework of power in the network society comes to the fore in the new bipolar rivalry between the U.S. and China. The adoption of either model will ensure the absolute leadership and influence of respective power in the world. The U.S., as a hegemon both within the traditional system of international relations and within cyberspace, maintains and develops the existing model of power "on the Internet" and "through the Internet" and this is supported by developed countries. China unites developing countries, interested in the legitimization and equalization of the rights of all countries in global governance [Zhao, 2021, pp. 50–1]. Despite this, it is worth acknowledging that Chinese experts propose to reform the international system of cyberspace management "according to the Chinese model" [Zhao, 2021, p. 59].

The Outlines of the Global Cyberspace Governance System: Competing Approaches

Table 1 provides a visual comparison of the differences between the approaches of the U.S. and China to the global governance of cyberspace. China has already formed a complete set of alternative tools to implement its approach to global governance in cyberspace, while the U.S. seeks to use the already established fora to maintain a leading position in this political space.

The existing model for global governance of cyberspace operates on principles that were developed at the end of the 20th century. The administration and development of the Internet and the ICT sphere is ensured through market mechanisms, that is, through interaction between non-state actors such as ICAAN, VeriSign, Cogent Communications, and others. Moreover, the principles of a free and open Internet established by the foundation of ICAAN allow U.S. technology corporations and media to spread their influence, thereby providing a unique advantageous environment for the U.S. in the global governance of cyberspace. The main beneficiaries of the decentralized model are developed countries, where the world's largest IT corporations are located, which allows them to use the "power in the network" to promote their interests.

China, on the other hand, proposes an alternative approach in which the role of market forces is much smaller. The domestic network administration processes are carried out by the state in accordance with its internal laws. Global Internet governance issues should primarily be resolved within the UN system, in the ITU. This would prevent technology companies from influencing global governance issues and ensure equal participation by all states. At this stage, China is establishing alternative platforms to promote its position among developing countries, including the World Internet Conference in Wuzhen.

The inevitability of the transformation of the system of global cyberspace management is evidenced by the ratio of Internet users: residents of developed countries account for about one third of the total number of Internet users, while developing countries account for two thirds [Li, 2020]. At the same time, about half of the population of developing countries does not have access to the Internet, which means that simultaneously with digitalization, the share of these countries will increase and there will be increasing support for Chinese ideas to transform the international system of cyberspace governance.

The COVID-19 pandemic accelerated the process of digitalization and revealed the vulnerabilities of the existing system of global cyberspace governance. States were unprepared for the new normalcy of people spending more time online than offline. This has given rise to the phenomenon of "digital authoritarianism" and once again proved the danger of a digital divide between developed and developing countries [Cai, Wang, 2021, pp. 5–8]. The crisis has opened

new opportunities for the U.S. and China to implement their global projects in the digital space, which has led to a new round of competition in the context of a new bipolarity.

Table 1. Comparison of Global Cyberspace Governance Models

	U.S.	**China**
Internet governance mode	Multistakeholder model of cyberspace governance with broad participation of non-governmental, private, and public organizations (multistakeholder)	Multilateral model of cyberspace governance with the leading role of states within the UN system (multilateral)
Information environment governance model	Open Internet space based on a decentralized structure	State-oriented model with an emphasis on sovereignty
Key authorities in cyberspace governance	ICAAN, IETF	UN/ITU
International Internet governance platform	Internet Governance Forum (IGF)	World Internet Conference in Wuzhen
Position papers	**National level:** U.S. National Cybersecurity Strategy 2011 U.S. National Cybersecurity Strategy 2018 **International level:** Budapest Convention on Combating Cybercrime The Declaration of Principles "Building an Information Society: A Global Challenge in the New Millennium" Tunisian Programme for the Information Society The final document of the World Multilateral Summit in Brazil 2014	**National level:** China White Paper International Strategy for Cooperation in Cyberspace Informatization and Development Strategy **International level:** Agreement on Cooperation in the Field of Ensuring International Information Security of the SCO Convention on International Information Security 2011 Convention on the Safe Functioning and Development of the Internet 2017
The role of telecommunications companies	Telecommunications companies as a key actor in the development and cyberspace governance	Telecommunications companies can be actors of state policy in cyberspace

Source: Compiled by the authors.

Conclusion

This article explored the problem of competition between the U.S. and Chinese approaches to global governance through the prism of Castells' theory of the network society. According to the theory, the power of the state undergoes changes in a technological context and receives new tools for its implementation. As a result, we can draw the following conclusions.

In the space of network power, where the competition is for the establishment of a global network society in which the actors implement the strategy of geotaping – switching on and off from the global network – the position of leader is occupied by the U.S. due to the current

near-monopoly status of GAFAM corporations in the technology markets. China is building an alternative network operating on its application ecosystem, which has no global distribution but reduces the dependence of the national network on the international context.

Similarly, the U.S. leads in networking power, where the competition between the two powers is for determining communication protocols, principles for managing critical Internet resources, and implementing the domain address distribution function, as most of these functions are currently shared between organizations based in the U.S. and developed countries. China seeks to reshape the existing order and seeks a state-driven, UN-led critical infrastructure management function.

Control over networked power is carried out through the establishment of institutions of global governance of cyberspace. Existing institutions of global Internet governance (ICAAN, the IGF, the WSIS, and the IETF) operate according to the principles of the U.S. global governance model. On the other hand, China promotes its institutions and bodies of global Internet governance, while establishing an alternative choice and a basis for the coexistence of the two systems.

The U.S. and China seek the ability to define the principles of communication in the global network and to set goals and directions for global interaction for leadership in network-making power. Each state establishes its own network based on the principles of global cyberspace governance that give them the most room for development in the future. All countries of the world have to make choices in the context of the formation of a new bipolarity and thus are participants in such networks.

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Networked G20 Governance of COVID-19 and Its Transversal Crisis Effect[1]

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Abstract

In this article, the Group of 20's (G20) networked pluralism and transversal policy practices in the governance of COVID-19 and the pandemic crisis effect are analyzed. The G20 is an important global governance hub, with the strategic capacities and authority to improve cooperation on the pandemic and economic recovery efforts. The forum's increasingly pluralistic networked-governance processes have been crucial for recent shifts in global governance practices and authority. They were augmented by transversal consequences of the pandemic crisis effect, the latter denoting the consequences of new evidence during a crisis leading to a heightened perception of uncertainty and the repoliticization of background knowledge. The analysis combines a "practice-relational" social constructivist analytical approach with discourse-analytic and sociological insights. It integrates empirical evidence from semi-structured interviews, informal discussions, participant observation, and documentary analysis of G20 engagement on transversal policy dimensions of the COVID-19 pandemic, especially with its interlocutors and governance networks. This indicates the growing significance of networked G20 governance, involving engagement with increasingly pluralistic networks of actors from the Global North and Global South.

Key words: authority, COVID-19, crisis effect, depoliticization, G20, global governance, global public goods, network pluralism, repoliticization; transversal

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In this article, how the Group of Twenty's (G20) networked governance practices have influenced and been influenced by the COVID-19 pandemic, plus the global crisis response and its consequences are examined. The pandemic involves complex and *transversal* or interconnected multisectoral challenges for policymakers and societies, including those of the G20.

The G20 is well-positioned to strengthen global coordination on COVID-19 and the post-pandemic recovery because of its importance as a global governance hub. The following assesses the significance of this forum during the pandemic, combining a "practice-relational" social constructivist analytical approach with discourse-analytic and sociological insights. First, the core conceptual focus is clarified, which is the co-constitutive processes of G20 network pluralism and transversal policy practices. Second, how networked G20 governance influenced the global pandemic response is examined. Third, the G20's role in managing transversal policy challenges from the pandemic, linking public health, economic, social, environmental, and other dimensions, is analyzed. Finally, evidence for a COVID-19 *crisis effect*, including the

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heightened perception of uncertainty and repoliticization, is examined, focusing on its influence on the G20 as a network hub of global governance.

G20 cooperation on COVID-19 and transversally linked issues has been flawed but with substantive achievements. The forum's networked-governance processes remain crucial for improving multilateral cooperation on pandemics, especially their diverse consequences. Pluralistic and transnational G20 governance networks constitute important coordination processes, combining with the pandemic crisis effect to augment contemporary shifts in global governance practices and authority relations.

G20 Network Pluralism and Transversal Policy Practices

Global governance networks [Baker, Carey, 2014; Luckhurst, 2020a; Sørensen, Torfing, 2017; Stone, 2013], and specifically G20 governance networks [Eccleston et al., 2015; Luckhurst, 2019a; Stone, 2015], have become an important research focus in recent years. They involve assemblages of private, intergovernmental, supranational, state, semi-state,[2] and civil society actors, working together through linked professional ecologies [Luckhurst, 2019a; Seabrooke, 2014]. The latter constitute processual and relational contexts in which actors from diverse professional backgrounds coordinate their activities and practices [Baker, Carey, 2014; Eccleston et al., 2015; Karlsrud, 2016; Luckhurst, 2019a; Seabrooke, 2014].

There is also some research on the linkages between global governance networks and transversal policy practices (see A. Ålund and C.U. Schierup [2019] and J. Luckhurst [2020b]). The more common usage of the word "mainstreaming" among G20 governance networks [Dongxiao et al., 2017; G20, 2018; Kulik, 2018; Luckhurst et al., 2020; UNDP-OECD, 2019; Thomas et al., 2018], in particular, indicates transversal linkages across the forum's extensive policy agenda.

The official G20 agenda covers a broad spectrum of policy issues, including economic growth, financial regulation, sustainable development, gender equality, infrastructure investment, employment, the environment, and anti-corruption measures, among others. This indicates the importance of the G20 as a global governance hub [Kirton, 2013, pp. 27–47; Luckhurst, 2016, pp. 141–71], as well as a nexus of decentralizing global authority, through which state and non-state actors, particularly from the Global South, have become increasingly influential in global governance [Luckhurst, 2016, 2019b]. The G20's agenda is increasingly managed through transversal governance practices, with joint ministerial meetings and other forms of policy coordination indicative of a growing trend for transversal, or "joined-up," governance approaches to reduce policymaking silos [Bastos Lima et al., 2017; Leal Filho et al., 2018; Pollitt, 2003; Rao et al., 2015; Russel, Jordan, 2009]. This involves more heterogeneous and often transnational governance networks, comprising public, private, intergovernmental, and civil society actors such as policy experts and advocates [Sørensen, Torfing, 2017; Stone, 2013].

The growing G20 policy agenda constitutes new contexts for transversal coordination between such networks, while increasing the potential for network *pluralism*. In this article, the importance of ideational and network pluralism in global governance is emphasized, echoing aspects of A. Acharya's conceptualization of a "multiplex world" [2018, pp. 28–32]. He indicates, with this, "multiple, overlapping layers of governance, at global, regional, and local levels... [in which] the sources of ideas and approaches to order are diffuse and shared among

[2] "Semi-state" or "quasi-state" indicates quasi-autonomous public bodies or state-backed private institutions that provide public services. They generally have ties to the state without being subsumed by it, hence retaining at least some aspects of formal autonomy.

actors with differential material capacities" [p. 30]. This involves "multiple, diverse but cross-cutting forms of agency... more global and more diverse in scope" [pp. 30–1]. The distinctive contribution of the present article is to augment this conceptualization of "pluralism" with its focus on G20 *network* pluralism, as indicated by the heterogeneity of G20 governance networks.

This analytical approach is indicative of the social-processual and relational ontology that underpins the present study, which fits the "practice-relational" turn in international relations research [Adler-Nissen, 2015; Cooper, Pouliot, 2015; Jackson, Nexon, 1999; McCourt, 2016; Pouliot, Cornut, 2015; Qin, 2018]. The qualitative methodology builds on substantial empirical evidence, gathered over a decade of researching the G20. This includes over 50 unstructured and semi-structured interviews, conducted online and in person, as well as informal discussions with around 10 G20 sherpas and sous-sherpas, a few policy advisors working for G20 secretariats and delegations, politicians, diplomats, and dozens of civil society representatives involved in official G20 engagement processes. This includes about a dozen interviews and group discussions specifically on the G20's COVID-19 response. This evidence is complemented with substantial analysis of G20 and World Health Organization (WHO) documents, especially related to the pandemic response, and participant-observation at G20 summits and engagement meetings, in-person in pre-pandemic times and virtual during the pandemic – including through media accreditation for the Riyadh G20 summit in November 2020. This approach to evidence gathering fits the practice-relational ontology, as it centres on analyzing how relational processes and practices shape the G20 and influence the global governance of COVID-19.

The expansion of both the G20's agenda and engagement have been co-constitutive social-relational processes over the past decade. The expanding agenda, especially since the Korean G20 presidency of 2010, involved more heterogeneous actor engagement. The official engagement groups, for example, constituted new practices for embedding G20 inputs from increasingly heterogeneous networks [Kirton, 2013; Luckhurst, 2016; 2019a; Naylor, 2021]. The broader engagement expanded the G20's agenda and vice versa, as the more diverse issue-agenda involved more heterogeneous networks in G20 dialogue.

Normative practices of G20 deliberations with a growing assemblage of those perceived as *appropriate* global governance actors from the Global South and civil society, which increased the impetus for an expanding agenda, were indicative of what might be called a rhetorical trap [Schimmelfennig, 2001]. This is because G20 practices of inclusivity and agenda expansion became increasingly imbricated with perceptions of G20 legitimacy, which became difficult to reverse for politico-normative reasons [Luckhurst, 2019a, pp. 527, 533]. This further contributed to the "Christmas-tree effect," indicating how each rotating presidency tends to add new issues to the G20 agenda, like multiplying the ornaments adorning a Christmas tree, as they attempt to influence the future G20 agenda and leave a mark on the forum [Rewizorski, 2017, p. 38; Ye, 2014, p. 28].

The United Nations (UN) Sustainable Development Goals (SDGs) indicate another key example of co-constitutive processes of network pluralism and transversal policy practices, as well as the rhetorical trap noted above. The SDGs' normative emphasis on a pluralistic agenda and actor inclusivity [Fukuda-Parr, 2016], incorporating voices from the Global South and civil society across a diverse range of policy fields, significantly influenced global governance and G20 practices [Berger, Leininger, Messner, 2017, pp. 120–1; McBride, Hawkes, Buse, 2019]. The SDGs became a key element of the legitimizing discourse for multilateral cooperation and policymaking practices [Fox, Stoett 2016; Thiele, 2016, pp. 6–8] (see also Luckhurst [2020a, 2020b, p. 50]), augmenting the trend for transversal and inclusive global governance practices. This was also indicated in the G20 context, with the goals frequently referenced in leaders' declarations and the forum's other policy documents (see G20 [2015; 2016a; 2016b; 2017; 2018;

2019; 2020a]). There is a growing normative consensus on the SDGs within the G20 and influential global governance networks [Luckhurst, 2017, pp. 155–85], which reinforces processes of network pluralism and transversal policy practices.

The co-constitutive processes of G20 network pluralism and transversal policy practices combine expanding pluralistic engagement between more heterogeneous governance networks, with more transversal policymaking. The processes are mutually reinforcing – G20 engagement of heterogeneous governance networks contributes to the increasing transversality of its policy agenda; the latter process co-constitutively broadens the inclusivity of G20 engagement. Engagement between more heterogeneous networks expanded the scope for transversal policy deliberation, enabling those networks to articulate issues such as gender equality and sustainability across the G20's agenda. This agenda expansion co-constitutively augmented heterogeneous actor engagement, as noted, due to the relevance and normative pressure to extend deliberations with appropriate global governance actors on a broader range of issues. This included the increased number of joint ministerial meetings and multistakeholder consultations and engagement processes.

The Importance of Networked G20 Governance for the COVID-19 Response

The key focus for this article is networked G20 governance of the transversal policy challenges from the COVID-19 pandemic. The pluralism of networked G20 governance was augmented by transversal consequences of the pandemic, even as the forum's agenda focused on public health and pandemics in 2020 and 2021 [G20, 2020a; 2020b].

The G20's health leadership role grew during the COVID-19 pandemic through its coordination of key aspects of the global response, including from interlocutors such as international organizations, governments, and civil society organizations (CSOs). Aside from substantial financial commitments from individual G20 members to tackle the pandemic, the forum pledged to support the WHO's COVID-19 Solidarity Response Fund and initiated its own action plan on COVID-19 in early 2020 [G20, 2020c]. The Italian G20 presidency appointed a "*High Level Independent Panel* on financing the global commons for pandemic preparedness and response" [Italian G20 Presidency, 2021 (original emphasis)], involving élite actors in networked G20 governance of the pandemic. Their remit further indicates the G20's role as a hub of networked global governance, as they were tasked to liaise with the WHO-appointed Independent Panel for Pandemic Preparedness and Response [2020]. The two independent panels further augment the pluralism of this networked pandemic governance by involving actors such as civil society representatives, former politicians, and public health experts from the Global South and North.

Interlocutors from the Think 20 (T20) proposed the implementation of new G20 peer-review mechanisms and additional joint ministerials to increase transversal global policy coordination [Luckhurst et al., 2020], building on the forum's joint finance and health ministerial of September 2020, scheduled again for October 2021. This included the claim that heterogeneous priorities and needs of different states should be a core aspect of the G20's pandemic response, echoing the SDG's emphasis on tailoring policy strategies to local conditions. This could involve a particular focus on pandemic challenges for the Global South. The *subsidiarity* principle is important here [Knight, Persaud, 2001], that is, the normative argument that people in the Global South or at local levels often have more appropriate experience and insights to understand local requirements. This is one argument why the G20 should prioritize feedback from interlocutors in the Global South, including on public health, economic, environmental, and social consequences of the pandemic. This is especially relevant in communities where poverty

and infrastructure constraints reduce their capacity to introduce pandemic measures implemented in some high-income states, such as homeworking or mandated national lockdowns.

The G20's discourse on the pandemic, including frequent references to "preparedness" and "resilience" [G20, 2020a; 2020b; 2021] (see also Luckhurst et al. [2020]), indicates core aspects of consensus between broader G20 governance networks and member state officials. This includes the widespread endorsement of the need for comprehensive institutional and preventive capacity building to improve future pandemic governance. There has also been support for global financial cooperation on the COVID-19 response, for example, Oxfam [2021] and several other CSOs advocated a new special drawing rights (SDR) allocation from the International Monetary Fund (IMF) [LATINDADD, 2021],[3] which the G20 [2021] agreed to support in April 2021. There remain issues of contestation, especially from G20 civil-society interlocutors. The official Civil 20 (C20) [2020] engagement group, and CSOs such as Oxfam [2020a, 2020b], argue the G20 should go further than its existing debt service suspension initiative (DSSI) for low- and middle-income states,[4] especially through a long-term extension of the initiative or by substituting it with debt cancelation.

The articulation of the G20's legitimacy and inclusivity claims, noted above, increased the potential for pluralistic engagement and transversal policy strategies on COVID-19. This consequence of networked G20 governance was indicated by the forum's inclusion of interlocutors such as Gavi, the Vaccine Alliance (GAVI), and the Coalition for Epidemic Preparedness Innovations (CEPI), in its engagement with global governance networks on the pandemic. This included GAVI representatives participating in discussion panels at the two G20 virtual summits held in 2020, while voluntary funding contributions from G20 members to GAVI and CEPI were noted in its leaders' extraordinary summit declaration of March 2020 [G20, 2020b]. This engagement augments G20 governance of the multifaceted challenges from COVID-19.

There are growing discussions within G20 stakeholder and governance circles about the need to address perceived inefficiencies or flaws of the forum's outreach engagement. There is a wealth of human expertise and capacity, a key resource for the G20. This expertise and local-level insights should continue to provide important benefits for the G20 member governments as well as their interlocutors. The pandemic response indicates the need for transversal policymaking, but this requires more heterogeneous voices to avoid the flaws of what has been called "groupthink" by social psychologists [Janis, 1971], when people with similar professional backgrounds and life experiences converge on common assumptions due to those commonalities. This potentially leads such groups to ignore evidence outside of those shared experiences, exacerbating the negative consequences of disconnected policymaking silos by restricting the potential for more comprehensive and effective policies. The increased heterogeneity of actor insights is one of the key policymaking gains from more pluralistic, networked G20 governance.

The official G20 engagement groups attempted to influence the forum's pandemic agenda through policy briefs, joint statements [B20 et al., 2020], communiqués, and other forms of deliberation. It is useful to examine the processes and consequences of such forms of networked G20 governance in this policy context. For example, the author of the present article organized a co-authored T20 policy brief on increasing the G20's role in the global governance response to COVID-19. This involved nine authors from diverse academic and practitioner backgrounds, collaborating through linked professional ecologies, which is further indicative of how network pluralism increases the scope for transversal policy practices. The policy brief advocated a transversal G20 approach to increasing pandemic policy-preparedness and institutional resilience

[3] SDRs are an international reserve asset allocated to IMF members, also used as a unit of account [IMF, 2021].

[4] The G20 [2020b; 2021] established the DSSI in 2020; it offers temporarily to suspend debt payments for 73 eligible states to reduce financial pressures on health systems during the pandemic [World Bank, 2021].

[Luckhurst et al., 2020]. The core proposals were included in the T20 [2020] communiqué, which was presented to the Saudi G20 presidency and shared with G20 summit delegations.

New engagement processes, combined with the May 2021 Global Health Summit and the Rome Declaration on pandemic cooperation, augmented the G20's role as a global governance hub on COVID-19 and potentially future pandemics. The preparations for this summit included civil society engagement, such as the official web-consultation sessions co-organized by the Commission of the European Union (EU) and the Italian G20 presidency on 20 April 2021. The C20 engagement group participated in this meeting, which included representatives from a number of CSOs. The official purpose was to gain insights from civil society interlocutors, which would be presented to sherpas of the delegations to the Global Health Summit. A detailed written report of the meeting proceedings would also be provided by the EU Commission and Italian G20 presidency to G20 delegations, as an input to their preparations for the Rome Declaration.[5]

There is some scepticism about these types of engagement processes, especially from scholars that doubt the policy influence or sincerity of official G20 outreach efforts [Harris Rimmer 2015; Larionova, 2012; Slaughter, 2013]. Dr. Fifa Rahman, who is a civil society representative working with the WHO's Access to COVID-19 Tools (ACT-) Accelerator, was also a civil society contributor to the April web consultation with the EU Commission and Italian G20 presidency. Dr. Rahman noted the under-representation of the Global South in this virtual meeting; while perceiving a general lack of G20 engagement with the ACT-Accelerator, which is the main global response toward supplying and scaling up COVID-19 vaccines, diagnostics, and therapeutics, and includes key civil society stakeholders.[6]

Civil society representatives often make such criticisms, exposing the opacity of some G20 engagement practices. The engagement forums sometimes contribute to this perception; their consultation processes, policy priorities, and actor networks are at times unclear and partially dependent on rotating G20 presidencies [Crump, Downie, 2018]. This indicates that while networked G20 governance constitutes opportunities for inclusivity, pluralism, and decentralizing authority, global governance networks also include leadership groups with more influence than other actors [Luckhurst, 2019b, p. 535]. It should be noted, such authority relations are fluid and contestable, through network-relational processes and practices. They are also context-dependent, with the COVID-19 pandemic increasing the potential for repoliticization[7] of the cognitive authority and background knowledge that underpin socially constructed hierarchies due to the heightened sense of uncertainty [Broome, Seabrooke, 2015; Widmaier, Blyth, Seabrooke, 2007].[8]

The augmentation of pluralistic networked G20 governance depends, in part, on further contestation and decentralizing global governance authority [Luckhurst 2016; 2017; 2019a]. Networked G20 governance constitutes new pluralistic social-relational processes and practices of contestation. Networked G20 pluralism significantly augments the transversal effectiveness of the forum in the global COVID-19 pandemic response.

[5] This information was shared by the meeting moderator Martin Seychell, a deputy director-general at the EU Commission, during the session. The recording of the meeting is available at: https://webcast.ec.europa.eu/consultation-with-csos-global-health-summit-rome-declaration-principles

[6] Interview with the author, April 2021.

[7] "Repoliticization" indicates moments of increasing political contestation on policy or political issues [de Goede, 2004; Edkins, 1999].

[8] "Cognitive authority" refers to actors' socially constructed authoritativeness due to their professional standing, perceived access to information, know-how, experience, and other status markers.

G20 Role in Tackling Transversal Pandemic Challenges

The G20 has a wealth of experience in transversal global governance due to its increasingly complex policy agenda over the past decade. One of the key challenges for the rotating G20 presidencies, plus the "troika" coordination between the previous, current, and incoming presidency, is to sustain and build on this agenda.

The transversal G20 agenda and its influence as a global governance hub, partly due to its authoritativeness as its members' "premier forum" for international economic cooperation [G20, 2009], constitutes sufficient capacity to coordinate global efforts on the complex policy challenges of the COVID-19 pandemic. The G20 response to the pandemic, however, has received some poor reviews [Demekas, 2021; Independent Panel for Pandemic Preparedness and Response, 2021, p. 27; Subacchi, 2020]. Several G20 members reacted too slowly or with insufficiently robust policies. Some failed to prepare for the pandemic by failing to implement the public health advice from the WHO's [2016] International Health Regulations (IHR) of 2005 and other important guidelines [WHO, 2014].

COVID-19 had begun to spread globally by February 2020 [WHO, 2020a]. Many governments failed to take substantive action until late March 2020, too late to halt the spread of the pandemic. The WHO [2020b] declared the novel coronavirus a public health emergency of international concern (PHEIC) on 30 January 2020; it was subsequently designated a pandemic on 11 March 2020 [WHO, 2020c]. Some argue that the organization acted too slowly, despite these steps [Larionova, Kirton 2020, p. 9], though a faster announcement of the pandemic might not have influenced political decision-making in many states. It should be noted that WHO director-general Dr. Tedros Adhanom Ghebreyesus repeatedly urged governments to act faster and more forcefully to contain the virus throughout February and March 2020, while imploring them to boost virus testing, tracing, isolation, and treatment capacities [Reuters, 2020; WHO, 2020d].

Several G20 governments, including the UK and U.S., failed to act swiftly on such measures even after the pandemic declaration. The UK government, for example, allowed major sporting events with large crowds to go ahead despite the pandemic in mid-March 2020; it delayed introducing a national lockdown, contrary to pleas from many UK experts, despite growing evidence from Italy of the terrible consequences of failing to prevent the spread of the virus. The UK and Japanese governments, among others, also implemented campaigns to promote domestic leisure and tourism in mid-2020, with some evidence that such campaigns exacerbated subsequent rises in COVID-19 cases [Phillips, 2020].

It was not only with hindsight that some G20 governments failed to take sufficient measures against COVID-19, as implied by those that argue the pandemic was unprecedented or unforeseeable. The WHO and its director-general issued multiple warnings that the window of opportunity to contain the virus was closing. Several governments disregarded them and also ignored the foresight contained in the WHO's IHR guidelines on pandemic preparedness measures, indicated by an earlier WHO [2015] review of members' performance on the IHR, which emphasized the inadequacy of implementation in some states. The WHO [2014] also published guidelines on preventing respiratory-virus epidemics and pandemics, stressing the need to improve virus testing and tracing capacities, maintain sufficient supplies of personal protective equipment for medical staff, and implement clear policy strategies for virus containment. Many states failed to comply with these recommendations.

Policymakers and commentators in G20 states sometimes posed a false dichotomy between prioritizing the economy *or* public health during the COVID-19 pandemic. The evidence indicates an effective public health strategy has important economic benefits, hence the two

should not be counterposed [Independent Panel for Pandemic Preparedness and Response 2021, p. 24]. A transversal, multisectoral approach to policy preparedness and institutional resilience should negate this false dichotomization of prioritizing one or the other. Effective preparations for future pandemics and improved global policy coordination on the present emergency should address both aspects, as well as other key issues.

Some Asian G20 members seemed better prepared than their African, European, and North and South American counterparts to manage the COVID-19 pandemic, suffering less severe virus outbreaks. There was no room for complacency, though, as the slow roll-out of vaccinations in Japan exacerbated the fourth and fifth pandemic waves in spring and summer of 2021. The G20 could be a source for sharing useful policy experience, for example, initially the Japanese vaccination programme depended on medical staff, when they could have adopted the faster UK approach of deploying a large number of volunteers to help with vaccinations. Some "populist" G20 governments, including in Brazil, the UK, and U.S., generally performed badly in 2020 by ignoring or undermining scientific advice or refusing to implement strategies based on it, such as the aforementioned WHO guidelines. There is growing evidence of these failings in journalistic and academic accounts (see C. Kahl and T. Wright [2021] and J.C. Pevehouse [2020]). They were slow to implement public health measures such as social distancing and face coverings, lockdowns, and prohibiting mass gatherings for sporting and other events.

Important lessons should be learned from the first year of the COVID-19 pandemic, with further research on the divergence in G20-member responses and performance in managing the complex and transversal policy issues. In the present article, how networked G20 governance influenced the global governance response to the pandemic, including its transversal policy challenges, is examined, as is how the pandemic influences networked G20 governance. The growing pluralism of this hub of global governance networks was important for its role in the pandemic, embedding the transversal G20 policy agenda on COVID-19 and its consequences. This echoed core public policymaking practices since the 2008–09 global financial crisis (GFC), in which complex and multifaceted approaches were prioritized, especially on sustainable development and the UN's 2030 agenda for the SDGs.

The G20 agenda on the COVID-19 pandemic constituted a transversal approach to the policy challenges, evidenced by the Riyadh summit leaders' declaration [G20, 2020b]. The declaration substantially focused on the pandemic, but transversally across the G20 policy agenda. It discussed the significance of the pandemic for employment, economic growth, the financial sector, debt in low-income countries, trade and investment, transportation, the digital economy, anti-corruption, sustainable development, inclusive economic growth, women's empowerment, education, tourism, migration and refugees, and for the environmental agenda. The latter indicates the strategic importance of a transversal global strategy on the COVID-19 pandemic. The G20 could focus more on the environment and deforestation to increase long-term resilience against further global pandemics. Civil society experts [Rockström, Edenhofer, 2020; Vittor et al., 2020] and international organizations [OECD, 2020; WHO and Convention on Biological Diversity Secretariat, 2020] note the danger of deforestation contributing to the spread of zoonotic diseases; indeed, it has been hypothesized that deforestation could have contributed to bringing humans into contact with the SARS-CoV-2 virus that causes COVID-19.

The G20's response to the pandemic often focused on economic aspects, including the aforementioned DSSI; G20 members' individual fiscal stimulus measures amount to over $5 trillion [G20, 2020b]. Other innovations included the Saudi G20 presidency's convening of an extraordinary virtual summit in March 2020 as a crisis response measure and the holding of the Global Health Summit on pandemic issues in May 2021, jointly hosted by the Italian G20 presidency and the EU Commission.

The global governance lessons from COVID-19 could be crucial for "building back better" through coordination across diverse policy areas. This should include cooperation on important and shared public health challenges, such as the need to accelerate vaccination efforts and to coordinate on the aforementioned diverse policy issues. This echoes the similarly heterogeneous and transversal challenges of the SDGs, indicating how pluralistic and networked G20 governance and engagement is suited to the growing transversality of contemporary global governance.

The transversal approach to global governance is intended to avoid the flaws of disjointed policymaking silos in which interconnectivities between policymaking challenges might be overlooked, undermining the potential for better policy outcomes. Networked G20 governance improves the prospects to achieve such a strategy through pluralistic engagement on its extensive and transversal policy agenda.

Pandemic Crisis Effect on the G20 and Global Governance

Financial crises sometimes narrow the focus of multilateral cooperation, including within the G20 [Cooper, 2010; Subacchi, Pickford, 2011, p. 3]. The broad G20 agenda persisted during the pandemic crisis of 2020, however, despite the sense of emergency. The G20's policy agenda was transversally influenced by it, becoming substantially filtered through a COVID-19 lens. The pandemic thus became mainstreamed across the G20's policy agenda, rather than being siloed as an isolated policy focus [Luckhurst et al., 2020; Thomas et al., 2020].

The increased G20 role in global public health governance as a consequence of this pandemic augmented the forum's importance as a hub of transversal public policymaking due to the diversity of interconnected policy challenges [Luckhurst et al., 2020]. This could continue to influence the G20's agenda over the coming years. A COVID-19 crisis effect has influenced conventional understandings and significantly raised public and policymakers' awareness of global governance challenges from pandemics and public health threats. The joint G20-EU Commission Global Health Summit of May 2021, which resulted in the Rome Declaration, indicates that the G20 has extended its hub role in global governance to include key aspects of global public health. This is partly evident from the Rome Declaration statement that the COVAX Vaccine Manufacturing Working Group, with support from the COVAX Manufacturing Task Force, led by the WHO, CEPI, GAVI, and the UN Children's Fund (UNICEF), "should report on their progress to the G20 in time for the Leaders' Summit in October" [G20 and EU Commission 2021, pp. 6–7].

The pandemic augmented the earlier, pluralistic expansion of the G20's agenda and engagement, while reinforcing the co-constitutive processes of network pluralism and transversal policymaking. G20 engagement on COVID-19 contributed to its increasingly transversal policy agenda, since it involves complex and interconnected policy issues [Luckhurst et al., 2020], while integrating more heterogeneous actor networks in G20 deliberations. The pandemic crisis effect also engendered forms of *repoliticization*, in the sense of heightened political contestation on particular policy issues. This occurred during the GFC, for example, as the inconsistency of new evidence from the crisis with the "efficient markets" hypothesis undermined confidence in the latter among public policy networks [Luckhurst, 2017, pp. 83–116]. Arguments from behavioural economists such as G. Akerlof and R. Shiller [2009] became more influential in policy circles, as evidence from the GFC reinforced their claims that psychological factors aside from rational calculation significantly influenced financial markets and other aspects of human behaviour. This had echoes of a Kuhnian paradigm shift [Kuhn, 1962], as erstwhile background knowledge assumptions were foregrounded, increasingly questioned and their influence de-

clined – such that, for example, macroprudential financial regulation rapidly superseded the microprudential approach (see A. Baker [2013] and Luckhurst [2017]). This opened space for alternative conceptualizations to gain prominence in public policy discourse, plus signifiers such as "sustainability," "inclusivity," and "resilience." The COVID-19 crisis effect further reinforces this evidence of the post-GFC and pandemic-induced shift in cognitive authority markers, at least among influential global governance networks.

The "global public goods" conceptualization of the COVID-19 pandemic response was prominent among global and G20 governance networks during 2020–21 [Chakrabarti, 2020; G20, 2020b; Love, 2020; Seavey, 2021; South Centre, 2020; Thomas et al., 2020; UN, 2020]. This emphasizes collective or even universal gains instead of particularistic political competition for resources (see I. Kaul, I. Grunberg and M.A. Stern [1999]), thus constituting a depoliticizing logic. It is congruent with important rhetorical and practical shifts in post-GFC global governance, such as the emphasis on macroprudential financial regulation, sustainable development, and especially during the pandemic, on resilience. This is further indicative of the cognitive-authority shift within G20 governance networks away from the pre-GFC prevalence of individual rational choice-based policy analysis to focusing, instead, on holistic and collective goods [Luckhurst, 2017], as well as emphasizing the importance of *resilience* in a world of uncertainty [Luckhurst et al., 2020] (see also N. Taleb [2007]) – a further cognitive shift away from the pre-GFC emphasis on risk calculation [Nelson, Katzenstein, 2014], reviving earlier arguments from J.M. Keynes [1948 (1921)] and F. Knight [1921].

Poststructuralist scholars such as J. Edkins [1999, pp. 125–43] and M. de Goede [2004] argue that repoliticization of economic policymaking occurs as the contingency of political decisions becomes evident. Contingency and uncertainty are pushed to the fore in public and policy discourse during moments of crisis, such as the GFC or the COVID-19 pandemic, through contextual relational processes that shift cognitive authority. Background assumptions, including conventional policy beliefs, become more contestable and contested in this context. The influential international relations scholar R. Keohane similarly argues, from a rationalist perspective, "under conditions of uncertainty in the real world, the chain of 'inheritability' will be broken, and actors' preferences about future outcomes will not dictate their choices of alternatives in the present" [2002, p. 265].

The Trump administration's accusations against the WHO over its handling of the pandemic, which it claimed justified the threat to withdraw from the organization [Rauhala, Demirjian, Olorunnipa, 2020], was one indication of how repoliticization constitutes an opening for potentially radical policy shifts. The Biden administration subsequently reversed this withdrawal policy, recommitting to U.S. membership of the WHO. The politicization of the pandemic due to short-term domestic political goals, especially by the Trump administration but also by others, undermined strategic aspects of global pandemic cooperation [Kickbusch, 2020; Kreps, Kriner, 2020]. The failure of many G20 members to comply with core tenets of the WHO's [2016] IHR and other guidelines during and prior to the COVID-19 pandemic, noted above, implicitly repoliticized global public health and pandemic governance. This was because it undermined the policy consensus on global pandemic governance practices.

The crisis effect could shift cognitive authority in ways that subsequently embed new forms of taken-for-granted or background knowledge, including associated authority markers. This could have significant consequences for WHO and G20 authority on global pandemic governance if repoliticization leads to the embedding of forms of background knowledge that increase their scope to reshape policy practices [Adler, 2019; Hopf, 2010]. This indicates another important dimension of the transversal G20 role in the global response to the pandemic, that is, the potential to *depoliticize* new policymaking approaches [Fawcett et al., 2017]. Practices of repoliticization and depoliticization thus coexist in this context.

The pandemic crisis augmented the sense of political contingency and uncertainty, thus constituting a repoliticization of aspects of global governance and public policymaking, by increasing the scope for shifts in many policy fields and organizational aspects of global governance and other policymaking contexts. This involved relational processes of networked G20 governance and other public policymaking contexts, then, including state, regional, and municipal contexts in addition to other global governance settings. The politicization of the pandemic undermined the policy response in several countries; for example, face coverings and warnings about mixing in crowds were sometimes perceived as political totems rather than public health measures.

The repoliticization of global pandemic governance in 2020, especially the role of the WHO, was influenced by heightened public awareness of the issue and the Trump administration's criticisms of the WHO's pandemic response [Kreps, Kriner 2020; Pevehouse, 2020, p. E206]. This fits the assertion from some scholars that closer scrutiny of international organizations increases the scope for contestation of their effects and functions [Zürn, Binder, Ecker-Ehrhardt, 2012, p. 71]. The new Biden administration has been more supportive than former U.S. president Donald Trump of multilateral and, importantly, G20 and WHO cooperation on the pandemic and transversally linked issues. This contributed to reinvigorating multilateral pandemic cooperation in early 2021, in combination with efforts to depoliticize pandemic governance by emphasizing scientific and evidence-based dimensions of public policies.

Depoliticization sometimes has negative consequences, for example, when it undermines challenges to flawed policies; it also could be problematical if it were to undermine democratic accountability and public feedback mechanisms, which could reduce public trust in global governance fora and institutions and thus increase support for political populism [Zürn, 2021]. There are, nevertheless, some important benefits in the context of the COVID-19 pandemic, especially from publicizing evidence-based public health advice and seeking to marginalize conspiracy theories and other misconceptions detrimental to public health. The GFC already indicated how the G20 could help its members to depoliticize potentially controversial domestic policy decisions [Luckhurst, 2016, p. 143], an aspect of multilateralism noted by R. Putnam [1988, pp. 428–9] in his influential article on diplomacy and domestic politics. Examples include the Obama administration's deflection of domestic political pressure to act against perceived Chinese currency manipulation by stressing the preference to act through the G20 [Kennedy, 2010; U.S. Department of the Treasury, 2010]. The Chinese government, under Hu Jintao, arguably utilized G20 agreements to pressure for controversial domestic reforms such as currency revaluation and shifting to a consumption-led growth strategy [He, 2014, pp. 12–3]. UK prime minister Gordon Brown was accused of using the London G20 summit fiscal-stimulus agreement to deflect criticism of his domestic fiscal-stimulus measures [Eaglesham, Barker, 2009; Helm, Stewart, 2009].

The G20's authoritativeness was crucial for this capacity to depoliticize domestic policymaking. The forum's endorsement effect conferred a perception of legitimacy on those policies [Eccleston, Kellow, Carroll, 2015, p. 300], while its collective action and peer-pressure encouraged members to comply [Angeloni, Pisani-Ferry, 2012, pp. 33, 35]. The same aspects of G20 authority could become more significant for the contemporary global pandemic response, including the Rome Declaration, since the May 2021 Global Health Summit and the G20's endorsement of the COVAX facility.

The G20's role in the pandemic has remained less politicized than that of the WHO in public discourse, at least as of the time of writing. Networked G20 pluralism consequently provides a useful context for depoliticizing the global governance response to the pandemic, through a technical and arguably technocratic approach. This is indicated by the tendency of its T20 interlocutors, especially, to emphasize "evidence-based" or "research-based" poli-

cies [Jayaraman, Rocholl, 2017; T20, 2020] – a useful rhetorical technique for undermining populist contestation that is evidentially flawed. Some public health researchers, though, warn depoliticizing language could undermine democratic accountability [Barnes, Parkhurst, 2014; Parkhurst, 2017], as noted above. The expansion of networked G20 governance through increasingly pluralistic G20 inclusivity might offset such concerns, in keeping with the global governance trend for increasing civil society engagement since the end of the 1990s.

The G20's network pluralism and transversal policy practices augmented and further embedded this global governance shift. It was normatively well-suited to the context of global governance because *global* governance, by definition, holistically emphasizes the broad, strategic dimension of policymaking. This is not to argue that G20 network pluralism and transversal policy practices have resolved all global governance challenges. The Global South is particularly vulnerable to the challenges from the COVID-19 pandemic [Knight, Reddy, 2020; Luckhurst et al., 2020]; civil society advocates and UN secretary-general António Guterres [UN, 2021] have urged more action to help with those challenges through the WHO's [2021] COVAX facility for expanding access to vaccines as part of its ACT-Accelerator programme and other means. There have been criticisms of the relative exclusion of Global South actors from G20 and multilateral deliberations on the pandemic response [Oldekop et al., 2020], also evidenced by the present author's discussions and interviews, including the one noted earlier.

The surge of COVID-19 cases in India in the early months of 2021 increased the political pressure to suspend vaccine patents, eventually leading the U.S. Biden administration to endorse this policy measure [Kaplan, Stolberg, Robbins, 2021]. This is a further example of the politico-normative crisis effect from the pandemic, shifting long-held U.S. political reluctance to accept relaxation of commercial patent rights. The political shift from 2020 to 2021, especially the change in U.S. administration, arguably indicates how COVID-19 undermined the politics of populism and increased the salience of multilateralism and global governance [Kickbusch, 2020]. Some EU leaders argue suspending intellectual property rights would not solve the problem of vaccine access for low- and middle-income states; although the Rome Declaration indicated the G20's commitment to funding for COVAX, it remains divided on a patent waiver [Guarascio, 2021].

Global South actors themselves, such as the Indian and South African governments, the African Union, and healthcare CSOs, with backing from WHO director-general Dr. Tedros, assert that vaccine patents inhibit the expansion of global production capacities [Nagaraj, Moloney, Harrisberg, 2021; Pietromarchi, 2021; Stiglitz, Wallach, 2021]. The outcome of this debate would indicate the authoritativeness of Global South networks on the global pandemic response, including those engaged with the G20.

The performance of several Asian states in containing the pandemic more effectively than other regions does not obscure concerns about civil rights. In Indonesia, South Korea, Malaysia, and elsewhere, concerns have been raised about the intrusiveness of telephone contact-tracing applications. Japanese constraints on foreign residents' travel and re-entry during the COVID-19 pandemic diverged from international norms on the equal treatment of citizens and foreign residents in the imposition of travel restrictions. This raised important concerns about whether they contravene international human rights law, including when it is legitimate to discriminate between citizens' and foreign residents' family and home rights. The Australian government was also criticized by some politicians and citizens because of its decision to prevent its nationals from returning to Australia from India in May 2021, using biosecurity laws some argue violate internationally and domestically recognized civil rights [Martin, 2021; Murphy, Martin 2021; Pillai, 2021].

The G20 could collectively re-examine the legal implications of civil and human rights protections in this context. It is particularly important to assess whether policies justified as

public health measures during the pandemic contradict legally "inalienable" rights, such as those contained in the UN's *Universal Declaration of Human Rights* [1948] and *International Covenant on Civil and Political Rights* [1976]. The G20 could request the UN and relevant international and domestic actors contribute to constructive dialogue on these rights, including how they might be better protected during future pandemics. This aspect of the pandemic crisis effect should not be ignored, especially when cross-border movement of people could substantially contribute to the economic recovery from the pandemic. There are also important transversal policy implications; for example, if citizens' and foreign residents' security, families, and livelihoods could be harmed by arbitrary or illegal travel restrictions, this might influence their willingness to accept employment in other countries. It might further damage the travel and leisure industries if people avoid international travel due to fears of potential future measures.

Conclusion

The practice-relational focus of this study indicates how networked G20 governance of the COVID-19 pandemic and its transversal crisis effect increased the potential to expand the forum's broad agenda, while crucially influencing its global governance role. This new role as an albeit-flawed hub of the global pandemic response augmented the co-constitutive processes of networked G20 pluralism and its transversal policy practices, thus increasing pre-pandemic global governance trends since the GFC.

Co-constitutive processes of G20 network pluralism and transversal policy practices increased the forum's strategic and relational governance capacities to manage the pandemic, despite flaws such as only partial inclusion of its Global South and civil society interlocutors. The forum was significant for multilateral cooperation, in support of the UN and WHO agenda, with G20 policy engagement on useful measures such as the DSSI. Challenges to multilateral cooperation in 2020, especially the lack of engagement from the Trump administration, became more manageable due to greater U.S. engagement through the G20 and other contexts in 2021. The G20's authoritativeness as a hub of global governance could bring further improvements in global governance coordination on the pandemic, depending on potential consequences from networked G20 pluralism and transversal policy practices, as well as the effects of repoliticization and depoliticization due to the pandemic crisis effect.

Networked G20 governance is reinforced by the shift in U.S. engagement, though political agency from heterogeneous actors shaped the G20 and global-governance agenda on the COVID-19 pandemic. Pluralistic and transversal aspects of networked G20 governance sustained its broader agenda, despite the substantial COVID-19 lens, as the G20 mainstreamed its pandemic agenda rather than implement a disjointed or siloed policy response. This was congruent with the increasingly holistic and transversal practices of global governance in the post-GFC period, indicated by macroprudential financial regulation and the SDGs.

The pandemic crisis effect could have lasting consequences for the G20 and global governance. The growing rhetorical emphasis on a global public goods approach to pandemic governance, particularly among G20 and global governance networks, at least contests the flaws and limitations of country-first approaches to challenges that require multilateral solutions, including issues such as vaccine distribution. It also augments the G20's broader transversal policy agenda, which is congruent with the holistic logic of global public goods. This crisis effect of emphasizing transversal global governance practices could increasingly extend to additional policy areas, such as international legal and normative practices on travel and civil and human rights, as indicated by the Rome Declaration statement on the IHR and the need for

"new public health guidance in consultation with relevant health organisations on international travel by air or sea" [G20 and EU Commission 2021, p. 9].

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Unresolved Issues of Article 6 of the Paris Agreement – Is a Compromise Possible in Glasgow?[1]

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Abstract

Article 6 of the Paris Agreement, adopted in 2015, defines three mechanisms that stimulate reduction of greenhouse gas emissions. These are the trading of the results of emission reductions, the implementation of climate projects, and so-called non-market approaches. However, the rules for the application of Article 6 have not been agreed so far. Among the remaining contradictions in the positions of the participating countries are different understandings of approaches to prevent double counting of the results of project activities, mandatory deductions for adaptation purposes, and the transfer of unused carbon units under the Kyoto Protocol.

At the same time, some countries have already initiated pilot projects under Article 6 with the intention that, in the coming years, they will become Article 6 projects.

In November 2021, the 26th United Nations (UN) Climate Conference will be held in Glasgow. The effectiveness of the forum is linked by experts to the completion of Article 6 negotiations. In this article, the main problematic issues in the negotiations are considered and proposals for the Russian position at the upcoming conference are formulated.

Keywords: Paris Agreement, Article 6, market and non-market mechanisms, carbon regulation

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Introduction

In 2015, at the 21st UN climate change conference, the Paris Agreement was adopted. One of the goals of the Agreement is "holding the increase in the global average temperature to well below 2°C above pre-industrial levels[2] and pursuing efforts to limit the temperature increase to 1.5°C."[3] Other objectives of the Agreement are improved adaptation and climate finance.

The Paris Agreement provides three mechanisms to facilitate the reduction of greenhouse gas (GHG) emissions, two of which are related to carbon pricing and recall the Kyoto Protocol mechanisms. It is quite a common understanding that joint activities of countries on GHG emission reductions are economically beneficial, since the cost of reduction is different, for example, in developed and developing countries [ISEU, 2012]. During the Kyoto period, a number of developed countries used reductions achieved through their participation in other countries (including in Russia) to fulfil their obligations under the Protocol. Such reductions

[1] This article was submitted 03.05.2021.
[2] Usually, this refers to the period 1850–1900 [IPCC, 2018].
[3] Article 2 of the Paris Agreement.

are called offsets or carbon credits. The potential benefits of these joint international activities under Article 6 of the Paris Agreement are estimated as being up to $250 billion [Edmonds et al., 2019].

Utilization of Article 6 mechanisms is supposed to be on a voluntary basis (as spelled out in several paragraphs of Article 6). To date, about 90 countries have reported that they plan to use international carbon pricing mechanisms to meet their nationally determined contributions (NDC)[4] [WBG-Ecofys, 2018]. However, the use of offsets is not the main way to demonstrate conformity with obligations by major emitters. For example, there are no references to Article 6 in the low-carbon development strategies of the European Union (EU), the United States or Germany [UNFCCC Secretariat, n. d.]. Therefore, Article 6 mechanisms are better considered more broadly, including as providing additional business opportunities.

Article 6 negotiations were launched in 2016 and have not yet been completed, while the other decisions of the so-called rule book of the Paris Agreement (the by-laws of the Agreement) were adopted in 2018.

Negotiations on market and non-market approaches were controversial, as evidenced by the appearance of nearly 600 square brackets, which indicate disagreements, in draft decisions prepared in 2019 at the Conference of Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) in Madrid [Evans, Gabbatiss, 2019]. Due to the COVID pandemic, COP-26 was postponed to November 2021, and the above-mentioned negotiating texts will be the basis for a new round of negotiations in Glasgow.[5]

The main contradictions in the positions of the participating countries and how Russia's interests might be advanced in the Article 6 negotiations in Glasgow are examined in this article.

Joint Approaches

Article 6 is closely related to the concept of carbon pricing, but the words "market," "carbon unit" or "trade" are not found therein. Instead, more complex wording is used, for example, "internationally transferred mitigation outcomes" or "benefits from mitigation activities resulting in emission reductions." Such turnover is the cost of the compromise that made possible the adoption of the Paris Agreement in 2015, with the participation of almost 200 official delegations. However, non-market mechanisms are explicitly mentioned in paragraph 8 of Article 6: "The Parties recognize the importance of integrated, holistic and balanced non-market approaches...".

In the absence of explicit UNFCCC definitions of market and non-market mechanisms, it is possible to adhere to the commonly accepted understanding that market mechanisms are those associated with the monetization (selling) of reductions of emission or an increase in their absorption; non-market mechanisms are not associated with emissions trading, but create incentives in other ways, for example, through taxes, eco-labelling, or technical standards.

Cooperation between countries in these areas is called a "cooperative approach" in the Paris Agreement. In addition to the text of Article 6 itself, the concept of joint approaches is supplemented by several special paragraphs in Decision 1/CP.21 of the COP to the UNFCCC that precede the Paris Agreement [UN, 2016, Decision 1, para. 36–40]. This rather complex design is also a consequence of a compromise.

Article 6 sets out three main mechanisms for international cooperation based on market and non-market approaches. A brief description of them is provided below.

[4] Nationally determined contributions are the parties' obligations under the Paris Agreement.

[5] Links to the texts can be found in the UNFCCC decision 9/CMA.2 from 2019 [UNFCCC Secretariat, 2019].

Article 6.2[6] defines cooperative approaches between countries on a bilateral basis. In other words, emission reduction or absorption measures are implemented in one country, but the results are transferred to another. These results are called "internationally transferred mitigation outcomes" (ITMOs). The host party uses ITMOs in its NDC commitments. This approach is similar to the Kyoto Protocol's emission trading mechanism and Joint Implementation (JI) Track 1 projects [ADB, 2020]. Track 1 involves the implementation of projects based on international standards, with full compliance of project documentation with the established requirements. JI Track 2 projects are implemented under auspices of the Committee for Supervision of Joint Implementation Projects. About 600 projects were implemented on Track 1 and 50 projects on Track 2 [UNFCCC, n. d., b].

Article 6.2 sets out the requirement to avoid double counting of the results. To this end, guidelines should be adopted "to ensure that double counting is avoided on the basis of a corresponding adjustment by Parties for both anthropogenic emissions by sources and removals by sinks covered by their NDC" [UN, 2016, Decision 1, para. 36].

Article 6.4 establishes a mechanism to promote the reduction of GHG emissions and supports the sustainable development mechanism, which shall be "supervised by a body designated by the Conference of the Parties." Actually, this is about the implementation of climate projects. At the same time, no strict provisions are foreseen for the Article 6.4 mechanism to include the results of projects in NDCs, unlike in the case of Article 6.2.

Article 6.5 states in this regard that emission reductions shall not be used to demonstrate achievement of the host party's NDC only if they are used by another party for this purpose or relevant adjustments are required. It also states the need "to incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities authorized by a Party" (Article 6.4(b)). Article 6.6 requires that a share of proceeds from activities under Article 6.4 shall be allocated to cover administrative expenses as well as to assist developing country parties to meet the costs of adaptation.

Paragraph 36 of Decision 1/CP.21 sets out a corresponding adjustment in NDC.

Paragraph 37 of Decision 1/CP.21 sets out the requirement of complementarity to the reductions achieved under Article 6.4 (that is, the reductions should be in addition to those that would otherwise have occurred), as well as the requirement for verification and certification of emission reductions by designated operational entities. It also notes the importance of taking into account methodological approaches and lessons learned from UNFCCC mechanisms and its legal instruments for Article 6.4 (obviously, it is the Kyoto Protocol to UNFCCC).

Paragraph 38 of Decision 1/CP.21 provides for the adoption of rules, conditions and procedures for the mechanism laid out in Article 6.4.

The name of the mechanism, as well as presence of a coordinating body, participation of businesses, and verification and certification requirements make it possible to draw analogies between Article 6.4 and the Clean Development Mechanism (CDM), the most-implemented flexibility mechanism out of three provided by the Kyoto Protocol.[7] There are also some similarities with JI Track 2 (see above).

Article 6.8 provides a framework for non-market approaches but is unclear about its practical implementation. The 2014 UNFCCC Technical Note provides some insight into what can be considered a non-market mechanism: non-market mechanisms should include economic and fiscal instruments (including carbon taxes), technical regulation, voluntary agreements, information, training, and education [UN, 2014].

[6] Commonly used reference in UNFCCC documents and decisions under Article 6 of the Paris Agreement.

[7] Foreseen by Article 12 of the Kyoto Protocol.

Paragraph 40 of Decision 1/CP.21 requires a draft decision on the work programme on Article 6.8 for consideration and adoption by the Conference of the Meeting of the Parties to the Paris Agreement.

Difficulties in Negotiations

At the beginning of the negotiations on Article 6, the lack of a common understanding of terms and definitions was revealed, and there were fundamental disagreements on some provisions of the document. Some of the main issues are discussed below.

Lack of an agreed definition of the term "internationally transferable climate change mitigation outcomes" – what can ITMOs represent? What is their origin, and how should they be issued? Some countries have encouraged the establishment of specific requirements for ITMOs, including independent verification and compliance against complementarity criterion. But so far, such proposals have not been generally accepted. There are also disagreements as to whether absorption of GHGs (for Russia, one of the priorities in the negotiations) should be included in ITMOs. An argument for supporting inclusion of GHG absorption activities in market and non-market mechanisms can be found in Article 5 of the Paris Agreement. Under this Article, parties should take action to conserve and enhance "sinks and reservoirs of greenhouse gases, including forests." Some countries propose to use a special UN mechanism for this purpose – Reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries (REDD+) [UNFCCC n. d., f]. But the inclusion of the REDD+ mechanism in Article 6 activities carries the risk of receiving double funding for the same activities. This potential makes it unacceptable for some negotiators to include REDD+ [ADB, 2020; Hein et al., 2018].

Preventing double-counting of the results of Article 6 activities can be described as one of the most difficult issues in the negotiations. Experts believe that double-counting may occur in three cases: issuance of emission reduction units more than once from a single project; use of the units more than once; and giving credit for the same units as meeting the obligations of both the issuing country and the host [Doda et al., 2021]. In this context, it is worth taking a closer look at the existing risk features for Article 6.2 and 6.4.

Prevention of double counting under Article 6.2 (avoidance of double-counting). This means that ITMOs transferred from the host country to the receiving country are properly accounted for and recorded in its NDC by applying "corresponding adjustments."

Under the Kyoto Protocol, all transactions with carbon units were registered in national registries and the International Transaction Log (ITL), which was connected to national registries. Transactions between countries were conducted through the ITL. How this should be organized under Article 6 of the Paris Agreement is not yet defined. But during negotiations developing countries made it clear that they are not prepared to bear the additional financial burden of creating and operating national registries. Therefore, draft decisions include options that give the UNFCCC secretariat the authority to maintain an international registry as well as national registries for developing countries.

In the Article 6.4 mechanism, the avoidance of double counting is ensured by the limitation that "emission reductions shall not be used to demonstrate achievement of the host Party's nationally determined contribution if used by another Party to demonstrate achievement of its nationally determined contribution" (stipulated in Article 6.5). Referring to these rules, some countries believe that if the climate project is implemented in areas of economic activity that are not included in the NDC, the adjustments are not required. This simplistic interpretation

of the principle of additionality creates false incentives to limit the scope of economic activities included in NDCs. This is contrary to the spirit of the Paris Agreement, which calls for both developed and developing countries to set economy-wide goals.[8] As a compromise, the postponement of corresponding adjustments was proposed and included in the negotiation texts – until 2023, 2025, or another period.

Ensuring environmental integrity under Article 6.2 *and overall mitigation in global emissions* under Article 6.4 (paragraph d) refer to the requirement to reduce GHG emissions in absolute terms. The difficulty lies in the fact that the criteria for achieving environmental integrity and ensuring absolute emission reduction have not yet been developed. To guarantee environmental integrity and absolute emission reduction, it is proposed to cancel some of the transmitted results. This would mean that each time carbon reduction or absorption units are transferred from one country to another, a portion should be cancelled. For example, a cancellation of 2% (this option is included in negotiation texts) means the following: when 100 carbon units (100 tons of CO_2-equivalent) are transferred, only 98 tons of CO_2-equivalent shall be counted. The remaining two tons of CO_2-equivalent will not be used by anyone.

The method and timing of adjustments to the NDC after the sale of carbon. There are various suggestions for such adjustments – for example, to make adjustments at each transfer of carbon units between countries, to do so once a year, or only in the last year of the commitment period – to demonstrate compliance with that year's commitment. Experts from the Organisation for Economic Co-operation and Development (OECD) suggest averaged and cumulative approaches [Lo Re, Vaidyula, 2019]. In the case of the averaged method, the adjustment is applied in the final year of the commitment period based on the average number of ITMOs transferred during the period of their implementation. The cumulative approach takes into account the sum of all ITMOs transferred in the period. The authors of this proposal note the importance of the simultaneous application of the same methods by the parties issuing and receiving ITMOs. The choice of a particular method is complicated by differences in the format of ITMOs in different countries.

How, and in what units, should the adjustments be made in various NDCs? An unambiguous answer to this question is difficult due to the disparity of different approaches. For example, EU countries' obligations are expressed in absolute emission reductions (minus 55% by 2030 from 1990 levels), while China's NDCs are set in terms of a reduction of carbon intensity (a measure of CO_2 produced per dollar of gross domestic product) by 60–65% by 2030 from the 2005 level [UNFCCC, n. d., a]. Theoretically, the transmitted results of climate projects can be brought to a certain common denominator. But so far there are no agreed solutions in this regard.

However, Decision 1/CMA.18 regarding the implementation of Article 13 of the Paris Agreement (transparency) set a requirement to reflect, in the reports on compliance, activities implemented under Article 6. Paragraph 77(d) of the decision states that each party participating in projects related to the use of ITMOs toward its NDC provide information about the emission balance (that is, on emission and absorption of GHGs) with appropriate adjustments (additions and subtractions of transferred ITMO), as well as information on how the "robust accounting to ensure the avoidance of double counting" is applied [UNFCCC, 2018, Decision 18, CMA.1]. Thus, methodological aspects of such additions and subtractions are moved to the country level, and the above-mentioned decision requires the inclusion of relevant information in national reports.

Safeguards and limits under Article 6.2. The different ambitions of countries in their commitments means different capacities and roles in the activities under Article 6.2. Some countries, due to more stringent obligations, potentially would have to buy additional offsets; others,

[8] Article 4 of the Paris Agreement.

due to less ambitious obligations, may potentially sell the available surplus of emission reduction units. In the first commitment period of the Kyoto Protocol (2008–12), oversupply of emission reduction units was referred to as "hot air" [Greiner, Michaelowa, 2018]. The presence of "hot air" was typical for Eastern Europe. Based on the lessons learned, western countries propose to put some restrictions on the transfer of ITMOs. Article 6 draft decisions have some references to possible restrictions, but do not specify which ones.

Share of proceeds for administrative costs and adaptation in developing countries. The problem is that a number of developing countries are proposing to extend the share of proceeds rule provided for in Article 6.4 to Article 6.2. The argument for that is the particular vulnerability of developing countries to climate change and continuous underfunding of adaptation. Thus, in fact, this is a proposal to review the Paris Agreement beyond procedures, applicable in such cases. This approach, of course, does not have the support of most developed countries. Also, the amount of the share of proceeds has not been agreed yet. In the negotiation texts, there are options for 2% and 5% of the transferred ITMO.

With regard to reimbursement of administrative costs, it might be noted that such a practice was used for CDM projects: the CDM executive board operates on commission paid by project participants when registering projects. Later, a share of proceeds for adaptation was also applied under the CDM. Two per cent of transferred CDM units, with the exception of projects in least developed countries, were accumulated in a specially created Adaptation Fund. From 2009–18, about 38 million certified emission reduction units (CERs) were transferred to the Fund. These units were sold for $5.2 each, on average [Michaelowa et al., 2019]. Trading of CERs met only 23% budgetary needs of the Adaptation Fund and its managing board, with the remainder (77%) coming from donors and income from deposits. Thus, 2% of the share of proceeds did not cover the actual costs. Based on this, the share of proceeds should be higher than 2% in order to provide the necessary level of financial resources to cover administrative costs and adaptation. It is important to note that, according to the decisions taken in 2018, the Adaptation Fund will serve the Paris Agreement and shall be "financed from the share of proceeds from the mechanism established by Article 6, paragraph 4, of the Paris Agreement" [UNFCCC, 2019, Decision 13, CMA.1 and Decision 1, CMP.14]. So, the place where share of proceeds shall be accumulated has already been defined. It is also worth underlining that the link to Article 6.4 is clearly defined by the decision, with no reference to Article 6.2.

Connection to the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). The possibility of using the results of joint activities under Article 6 for conformity with obligations under the International Civil Aviation Organization's (ICAO) CORSIA has been discussed in the negotiations. However, there is no reference to ICAO in negotiation texts. Instead, the proposed language for Article 6.4 states that emission reductions might be used for "other international mitigation purposes" that also should be accordingly reflected in the mechanism registry. These other purposes, obviously, should be understood as CORSIA [ADB, 2020]

Transitions from the Kyoto Protocol – should the transfer of units (CDM and JI) be allowed, and to what extent (with or without limits)? The main concerns about such a transition from the Kyoto period is linked to the risk of market oversupply, which would lower the price of carbon units [Evans, Gabbatiss, 2019]. According to various estimates, this may range from 2.3 to 4.7 billion CERs, while the demand may be several times less [Lo Re, Vaidyula, 2019].

Eighty per cent of CDM projects took place in five countries – China, India, Korea, Brazil and Mexico. China leads by a significant margin, with 54% of the world's CER carbon units [UNFCCC, n. d., c]. In the event of a transition, these countries will have an obvious advantage, which others would contest. As a solution, the application of transition restrictions has been suggested: for example, to allow transition of units only from the second commitment

period of the Kyoto Protocol (starting from 2013), or units from projects in the least developed countries, or from critically important projects (criteria to be defined). An option under consideration is to limit the validity period of transferred units to three to five years.

Objectively, the number of available JI units is much lower than for the CDM. For the whole period, about 900 million JI units were issued [UNFCCC, 2016] while at the same time CERs under the CDM amounted to more than 2 billion. There are not many proponents for the transition of JI units. This fact might be explained by the following circumstances: JIs were mostly implemented in Eastern European countries, some of which are now part of the EU and have to follow the bloc's common position in support of limiting the transition of Kyoto units as a matter of principle. The Republic of Belarus, at that time, had not received full access to the Kyoto Protocol flexibility mechanisms [UNFCCC, n. d., d]. Russia, in 2012, decided not to join the second commitment period of the Kyoto Protocol and stated in a special report at the end of the first commitment period that the remaining units would not be transferred to the second [UNFCCC, 2015]. Thus, from a practical point of view, the transfer of JI units should not be particularly in demand.

With regard to Article 6.8, it must be noted that so far there have been no problematic issues in the negotiations in this area. There are several options for launching the work programme and coordination body. It is quite possible that a consensus will be found on these options in Glasgow. Theoretically, under Article 6.8, discussion on border carbon adjustments – such as the CBAM provided for in the European Green Deal [EC, n. d.] – may be considered. After the EU documents were revealed in July 2021, the discussion on this issue has intensified in Russia and other countries. With this in mind, negotiations on Article 6.8 in Glasgow may have an additional topic for discussion that has not yet been addressed. On the other hand, a forum on response measures might be a more relevant agenda item for CBAM discussions [UNFCCC, n. d., e].

Pilot Projects Under Article 6

Despite the pending negotiations, many countries have started implementing joint projects under Article 6 as pilot projects. For example, Sweden and Norway are implementing projects in cooperation with some Latin American and African countries [Roth, Echeverria, Gass, 2019]; Switzerland signed an agreement with Peru to gain offsets under the Paris Agreement [Lo, 2020] and plans to sign similar agreements with other developing countries to offset 35–54 million tons of its GHG emissions up to 2030. Of course, this kind of joint activity recalls many CDM projects, but politically these projects immediately enjoy a different status, as they are implemented under the Paris Agreement.

Pilot projects are based on bilateral agreements (for example, Switzerland and Peru), special facilitative mechanisms for developing countries (such as Japan's Joint Crediting Mechanism), and platforms of international financial institutions. Thus, under the auspices of the World Bank, the Climate Markets Club was established, which includes the Asian Development Bank, the African Development Bank, the European Bank for Reconstruction and Development, and the Inter-American Development Bank, as well as more than 10 national governments. These actors are jointly developing pilot activities under Article 6.2 of the Paris Agreement [Srinivasan, Sanchez, 2020].

According to expert estimates, both Articles 6.2 and 6.4 are most popular among pilot projects. To date, only one project is being implemented under Article 6.8. According to available information, the only metric that is used in pilot projects is a ton of CO_2-equivalent. Approximately $1.37 billion has been allocated for the development and implementation of pilot activities [Greiner et al., 2020].

In 2019, 30 countries signed a declaration on cooperation to implement Article 6 of the Paris Agreement based on the agreed principles, named after the place of signing – the San Jose Principles (capital of Costa Rica) [Dirección de Cambio Climático, 2019]. Among the signatories were the EU countries, Norway, Switzerland, New Zealand, some small island states and Latin American countries – Peru, Paraguay, Colombia and Costa Rica. The countries agreed to: use carbon credits issued only after 2020; prevent double-counting and make corresponding adjustments; use CO_2-equivalent as a metric; apply principles of "transparency, accuracy, consistency, comparability and completeness"; and use centralized and publicly accessible infrastructure and systems to collect, track, and exchange information necessary for reliable and transparent accounting.

These examples confirm that joint activities under Article 6 can be carried out now, in the absence of agreed decisions under the UNFCCC. However, there are pros and cons to this situation. On the one hand, there is global GHG emission reduction, contribution to the achievement of UN sustainable development goals, and testing of project activity methodologies. On the other, this may signal that adoption of decisions on Article 6 is not such a critical point, because, practically, it is possible to apply the market mechanisms of the Paris Agreement without them.

Proposals for Russia's Position in the Article 6 Negotiations in Glasgow

Russian companies have shown high interest in cooperation under Article 6. The regulatory framework for that is already being formed – the federal law On Limiting Greenhouse Gas Emissions, adopted in July 2021,[9] and the provisions of a draft law, On Conducting an Experiment to Establish Special Regulation of Greenhouse Gas Emissions and Uptake in the Sakhalin Region – allow implementation of climate projects with international participation.

To ensure that the Article 6 framework being created provides wide opportunities for Russia, there are some important points to be considered.

Existing options limiting transfers of ITMOs under Article 6.2 (limits to the transfer and use of ITMOs) obviously are not ideal as they reduce the number of participants. In accordance with the Paris Agreement, parties determine their own NDCs, taking into account the socioeconomic circumstances to achieve the goal. Article 6 rules should not set a precedent for assessing the ambition of commitments and related limitations for parties. This approach should not be supported.

The share of procedures is foreseen only in Article 6.4 and are not provided for in Article 6.2. Proponents of such a proposal may be invited to amend Article 6.2 in accordance with the procedure provided for in Article 22. In addition, the Adaptation Fund has already been identified as a body for mobilizing the sharing of proceeds. And the corresponding decision has a clear reference to Article 6.4 only. But from another point of view, inclusion of sharing of proceeds in Article 6.2 may become a subject for mutual compromise on other issues that are important for other countries. For Russia, for example, such important elements include opportunities to implement projects under Article 6 (without limits) related to forestry and low carbon energy, including large hydropower or nuclear power.

Russia has always supported broad coverage of project activities under Article 6, both in terms of GHG emission reduction and absorption by sinks. As a result, the negotiation texts have options that provide for activities in the forest sector. But for now, these options are enclosed in squared brackets, meaning that there is no agreement on them among negotiators.

[9] Federal law of 2 July 2021 No 296-FZ.

Obviously, additional consultations and clarifications would be required to remove objections. An argument can be made, referring to Decision 1/CMA.18 on reporting, that paragraph 77(d) implies statements about the balance of emissions, reflecting emissions from sources *and removals by sinks of greenhouse gases*, adjusted according to the results of activities under Article 6. To reflect adequate project duration for activity in forestry, it is advised to add the option of 20 years and more in Article 6.4 (while currently there are options of 10 years and three times of five).

Strictly speaking, the issue of transferring Kyoto units does not directly affect Russia due to its non-alignment with the second commitment period of the Kyoto Protocol. CDM unit transition brings a risk of flooding the market with CERs units, resulting in low carbon unit prices. Obviously, this is not beneficial to anyone. If it would be difficult to agree on the transition of Kyoto units as a universal approach, the transition of both CDM and JI units might be proposed instead. The number of JI units is many times fewer than the CDM; thus, their transfer would not lead to an oversupply on the market.

A high priority question is how to make adjustments to NDCs when transferring emission reduction results under both Article 6.2 and Article 6.4. For environmental integrity, it is important to ensure that carbon units are taken into account when they are transferred from one country to another. Postponing requirements to account for operations with units harms environmental integrity. As a compromise, providing international assistance to developing countries for establishing and operating a carbon unit registry may be supported.

Russia's active participation in the negotiations on Article 6 of the Paris Agreement is not only politically important, but also meaningful in practice. In the context of developing domestic carbon regulation, experts and government officials often emphasize the importance of further international recognition of Russian regulatory mechanisms and climate projects. Participation in the development of international rules for climate projects and building a national system in accordance with UN decisions is the most effective way to approach this task. Project validation and verification by independent organizations are important elements of international project activities. In fact, only a few expert organizations – mostly international auditors – can provide such services in Russia today. The cost of these organizations' services is rather high (up to several tens of thousands of dollars). With the growing number of climate projects and requests for verification, existing expert organizations will not be able to cover all such requests. There is an obvious need to develop a national expert community to be recognized at the international level. Provisions that enable national authorities to nominate independent verifiers and approve requirements for verifiers in Article 6 decisions would help to solve this problem.

Reaching a compromise in Glasgow on Article 6 will obviously not be an easy task. Online sessions of the UNFCCC subsidiary bodies held in June 2021 showed that contradictions in the positions of countries have not disappeared. One possible solution for Glasgow might be adoption of a package – quite a common practice in complex and lengthy negotiations. Indeed, the Paris Agreement was adopted in this way. Article 6 arrangements can also be linked to other decisions, such as strengthening financial support to developing countries. International financial assistance defines the scope and ambition of climate action and contributes to a number of development goals in developing countries. Therefore, the ability to gain access to such resources may be a higher priority compared to the rules of mechanisms whose application is not an obligation. But the desire to reach a compromise in Glasgow should not diminish the requirements for the mechanism being created. A transparent framework for the implementation of climate projects and strict accounting of their results should be established.

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A Green Revolution? A Tentative Assessment of the European Green Deal[1, 2]

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Abstract

This article analyses the main aspects of the European Green Deal proposed by the European Commission in December 2019. It puts the Green Deal into the broader context of European Union (EU) climate governance in order to assess whether and how it advances the EU's climate agenda. Four broad and interrelated categories to evaluate the Green Deal are proposed. Its performance depends on whether it is and will remain a policy priority, despite the COVID-19 emergency and the ensuing economic crisis. Second, successful implementation depends on adequate financial endowment, including the shift of public funding from hydrocarbons to renewables and energy efficiency in post-pandemic economic programmes. The legal competence of EU institutions to coordinate and enforce the implementation of the Green Deal is also essential, as highlighted by ongoing discussions concerning governance to achieve zero net emissions by 2050. Furthermore, international cooperation with third partners on issues such as border carbon adjustment, technology transfers, and green industry will influence both the implementation of the Green Deal in the EU and the contribution of other major emitters to the climate agenda. The impact of the European Green Deal on EU-Russia relations is also investigated. In this respect, it is argued that the Green Deal poses a serious challenge to the traditional pattern of EU-Russia energy trade, which has been dominated by fossil fuels. However, the Green Deal also offers new avenues for cooperation and for a more sustainable EU-Russia energy relationship.

Keywords: European Green Deal, European Union, energy transition, EU-Russia relations, COVID-19, energy policy, climate policy

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Introduction

The European Union (EU) has long pursued policies to tackle climate change. It adopted a climate change strategy as early as 1992 and endorsed the goal of limiting global warming to 2° Celsius above pre-industrial levels in 1996. In the early 2000s, the EU strengthened its credentials as an international leader in addressing climate change when it secured enough followers for the Kyoto Protocol to enter into force despite the withdrawal of the United States [Parker et al., 2017]. Russia's ratification of the Protocol in 2004 was essential in this regard, as the treaty

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required that a majority of countries approve it and that the signatory states account for 55% of the world's emissions [Deutsche Welle, 2004].

Ambitious domestic policies backed up the EU's global role. In 2005, the EU launched an emissions trading scheme (ETS) – the world's most important greenhouse gas emissions trading scheme and flagship of the EU's climate policy [Kulovesi, 2017; Lindberg, 2019]. Two years later, it adopted a comprehensive climate legislative package that included the 20-20-20 targets (see discussion of the 2020 Climate and Energy Policy Framework below). At the 2009 UN Climate Change Conference in Copenhagen, the international community failed to secure a global agreement on limiting greenhouse gas (GHG) emissions. Nonetheless, the EU continued to pursue its domestic climate targets and drafted new ones for 2030 [Szulecki, 2016]. The Paris climate agreement of December 2015 was a success for EU diplomacy and encouraged the Union to revise its emission reduction, renewable energy, and energy efficiency goals upward [Oberthür, 2019].

After 2016, the rise to power of leaders hostile to climate action in several major emitters, from Donald Trump in the U.S. to Jair Bolsonaro in Brazil, has challenged EU and global climate action [Vihma, 2019]. In the face of mounting evidence of the climate crisis, the EU has continued to consider climate policy a priority. The European Commission presided over by Ursula von der Leyen, which started its mandate in December 2019, made energy transition one of its main goals and announced that it would pursue a "European Green Deal" – henceforth, the Green Deal [EC, 2019a]. The Green Deal can be conceptualized as a road map of key policies for the EU's climate agenda, based on which the Commission has started and will continue to develop legislative proposals and strategies from 2020 onward.

This article analyzes the main aspects of the proposed Green Deal. First, it puts the Green Deal into the broader context of EU climate governance. In a second step, it presents four broad and interrelated categories to evaluate the performance of the Green Deal: policy priority, financial endowment, legal competence of EU institutions, and international cooperation. These categories have been derived from the main policy issues that emerged from an analysis of relevant official documents (including the Green Deal Communication and the draft European Climate Law) and policy debates thus far. They address the topic through a comprehensive, interdisciplinary approach including political, economic and legal perspectives.

It is argued that the implementation of the Green Deal depends on whether it is and will remain a policy priority in both the short and the long run, an issue which has been aggravated by the COVID-19 emergency and the ensuing economic crisis. Second, successful implementation depends on adequate financial endowment, including the shift of public fund allocation from hydrocarbons to renewables and energy efficiency. The prioritization of the climate agenda in the EU's financial programmes to restart the European economy after the COVID-19 emergency will be an essential factor. The legal competence of EU institutions to frame, coordinate and enforce measures for the implementation of the Green Deal is also of paramount importance, as highlighted by the intra-EU debates concerning the European Climate Law and governance to achieve zero net emissions by 2050. Furthermore, international cooperation with third countries will shape both the implementation of the climate agenda within the EU and the contribution of other major emitters to climate action. In this regard, it is argued in this article that the Green Deal poses a challenge to long-standing trade relationships between the EU and hydrocarbon providers, such as Russia. However, it also offers new avenues for cooperation and for a more sustainable EU-Russia energy relationship focusing on renewable energy and hydrogen technologies.

EU Climate and Energy Governance and the Green Deal

The 2020 and 2030 Climate and Energy Policy Frameworks

EU climate and energy governance is structured around three main headline targets concerning GHG emission reduction from 1990 levels, the share of renewable energy in final energy consumption, and improvement in energy efficiency. For the year 2020, the EU-level goal for each of the three headline targets was 20%. The GHG reduction and renewable energy targets were binding on member states, whereas the energy efficiency target was indicative only. The EU's 2020 Climate and Energy Policy Framework, adopted in 2007, was implemented through three directives (on the EU's ETS, on renewable energy, and on energy efficiency) and an effort-sharing decision on reduction targets for members' GHG emissions outside the ETS [Oberthür, 2019, p. 18]. Broadly speaking, the ETS aims to cut GHG emissions in power and heat generation, the energy-intensive industry, and the aviation sector [EC, n. d., a]. The effort-sharing decision concerns a GHG reduction in most sectors not covered by the ETS, notably transport (excluding aviation), buildings, agriculture and waste [EC, n. d., b].

The 2030 Framework builds on and further develops the 2020 targets. The GHG emission reduction target was initially raised to at least 40% compared to 1990 levels. This target is implemented through the revised ETS directive (Directive 2018/410) and an effort-sharing regulation (Regulation 2018/842) covering non-ETS sectors. The target for renewable energy was increased to at least 32% (Directive 2018/2001) and that for energy efficiency to at least 32.5% (Directive 2018/2002). The target for renewables is binding at Union level but, contrary to the 2020 Framework, binding targets for each member are no longer specified. The energy efficiency target remains indicative.

Furthermore, a new directive integrates GHG emissions and removals from land use, land use change, and forestry (LULUCF, Regulation 2018/841) in the 2030 Framework. Based on this regulation, each member will have to ensure that LULUCF emissions do not exceed removals by the sector. Finally, the new Governance Regulation (Regulation 2018/1999) establishes a framework for planning, reporting and review. In particular, it requires each member to submit an integrated national energy and climate plan every 10 years (starting in 2019, with an update every five years), including national contributions to the EU-wide renewable energy and energy efficiency targets and related policies. Biennially, members have to submit progress reports on the implementation of national energy and climate plans and policies for GHG emission reduction. They also have to submit and regularly update long-term strategies for climate and energy covering at least the next 30 years. The European Commission is mandated with the task of assessing draft plans, monitoring progress in implementation, and taking remedial action – mostly in the form of recommendations to members (for more detailed analysis, see S. Oberthür [2019] and M. Ringel and M. Knodt [2018]).

According to the European Environment Agency's 2020 report on trends and projections in Europe, the EU was on track to meet its 2020 GHG emission reduction target. However, it will not achieve the 2030 target based on existing national policies and measures [EEA, 2020, pp. 6–9]. The EU was also on track to meet the 2020 renewable target, but it will miss the 2030 goal unless it raises the yearly increase of renewables in final energy consumption from the current 0.7% (recorded between 2005 and 2017) to at least 1.1%. Furthermore, the EU failed to meet its 2020 energy efficiency target and will also fail to meet the 2030 target, unless annual reductions in energy consumption reach, over the next decade, more than double the average rate of reductions achieved between 2005 and 2017. This highlights that new and ambitious policies are necessary to pursue the climate agenda.

The European Green Deal

From the beginning of its mandate in December 2019, the new European Commission headed by President Ursula von der Leyen declared climate policy a top priority. At a rhetorical level, to an extent, this differentiates it from the previous Commission, which put stronger emphasis on the security of supply in the wake of the 2014 Ukraine crisis and tensions with Russia [Goldthau, Sitter, 2019; Siddi, 2016; 2019]. Several factors are likely to have contributed to the prioritization of climate policy. The climate crisis has become increasingly evident both in Europe and globally, as highlighted by repeated record high summer and winter temperatures, the melting of polar ice and glaciers, and highly mediatized events such as the catastrophic forest fires in Sweden, Siberia and Australia in 2018–19. In Europe, growing concern about climate change was reflected in stronger electoral support for Green parties in the 2019 European elections, especially in some larger western member states, as well as in the emergence of grassroots movements such as "Fridays for Future" or "Youth Strike for Climate" [Deisenrieder et al., 2020; Mudde, 2019]. Moreover, the rise to power of climate change deniers such as Donald Trump in the U.S. and Jair Bolsonaro in Brazil risked fatally undermining global cooperation on tackling climate change, as enshrined in the Paris climate agreement [Fraune, Knodt, 2018]. All of these factors encouraged the von der Leyen Commission to take the initiative and strengthen the Union's profile in global climate action.

The first concrete step was to reprioritize climate policy in both official discourse and policy documents, expanding on the legislation, targets, and policies already set by the Commission in 2016–18 for the 2030 Climate and Energy Framework. On 11 December 2019, the Commission presented the Communication on the European Green Deal, with the goal of providing an initial road map of the necessary key policies and measures. The Communication highlighted tackling climate and environmental-related challenges as "this generation's defining task." It described the Green Deal as a response to these challenges as well as "a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use" [EC, 2019a, p. 2].

The pursuit of a just and inclusive transition, including cooperation with international partners, was presented as a key overarching component of the Green Deal.

Achieving zero net GHG emissions by 2050 is arguably the most central, ambitious and challenging goal set out by the Communication. The document highlighted this target again in paragraph 2.1, declaring that the Commission would propose "the first European 'Climate Law' by March 2020" in order to enshrine the 2050 climate neutrality objective in legislation. Moreover, it proposed increasing the EU's 2030 GHG reduction target to at least 50% and toward 55% compared with 1990 levels through a revision of climate-related policy instruments [EC, 2019a, pp. 4–5]. From a political perspective, the 2030 goal is particularly important because it requires incumbent governments to take action in the short term [Morgan, 2020a].

In order to meet the higher costs of the energy transition for regions and member states that are more reliant on coal or heavily polluting fossil fuels, the Green Deal Communication also proposed a Just Transition Mechanism and a Just Transition Fund. This was developed further in mid-January 2020, when the Commission presented a regulation to establish the Just Transition Fund [EC, 2020b]. The proposed financial mechanism should also act as an incentive for members such as Poland, one of the largest prospective recipients and the only member that initially refused to commit to the 2050 zero net emission target.

Furthermore, the Green Deal Communication announced the upcoming introduction of various strategies and operational frameworks, some of which are of intrinsic importance – for instance, the carbon border adjustment mechanism (CBAM), the Sustainable Europe Invest-

ment Plan, an EU industrial strategy, a circular economy action plan, a new EU Biodiversity Strategy to 2030 and a "farm to fork" sustainable agriculture strategy. Ambitious, long-standing ideas such as mainstreaming sustainability in all EU policies and turning the European Investment Bank into "Europe's climate bank" were reiterated and reframed as targets with indicative deadlines [EC, 2019a, pp. 5–7, 15–6; Szulecki, 2020].

The European Climate Law

The Green Deal is designed to have a substantial impact on both medium-term goals, for 2030, and long-term targets for 2050. The European Commission's proposal for a draft climate regulation in early March 2020 substantiated the long-term policy goals outlined in the Green Deal Communication. Article 2.1 of the draft regulation states that "Union-wide emissions and removals of greenhouse gases regulated in Union law shall be balanced at the latest by 2050, thus reducing emissions to net zero by that date" [EC, 2020a]. The first draft of the regulation also empowered the Commission to review the trajectory toward the climate neutrality objective every five years starting in 2023, "at the latest within six months after each global stocktake referred to in Article 14 of the Paris Agreement" (Article 3.1).[3]

Furthermore, the Commission was tasked with assessing the collective progress made by all member states toward the climate neutrality objective and on adaptation to climate change, as well as the consistency and adequacy of both Union and national measures (Articles 5 and 6). If the measures of a member are inconsistent with the climate neutrality and adaptation goals, the Commission may "issue recommendations to that member state," which "shall take due account" of them and explain how it has addressed the recommendations in its first progress report (Article 6.2 and 6.3).

The prerogatives of the Commission to review targets every five years were significant and raised controversy with member states and the European Parliament [Morgan 2020b]. Article 3 of the draft regulation empowered the Commission to review the targets by delegated acts, namely without having to go through full negotiations with the European Parliament and the member states. This *modus operandi* would have strengthened the Commission's mandate and enabled it to act faster and relate better to the global climate agenda. However, Article 3 was modified in later negotiations between the Commission, the European Parliament and the Council of the EU due to the opposition of the Parliament and the Council to delegate these powers to the Commission. Member states were reluctant to transfer competence over sensitive GHG emission reduction targets. The European Parliament and industry also took a sceptical stance because delegating decision-making to the Commission in this area would weaken their power to push through legislative amendments.

With regard to the 2030 Framework, the draft regulation stated that the Commission will review the 40% GHG emission reduction target by September 2020 and "explore options for a new 2030 target of 50 to 55% emission reductions compared to 1990" (Article 2.3). This would be followed by an assessment, to be made by June 2021, of how related legislation would have to be amended to achieve the higher target (Article 2.4). In September 2020, the Commission raised the 2030 GHG reduction target to "at least 55%" compared to 1990 levels [EC, 2020d]. This target became the new nationally determined contribution (NDC) of the EU to the Paris climate agreement, namely the GHG reduction target that the Union will officially present in multilateral fora. Conferences of the Parties (COP) of the United Nations Framework Con-

[3] Negotiations on the European Climate Law continued until April 2021. They involved the European Commission, the European Parliament and the Council of the EU. Some parts of the initial proposal were modified in subsequent drafts. The most relevant changes for this analysis are discussed below.

vention on Climate Change (UNFCCC) are the most important of these fora. The EU hoped that its commitment would serve as a stimulus for third countries to present ambitious climate targets prior to the next COP, which took place in Glasgow in November 2021.

Assessing the Performance of the Green Deal

Policy Priority

Maintaining priority in EU and national policy planning throughout the long period over which it will be implemented is the main overarching challenge for the Green Deal. While the climate crisis is a constant reminder of the urgency of climate action, many variables – at times competing ones – can play a role. The recent past has shown how geopolitical crises can shift the attention of European policymakers toward the security of energy supply. In these circumstances, a narrow understanding of the security of supply leads to the prioritization of more polluting domestically produced fossil fuels (notably coal) over less polluting imports. In April 2014, two months after the beginning of the Ukraine crisis, then Polish prime minister (and soon-to-be European Council president) Donald Tusk argued that "Europe should make full use of the fossil fuels available, including coal and shale gas. In the EU's eastern states, Poland among them, coal is synonymous with energy security" [Tusk, 2014]. Future geopolitical crises or international tensions may lead to the return of such political discourse, which pits allegedly secure, domestic fossil fuels against supposedly insecure or more expensive renewable energy.

Rising geopolitical tensions and the fact that some rare earth materials necessary for producing renewable energy need to be imported from competitors such as China have already fuelled zero-sum and *realpolitik* narratives concerning the "geopolitics of renewable energy." However, more nuanced analyses indicate that, with the growing role of renewables, energy systems and geopolitics are likely to be more decentralized and less conflictual and therefore fundamentally different from the current fossil fuel-centred geopolitics of energy [Overland, 2019, pp. 36–40; Paltsev, 2016] (for a comprehensive literature review, see [Vakulchuk, Overland, Cholten, 2020]).

At present, the main challenge to the Green Deal in terms of policy priority comes from the health emergency caused by the COVID-19 pandemic and, most acutely, from the associated economic slowdown. Prior to the COVID-19 emergency, the Green Deal was arguably at the top of the European Commission's policy agenda. The draft European Climate Law was presented in the week before the Italian government imposed a comprehensive lockdown on the country, a policy that was followed by most member states within days or a few weeks at most. Inevitably, the Green Deal lost its discursive and policy priority in order to allow for a focus on the unprecedented health emergency. In mid-April, the Commission announced that some of the "less essential" initiatives of the Green Deal would be delayed until 2021 (for instance the new EU Strategy on Adaptation to Climate Change and the new EU Forest Strategy), but the schedule for key priorities (such as the assessment of new emission reduction targets for 2030) would be maintained [Simon, 2020].

The risk is that important aspects of the Green Deal will not regain priority even after the health emergency is over. The post-COVID-19 economic recession may induce policymakers to relieve industry of carbon costs or to promote coal bailout measures that artificially extend the operation of already uneconomic coal. Leaders and prominent officials of the member states that are more reluctant to endorse the climate agenda have attempted to pit the Green Deal against the need to focus on boosting the economy. Czech prime minister Andrej Babis argued for scrapping the Green Deal, while Polish deputy minister for state assets Janusz Kow-

alski stated that the EU ETS should be discontinued from 2021 onward [Elkerbout et al., 2020, p. 2; Khan, Brundsen, 2020].

However, the relationship between the Green Deal and economic recovery is not necessarily competitive or conflictual. The EU's political and economic response to the crisis has continued to prioritize the energy transition so far. During 2020, the European Commission borrowed 750 million euros on financial markets to launch NextGenerationEU, a financial instrument designed to boost the recovery. Moreover, the EU passed a budget for the years 2021–27 (the so-called Multiannual Financial Framework, or MFF) worth 1.1 trillion euros. EU institutions agreed that 30% of both NextGenerationEU and the MFF will be devoted to climate expenditure [Dupont, Oberthür, von Homeyer, 2020, p. 1102]. For a comparison, this is a much greater financial allocation to climate projects than the one agreed upon by the EU after the 2008 financial crisis. The post-2008 European Economic Recovery Programme allocated only 2% of its 200 billion euros budget to climate and energy spending [Elkerbaut et al., 2020, pp. 4–5].

Financial Endowment

The Commission has estimated that achieving the current 2030 climate and energy targets will require 260 billion euros in additional annual investment. The Green Deal Communication states that at least 30% of the InvestEU Fund – a large EU investment scheme expected to trigger at least 650 billion euros in investments in 2021–27 – will contribute to fighting climate change. Moreover, the Communication highlights that the European Investment Bank set itself the target of doubling the share of its financing allocated to climate action from 25 to 50% by 2025 [EC, 2019a, pp. 15–6].

In January 2020, the Commission announced a European Green Deal Investment Plan aimed at "mobilising at least €1 trillion of sustainable investments over the next decade." This includes the Just Transition Mechanism, which should provide "targeted support to help mobilise at least €100 billion over the period 2021–2027" in order to alleviate the socio-economic impact of the transition in regions that rely heavily on the fossil fuel value chain [EC, 2020c]. Some pundits have criticized these figures, arguing that they are only a fraction of what the EU invested to save the banking sector after the 2008 economic crisis. They also cast doubt on whether the funds announced by the EU are new and will indeed materialize [Storm, 2020; Varoufakis, Adler, 2020]. Critics also fear that the Just Transition Mechanism will channel European taxpayer money to influential local elites in charge of the business related to decarbonization, rather than to miners and other key losers of the process [Gabor, 2020].

According to early assessments, a large part of the promised investments comes from the reshuffling of already existing EU funds and especially from the expected mobilization of national and private funds. For instance, in the Green Deal Communication, the Commission proposed an increase in the allocation of the EU budget to climate and environmental expenditures from 20 to 25%. It then counted 25% of the budget (around 500 billion euros), rather than just the 5% increase (around 100 billion euros), as part of the promised, additional one trillion euros until 2030 [Claeys, Tagliapietra, 2020]. The one trillion euros figure is also questionable because it remains unclear as to whether the InvestEU fund will indeed manage to mobilize the estimated 279 billion euros – mostly private finance – for Green Deal-associated projects. According to some experts, national co-financing will be limited as long as spending for the Green Deal is subject to the rules of the Stability and Growth Pact [Storm, 2020]. Moreover, the actual EU financial endowment for the Just Transition Fund is 7.5 billion euros, while the rest should come from additional funds and private investments [Cameron et al., 2020].

Furthermore, as G. Claeys and S. Tagliapietra noted, the Commission's estimate of 260 billion euros per year of required additional investment is based on the current GHG emission reduction target of 40% for 2030. If the target is raised to 50–55%, the necessary investments will be close to 300 billion euros yearly for the rest of the decade [2020]. Hence, the one trillion euros promised by the Commission would only represent a third of the additional investments necessary for the Green Deal. Moreover, it is far from certain whether the sum promised by the Commission will materialize in its entirety. Additional pressure on fund allocation to the Green Deal will come from the aftermath of the COVID-19 emergency and the related economic slowdown. The falling oil price may also discourage investments in renewable energy.

Overall, based on the figures and estimates that the Commission has published and the broader economic context, financial prospects for the Green Deal remain uncertain. A central issue is the reliance of the entire process on large private financiers, many of whom already have substantial investments in the fossil fuel industry and are unlikely to prioritize long-term climate considerations over short-term profit. In order to avoid greenwashing, the Commission is negotiating a "green taxonomy" of assets and activities that are sustainable and that would eventually become eligible to obtain EU subsidies or financial guarantees. However, private lobbying seems to be leading to the inclusion of a broader category of assets, which could provide loopholes for activities that are not sustainable [Gabor 2020; Storm 2020]. Scrutinizing the allocation of funds and their impact on achieving GHG emission reduction targets will therefore be essential in order to assess the performance of the Green Deal.

Competence of EU Institutions

The degree of legal competence that EU institutions are entrusted with will largely determine the ambition and urgency of Green Deal-related EU policies. With a clear and robust mandate, the Commission is likely to be more ambitious in proposing EU targets and more proactive (and faster) in negotiating with partners in the international arena. However, the Union shares competence with member states in the area of energy and climate policy (see Articles 4 and 194 of the Treaty on the Functioning of the European Union). Member states are reluctant to relinquish additional sovereignty on decisions that affect the structure of their energy supply and the speed and cost of the energy transition. This does not necessarily mean that members will obstruct or be less ambitious in the implementation of the Green Deal. Based on past experience, some members will probably pursue more ambitious goals than those set at the EU level, while others will be less ambitious – with potential variations within each member state based on the political priorities of successive national governments.

As discussed previously, the EU Council and the European Parliament rejected the proposal to delegate powers to the Commission to set a trajectory toward climate neutrality, which was formulated in the first draft of the European Climate Law. While the European Parliament tends to be ambitious in the advancement of the climate agenda, it is reluctant to transfer competences to the Commission and intends to retain its prerogative to discuss and propose amendments on new climate and energy legislation.

Significantly, on 31 March 2020, an opinion formulated by the European Parliament's legal services stated that delegating power to the Commission to set out the trajectory for achieving climate neutrality by 2050 is not in line with Article 290 of the Treaty on the Functioning of the European Union [European Parliament, 2020]. The legal opinion was formulated at the request of two conservative members of the European Parliament from the Czech Republic and Poland, Alexandr Vondra and Anna Zalewska, who are critical of the 2050 GHG emission reduction target [European Conservatives and Reformists, 2020]. Furthermore, during the redrafting of the European Climate Law in October 2020, member state representatives in the EU

Council formally rejected the Commission's proposal to use delegated acts to set a trajectory toward climate neutrality [Agence Europe, 2020].

International Cooperation

Section 3 of the Green Deal Communication focuses on making the EU a global leader in climate action [EC, 2019a, pp. 20–2]. This is framed in terms of continued EU support for the Paris Agreement and the use of all diplomatic channels in bilateral and multilateral fora (such as the UN, the Group of 7 and the Group of 20) to this end. Particular emphasis is put on supporting the ecological transition in the EU's immediate neighbours, namely the Western Balkans, the Southern Neighbourhood, and the Eastern Partnership countries. The centrality of relations with China and of forging "green alliances" with Africa and the Global South is also stressed. In concrete terms, the proposal to gear EU trade policy to support the ecological transition, including commitments to sustainability in EU trade agreements, is one of the most consequential measures. This would include making "respect of the Paris agreement an essential element for all future comprehensive trade agreements" [EC, 2019a, p. 21].

While not explicitly mentioned in the Green Deal Communication, the success of global climate action will largely depend on policy coordination between the three largest GHG emitters – China, the U.S. and the EU [Schreuers, 2016, pp. 219–23]. U.S. president Donald Trump's decision to withdraw from the Paris climate agreement posed the most serious challenge to this coordination. However, following the November 2020 presidential election, newly elected President Joe Biden vowed to rejoin the Paris Agreement. In order to strengthen the international dimension of the Green Deal, the EU can focus on progressively transforming the energy relationship with its main energy partner (and fourth largest GHG emitter), Russia, away from fossil fuels and toward cooperation on renewable energy and energy efficiency [Siddi, 2020a] (see also below). Cooperation with other neighbouring countries can help meet global climate targets. Moreover, it would be cheaper for the EU to achieve drastic emission reductions in countries with less efficient and more energy-intensive industrial sectors than its own [Eyl-Mazzega, 2020].

Coordination with third countries will also be important in the light of measures that will need to be introduced to ensure domestic functioning and to advance the objectives of the Green Deal. Border carbon adjustment is the most important example. Following the Paris climate agreement, global climate governance is based on bottom-up national contributions with varying levels of ambition. Major economies will act according to different timetables and ambition levels. The EU is one of the most ambitious actors in climate policy, with a relatively stringent timetable for emission reductions compared to other major economies.[4] In order to prevent carbon leakage – the transfer of GHG-intensive production outside the EU, where such emissions may not be taxed – Brussels plans to introduce a CBAM. By taxing foreign producers like domestic producers, the EU wants to ensure that the latter do not incur a competitive disadvantage due to stricter environmental requirements.

A border carbon tax involves several challenges and criticisms. It could disadvantage emerging economies, where industrial processes tend to be less efficient. It could be regarded as "green protectionism" and as incompatible with World Trade Organization (WTO) legislation. It could also be very difficult to implement, as foreign producers' emissions are harder to calculate and verify [Wolff, 2020]. Some analysts have criticized the EU's plan to introduce the CBAM, arguing that it entails too many logistical, legal and political challenges and that it is better to focus on developing a competitive low-carbon industry in Europe [McWilliams,

[4] For a comparative policy assessment, see for instance Climate Action Tracker [CAT, n. d., a].

Zachmann, 2020]. Nevertheless, EU policy makers believe that addressing carbon leakage is essential to reconcile the Green Deal with domestic economic interests. The main challenge for the EU in this area will be to devise a mechanism that is compatible with WTO law, does not undermine the interests of the Global South, and incentivizes other major emitters to follow a similar approach, rather than engage in "tariff wars."

Scholars have already presented proposals for border carbon adjustment designs that harness climate benefits while limiting their technical complexities and legal risks [Mehling et al., 2019]. Considering the size of the EU market, the border adjustment mechanism could become an incentive to improve efficiency and reduce GHG emissions in third countries. According to recent analyses, the prospect of an EU carbon border tax has already induced some large foreign companies with a strong presence in the EU market (for instance, the Russian Rusal) to start transitioning to less polluting energy sources [Aris, 2020].

The European Green Deal and Russia

The European Green Deal will have two types of consequences for Russia. First, as implementation of the energy transition in Europe proceeds, Russia's energy exports to the European market will be affected, especially in the medium and long term. European demand for Russian fossil fuels will decrease. Initially, this will especially affect coal demand, then oil and, after 2030, gas (for an analysis of projections, see I. Makarov, H. Chen and S. Paltsev [2020]). Russia has been increasing exports of fossil fuels to Asia for a decade, and China is now the largest single buyer of Russian oil. However, taken together, European countries are still by far the largest purchasers of Russian oil, coal and gas. Moreover, Asian countries have announced that they will also pursue energy transition. Korea and Japan declared that they aim for climate neutrality by 2050, China by 2060 [Financial Times, 2020]. Consequently, Asia's demand for fossil fuels is expected to decline in the medium and long term.

The second key consequence of the European Green Deal concerns Russian energy-intensive exports to Europe, such as metals, chemicals and fertilizers. As explained above, the EU intends to introduce a CBAM, although the details are still to be decided. It could take the form of a tax commensurate to the volume of emissions caused by the production of the imported goods. With the tax, the EU aims to both prevent the transfer of carbon-intensive production to countries with weaker environmental standards and induce other countries to adopt similar standards. The tax could significantly affect the price of Russia's metallurgical and chemical products on the European market.

The EU's plan to introduce a carbon border tax has been met with criticism in Russia and in other trade partners of the EU. Many partners see the tax as "green protectionism," that is, as a way of abusing environmental arguments to protect domestic industry. Some Russian actors mentioned that the issue could be taken to the WTO. However, other countries could also adopt carbon border taxes as part of their climate policies, which could therefore become a common practice. If this happens, Russia could introduce its own domestic carbon pricing mechanism. As argued by the Russian presidential advisor on climate issues, Ruslan Edelgeriyev, this would ensure that carbon fees are collected in Russia rather than abroad (cited in I. Makarov [2021]).

From Russia's perspective, investing in the energy transition can bring several significant advantages. If it develops a specialization in clean energy technologies, Russia will be able to compete for a share of a growing and promising global market. Hydrogen production – especially from renewables – can open the way for a more sustainable type of energy partnership with European countries, relying on the already existing network of gas pipelines for transportation. As J. Henderson and T. Mitrova [2019] have argued, Russia has enormous potential to produce hydrogen and export it on a global scale.

Thanks to its natural endowments, Russia could become a "green energy power": the country has huge potential for developing renewable energy. Moreover, renewable energy – for instance wind power – can be developed and used locally to satisfy the demand of relatively small urban centres in the vast Russian North and East. This is more cost-efficient than linking them to a centralized power grid over hundreds of kilometres [Ibid.].

While the energy transition requires a rethinking and progressive transformation of the EU-Russia energy partnership, green energy cooperation could be based on already existing corporate and trade networks. Some European companies have already invested in the renewables sector in Russia. The Italian ENEL provides an apt example. Its Russian branch EnelRussia has built wind farms in the Murmansk, Stavropol and Azov regions [Enel Russia, 2019]. Other European companies that have long been active in the Russian fossil fuel sector are also greening their portfolios and could use their operational expertise in Russia to make new, greener investments.

Furthermore, commitment to the energy transition also has wider, political significance. As discussed above, climate change is a top concern in the EU, especially for the younger generation [EC, 2019b]. Awareness of the disastrous consequences of climate change is growing in Russia, too [Russian Analytical Digest, 2020]; for a discussion, see J. Lassila and M. Siddi [2021]. Hence, there would most probably be strong public support for common initiatives that address climate change. Shared commitment and joint EU-Russia efforts to tackle climate change and foster the energy transition could be a significant step toward rebuilding a relationship that has been marred by numerous crises in recent years.

Conclusion

The European Commission has pursued climate action in a challenging international setting, amidst growing geopolitical tensions, the rise to power of climate change deniers in major emitters, a pandemic, and the ensuing economic slowdown. Opposition to ambitious climate action also exists inside the ranks of the EU, particularly among Eastern and Central European countries that are concerned about the costs of the energy transition. In this context, the implementation of the Green Deal will face numerous obstacles. Its outcome will depend on several essential prerequisites. Careful scrutiny of four broad and interrelated factors will be necessary. Policy priority will remain essential and will be reflected in the funding assigned to green projects in the post-COVID-19 recovery programmes. At the time of writing, the EU's post-pandemic recovery plans reiterate the importance of the energy transition.

The European Commission also needs to ensure that the additional allocation of funds for the Green Deal is indeed supplementary to the pre-existing budget, rather than a reshuffling of commitments already made. Reliance on private investments should be regulated carefully, as it involves the risk of making the Green Deal subject to corporate interests that are heavily invested in the fossil fuel industry. Another risk is that EU public investments in the green sector do not generate the expected multiplier effect from the private sector. Additionally, if EU funds do not reach the main losers from the energy transitions (for instance, workers of the regions more heavily dependent on the fossil fuel industry), poverty and discontent could become widespread.

A strong legal mandate that simultaneously preserves democratic scrutiny will encourage the European Commission to pursue bolder targets, as well as more proactive strategies in negotiations with other major emitters. Even while climate policy and science are the subject of heavy political contestation in the U.S. (the world's second largest emitter) and China takes an ambiguous stance on phasing out coal [CAT, n. d., b], the EU can continue to pursue the

energy transition in cooperation with other major global players and polluters, such as Russia. Russia's vast resources for renewable energy and hydrogen production provide an important opportunity for sectoral cooperation in decades to come. Furthermore, the EU can also make a fundamental contribution to climate action through technology and financial transfers to countries of the Global South, where GHG emissions can be reduced substantially by overhauling inefficient production processes.

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The Green Deal and the Resilience of EU-Russian Energy Relations[1]

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Abstract

In this article, the influence of the European Union's (EU) Green Deal on its energy relations with Russia is analyzed. Two models of resilience are identified in the EU's discourse. One aims at achieving resilience at the level of the EU's energy sector (the "microsystem" for the purpose of this study) while destroying the system of EU-Russia relations (the "macrosystem"). The other aims at achieving resilience in the micro- and macrosystem at the same time. Empirically, the study relies on EU documents and speeches by its national and supranational representatives. Three cases are studied. The first covers competition of two models of resilience in the principles that the EU defined for its relations with Russia. The second case involves investments that slow down the development of renewable sources of energy in favour of natural gas. This case demonstrates how resilience can be achieved as a return to the previous pattern (bouncing back). Although it can be achieved both at the EU-only level and at the level of the EU and its relations with Russia, it clearly favours the latter. The third case involves the import of hydrogen, which creates possibilities for resilience both at the microsystem alone and at the micro- and macrosystems at the same time. This latter option is achieved through adaptation to new challenges (bouncing forward). The author concludes by comparing the two models of resilience. The model that prioritizes the microsystem's resilience and challenges the macrosystem is based on the synthesis of environmental and geopolitical logics. The other model is based on economic and market logics, but the EU's normative leadership is a prerequisite. The EU's discourse demonstrates the viability of both models and related governance practices. Most likely, the two models will co-exist, but their relative importance will vary over time. This variation will be primarily determined by the EU's internal constraints. However, Russia's policy can facilitate the model of resilience, achieved in both the micro- and macrosystem.

Keywords: resilience, Green Deal, EU-Russia relations, energy, geopolitics, market, energy transition

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The Green Deal, introduced by the European Commission in 2019, became the central pillar of the European Union's (EU) internal and external policies in 2020. The EU links the energy sector with 70% of greenhouse gas emissions [EC, 2019]; therefore, it is the subject of the bulk of present legislative initiatives. Brussels focuses on energy transition, and in particular, on boosting renewable sources of energy (RES) and developing hydrogen facilities. At the same time, energy is the centrepiece of EU-Russia economic relations, with hydrocarbons accounting for 70% of Russia's export to the EU [EC, 2021b]. In this context, the goal of this article is

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to identify how the Green Deal is supposed to affect EU-Russia energy relations. The EU's discourse is identified as an interplay of two models, which form divergent governance practices. The first model presupposes building resilience only at the level of the EU (the "microsystem" for the purpose of this study) while undermining the system of EU-Russia energy relations (hereinafter, the "macrosystem"). The second model looks at strengthening the resilience of both micro- and macrosystems.

Studies of the concept of resilience, which are summarized in the next section, provide the theoretical basis for this analysis. The methodology is built around three case studies: the general context of the EU's relations with Russia in the field of energy and the Green Deal; investments in energy, which illustrate the influence of the past patterns; and the import of hydrogen to the EU, which demonstrates the influence of new technologies and governance practices. The first case sets a conceptual framework for the two models of resilience in EU-Russia energy relations. The second and third cases demonstrate how these models are shaped in specific cases and illustrate the search for resilience respectively as bouncing back and bouncing forward.[2] All three cases are based on discourse analysis of EU official documents and the speeches of its supranational and national representatives from 2019 (when the Green Deal was launched) until present. In some cases, earlier EU sources are used to illustrate the formation of the two models of resilience as discussed in this study. In the final part, the two competing models and ways of their articulation in the EU are summarized.

Resilience and Energy

The concept of resilience is not new. Its genealogy can be traced to the 16th century [Bourbeau, 2018]. The contemporary usage of this term originates in the writings of C.S. Holling, who defined resilience as a "measure of the persistence of systems and of their ability to absorb change and disturbance and still maintain the same relationships between populations or state variables" [1973, p. 14]. Resilience quickly became a "dominating discourse in natural resource management" [Walker, Cooper, 2011, p. 143]. In the following years, resilience was also integrated in social and economic studies as well as in the policies of different countries across the world. On the one hand, the process was driven by the idea that everything is a system linked to other systems. On the other hand, the self-organizing logics of resilience have been in tune with neoliberalism and it has established itself as an attractive governance principle in the context of growing uncertainty and multiplication of unpredictable threats [Chandler, Coaffee, 2017; Romanova, 2019].

At least three approaches to resilience can be identified in the academic literature. According to the first, resilience is a category, which characterizes any system; it is the system's ability to maintain itself and further develop [Anderson, 2015; Folke et al., 2002]. In the second approach resilience is seen as a technique of political and social governance [Coaffee, Fussey, 2015; Kotsur, 2018]. In both the first and the second approaches the focus is on resources — how they are mobilized in response to various challenges, risks and threats. The reorganization of resources allows either a return to the previous state (bouncing back), or a new equilibrium as a result of the adaptation to new threats (bouncing forward). Finally, within the third approach to resilience in the academic studies the focus is on the analysis of various discourses on resilience. In particular, it identifies how various ethical connotations emerge (for example, the EU

[2] The most discussed part of the EU's Green Deal in Russia is the carbon border adjustment mechanism (CBAM) to be introduced gradually in the coming years. Yet, the draft that the Commission proposed in July 2021 does not affect Russian export of oil and gas to the EU. Hence, it is beyond the scope of this article. However, the CBAM will certainly influence the character of Russia's energy consumption

links resilience to democracy) and how threats rather than resources came to dominate in the discussions on resilience [Romanova, 2019].

In energy studies resilience is understood mostly in the context of the first or second approaches. For example, A. Cherp and J. Jewell [2011] suggested that contemporary concepts of energy security should be based on resilience because the latter is in tune with liberalized markets and allows resisting today's unpredictable challenges and risks. These authors also specified that resilience "searches for more generic characteristics of energy systems (flexibility, adaptability, diversity) that ensure protection against any threats by spreading risks (both known and unknown)" [Ibid., p. 208]. A. Gatto and C. Drago, based on their study of various writings on resilience, suggested defining energy resilience as "the adaptive capacity of improving performance, as a result of learning and adaptation, informed by continuous change" [2020, p. 1]. Finally, P.E. Roege and his co-authors identified three elements in energy resilience: physical (existence of resources), information (data on resources that we have), and human (how this information is used and how communication is organized) [Roege et al., 2014].

In this study, resilience is understood as a governance technique. The analysis is focused on how the EU suggests using physical (natural) resources in the context of its Green Deal, what information about resources is circulated, how the EU plans to organize production cycles around those resources, and what type of relations with Russia emerge as a result. As of the 1970s, when the Soviet Union started to supply energy resources to Western Europe on a large scale, energy resilience was achieved synchronously at the levels of micro- and macrosystems. The Green Deal can either maintain this approach (and hence develop the second model of resilience), or prioritize the EU's energy sector by concentrating on resources and technologies that are available internally, thus weakening the macrosystem (EU-Russia energy relations). Today's EU discourse creates possibilities for both models of resilience and respective governance practices. The following analysis demonstrates how the EU articulates these two models, how these models compete in the EU's discourse, and what the potential of each of these models is.

The Overall Context of EU-Russia Relations: Between the Two Principles?

The EU's discourse on relations with Russia is dominated by the so-called five principles [EEAS, 2016], of which two are relevant to the present discussion. The first is about the EU's resilience to threats and risks that Russia provokes. Initially, the EU specified these threats as energy dependence, cyberthreats and disinformation [EC and High Representative, 2017]. However, gradually the latter two moved to the forefront as Russia's capacity to blackmail the EU and its members with energy deliveries diminished [EC, 2020a]. Yet, the key for this discussion is that the EU's discourse on resilience focuses on threats rather than on resources; it is also based on the geopolitical approach to energy and favours strengthening the microsystem (the EU and its energy sector), whereas the macrosystem (EU-Russia energy cooperation) is viewed as a source of threats to the microsystem. In this context, the EU logically chooses the first model of resilience, that is, to strengthen the resilience of the microsystem through reliance on internal resources, minimization of external dependence, and use of resources coming from other macrosystems (such as EU-U.S. interaction) at the expense of the EU-Russia system.

At the same time, another EU principle for relations with Russia is selective engagement. The EU has always recognized the necessity of cooperation with Russia where interests overlap, in particular in the field of climate change [EEAS, 2016], which is closely connected to energy. Vice-President of the European Commission Frans Timmermans underlined that "we

will have to collectively make sure that those countries who depend a lot on fossil fuel have an opportunity to transform their economy and society so that they can prosper in the post-fossil fuel society... [this is] a collective responsibility... this is about making this transition together... causing trouble to one or both sides is going to hurt both sides" [Timmermans, 2020]. Thus, the discourse on cooperation in the field of climate change also leads to the recognition that resilience is to be achieved in both the micro- and macrosystem.

The contradictory nature of the EU's discourse – the coexistence of two different models of resilience in it – was preserved in the 2021 communication on relations with Russia. On the one hand, the document underlined that "the EU has made significant progress in strengthening its resilience against challenges emanating or being instrumentalised from abroad," and that "[m]anaging and accelerating the twin green and digital transitions enhances EU resilience, by making [the EU] gradually less dependent on foreign supplies and the geopolitics of energy" [EC and High Representative, 2021, p. 5]. The document also stresses that "by moving decisively toward decarbonization [the EU's] energy independence will further grow and reliance on Russian supplies overall decrease" [Ibid.]. Hence, dealing with threats and geopolitics considerations are key for this line of thinking.

On the other hand, the document strengthened climate and energy components of the EU's selective engagement with Russia. In particular, the communication specifies such questions as "carbon pricing, renewables, methane emissions, climate change adaptation and the EU's future carbon border adjustment mechanism" [Ibid., p. 12]. At the same time, the document stresses that cooperation in this field is "all the more important for Russia given the fast-changing geopolitics of energy and its own delayed low-carbon transition" [Ibid.]. Here one can see the traces of the second model of resilience, the wish to guarantee resilience in both micro- and macrosystems through the involvement of Russia. Yet, the emphasis is on Russia lagging behind while the EU is leading the way based on its normative hegemony. The lessening of energy dependence on Russia, which the EU sees as imminent, gives the EU the feeling that its positions have strengthened. Earlier, the universality of market regulation, democracy, and human rights served as the source of its normative leadership; now the EU relies on the universality of the climate agenda and on its achievements in this field, which substantiate its leadership.

The competition of two models of resilience in the EU's relations with Russia will continue. The first model is reinforced by the EU's discourse on sovereignty, which is interpreted as limiting intervention in the EU's affairs from outside [Breton, 2020]. The second model is driven by actualization of the climate agenda, in particular by the EU's delegation in Russia [Ederer, 2021], or by efforts of some EU members to partly restore relations with Russia [Santos Silva, 2021]. The interest of business is noteworthy; for example, representatives of CREON Group argue that the success of the EU's Green Deal will come from it becoming the "Eurasian Green Deal" and from paying attention to Russia as a partner in both energy and climate change mitigation [RIAC, 2021].

In sum, the EU's discourse on general relations with Russia demonstrates co-existence of two models of resilience. While the first model became the EU's preferred choice following the 2014 breakdown of EU-Russian relations, the second model, oriented to the resilience of the micro- and macrosystems, has been recently growing in importance. Yet, the EU's normative leadership is a prerequisite for the latter, which logically leads to the restoration of a mentor attitude toward Russia and its achievements in the field of climate policy [Bardon, 2021]. This would inevitably provoke negative sentiments in Russia.

The contradictory character of the EU's discourse, which creates openings for two different models of resilience, also manifests itself in more narrow aspects of energy transition and the EU's Green Deal.

Old Wine in New Skins: RES or Gas?

The general direction of the EU's energy policy is to stimulate the development of RES, which will provide more and more electricity and serve to produce hydrogen in the EU. As a result, the EU's external dependence will decrease. Already, in 2018, a European Commission study forecasted that the EU's external dependence will fall from 55% to as low as 20% by 2050 "in the net zero emissions scenarios"; natural gas will remain "an important energy source" until 2030 but its import will fall by 60–92% by 2050 [EC, 2018, pp. 214, 216]. In sum, even before the Green Deal the EU promoted the development of RES with the help of geopolitical arguments about the need to decrease its external dependence and strengthen its self-sufficiency; in other words, it favoured the first model of resilience (that focuses on the microsystem).

This line of argument has been further developed in the documents that clarified the Green Deal. In particular, the Commission underlined that the "the share of natural gas in gaseous fuels is projected to reduce to 20% and most of the remaining 80% gaseous fuels should be of renewable origin" by 2050 [EC, 2020c, pp. 15–16]. Moreover, the consumption of natural gas in Europe will decrease by 25% by 2030. Similar to the general discourse on EU-Russia relations, "a more resilient European economy" is linked to the "lessen[ing of the EU's] dependency on external fossil fuel supplies" [Ibid, p. 4]. Hence, the EU's discourse on resilience is about strengthening the microsystem at the expense of the macrosystem and promotes the first model of resilience. The symbiosis of environmental and geopolitical logics that was identified in the previous section is preserved here.

At the same time, when the EU puts framework policy decisions into a specific form, the refusal of natural gas in favour of RES is challenged. The 2021 discussions on the energy taxonomy, which is to clarify for investors which projects are in line with the Green Deal, well illustrate this trend [EC, 2021a]. Initially it was suggested that natural gas would be excluded from this taxonomy. Yet, in 2020, the European Council stressed the need to preserve the EU's "competitiveness," to respect "specific national circumstances," and member states' right to "decide on their energy mix" [European Council, 2020, p. 6]. German representatives, in particular, emphasized the transition and balancing role of natural gas in the context of RES volatility, as well as the importance of natural gas to preserve competition in the energy markets [Wettengel, 2021] and to guarantee "energy security" [Amelang, 2021]. Poland insisted on the transition potential of natural gas for the production of both electricity and hydrogen [Taylor, 2021a]. A group of seven EU states (mostly from Central Europe) stressed that "a transition based solely on renewable energy sources does not consider the need for a diversified energy mix in the EU" (cited in F. Simon [2020]). As a result, the European Commission had to admit that for some members energy transition is a "big jump" and intermediate investment measures are needed (M. McGuinness cited in Euronews [2021]); their legitimation is expected at the end of 2021.

A similar example is provided by the programme of expenditures from the EU's Recovery and Resilience Facility. EU members are supposed to spend at least 30% on climate priorities, that is on RES, energy efficiency, and the development of new generation of transport [European Council, 2020]. Yet, most Central and Eastern European countries included gas in their "climate" expenditures, rationalizing it by their move from dirty coal and by the transition period on the way to expensive biogases and hydrogen [CEE BankWatch Network, 2021]. Here again, the European Commission had to agree with this transition solution [Simon, 2021b], with investments in gas recognized as green investments.

The role of natural gas in the EU's energy transition has always been recognized. Yet, new investment decisions mean that the transition to RES will be postponed indefinitely. It is

for this reason that the commissioner for energy expressed her concern that investments in gas "may displace other green investments" (K. Simson cited in K. Taylor [2021b]). Investments in natural gas do not automatically mean that it will be supplied from Russia; yet, those decisions legitimize the role of natural gas and therefore support the second model of resilience, which presupposes strengthening of both the micro- and macrosystems, and the use of the resources of the latter to address challenges of the transition to the climate neutral economy in the EU. From the point of view of theoretical approaches to resilience, this case also illustrates resilience as bouncing back to solutions that previously guaranteed equilibrium in various energy systems.

This case illustrates that the first model of resilience is characterized by the symbiosis of environmental and geopolitical argumentation. The second model of resilience, for its part, is advanced by the discourse on economic rationality, competitiveness, and member states' competences. Both Russia-friendly (Germany) and Russia-critical (Poland) members support the role of natural gas in the energy transition. The latter group counts mostly on natural gas from Norway or the U.S., that is, on the support of the microsystem (the EU) with resources from other macrosystems. In most cases, gas is presented as an intermediate option. Yet, similar to the case on general EU-Russia relations, all EU actors allocate to the EU the role of rules-setter (in particular, in defining requirements for natural gas at all stages of its life cycle).

New Wine in Old Skins: Which Hydrogen?

The competition between the two models of energy sector resilience continues in numerous discussions on hydrogen. The EU believes that hydrogen is key for the success of the Green Deal. It is to substitute oil products in the transport sector and some other sectors of the economy, and it will also provide a possibility to store energy and thus balance the volatility of RES [EC, 2020b]. The EU's hydrogen strategy prioritizes the so-called green (or clean) hydrogen that is produced from RES. At the same time, its price at the moment is much higher compared to the price of other types of hydrogen, including grey (produced from natural gas or other sources with CO_2 emissions), blue (produced from natural gas with CO_2 emissions being captured), yellow (produced from nuclear energy), or turquoise (produced from natural gas with the help of relatively new pyrolyze technology) [Ibid.].

From the point of view of resilience, the import of hydrogen to the EU is particularly interesting. The EU cannot by itself produce the needed amount of green hydrogen (due to the insufficient amount of RES, limited territory, and other constraints). On the one hand, hydrogen import returns the EU to resource dependence, changing only what is shipped from outside. On the other hand, the EU's hydrogen strategy sees the EU as a future centre for the global hydrogen market, as a source of its norms and with the euro being its key currency [EC, 2020b]. Moreover, this document sees western countries as priority partners in the development of rules, whereas neighbouring countries (in particular, Ukraine and those of the Southern Mediterranean) are key for the trade in hydrogen [Ibid.]. Russia, for its part, is not mentioned as a partner although EU institutions in general declare their readiness for any international cooperation, which creates a window of opportunities for both hydrogen cooperation and wider EU-Russia relations.

EU states have not yet formulated a single position on the import of hydrogen. Countries that call for the minimization of external energy supply (in particular, from Russia) are predictably against the import of hydrogen. Polish representatives specify that the EU "should be rather cautious about extending cooperation outside the EU or the EEA" [Kurmayer, 2021]. This logic is also typical of members that would like to enlarge their own production of hydrogen (including yellow and blue) and thus look for some protectionism. For example, Hungar-

ian representatives underline that "[e]ntering new geopolitical or technological dependencies should be avoided" [Ibid.], whereas France calls for a strategy that would "be linked to innovation and deployment of industrial capacity in Europe, not based on imports from third countries" [Kurmayer, 2021]. These geopolitical arguments that lead to the strengthening of the microsystem's resilience at the expense of the EU-Russia macrosystem are also shared by EU companies that produce RES [Grare, 2021].

At the same time, countries that traditionally support open international trade also support hydrogen import to the EU. Germany has already launched a targeted programme – H2Global – which it justifies by citing insufficient space in Germany and the EU to produce the needed amount of green hydrogen [Franke, 2021; Kurmayer, 2021; Schulz, 2019]. The Netherlands, Spain and Belgium are also active proponents of hydrogen import [EuroEFE, 2021; Simon, 2021a]. German representatives actively support the import of (mostly green) hydrogen from Russia [Schulz, 2020; Wehrmann, 2019]. Vice-President of the European Commission Frans Timmermans [Timmermans, 2020] and High Representative Jose Borrell [Borrell, 2021] also called for trade in hydrogen with Russia (including blue hydrogen during the transition period).

Discussions on hydrogen import are key for the second model of resilience, the one that reinstates resilience of both micro- and macrosystems. The EU's constraints on import, on the other hand, will undermine the macrosystem of EU-Russia relations; the resources of the latter will not be taken into account. The EU's openness to the supply of hydrogen from outside (including from Russia) will allow strengthening of the micro- and macrosystems at the same time and a more comprehensive use of the resources of both systems. From the theoretical point of view, the intensification of EU-Russia trade in hydrogen will also be an example of finding resilience in a new context (bouncing forward) and adjusting to new challenges.

Much like in previous cases, the limit on hydrogen import that leads to the increased resilience in the EU's energy system at the expense of the macrosystem is based on the combination of environmental and geopolitical arguments. At the same time, synchronous enhancement of micro- and macrosystem resilience is based on economic arguments and effective use of different resources. Similar to the previous cases, the second model of resilience (that is enhancement of the resilience in the micro- and macrosystems) requires the recognition of the EU's regulatory authority, its norms, and its rules. The formula "rules-based market" [EC, 2020b] is particularly noteworthy because it reflects the EU's ambitions but also links hydrogen trade to a wider discussion on "rules-based order" that is the quintessence of the EU's contemporary normative hegemony [Lavrov, 2021].

Which Model of Resilience?

The three cases above demonstrate that the EU at present articulates two competing models of resilience in the context of the Green Deal and energy transition. The first focuses on resilience of the EU's energy system only (microsystem) and on its own resources, while undermining the resilience of the EU-Russia macrosystem. The second model presupposes a synchronous search for resilience in both micro- and macrosystems and the use of macrosystem resources for the microsystem. These cases demonstrate that the two models can be identified in both EU-Russia general relations and in more narrow fields of the Green Deal and energy transition.

The first model is based on the symbiosis of the two logics; these are ambitious goals in the field of RES, radical energy transition and geopolitical concerns, increase in the EU's self-sufficiency, and perception of Russia as a threat. The European Commission instrumentalizes the geopolitical logics to stimulate members to bolder decisions in the field of energy transition

and the Green Deal, whereas companies that produce RES recur to this logic to limit competition. These developments lead to external players reproaching the EU for its protectionism.

The second model of resilience presupposes a more or less synchronous search for resilience in both micro- and macrosystems; it is based on the discourse about shared climate challenges and on economic arguments and member states' competences. In the second case this model of resilience is a part of the medium-term solution that can be viewed as bouncing back to the practices that existed previously. The third case, on the other hand, demonstrates adaptation to new challenges and conditions, that is, resilience as bouncing forward. The second (synchronous at the level of different systems) model of resilience is based on the EU's normative leadership. In the case of hydrogen, the EU even talks about the "rules-based market". In fact, here the EU follows a familiar path of leadership, yet its leadership is explained not so much by the universality of norms like democracy or market relations, but rather by its activities and achievements in the field of climate.

The juxtaposition of geopolitical and market logics in the EU's energy sector has been discussed at length [Siddi, 2018; Stoddard, 2013]. Yet, the present situation is characterized by a number of new points. First, the geopolitical logics reinforce protectionism and environmental arguments. Second, the division of member states into those that follow geopolitics and market logics is fluid; it is the result of their internal politics and economic constraints. Poland provides the most vivid example of this trend. This fluidity is a guarantee of the resilience of the EU-Russia energy system in the medium term. Third, the EU's discourse links geopolitics with resilience, whereas openness to resilience at the level of both systems and cooperation on the Green Deal is based on the EU's normative leadership.

The EU's discourse can differ from its policy; however, it demonstrates varying possibilities of how existing resources, information about them, communication, and human resources can be used to achieve resilience. From the theoretical point of view, the study also demonstrates that the systems of different levels can evolve in different directions; searching for a new equilibrium in one system might challenge another system. The choice of a model is the result of internal developments in the EU and its members. Russia's policies seem to be of secondary importance. Most likely the two models of resilience will coexist; yet their relative importance will change dynamically.

Finally, this study also allows for recommendations to Russia as to how to build energy cooperation with the EU. First, it seems inevitable that there will be a legal approximation between the EU and Russia in certain fields of energy transition and climate policy; this legal approximation is a prerequisite for the second model of resilience. However, it would be better for Russia to concentrate on technical aspects of this approximation rather than on its conceptualization in the binary terms of norm-setter and norm-taker. Otherwise, there is a high risk of EU-Russia normative competition [Lavrov, 2021] infecting cooperation in the field of energy transition and climate policy. Second, Russia must take more active steps in the field of climate policy; this is the only way to increase trust among EU members that Russia is an international climate policy partner, thus enhancing its reputation in this field and bolstering its weight in defining the rules and norms. These steps will also help to ensure that the second model of resilience prevails in EU-Russia energy relations in the longer run.

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Energy Transition and Asset Specificity Transformation of the European Gas Market[1]

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Abstract

In 2021, the European Union (EU) is entering a new phase of energy transition, reducing the use of fossil fuels to achieve climate neutrality by the mid-century. For a qualitative assessment of the impact of the EU gas market's green policy, transaction cost theory and the concept of asset specificity is referenced in this article. During the first stage of market development, the level of asset specificity was high, while a decline can be observed with market liberalization. However, at the current stage, a radical transformation of specificity in the context of energy transition can be seen. Assets that used to guarantee higher profitability (gas pipelines, gas processing plants, liquified natural gas (LNG) terminals) will soon be disqualified. In this article, the long-term prospects for the natural gas market in Europe, and what will happen to key assets if the climate agenda dominates the issue of energy security, are considered; qualitative assessment of the changes and of the future of the assets on the European gas market is undertaken.

Keywords: asset specificity, gas markets, European gas market, assets disqualification, pipeline, LNG, Green deal, energy transition

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Specificity in Natural Gas Markets

The concept of "asset specificity" has its origins in the new institutional economics theory and the theory of transaction costs. In its most general form, asset specificity is determined by the investment, made by one or both parties during the actual partnership, that has limited alternative use [Joskow, 2005, p. 327]. Education creates specific assets – researchers (human capital) that cannot be effectively applied in another area – while physical assets' usage derives from technological preconditions [Bernanke, 1983; Pindyck, 1991].

In this article, asset specificity is evaluated using the classification of the level (or degree) of specificity proposed by P. Joskow: high, medium and low [1988, p. 100]. A high level of specificity implies a complete impossibility for alternative use of an asset; medium-level specificity implies high costs of using the asset alternatively; low-level specificity means there is a wide range of opportunities for using the asset in other industries.

[1] This article was submitted 24 March 2021.

While no general approach for determining specificity in applied science exists, there are three that should be mentioned. Within the framework of the first approach, specificity is classified and then referred to certain selected types [Morrill, Morrill, 2003]. Within the second approach, analysis is conducted at the general level without splitting into types of specificity [Espino-Rodríguez, Padrón-Robaina, 2006]. The third combines elements of the first and second approaches: specificity is considered both by type and in general [Brouthers, Brouthers, 2003]. In this article, the third approach is used; furthermore, competitive advantages will be treated as a simple consequence of asset specificity.

O. Williamson introduced an acknowledged typology of asset specificity [2005, p. 21]. Each industry has its own characteristics; hence, all types of specificity acquire different connotations depending on the industry where assets are located. Table 1 presents the features of the types of asset specificity in the gas industry.

Table 1. Types of Asset Specificity in the Gas Industry

Type of Specificity	Gas Industry Features
Site specificity	The geographic location of the field and its proximity to crucial markets. The type is important for pipeline and tanker transportation (due to transportation costs)
Physical asset specificity	Characteristics of the assets used during exploration, production, transportation, processing, and delivery to the consumer
Temporal specificity	A combination of technological and management factors, ensuring stable supply
Brand name capital	A company's reputation. State intervention and participation changes (and often diminishes) the risks
Human asset specificity	Knowledge, skills, and a company's (and industry's) accumulated experience allowing it to benefit from substantial competitive advantages during production or services provision
Specificity of technologies	Geological characteristic of the field might require more advanced technologies (for example, unconventional reserves)
Specificity of institutions	State policy, quality of arbitration, stable fiscal system, stable currency, characteristics of subsoil legislation, and market regulation

Source: Compiled by the author.

In addition to those mentioned by Williamson, types appropriate to the gas industry can be identified. The specificity of technologies can vary depending on the geological characteristics of a gas field: from high-level for non-conventional to medium-level for conventional gas. The level increases as the extraction complication grows due to geological and climate conditions at the production site. The reverse influence is created by the development of the service sector, increasing investments in research and development by the state and private companies, and technological progress that optimizes costs.

Institutional specificity (or resource regime [Young, 1980]) is associated with energy policy goals and characteristics. Characteristics such as the attractiveness of investments, subsoil legislation, the fiscal system, the degree of market liberalization, and the availability of financial institutions and instruments (such as favourable loan conditions for small regional companies) are also significant. The more convenient the resource regime in the industry, the lower the costs (including transaction costs), and subsequently, the level of specificity.

Asset specificity is the main factor determining the difference in transaction costs [Riordan, Williamson, 1985, p. 367], the mechanisms of control (or coordination), and the market structure. If assets are idiosyncratic,[2] hierarchy is the most appropriate governance mechanism [Williamson, 1979, p. 247]. In other words, for assets with a high level of specificity, the optimal mechanism of governance is a vertically integrated company. Other mechanisms comprise hybrid (long-term contracts) and market (price mechanism) ones.

Natural gas reserves as an asset per se are not idiosyncratic since gas produced in different countries and regions is interchangeable. However, gas is the most environmentally friendly fossil fuel. For a long time, it was considered a bridge between coal and renewable energy sources (RES) [Hausfather, 2015]. Thus, the inherent characteristics of natural gas (first and foremost, its "environmental friendliness") determine its specificity as an asset.

The gas sector can be divided into three segments: upstream (exploration and production), midstream (transportation, processing, storage), and downstream (sales). It should be noted that the level of specificity in each of the segments can vary. In this article, the focus is on midstream and downstream assets, as they historically have the highest level of specificity in the industry.

For some time, due to the lack of opportunities and high dismantling costs, the most acceptable mechanism was hierarchy, that is, establishing a bilateral monopoly or vertically integrated oil companies. However, today we are witnessing the effectiveness of the price mechanism (or market mechanism) in the two largest markets – Europe and North America – at once.

The pipeline infrastructure includes a trunk (cross-border) pipeline and several groups of participants: a seller (exporting country), a buyer (importing country), and often a transit country. Although capital construction costs for gas pipelines are high, the operating expenses are low during a long service period. For example, the construction costs of the Nord Stream amounted to three million euros per kilometre of pipeline [Frolov, 2012]. The service period of trunk pipelines can exceed 70 years.[3]

Liquefied natural gas (LNG) transportation infrastructure is distributed among different players (Figure 1). A tanker can be owned either by an exporter or an importer or by a third party providing leasing services.

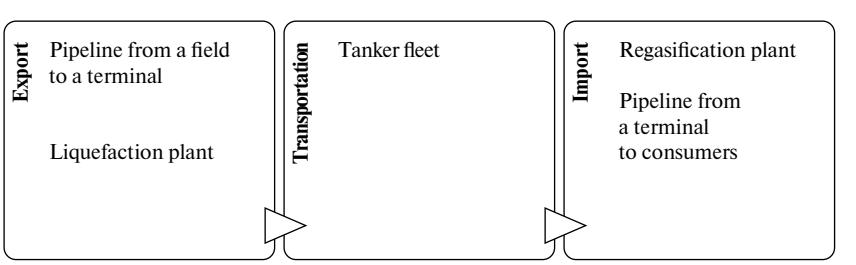

Fig. 1. LNG Infrastructure Scheme

Source: Compiled by the author.

Pipeline transportation currently has a higher level of specificity compared to tankers for several reasons. First, if the pipeline crosses the territories of several transit countries, transaction costs increase. The risk derives from the possibility of opportunistic behaviour of transit

[2] Unique, having the highest level of asset specificity.

[3] With an outer diameter of 1420 mm, a pipe wall thickness of 17.5 mm, and a design pressure of 7.4 MPa.

countries and the problem of "hold-up" if the level of asset specificity is high [Rogerson, 1991, p. 777]. Second, constructing "alternative" gas pipelines involves significant investments, while the capacity might be excessive. Finally, suppose a breach of contract or interruption of supply happens. In that case, both the supplier and the buyer will suffer time and financial losses associated with new construction and the dismantling of the existing infrastructure. During a partnership, it is impossible to change the number of its participants; the prospect of concluding a new agreement is practically levelled by the volume of required investments and the geographical features of a territory. An acceptable coordination mechanism is a long-term "take-or-pay" contract with automatic renewal.

Researchers confirmed a direct correlation between the duration of a contract and the level of asset specificity [von Hirschhausen, Neumann, 2008]. The more idiosyncratic the asset is, the longer the contract duration becomes.

LNG allows responding to fluctuations in supply and demand quickly. Tanker transportation has some competitive advantages. One of them is the equalization of the efficiency of LNG and pipeline gas transportation, even taking into account the economies of scale [Eremin, 2015, p. 35]. If the infrastructure investments have already been made, the specificity during the transportation phase is lower.

Due to competitive advantages in 2019, the volume of LNG trade in the world was almost equal to the volume of pipeline gas trade (Figure 2).

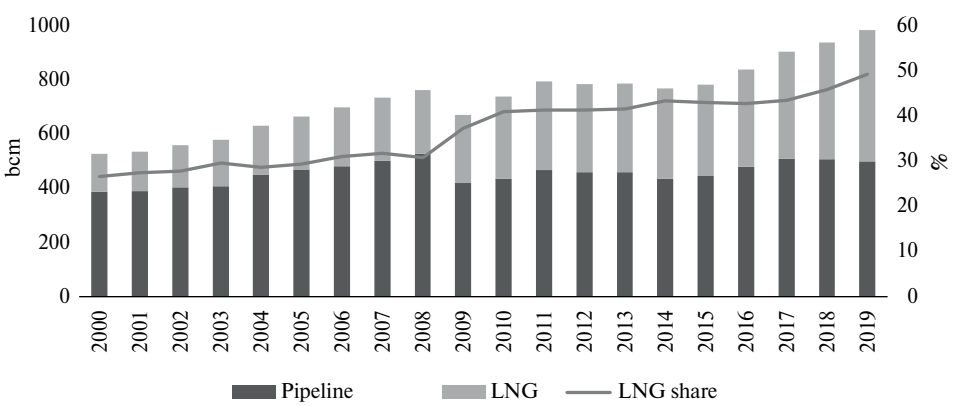

Fig. 2. Global Gas Trade (bcm), LNG Share in Global Gas Trade, % (right-hand scale), 2000–20

Source: Author's calculations based on data from BP [2020].

With the development of technologies, infrastructure, and reforms in state (interstate) policy, factors affecting specificity are also changing. The first group of factors is historically represented by geographic location and geological features (resource allocation). The resource base is driving transformation: the time of giant and super-giant deposits is almost over, so the influence of economies of scale – which used to provide higher profits at low costs – has decreased.

While newly discovered gas fields have modest reserves (in comparison to discoveries of the 20th century), the number of separate projects is growing. The realization of these projects does not necessarily suggest the construction of trunk pipelines. Small and medium-sized deposits are changing the geography of supplies. The latter is becoming increasingly dependent on transportation costs. The produced gas is often easier (and cheaper) to sell on the domestic market.

The second group of factors comprises technologies and technological progress. Even during the early stages of market development, technology influenced the construction of infrastructure. Thus, Soviet gas supplies to Europe were carried out at the expense of a loan for German large-diameter pipes [Gustafson, 1989]. In the 20th century, natural resource-based industries were treated as a relic of the past. Reconsideration of this attitude is associated with new opportunities opened up through the formation of innovation systems [Andersen, 2012] and the development of the service sector.

In Norway, the service sector is the second largest industry in the country. It is represented by 1100 companies, exporting 29% of total production, worth $36 billion [Norwegian Petroleum, n. d.]. Demand from natural resource-based industries for new technologies [Fagerberg et al., 2009; Sæther, Isaksen, Karlsen, 2011], digitalization, and information technology (IT) has become the main driver for the development of the particular industries and the national economy in general [Engen, 2009]. Innovation tends to optimize costs, foster value chains, and create new industrial linkages with other sectors. These processes are associated with the declining specificity of technologies.

The third group of factors is related to the climate agenda, particularly relevant in Europe. The mostly successful implementation of the 20-20-20 programme (partly due to a sharp decrease in CO_2 emissions during the pandemic) and, in some countries, the achievement of primary objectives under the Paris Agreement, dictate new conditions on the natural gas market in Europe. The most important goal is to achieve carbon neutrality by 2050 and ultimately move away from fossil fuels in favour of RES [EC, 2020a]. The coming to power of the Biden administration in the United States and China's new climate policy aimed at achieving carbon neutrality by 2060 indicate that the energy transition concept is gaining more support.

The transformation of specificity associated with fundamental changes in the natural gas market is already taking place and will only accelerate in the near future [Kryukov, Medzhidova, 2021]. The focus of attention of the exporters is shifting to natural gas decarbonization technologies and the possibility of hydrogen supply [Stern, 2020]. For a long time, asset specificity determined the structure and mechanisms of governance in the gas markets. However, under the influence of the above groups of factors, the essential prerequisites for specificity have changed. The main question is what will happen to a giant continental pipeline infrastructure with a high level of asset specificity constructed over the past half-century.

European Natural Gas Market and Its Assets

Even though natural gas accounts for 24% of the global energy balance, there is no single gas market. The three largest regional markets, located in North America, Europe, and the Asia-Pacific region, differ in the degree of liberalization, the preferred type of contract and pricing formula, the dominant mode of transportation, and the number of participants. Depending on the market, the general level of asset specificity changes, as do the factors influencing it.

The European gas market is represented by a relatively large number of importers and several exporters (Norway, Great Britain, Algeria and Russia). With the development of the LNG market, the number of exporters has grown, but the supply is still mainly carried out through pipelines from Algeria, Norway and Russia.

Growth of natural gas imports in 2000–19 amounted to about 100 billion cubic metres, while the Russian supply share fell from 74% to 53%. In recent years, LNG import volumes have increased, while pipeline supply has remained relatively stable. At the beginning of the 21st century, the share of LNG import was less than 13%, but in 19 years, it has expanded to 34%. The increase accounted for 90% of the total import growth.

During the indicated period, gas consumption in Europe was stable, but with a downward trend: the average annual decline (2001–19) was 0.1% (Figure 3).

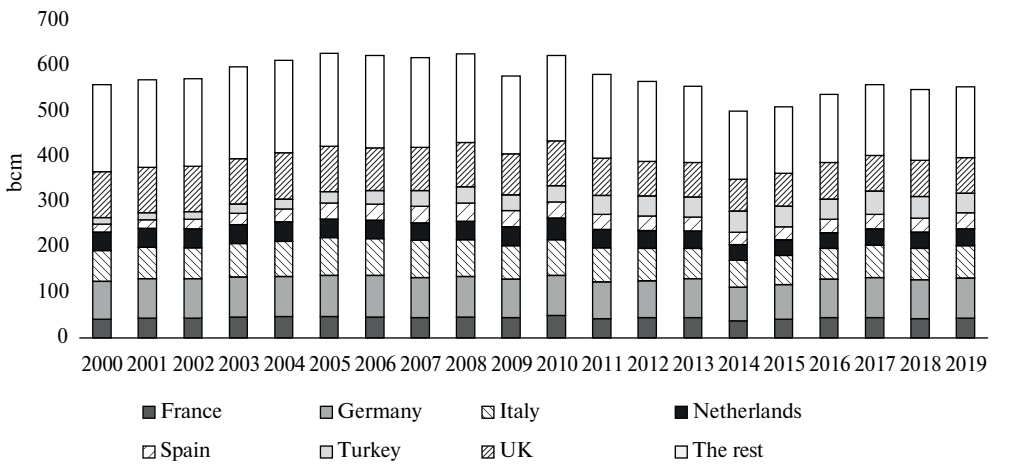

Fig. 3. Gas Consumption in Europe by Country (bcm), 2000–20

Source: Author's calculations based on data from BP [2020].

The liberalization of the European gas market was carried out through directives and energy packages. A liberalized market has the following features: access to gas pipelines and regasification terminals for third parties, the presence of gas hubs,[4] and gas-to-gas pricing (that is, the binding of contracts to the price at the hubs). Liberalization contributes to a decrease in the level of asset specificity due to access to transport facilities of third parties and consequently increased competition in the downstream segment. The latter leads to lower transaction costs and decreases the possibility of opportunism.

Several major consequences of the liberalization of the gas market can be highlighted. First, the number of gas hubs and the volume of gas traded increased [Heather, 2015, 2019]. Today, two hubs have reached maturity – the Dutch TTF and the British NBP [Heather, 2020]. Second, the share of spot (up to four years) contracts increased, indicating a decrease in the level of specificity. New LNG projects can change this trend, but only during the construction phase. Today, spot trade accounts for 40% of total LNG imports [GIIGNL, 2021] and continues to grow.

The European Union's (EU) midstream is represented by the trunk pipelines and the European gas distribution network. The four largest operating companies (Snam, Enagas, Fluxys and CRTgas) own pipelines over 105,000 km long [Statista, 2019a]. In addition, the ongoing construction of gas pipelines (Southern Gas Transportation Corridor and Nord Stream 2) is underway at the height of the battle for climate neutrality. Despite the desire to move away from fossil fuels, Europe is pursuing a policy of enhancing energy security. As the experience of Nord Stream 2 shows, even a rich country such as Germany cannot give up coal, gas, and nuclear power plants at the same time [Schultz, 2021]. Natural gas continues to act as a de facto bridge.

The midstream segment also includes LNG terminals, liquefaction plants (in exporting countries) and regasification plants (in importing countries). Twenty-six LNG terminals operate in the EU, seven are under construction, and 21 are projected [Statista, 2019b].

[4] The central pricing point in the natural gas market.

Since the construction of an LNG terminal involves high costs and (in times of low gas prices) a long payback period, many European countries have opted for floating regasification units (FSRU). They have lower capital costs (up to $300 million) and a shorter construction period (one to three years). The storage, liquefaction and regasification capacities of these plants are inferior to those of the terminals. The operation of the FSRU can meet the needs of the countries with a modest volume of natural gas consumption. These units have a lower level of asset specificity than an LNG terminal, not to mention a pipeline.

According to the Global Energy Monitor, the EU and the UK plan to build infrastructure to increase import capacity by 233 billion cubic metres per year (138 billion cubic metres through gas pipelines). Such large-scale construction will require up to 100 billion euros, including the cost of gas-fired power plants, requiring 35 billion euros [Inman, 2020].

The announced construction plans support the stocks of energy infrastructure operators, while the stocks of extracting companies (Total, E.ON) are on a downtrend. The first peak (Figure 4) happened before the 2008–09 financial crisis. However, the entry into force of the Kyoto Protocol in 2005 did not affect the growth of stocks. The next peak is associated with the rise in hydrocarbon prices until 2014. The Paris Agreement could have been a factor restraining growth from 2015.

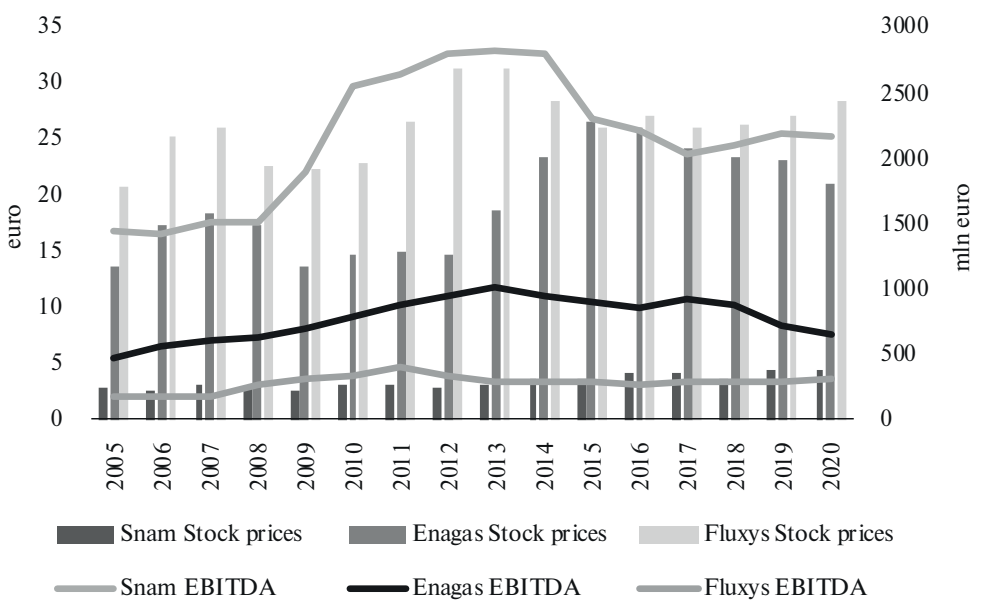

Fig. 4. Stock Movements of the Major European Gas Infrastructure Operators (euros), EBITDA (million euros), 2005–20

Source: Author's calculations based on Bloomberg Terminal.

It is difficult to make a forecast on the changes in stock prices in 2021–30. Despite the green European plans, construction, refurbishment, and dismantling of infrastructure are far from complete. In 2012–20 the average annual drop in EBITDA by companies amounted to: Snam – 3.1%; Fluxys – 0.7%; Enagas – 4.4%; Total – 2.3%. In terms of transaction cost theory, the ownership of assets with a high level of specificity leads to higher financial performance. Nevertheless, the political decisions of states affect the market.

Gas processing plants have a high level of specificity. As the equipment is focused on methane processing, there is little room for it in a green European future.

For a long time, the factor of energy security had a massive impact on the specificity of assets. Diversification of imports justified the costs of the construction of pipelines and LNG infrastructure. As already noted, different segments have different levels of asset specificity. In particular, LNG has an advantage over pipeline infrastructure in this regard since it involves a larger number of players. More importantly, the LNG market lacks a rigid connection between the supplier and the consumer. In general, diversification of imports and expansion of the number of suppliers is in line with the objectives of the EU's energy policy. However, the trend toward reducing emissions and introducing RES can weaken the position of natural gas and hence the main assets in this market.

Impact of EU Climate Policy on the Natural Gas Market

Today, one of the most discussed topics is climate change mitigation and the consequences humanity will face if the temperature rises by more than 2° C [Thuiller, 2007]. Over the past decades, European countries have been pursuing and promoting the transition to a green economy. The fourth energy transition is being performed with the enthusiastic assistance of the state and under the influence of state policy [Grigoryev, Medzhidova, 2020].

In 2015, the Paris Agreement was signed, according to which each country independently sets emission caps [Makarov, Stepanov, 2018]. European countries have set some of the most ambitious targets through pan-European and national strategies. After successfully implementing the 20-20-20 programme [Stankeviciute, Criqui, 2008], the EU adopted a goal to achieve carbon neutrality by 2050. The Green Deal is a large-scale programme that involves restructuring the entire economy and moving it to a green track.

As a part of the Green Deal, an investment plan was developed in March 2020: it is expected to attract at least one trillion euros over 10 years. More than half of this amount will come from the EU budget (503 billion euros), part from national budgets (114 billion euros), and part from the InvestEU fund (279 billion euros) [Hafner, Raimondi, 2020]. A Just Transition Mechanism has been proposed since European economies are prepared for the transition to varying degrees. It is supposed to mobilize over 150 billion euros through several European funds in 2021–27 to help the regions, industries, and workers facing the highest costs. However, the pandemic and the recession in 2020 have already changed the situation, resulting in a 6.5% decline in gross domestic product (GDP) in the eurozone [IMF, 2021]. Today, we discuss debt financing of the recovery of the European economies with a simultaneous transformation of the energy balances. Although funding has been expanded to 1.9 trillion euros, the problems of the energy transition in the context of the crisis remain severe.

Efficient investments allocation persists as an essential issue. Coal is still mined in the EU and used for power generation. Over the past 30 years, the share of coal in electricity generation has halved, but it was still 20% in 2018 (Figure 5). The withdrawal of these capacities and the transition to gas or RES will require investment and political determination. It will lead to job losses and reduce exports (in Poland and Germany, for example). At the same time, in Poland, the share of coal in the energy balance in 2019 was 74%, in Estonia – 70%, and in Germany – 30%.

From the point of view of asset specificity, the transition from oil to gas (the third energy transition) was accompanied by the active construction of infrastructure – trunk pipelines, gas distribution networks, and gas processing plants. As a result, the level of specificity in the midstream and downstream sectors was extremely high. Long-term import contracts formed a

bilateral monopoly that excluded any competition in the market [Gustafson, 2020]. With the diversification of imports and liberalization, the level of specificity declined, first of the domestic market assets and then of the import assets. The mainstreaming of the climate agenda and the introduction of combined cycle gas turbines led to a dynamic switch from coal to gas in several countries, especially in power generation.

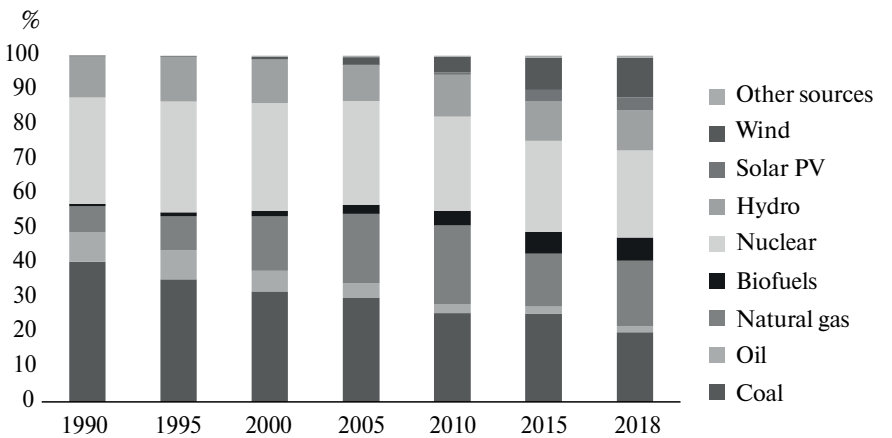

Fig. 5. Electricity Generation in EU-28 by Source of Fuel (%), 1990–2018

Source: Author's calculations based on IEA [2021].

The fourth energy transition and the goals of achieving carbon neutrality and a fundamental restructuring of the fuel and energy balance lead to the *disqualification of assets*. Asset disqualification is the loss of specificity and the ability to generate income, which primarily derives from political (state) decisions. In other words, the demand for assets that were previously characterized by a high level of specificity and guaranteed a competitive advantage for the owner is falling. At the same time, the drop in demand is not a natural process but a consequence of states' decisions. If the level of specificity is low (which suggests that there exist alternative ways to use an asset), the assets most likely will not be disqualified. Restructuring of such assets for other needs can be carried out at a low cost. In the context of the energy transition, it is not feasible to build new transport facilities [Correljé, 2016] and some highly specific assets are being transitioned into the category of practically useless ones.

The specificity level directly impacted the mechanisms of governance and the interaction between economic agents. A good illustration is provided by the OPAL case. The company was deprived of the opportunity to buy more than 50% of the gas volumes supplied by Gazprom. This decision of the European Commission led to an increase in gas prices in the Czech Republic for several years. The problem was resolved only in 2016 when the European Commission allowed OPAL to sell empty capacities, while Gazprom was allowed to buy them [Kurdin, Shastitko, 2018]. When the level of specificity is high, even in the liberalized markets, the government often needs to intervene to prevent monopolization and find the optimal solution. The price mechanism is effective, but asset specificity creates the preconditions for a neoclassical mechanism (trilateral governance) during crises.

The fate of the entire gas distribution infrastructure in Europe largely depends on technologies and innovations: in what time frame technologies will be proposed and introduced to optimize costs, reduce emissions, and increase production and what the cost of these technologies will be. Biogas and biomethane can be transported through existing pipelines, but production

is highly costly. Hydrogen can be mixed with methane if the proportion of hydrogen remains within 5–20% [Peters et al., 2020], but this sphere also requires additional research.

In line with the new EU targets, transport companies have developed an action plan combining three options. The first option is to replace methane with biomethane and synthetic methane; the second option is to blend methane and hydrogen; the third option is to use hydrogen in particular regions (clusters). Instead of replacing the existing infrastructure, the plan is to restructure it for the new needs, which is associated with a 10–33% cost reduction compared to constructing a new pipeline system [ENTSOG, 2020]. At the same time, operators are ready to take on investment at the initial stage, which will require some regulatory changes.

In sum, 60 billion euros must be invested in hydrogen by 2030, of which more than 24 billion will be directed to infrastructure, including gas pipelines and plants for the production of hydrogen using RES. In 2019, there were 190 projects in the EU; the total investment amounted to more than 1.5 billion euros [FCH JU, 2019], but with the support of the state, this number will grow. However, the costs will also increase. The above data does not include the cost of dismantling disqualified assets or plant and pipeline refurbishment to meet the new European energy policy goals, not to mention the construction of additional pipelines and LNG terminals.

International agreements and national strategies aim to reduce emissions associated with the production of carbon-intensive products on the territory of the countries. Indirectly this leads to the "leakage of emissions" [Makarov, Sokolova, 2014] due to imports. To adjust these indicators, the EU plans to introduce a carbon tax on all imported products. According to BCG estimates, losses for the Russian oil and gas sector could reach $1.4–$2.5 billion. The tax could provide significant support for financing the Green Deal if used directly and on purpose [Krukowska, 2020]. However, such a tax will increase the burden on the exporters, especially when natural gas prices are low.

Today, climate policy is the most crucial factor that directly impacts the transformation of specificity in the European natural gas market. The greening of the economy and the region's dependence on imports intensifies the energy transition from hydrocarbons to renewable energy sources. The Green Deal has long-term implications for Russian exports and the implementation of LNG projects. The basic conditions for the profitability of infrastructure and production are changing and the very meaning of specificity is changing. There is currently no clarity regarding the new EU hydrogen market regulation and the associated transaction costs. Obviously, the assets that provide competitive advantages and additional income will be threatened, if not by dismantling, then by significant refurbishment.

The pandemic and the associated crisis are the factors accelerating the energy transition. Global lockdowns and supply delays led to a decline in hydrocarbons (including natural gas) consumption in 2020. The prospects for recovery remain unclear, but most likely, it will be partially green in the EU.

State support and subsidies can be received by those companies or even industries that make the most outstanding contribution to reducing emissions and use renewable energy sources. Investment in fossil energy sources declined significantly in 2020, in contrast to investment in renewable energy [IEA, 2020b]. Such a scenario will only accelerate the reduction in gas demand. However, it will not lead to its complete exclusion from European countries' energy balances in the near future. At the same time, it must be underscored that the investments in renewable energy in the EU peaked in 2011, steadily declining since then [FS-UNEP Center & BNEF, 2019]. A significant decrease in hydrocarbon prices in 2020 increases their competitiveness compared to renewable energy sources [Telegina, Khalova, 2020]. The further development of alternative sources remains largely an act of political will.

Since renewable sources have a number of disadvantages, including the lack of large capacities for energy storage, generation volatility, and the lack of correlation between demand and production, a complete transition to renewable energy is a complex task.

Technologies creating green natural gas are considered a feasible solution. J. Stern offers several ways to decarbonize natural gas. The first option is to obtain biogas or biomethane through gasification. The second and third alternatives are associated with hydrogen production through RES or methane using sequestration[5] [Stern, 2019b]. Today, biogas production and hydrogen production through RES are limited to small volumes. Hydrogen can replace the consumed volumes of methane. However, the transition to hydrogen will require investment in the foreseeable horizon and entail a long period of higher production operational costs [Stern, 2020].

Some scenarios (before the Green Deal) assumed a slight increase in gas consumption in Europe by 2040 [Makarov, Mitrova, Kulagin, 2019]. However, the new scenarios assume a sharp decline in gas demand. According to the International Energy Agency's (IEA) scenario, achieving carbon neutrality will require a reduction in consumption by 80% by 2050. In addition, all gas will be decarbonized, and more than half of the consumed volume will come from hydrogen (generated by RES) and biomethane [IEA, 2020a]. Complete dismissal of gas by 2050 seems impossible to most energy economists, although it is acknowledged as a goal by some politicians. However, today the largest European mining companies are switching from hydrocarbons to renewable energy sources. In particular, BP plans to reduce hydrocarbon production and build wind farms; Total is interested in wind energy and electric vehicles; Shell – in hydrogen production; Eni – in biomethane [Gurkov, 2020].

In considering the transition to hydrogen, several comments should be made. First, hydrogen can be obtained from various sources, including coal, natural gas, methanol, electricity, and RES. This might lead to a reduction in imports for the European region. Second, the transition to hydrogen will be accompanied by large-scale infrastructure projects. As the leading exporter of pipeline gas to Europe, Russia will need to develop sequestration technologies and build the corresponding capacities. In other words, the level of specificity of these assets will be high.[6] Third, it is highly likely that transportation will require replacing existing gas pipelines and gas processing plants, both in Russia and Europe. It will be necessary to replace gas pipelines and the infrastructure for the LNG projects. Fourth, there is still no estimate of the costs of these large-scale projects and the time frame of their practical implementation within 10–20 years.

Suppose hydrogen is to meet up to a quarter of the energy demand. In that case, the active participation of companies is expected, as well as the development of technologies that could minimize costs [FCH JU, 2019].

In the medium term (until 2030/35), the main factor determining the specificity of the European gas market will remain the climate agenda. LNG is associated with higher emissions than pipeline gas but contributes to the security of supply and reduces dependence on the dominant exporter [Grigoryev, Medzhidova, 2021]. Liquefaction of hydrogen is carried out at even lower temperatures. Further development of LNG infrastructure is associated with setting political priorities in Europe and choosing between climate and security.

[5] The process of capturing and storing carbon dioxide underground.

[6] In this article, the specificity of the hydrogen market is not analyzed; however, its high level and, accordingly, hierarchical structure with long-term contracts (without the state's decision on liberalization) seems obvious.

In the long term (until 2050), a significant reduction in gas demand is expected due to an increase in the share of renewable energy sources in energy balances and energy efficiency growth. An open question remains: is it rational to build a new gas distribution network, trunk pipelines and pipelines for transporting carbon dioxide in the context of falling consumption? Through the FRSU and further limited distribution, gas imports in small volumes will act as a "reserve capacity" for renewable energy sources.

At the same time, the widespread use of LNG does not facilitate climate change mitigation, but on the contrary, complicates it. Emissions are generated during the production, liquefaction, and regasification stages; emissions from LNG imports generally exceed those from pipeline supplies [Stern, 2019a]. Sequestration costs can render LNG uncompetitive. Large-scale projects aimed at introducing biogas and hydrogen will require comparable investments. The planning horizon shifts to 2030, then the EU will switch to green hydrogen from renewable energy sources [EC, 2020b].

Russia can become one of Europe's leading hydrogen suppliers, but cooperation will be determined by mutual willingness for the mentioned transformations. Since the IEA scenario allows replacing only 50% of the consumed hydrogen, the gas transmission network connecting Russia and Europe can be used for supplies in future until 2050.

In summary, by 2050, the EU plans to:

- Satisfy 24% of final energy demand with hydrogen.
- By 2030, allocate 60 billion euros for the development of the hydrogen market.
- Achieve carbon neutrality with over one trillion euros of Green Deal investments.
- Reduce natural gas consumption by 80% (as estimated by the IEA) with renewables and through energy efficiency growth.
- Dismantle and/or rebuild highly specific assets for hydrogen.

The construction of additional import capacities does not correlate with these plans (the minimum investment is 100 billion euros); however, it derives from the energy security issue.

The EU faces a difficult choice: the primary goal of the previous decade – strengthening energy security – is in confrontation with the new climate plans. The feasibility of building new transport infrastructure, especially trunk gas pipelines, remains highly controversial. With the active replacement of renewable energy sources, it loses its attractiveness in the eyes of investors. In this case, the main risks are borne by the state. The example of German companies that have received compensation from the state for dismantling nuclear power is a striking precedent [DW, 2016] that speaks to the common fate of the infrastructure of the European gas market.

In 2011, Germany decided to phase out all nuclear power plants in the country by 2022. In response to this decision, in 2016, the companies owning nuclear power plants – E.ON, RWE, Vattenfall – demanded a revision of the compensation proposed in the law. The demand to switch power generation to gas, and then to renewable energy sources, was accompanied by an increase in retail prices for electricity and the loss of dividends for the companies' shareholders. The court took the side of the companies and ordered the federal government to increase compensation, as the companies failed to sell the same amount of electricity compared to usual market sales. In other words, the government had to compensate for the long-term investments in disqualified assets. In 2018, Germany pledged to revise payments to operators after the closure of all reactors in 2023. However, Vattenfall, which did not agree with this decision, continues to file claims. According to one of them, filed with the International Centre for Settlement of Investment Disputes, the company has demanded several billion euros in compensation [FitchRatings, 2021].

It is notable that the courts in Germany did not question the need to close nuclear power plants. However, the proper course does not imply the absence of adequate compensation for the assets that will become useless and will no longer be profitable as a result of the state's deci-

sion. Disqualification "from above" is a de facto economic sanction by the state against those of its own companies that own highly specific assets. A similar fate may await gas distribution infrastructure, trunk pipelines, and gas processing plants. Another, so far undeveloped, problem remains the technological readiness of the industry and the cost of a dramatic, simultaneous, and large-scale transition in such a short period in many countries with different technological, economic, and political situations.

The economic consequences of the political decision to disqualify assets in Germany included the loss of dividends and profits and the costs of dismantling the assets. A new round of energy transition in the EU will lead to the same consequences, but in 27 countries simultaneously and after a severe crisis, which led to an increase in sovereign debt.

Conclusion

In terms of transaction cost theory, the issue of asset disqualification has not yet been addressed. It is important to note that the higher the specificity of the assets in the gas industry, the higher the dismantling costs. The forthcoming contraction of the natural gas market will lead to a new revision of the market structure and relations between the players. There is a high probability of a return to a hierarchical structure and long-term contracts since the number of players will decrease, the level of competition will drop, and the best guarantor of supplies will not be the company's reputation but rather the state.

Under the energy transition conditions, the pipeline infrastructure's level of specificity will be associated with the possibility of its refurbishment for the supply of "blue" and "green" hydrogen.[7] In other words, if it is possible to reduce the specificity of the infrastructure, the problem of its dismantling will be solved. However, the refurbishment of gas pipelines will only be a solution to the asset disqualification problem in the medium term. In the long term, the EU plans to switch to green hydrogen and increase energy efficiency, which will reduce import demand to zero. Technologies for transporting hydrogen by tankers have not yet been invented.

We are witnessing a fundamental restructuring of the global energy sector, affecting the transformation of asset specificity. In the EU, political decisions affect the cost structure, profitability of companies, and the nature of their actual investments. Hence, the necessity arises for radical transformations in the energy sector and simultaneously in most EU countries. The nature, speed, and depth of the disqualification of currently active assets depends on the decisions made in the near future. Accordingly, a difficult transition period in the EU energy sector will begin, accompanied by a revision of bilateral and multilateral relations and spheres of their further development.

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[7] Blue hydrogen is produced from natural gas, using sequestration technologies. Green hydrogen is produced by electrolysis from renewable energy sources.

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Investigating the Dynamic Impact of FDI Inflows and Economic Growth on Environmental Degradation: Evidence From FMOLS and DOLS for Selected Asian Countries[1]

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Abstract

The study examines the dynamic relationship between foreign direct investment (FDI) inflows, economic growth, and environmental degradation and investigates the long-run validity of the environmental Kuznets curve (EKC) and the pollution haven hypothesis (PHH) for selected Asian countries over the period 1990–2019. Additionally, this study aims to discover the long-run impact of energy consumption, globalization, and population density on environmental degradation by employing a panel cointegration approach, fully modified ordinary least squares (FMOLS), and dynamic ordinary least squares (DOLS). The findings provide clear evidence of the existence of EKC and PHH in Asian countries for the period 1990–2019 in the long run. The findings reveal that economic growth has a highly significant and positive role in depleting environmental quality, but this effect gets reversed in the long run as, after a certain turning point, economic growth increases, and the quality of the environment gets better. Moreover, FDI inflows and energy consumption have a positive long-run impact on CO_2 emissions, thus contributing to environmental degradation. The study recommends that governments and policymakers should strategically devise and implement CO_2 reduction policies, such as carbon pricing, to encourage economic growth and to improve the quality of the environment, with the ultimate goal being to achieve sustainable development. Moreover, the use of cleaner energy should be promoted, and innovations and technological developments should be encouraged for hydropower, wind power, solar energy and other facilities around the world.

Keywords: environmental Kuznets curve, pollution haven hypothesis, environmental degradation, panel cointegration approach, fully modified ordinary least squares (FOLS), dynamic ordinary least squares (DOLS)

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Introduction

One of the biggest concerns among academics, environmentalists, scientists, policymakers, and governments is how to cope with challenges and threats posed by climate change. Greenhouse gases (GHGs) which contribute to global warming, have polluted the environment such that breathable air and drinkable water have become scarce. Climate change poses a great threat to all species and is affecting the planet dreadfully and dangerously at an alarming rate. Some of the proven impacts of climate change are warmer weather, rising temperatures, extreme rainfalls, floods, droughts, rising sea levels, and melting glaciers (directly affecting the freshwater ecosystem, hydropower, agriculture, and sanitation, which are among the necessities of human survival). Thus, the challenge for governments and societies is how to deal with threats posed by climate change in the context of ongoing economic development [Chowdhury, Moran, 2012].

States need economic production to achieve sustainable development, which at present comes through energy consumption and the burning of fossil fuels. This in turn produces significant emissions of GHGs. The most frequently emitted GHGs are carbon dioxide (CO_2, released from burning fossil fuels), methane (CH_4, released from production and transportation of oil, gas and coal), and nitrous oxide (N_2O, released from industrial and agricultural activities). Moreover, gases with a high global warming potential, known as fluorinated gases, are also emitted during industrial processes [IPCC, 2014]. Thus, economic growth comes at the cost of the environment.

In their noteworthy study of the environmental impacts of the North American Free Trade Agreement, G.M. Grossman and A.B. Kruger [1991] developed what became known as the environmental Kuznets curve (EKC) hypothesis to explain the relationship between economic growth and environmental quality. The EKC hypothesis posits that the environment tends to degrade as per capita income rises up to a certain level, after which the environment tends to improve as per capita income further rises, reflecting an inverted U-shaped relationship between economic growth and environmental pollution [Sapkota, Bastola, 2017]. Graphically, the concept of the EKC hypothesis is shown in Figure 1.

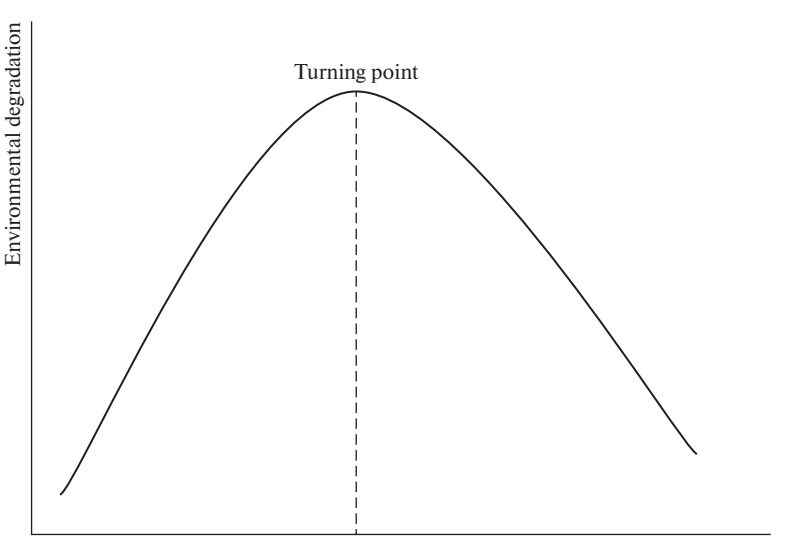

Fig. 1. Environmental Kuznets Curve

Source: Prepared by the authors.

Foreign direct investment (FDI) is an important contributor to sustainable development. FDI inflows are an important source of income that generates employment in developing and emerging economies, and it is welcome as a result. Generally, regulatory costs play a vital role in determining the level of FDI inflows and outflows from developed to developing countries or vice versa [Busse, Groizard, 2006] and these are higher for pollution-intensive firms in developed countries relative to developing countries. As a result, competition among countries to attract FDI can lead to environmental degradation [Bokpin, 2017] as these countries offer more attractive, flexible environmental policies. The lower regulatory costs and flexible environmental policies in developing countries create an incentive for pollution-intensive industries to shift to developing states to avoid higher regulatory costs and stringent environmental regulation. This is known as the Pollution Haven Hypothesis (PHH), developed by B.R. Copeland and M.S. Taylor [1994], which describes the logic of developed states physically investing in developing countries because they tend to have lower environmental standards and weak enforcement.

This study is focused on Asian countries and in this regard, the Carbon Dioxide Information Analysis Centre (CDIAC) reports that Asian countries are among the highest CO_2 emitting countries [Boden, Marland, Andres, 2017]. As developing countries grow, their CO_2 emissions also tend to grow; this is a matter of concern in the context of international environmental agreements such as the Kyoto Protocol,[2] which are working to overcome problems related to GHGs and global warming. Figure 2 shows the CO_2 emissions trends in developing Asian countries.

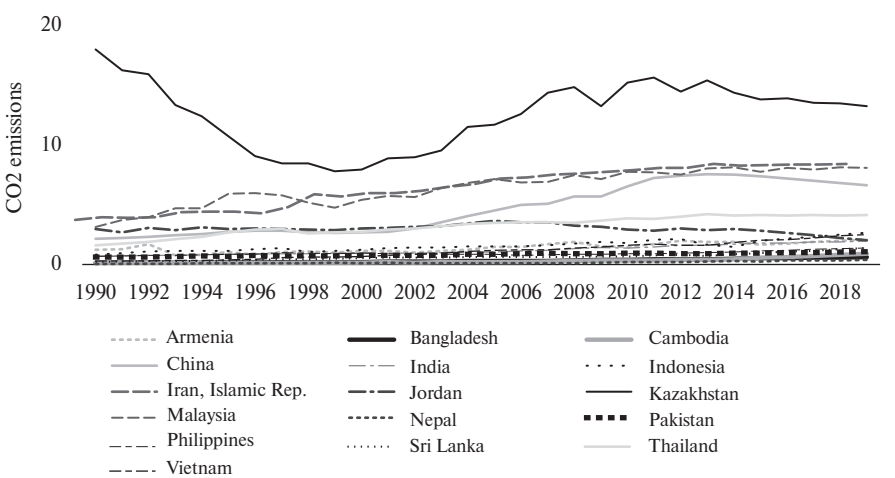

Fig. 2. CO_2 Emission Trends in Asian Countries

Source: Compiled by the authors based on information from the World Bank [2021].

As Figure 2 shows, Kazakhstan is the highest emitter of CO_2 and stood at 12.24 metric tons per capita in 2019, followed by Iran, Malaysia, and China with 8.42, 8.12, and 6.62 metric tons per capita of CO_2 emissions respectively. The high level of CO_2 emissions in Kazakhstan is related to a series of reforms including privatizations, significant changes to its regulatory system, and political reforms to modernize and stabilize the economy. The reforms in Kazakhstan resulted in higher FDI inflows and strong economic growth throughout the 2000s [OECD, 2017].

[2] The Kyoto Protocol was adopted on 11 December 1997 in Kyoto, Japan with an aim to reduce GHGs and prevent dangerous climate change.

The validity of the EKC hypothesis has been widely tested, but there is still room for testing. While there is a substantial body of literature supporting the hypothesis, it has not been proven and is subject to criticism due to inconsistent outcomes prior to various adjustments in the econometric model specification [Kaika, Zervas, 2013; Stern, 2014]. The empirical literature on the hypothesis shows contradictory evidence; some studies discovered that economic growth worsens environment quality, thus confirming the EKC hypothesis [Baek, Kim, 2013; Pao, Tsai, 2011] while U. Al-Mulali, B. Saboori and I. Ozturk [2015] found a positive relationship between gross domestic product (GDP) and pollution in both the short and long run. Likewise, the relationship between FDI inflows and environmental degradation is contradictory and in need of further examination. Some studies conclude that FDI inflows are good for the environmental quality of recipient countries as they facilitate the transference of eco-friendly and energy-efficient technologies [Eskeland, Harrison, 2003; Liang, 2008], while a few studies reverse this relationship and conclude that FDI inflows harm the environmental quality of the recipient countries [Lan, Kakinaka, Huang, 2011; Pao, Tsai, 2011].

In light of these arguments, this study investigates the dynamic relationship between FDI inflows, economic growth, and environmental degradation for selected Asian countries over the period 1990–2019. Specifically, the study examines the long-run validity of the EKC and PHH hypotheses. Additionally, the study investigates the impact of energy consumption, globalization, and population density on environmental degradation.

Literature Review

Different pollutants have been used in the literature as a proxy to represent pollution and environmental degradation. The first empirical investigation of the EKC hypothesis by Grossman and Krueger [1991] used sulphur dioxide (SO_2), fine smoke, and suspended particles to investigate the income relationship. T.M. Selden and D. Song [1994] examined the EKC hypothesis using four indicators: SO_2, carbon monoxide, oxides of nitrogen, and suspended particulate matter; the study concluded that the EKC hypothesis holds for all of these. Various studies have used SO_2 for investigation of the EKC hypothesis [Stern, Common, 2001; Taguchi, 2013]. However, because SO_2 has more localized impacts, many studies have used CO_2 emissions, which have global impacts, as the pollution indicator and have explored the relationship between CO_2 and economic growth [Chiu, 2017; Saboori, Sulaiman, Mohd, 2012; Shahbaz et al., 2013]. Further, because it is responsible for approximately 76% of GHG emissions [IPCC, 2014], this study uses CO_2 emissions as a proxy for environmental degradation.

It is generally found in the environmental literature that economic growth leads to a rise in the levels of CO_2 emissions and consequently causes environmental degradation. However, the relationship is still contradictory in the empirical literature and invites further investigation. M. Shahbaz et al. [2013] concluded that economic growth directly leads to an increase in CO_2 emissions. Similarly, T. Li, Y. Wang, and D. Zhao [2016] confirmed the existence of an EKC for pollutants including wastewater, solid waste emissions, and CO_2. The impact of economic growth may also vary by income group. N. Aslanidis and S. Iranzo [2009] examined the validity of the EKC hypothesis and found no evidence for the existence of an EKC; rather, they found two regimes – a low-income regime and middle to high-income regime. They concluded that CO_2 emissions increased with economic growth in the low-income regime, while economic growth was found to slow environmental degradation in middle to high-income regimes. There are studies that found evidence in support of the EKC hypothesis in China [Jalil, Feridun 2011], Pakistan [Ahmed, Long, 2012; Nasir, Ur Rehman, 2011], Italy [Mongelli, Tassielli, Notarnicola, 2006)], and Korea [Baek, Kim, 2013]. P.K. Narayan and S. Narayan [2010] discovered

that an increase in income has reduced CO_2 emissions in South Asian and Middle Eastern countries.

The empirical literature on the relationship between FDI inflows and pollution contains contradictory findings. Some empirical studies found a positive relationship between FDI and pollution while others discovered a negative relationship between the two variables. F.H. Liang [2008] found a positive association between FDI and the environmental quality in China as the recipient country, due to the transfer of eco-friendly technology. Likewise, J. Acharyya [2009] found a positive impact of FDI inflows on economic growth and CO_2 emissions in India. Moreover, the study also discovered that the impact on CO_2 is larger and that, in the 1990s, FDI inflows had a larger positive impact on CO_2 emissions via economic growth. In contrast, H.-T. Pao and C.-M. Tsai [2011] concluded that FDI inflows worsen environmental quality in a study that confirmed the PHH. The study by Al-Mulali, Saboori and Ozturk [2015] concluded that capital increases pollution and confirmed the PHH in Vietnam, while L.-S. Lau, C.-K. Choon and Y.-K. Eng [2014] also discovered that FDI deteriorates environmental quality as it promotes economic growth. Li, Wang, and Zhao [2016] concluded that FDI inflows increase CO_2 emissions, thus deteriorating environmental quality. However, the study also suggested that this impact may be minimal. Likewise, other studies, such as those by G.A. Bokpin [2017] and J. Baek [2016] found harmful impacts of FDI inflows on environmental quality, thus confirming the PHH, and concluded that FDI inflows lead to a rise in CO_2 emissions.

Energy consumption has long been associated with an increase in CO_2 emissions and climate change. On the relationship between energy consumption and environmental pollution, M. Shahbaz et al. [2013] discovered that energy consumption has a positive impact on CO_2 emissions. Besides CO_2 emissions, energy consumption also positively impacts other pollutants such as wastewater and solid waste emissions [Li, Wang, Zhao, 2016]. Other studies that found a positive relationship between energy consumption and CO_2 emissions were undertaken by K. Ahmed and W. Long [2012] and N.C. Leitão [2013]. Therefore, energy consumption is one of the main determinants of CO_2 emissions that lead to environmental degradation [Jalil, Feridun, 2011].

On the relationship between globalization and pollution, M. Liu et al. [2020] found that globalization and CO_2 emission reflect an inverted U-shaped curve which supports the EKC hypothesis for Group of 7 (G7) countries. With respect to Vietnam, T.C.V. Nguyen and Q.H. Le [2020] found that globalization is harmful to the economy and as globalization increases over time, so too will CO_2 emissions in Vietnam. Shahbaz et al. [2019] also investigated globalization-driven CO_2 emissions and examined the EKC of 87 low- to high-income countries. Surprisingly, some countries confirmed the U-shaped and inverted U-shape curves, while some had neither U-shaped nor inverted U-shaped curves. The study concluded that, in some countries, increased globalization tends to decrease carbon emissions while globalization damages environmental health in others. A. AhAtil et al. [2019] investigated the nexus between CO_2 emissions and four dimensions of globalization, namely: economic globalization, social globalization, political globalization, and overall globalization. They found that economic globalization has no effect on CO_2 emissions in the short run, but that it significantly affects CO_2 emissions in the long run.

On population density's impact on environmental degradation, Ahmed and Long [2012] concluded that population density is positively related to environmental degradation in Pakistan. H. Saleem et al. [2018] discovered a positive relationship between population density and CO_2 emissions, indicating that population density increases CO_2 emissions. Similarly, P. Sapkota and U. Bastola [2017] found a significant and positive impact of population density on CO_2 emissions. According to the study, the more densely inhabited a region is, the less obvious the pollution is and, as a result, the less opposition to polluted planted areas. Similarly, M.A. Cole,

R.J.R. Elliot, and S. Wu [2008] discovered that industries located in areas with high population density tend to have higher pollution. The study concluded that population density and SO_2 emissions are positively related to each other.

Data and Methodology

Data and Descriptive Statistics

To estimate model (1), panel data for 16 Asian countries is used for the period 1990–2019. The choice of countries is based on the availability of the data and the list of countries is given in Appendix A. The data for CO_2 emissions, GDP per capita, FDI net inflows, energy consumption, and population density were collected from world development indicators (WDI), while data on globalization was taken from the KOF index (for details on the KOF index see S. Gygli et al. [2019]). Summary statistics of the data are presented in Table 1, which shows that the total number of countries (n) used in the study is 16 ($n = 16$), time (T) span is 30 years ($t = 30$), and overall observations are 480 ($N = 480$). As also shown in Table 1, the highest overall mean value is 15,200,000.0 for squared GDP per capita, while the lowest overall mean value is 2.80 for CO_2 emissions. Similarly, CO_2 emissions range from 0.04 to 18.01 metric tons per capita and GDP per capita ranges from $321.30 to $12,478.20. Energy consumption ranges from 118.9 to 4,796.1 kilograms of oil equivalent per capita. FDI net inflows range from –2.76 to 23.21% of GDP, and population density ranges from 5.50 to 1,252.60 people per square kilometres of land area; globalization has a minimum range value of 11.10 and maximum range value of 90.30.

Table 1. Descriptive Statistics

Variable	Analysis	Mean	Std. Dev.	Min	Max	Observations
CO_2 emissions	overall	2.800	3.39	0.04	18.01	$N = 480$
	between		3.32	0.16	12.57	$n = 16$
	within		1.08	–1.97	8.23	$T = 30$
GDP per capita	overall	2915.0	2583.6	321.3	12478.2	$N = 480$
	between		2352.3	536.9	8148.3	$n = 16$
	within		1215.3	–696.3	7742.0	$T = 30$
Squared GDP per capita	overall	15200000.0	25900000.0	103221.6	156000000.0	N= 480
	between		21600000.0	308808.7	71100000.0	$n = 16$
	within		15200000.0	–35400000.0	99700000.0	T= 30
Energy consumption	overall	1082.8	1047.6	118.9	4796.1	$N = 480$
	between		1004.9	176.6	3823.4	$n = 16$
	within		385.8	–416.1	2398.8	$T = 30$
FDI	overall	2.945	3.25	–2.76	23.21	$N = 480$
	between		2.29	0.19	7.10	$N = 16$
	within		2.37	–3.28	20.71	$T = 30$
Population density	overall	214.366	240.67	5.50	1252.60	$N = 480$
	between		244.47	5.99	1041.97	$n = 16$
	within		42.17	–35.01	425.00	$T = 30$

Variable	Analysis	Mean	Std. Dev.	Min	Max	Observations
Globalization	overall	51.572	23.38	11.10	90.30	$N = 480$
	between		21.30	25.54	87.23	$n = 16$
	within		10.98	4.73	84.74	$T = 30$

Source: Authors' calculations.

This study investigates the dynamic relationships between CO_2 emissions, FDI inflows, economic growth, energy consumption, globalization, and population density. Additionally, the study attempts to validate the existence of the EKC and PHH hypotheses. Thus, the study includes the most relevant variables based on the empirical literature related to the EKC and PHH [Acharyya, 2009; Dinda, 2004; Sapkota, Bastola, 2017] and considers the following equation:

$$lnCO2_{it} = \beta_0 + \beta_1 lnGDP_{it} + \beta_2 lnGDP_{it}^2 + \beta_3 lnFDI_{it} + \beta_4 lnEC_{it} + \beta_5 lnGBZ_{it} + \beta_6 lnPD_{it} + \varepsilon_{it},$$

where i indicates cross-section, while t in subscript stands for time series. β_0 is constant while (β_1... β_6) are coefficients and ε_{it} is the error term. ln represents the natural log of variables. $CO2_{it}$ is carbon dioxide emissions used as a proxy to represent environmental degradation, thus it is the dependent variable and measured in metric tons per capita. Moreover, GDP_{it} is the gross domestic product (GDP) per capita measured in Constant 2010 US$, and squared *GDP* per capita is denoted by GDP_{it}^2. FDI_{it} is the foreign direct investment (FDI) net inflows measured as a per cent of *GDP*. EC_{it} is energy consumption that is measured in kilograms of oil equivalent per capita. GBZ_{it} symbolizes globalization on a KOF index scale ranging from 1 (lowest level of globalization) to 100 (highest level of globalization). The KOF index reflects multiple aspects of globalization. However, this study uses only the economic globalization aspect of the index. PD_{it} shows population density measured in people per square kilometre of land area. ε_{it} is a disturbance term. The existence of an EKC, that is, an inverted U-shaped relationship between CO_2 emissions and economic growth, depends on the estimated values of coefficients of GDP and GDP^2 (β_1, β_2). There will be a level relationship if both coefficients equal zero ($\beta_1 = \beta_2 = 0$). Likewise, a monotonically decreasing linear relationship is present if $\beta_1 < 0$ and $\beta_2 = 0$. A U-shaped relationship is present with the estimated coefficients $\beta_1 < 0$ and $\beta_2 > 0$, while an inverted U-shaped relationship or EKC will hold if $\beta_1 > 0$ and $\beta_2 < 1$. The expected sign for EC is positive, while expected signs for FDI, GZB, and PD can either be positive or negative since the empirical literature has contradictory and mixed results of each variable.

Econometric Technique

To estimate the model, it is necessary to check unit root in panel series. Several panel unit roots are developed to test unit root in panel data and the tests are widely used in the analysis of dynamic panel estimations. The panel unit root tests are categorized into two types, namely first and second generations. Both first-generation and second-generation unit root tests are dependent on the assumption of cross-sectional independence in the panel data. The first-generation panel unit root tests are independent of an assumption of cross-sectional dependence: these include the LLC test [Levin, Lin, Chu, 2002], the Breitung test [Breitung, 2001], the IPS test [Im, Pesaran, Shin, 2003], the Fisher ADF, and PP-Fisher tests [Choi, 2001; Maddala, Wu, 1999]. This study will make use of the LLC, IPS, and Fisher tests to check panel unit root in the data.

In addition to panel unit root tests, panel cointegration tests are also popularly used in literature; this study adopts residual-based cointegration tests. Residual-based tests are aimed at observing unit root in the residuals by modelling a cointegration equation. The presence of unit root in residuals indicates there is no cointegration among variables; cointegration exists when unit root in residuals remains absent. The commonly known residual-based tests are the Pedroni tests [Pedroni, 1999; 2004], the Kao tests [Kao, 1999; McCoskey, Kao, 1998] and the Westerlund tests [Westerlund, 2007]. If the presence of cointegration is confirmed by residual-based tests, that is, Pedroni and Kao, the next step is to select an estimator for panel cointegration estimation. Since the conventional OLS estimator is second-order asymptotically biased with invalid standard errors [Kao, Chen, 1995], this study adopts Fully Modified OLS (FMOLS) and Dynamic OLS (DOLS) to for panel cointegration estimation. The aim of FMOLS and DOLS estimators is to estimate the long-run equilibrium association amongst the variables after being identified by cointegration tests. The advantage of FMOLS lies in its ability to correct for serial correlation and endogeneity bias. FMOLS also has the advantage of dealing with heterogeneous cointegration [Khan et al., 2019], and M. Hamit-Haggar [2012] considered it to be the most suitable technique for the panel. Likewise, DOLS also takes into account serial correlation and endogeneity presented in standard OLS by incorporating cross-section specific lags and leads along with a panel cointegrating equation [Othman, Masih, 2015].

Results and Discussion

The panel unit root tests indicated in this study include individual effects and user-specified lag 1 is used. The results of the panel unit root tests are presented in Table 2. The study used Levin-Lin-Chu (LLC), Im Pesaran Shin (IPS), and Fisher unit root tests to inspect the order of integration. Table 2 reports the results of these three unit root tests, at a level and 1st difference. The results indicate no such stationarity issue at the first difference for all of the variables with a 1% level of significance. Consequently, a mix of I (0) and I (1) order of integration processes was found, and the study proceeded to examine the presence of cointegration between the dependent variable (CO_2 emissions) and independent variables (GDP, squared GDP, FDI, energy consumption, globalization, and population density).

Table 2. Panel Unit Root Tests Results

Variable	**LLC**		**IPS**		**Fisher**			
	level	1st diff.	level	1st diff.	level	1st diff.	level	1st diff.
	t*stat		W-stat		ADF. Chi sq.		PP Chi Sq.	
CO2 emission	–0.35	–6.97***	3.61	–8.68***	16.02	141.84***	33.04	300.77***
GDP	–0.16	–4.28***	6.27	–5.93***	11.24	97.40***	7.90	156.04***
Squared GDP	–0.16	–4.28***	6.27	–5.93***	11.24	97.40***	7.90	156.04***
FDI	–4.00***	–	–7.33***	–	117.12***	–	118.8***	–
Energy Consumption	–0.13	–5.92***	3.31	–7.71***	18.66	124.26***	25.16	280.31***
Globalisation	–5.00***	–	–3.11***	–	64.95***	–	55.06***	–
Population density	–0.41	–7.05***	1.85	–4.00***	38.04	84.92***	297.1***	–

Note: * indicates 10% level of significance, ** indicates 5% level of significance, and *** indicates 1% level of significance.

To analyze the long-run equilibrium among variables of interest, two tests were applied: the Pedroni panel and group statistics and Kao *t*-statistics. Each test considers different assumptions and approaches to calculating the statistics. The tests' null hypothesis is that no cointegration exists against the alternative hypothesis of cointegrated series. Based on the within dimension analysis, the Pedroni panel independently tests sum numerators and denominators along with series and uses the summation to compute the statistics. The panel statistics is divided into four components: panel-v statistic, panel-rho, panel-PP, and panel ADF statistics. In contrast, based on the between dimension analysis, Pedroni group statistics divide the numerator and denominator before summing over cross-sections and compute the statistics. Pedroni group statistics have three computable statistics: group-rho, group-PP, and group ADF statistics. Kao t-statistics assumes the homogeneity in panels and is based on the ADF framework. It is derived from panel least squared dummy variable (LSDV) analysis.

Results of Pedroni and Kao tests are presented in Table 3. For the Pedroni and Kao cointegration tests, the automatic lag length is determined by Schwarz Information Criterion (SIC), and the Bartlett kernel is used for spectral estimation with a determination of bandwidth by Newey and West automatic lag selection. Both tests include individual intercept with no deterministic trend. The results suggest that a long-run relationship among variables exists, that is, variables are cointegrated and tend to move together in the long run.

Table 3. Cointegration Tests' Results

Cointegration Test		**Statistics**
Padroni	Panel v-Statistic	0.554528
	Panel rho-Statistic	0.733316
	Panel PP-Statistic	–6.787947***
	Panel ADF-Statistic	–2.506911***
	Group rho-Statistic	2.844066
	Group PP-Statistic	–5.722652***
	Group ADF-Statistic	–3.570637***
Kao	t-statistic	–2.909462***

Note: * indicates 10% level of significance, ** indicates 5% level of significance, and *** indicates 1% level of significance.

Table 3 presents evidence of a long-run relationship among variables; the next step was to estimate the relationship among the variables and obtain desired findings. To do so, this study employed two classical long-run estimators – fully modified OLS (FMOLS) and dynamic OLS (DOLS) – to obtain findings.

Table 4 reports FMOLS and DOLS findings; the dynamic OLS performed better relative to the full modified OLS; C. Kao and M.-H. Chiang [2001], using Monte Carlo simulations, reported that DOLS performs better than FMOLS in finite-sample, as finite-sample properties of DOLS are higher relative to FMOLS properties. The findings of both estimators reveal that coefficients of a log of GDP and log of squared GDP are significant at 1% level of significance and are positive and negative, respectively. It is evident that the EKC for selected Asian countries holds in the long run. Long-run coefficient values of GDP and squared GDP for DOLS indicate that 1% increase in GDP per capita will lead to 15.647% increase in CO_2 emissions in

long run, and while negative squared GDP per capita shows that 1% increase in squared GDP per capita will decrease CO_2 emissions by −1.122%. A negative log squared GDP per capita coefficient, on the other hand, implies a weak and delayed effect, which could signal a country's failure to keep up with recent discoveries, improve production techniques, or adopt cleaner technology. As a result, environmental regulations may play an important role in enhancing environmental quality. Thus, the EKC hypothesis holds in selected Asian countries, a finding that is consistent with other studies [Baek, Kim, 2013; Jalil, Feridun, 2011; Mongelli, Tassielli, Notarnicola, 2006; Nasir, Rehman, 2011; Shahbaz et al., 2013].

Table 4. FMOLS and DOLS Results

Variable	DOLS	FMOLS
Log GDP per capita	15.647*** (5.756)	9.320*** (1.561)
Log squared GDP per capita	−1.122*** (0.385)	−0.542*** (0.101)
Log FDI inflows	0.056*** (0.014)	−0.002 (0.006)
Log energy consumption	1.285*** (0.308)	0.752*** (0.082)
Log globalization	−0.575 (0.611)	0.054 (0.045)
Log population density	1.187 (1.077)	−0.130 (0.270)

Note: * indicates 10% level of significance, ** indicates 5% level of significance, and *** indicates 1% level of significance

Similarly, the coefficient of FDI inflows is positive and significant at 1% level of significance, suggesting that a 1% increase in FDI inflows will lead to a 0.056% increase in the level of CO_2 emissions in the long run, and thus degrades environmental quality. The results favour the argument that FDI inflows deteriorate environmental quality; thus, the existence of PHH in selected Asian countries is evident. The result is similar to those of the studies by L.-S. Lau, C.-K. Choong, and Y.-K. Eng [2014], N. A. Neequaye and R. Oladi [2015], and Pao and Tsai [2011]; these studies also found that FDI inflows harm environmental quality by contributing to CO_2 emissions. Energy consumption is significant at 1% level of significance and positively associated with CO_2 emissions. This result is consistent with studies by Shahbaz et al. [2013] and by Li, Wang, and Zhao [2016]. Findings show that a 1% increase in energy consumption will increase CO_2 emissions by 1.285% in the long run. Globalization and population density are positive, but the impact is insignificant on CO_2 emission in the long run.

Conclusion and Policy Implications

This study assessed the relevance of possible determinants that contribute to environmental degradation by examining the dynamic impact of FDI inflows and economic growth on envi-

ronmental degradation for selected Asian countries. Moreover, the study also assessed the EKC and PHH hypotheses and the impact of energy consumption, globalization, and population density on environmental degradation for these countries for the period 1990–2019. The study used a panel cointegration approach with fully modified OLS (FMOLS) and dynamic OLS (DOLS) to estimate long-run relationships among variables. Findings provide clear evidence of the existence of an EKC and the PHH. Moreover, economic growth has a highly significant and positive role in environmental degradation, but this effect gets reversed in long run after a certain turning point. After that turning point, as economic growth increases, the quality of the environment gets better, thus, confirming the existence of the EKC.

FDI inflows are found to be positively related to CO_2 emissions, and thus, also contribute to environmental degradation. This implies that firms seek safe havens in recipient countries, shifting their pollution-intensive plants to countries with weak environmental regulations. Therefore, there is evidence that the PHH holds in the long run in Asian countries. Additionally, energy consumption linked to economic production highly contributes to CO_2 emissions and causes environmental degradation. Globalization and population density are found to be insignificant in the long run, showing no impact on the environment.

The findings of this study lead to the following policy recommendations: first, to preserve the environment, the governments and policymakers of Asian countries studied herein should act as one, taking a mutual decision on targeting and mitigating CO_2 emissions by devising reduction policies such as carbon pricing. A carbon pricing scheme, which imposes taxes on carbon emissions and polluters, is widely practised across the world and has been proven to reduce CO_2 emissions [Boyce, 2018]. Moreover, policymakers should strategically devise and implement policies to encourage economic growth and environmental protection, with the ultimate goal of achieving sustainable development. Second, since the PHH is confirmed, these Asian countries should seek and encourage eco-friendly FDI inflows and transference of energy-efficient technologies to improve the quality of the environment. A third recommendation relates to the fact that energy consumption contributes to environmental degradation; this concern should be addressed by promoting the use of cleaner energy. Innovations and technological developments should also be encouraged for hydropower, wind power, solar energy, and other facilities within these countries.

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Appendix A

Table A1. List of countries

1	Armenia	9	Kazakhstan
2	Bangladesh	10	Malaysia
3	Cambodia	11	Nepal
4	China	12	Pakistan
5	India	13	Philippines
6	Indonesia	14	Sri Lanka
7	Iran, Islamic Rep.	15	Thailand
8	Jordan	16	Vietnam

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The Struggle for Recognition or Enhancement of Status: Conditions for the Stability and Development of Unrecognized States Using the Example of Eurasia[1]

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Abstract

In this article, the prospects for changing the status of unrecognized states in Greater Eurasia are analyzed. Status and recognition are close but distinct categories in international relations (IR) theory and international law. Status defines a state's rank in the hierarchical international system. Recognition is a different category; legally, it defines whether other states recognize a particular state as fully established and sovereign. Sovereignty is a third category related to the issue of recognition but not equal to it since it includes internal and external (international) sovereignty. There are examples of sovereign states that effectively control their territories and collect taxes, but which are not recognized as sovereign by other states.

The analysis in this article focuses on whether an unrecognized state can strengthen its status and improve its position in the international system. It is argued that this is possible, and that the absence of international recognition should not be regarded as an unsurpassable impediment to the economic development of the country.

Keywords: unrecognized states, Greater Eurasia, status

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The end of the 20th century and the beginning of the 21st were marked by profound changes on the Eurasian continent, especially in its eastern and central parts, which have witnessed multifold expansion and intensification of ties among Eurasian countries in trade, investment, other sectors of the economy, and the political and other spheres. At the same time, the development of interstate relations has been accompanied by further disintegration of the actors. Monoethnic nation-states have emerged or asserted themselves in the space of former multi-ethnic states. Some scholars explain this process by the cyclic rise and decline of empires [Pomper, 2005] while others point to democratization as an incentive to, and a tool for, separating one part of society from another [Huntington, 1997]. Yet, all theories that describe disintegration generally put the emphasis on enlarged entities – the original states. Meanwhile, the emergence of many well-established – but not (yet) internationally recognized – territorial entities is already an accomplished fact.

The reasons for their unrecognition are obvious: the emergence of new states is usually accompanied by their secession from the multi-ethnic parent countries, often contrary to domestic legislation, which cannot suit those who lose territory, people, resources, and part of their prestige. Meanwhile, international law does not provide a clear answer to the question of what is to be done in such situations. On the one hand, there is the right of people to self-determination; on the other hand, secession entails violation of the principle of territorial integrity. If the conflicting parties fail to come to terms regarding a model of secession, then recognition, first, becomes dependent on the political will of individual states (that is, if there are any states ready to support this step), and second, does not evoke a universal response from the sovereign members of the world community. In practice, there are always states that sympathize with the disintegrating country and are not ready to recognize the "separatists" officially.

The lack of international recognition imposes certain constraints on a state that has turned sovereign internally but has not yet obtained sovereign status internationally. Obviously, sovereignty is an important element of a state's status because it serves as a basis for gaining additional reputation, authority, and influence in the international system – that is, everything that ensures its sustainable existence and development. At the same time, the question arises: is sovereignty in the case of an unrecognized state a "blocking" condition, or are there other opportunities for such a state to achieve a certain status and improve its position?

This article lays out an attempt to answer this question. It is structured as follows: first, we define the place of unrecognized states in the modern international environment. Then we describe the difficulties that unrecognized states encounter on the way to recognition and the implications these difficulties entail for their development. Third, we examine the concept of status in international relations and offer a broader understanding of status with regard to actors that are not centres of power in international relations. Fourth, we analyze the experience of dependent territories, demonstrating that a certain status can be achieved even in the absence of sovereignty (or in the case of limited sovereignty), which, as the fifth section shows, is important for newly established, unrecognized Eurasian states.

Unrecognized States and Their Place in International Relations

As a result of decolonization in the second half of the 20th century, the concept of the sovereign state was finalized as a key element of international politics and the system of international law. As the principle of sovereignty, supported by mutual international recognition and participation in international organizations, spread far and wide, colonial forms of territorial entity ceased to exist. As a consequence, modern international relations are relations between sovereign states. The so-called mainstream international relations (IR) theories – realism and liberalism – were largely built on this principle.

However, a closer look at the political map of the world shows that such states are its main elements but are not the only ones. Not all territorial entities fall under the definition of sovereignty in the original understanding. Here, S. Krasner's approach may be useful: he showed that IR actors can vary in the degree of their sovereignty, including in certain attributes of sovereignty [1999]. Hence, on the modern political map, one can find forms of political structure that differ from the conventional understanding of a sovereign state. Several situations are possible.

First, there are ***dependent territories***, whose status enjoys international recognition. Although some of them appear on the United Nations (UN) list of non-self-governing territories and are characterized by the UN General Assembly as territories "whose people have not yet attained a full measure of self-government" in matters of internal governance and development, the dependent territories have a certain autonomy and independence in decision-making. However, despite their autonomous status, in the context of international relations these territories (the term "state" is not used in relation to them for good reason) are not actors in the full sense of the word. Often, such territories include small or micro entities (with the exception, perhaps, only of Greenland), which objectively do not possess either the strength or the will for self-determination and complete distancing from their patron. The best example of this is the transfer of Hong Kong and Macau (from the United Kingdom and Portugal, respectively) to China at the end of the 20th century, which indicated the possibility of transfer of a dependent territory from one owner to another and the liquidation, albeit gradual, of the status of an internal autonomy in favour of the status of a constituent part of a sovereign state.

Second, there are numerous ***political entities*** and ***separatist regions*** – poorly controlled spaces and disputed territories (de jure owned by the state, but de facto not controlled by it and sometimes contested by neighbouring countries). These are grey zones that have not yet developed as full-fledged states. Such zones can be found in the heartland of continents in sparsely populated areas (the jungle of South America, the desert regions of the Middle East, and mountainous regions in the centre of Eurasia), as well as in places with deep-seated, smouldering conflicts where the state was ousted by rebel or terrorist groups.

The key distinction between this group and dependent territories is the desire for self-determination and, most often, independence. Typically, such "deviations" from sovereignty are not recognized inside the country. They rarely gain international recognition due to obvious legitimacy problems. The latter, in turn, predetermines the internal conflict and instability of such entities. The main feature of these political entities is poor internal governance and unestablished statehood; these are territories that have no clear geographical (border) ambitions and no official support from other countries.

Unlike the more anarchic second group of political entities, the third group of states is comprised of well-structured entities, which we call ***unrecognized states***. At first glance, this group of "countries" does not differ much from the previous one, where the desire for self-determination is strong enough, too. Nevertheless, in our classification, we place the emphasis on the political governability (territoriality, as opposed to the more anarchic term "space") and statehood (established institutions of governance) of these territories. In other words, unlike the previous group, such "states," lacking all attributes of international sovereignty, are characterized by greater internal stability and sovereignty, or at least governability and clear geographical "scaling." The desire for independence and relative stability are the important attributes that put the unrecognized states closer in status to IR actors.

Such self-proclaimed countries, although not recognized by the entire global community, are often described as "quasi-states with internal sovereignty" and are opposed to "quasi-states–former colonies," which, although they have achieved international recognition, failed to establish effective control of their own territory and internal politics [Caspersen, 2011; Kol-

stø, 2006]. Unlike the latter, the self-proclaimed countries in the third group are not recognized by all sovereign states. The lack of common recognition deprives them of an opportunity to realize their potential at the international level due to the lack of legal personality. At the same time, even limited recognition by several states is an important support for their state (sovereign) status, albeit truncated.

Returning to the subject of the internal structure of unrecognized states, we must admit that their political stability (which in our analysis is the main feature that distinguishes the third group from the second) is not always equivalent to internal sovereignty. Sometimes stability (like a declaration of independence itself) is a result of external incentives and, not least, external assistance [Jones, Clark, 2020]. The most striking examples are Kosovo, Abkhazia and South Ossetia, whose internal institutions are still fragile, and their stability depends on external support (financial or advisory).

The proposed classification is rather abstract and certainly not perfect and invariable. At the same time, such classification makes it possible to better differentiate political entities according to the degree of their substantiality, stability, and integration (or potential for integration) in world affairs. Some of them (dependent territories) have not proven themselves as sovereign states but they are very stable territorial units. Others are poorly governed territories with little control over domestic affairs and the bounds of their influence. Still others (unrecognized states) are distinguished by internal stability and governability but are only partially recognized at the international level and therefore do not fully realize their potential.

Adverse Beginnings of Eurasian Unrecognized States

The issue of unrecognized states is not new, but it remains among the unsolved problems of international relations. Today, there are 15 unrecognized states around the world (including those that are partially recognized). We include in this list stable state entities that have declared their secession within clearly defined boundaries and have gained international recognition, though by far from all countries. Although the criteria for recognition are not completely clear (theoretically, recognition by even one state is enough), it is still believed that the ultimate sign of complete recognition is admission to the UN (even though the United Nations itself, not being a state, does not have the right of recognition).

What makes the recognition process complicated is that, although international law includes the right to self-determination, in practice the policy of many states and international institutions is geared to maintaining peace and the territorial integrity of states, and in most cases it interprets the "right to self-determination" as the right to self-determination of all people who reside in the given state and not some separate part of it. The UN Security Council resolutions on Rhodesia (216 and 217 of 1965), on Northern Cyprus (541 of 1983), and on the Republic of Srpska (787 of 1992) are usually referred to as the basis for such an interpretation. Since all unrecognized states emerged as a result of civil wars and secession against the will of the parent state, the process of their recognition is extremely difficult and, more often than not, unsuccessful.

In this respect, the unrecognized states that emerged on the territory of the former Soviet Union are no exception. South Ossetia and Abkhazia appeared as a result of civil wars and ethnic conflicts; the fate of several other political entities remains uncertain, and in the future, under a certain set of circumstances, they may join the group of unrecognized states in the post-Soviet space – Transdniestria, Nagorno-Karabakh, Donetsk People's Republic and Lugansk People's Republic (for more details about the unrecognized states in the post-Soviet space see: C. King [2001], V. Kolossov and J. O'Loughlin [1999], D. Lynch [2002], and S.M. Markedonov [2012]).

In the Eurasian space, some other examples can be found. One of the partially recognized states in the Middle East is Palestine, whose legislative body announced in 1988 the creation of an independent state in East Jerusalem. Another example of an unrecognized state in Eurasia is the Turkish Republic of Northern Cyprus, which declared independence in 1983 but never earned international recognition. One of the most remarkable examples is Taiwan. Disagreements over its status date back to the civil war in China. Since 28 countries have officially recognized Taiwan as an independent state, some authors suggest classifying the sovereign status of the island as something between an "unrecognized state" and a "quasi-state," that is, a state with incomplete sovereignty [Kolstø, 2006].

The absence of comprehensive international recognition is not critical, but it certainly complicates the life and development of newly founded states. Their main problem is the lack of opportunity to take part in international political and economic institutions that set the rules of the game. Another problem is that unrecognized states often develop a strong military bias and spend on their defence programmes considerable resources so much needed for economic development. Their bias for militarization stems from the fact that international law does not protect such a state, and it can rely only on itself or, if possible, on the external allies that have recognized it. There are some other inconveniences, including restrictions on the international movement of citizens, dependence on the patron country,[2] low investment attractiveness, and fragility of government institutions due to immaturity and militarization.

Because of these factors, some unrecognized states failed to survive and disappeared from the political map. Among them, for example, were two African states, Katanga and Biafra, as well as Tamil Eelam in Southeast Asia. Some unrecognized states in Eastern Europe were subsequently incorporated into the countries that gained independence following the collapse of Yugoslavia. In 1995, the Republic of Srpska received the status of a territorial entity within Bosnia-Herzegovina, while the self-proclaimed state of the Republic of Srpska Krajina lost most of its territory and was integrated into Croatia.

However, some unrecognized states prove to be viable. Several factors act in their favour: a high level of nationalism cementing the population, the militarization of society, the weakness of the parent state, support from an external patron and the international community's reluctance to intervene [Kolstø, 2006]. In other words, the lack of recognition as such does not doom the state to failure. Perhaps one of the most successful examples of this is Taiwan, whose gross domestic product per capita is one of the highest in the world according to the International Monetary Fund [IMF, 2020] and whose foreign exchange reserves amount to $543.3 billion according to indicators available from the country's Central Bank [2020]. Many sovereign states possess far smaller forex reserves.

The foregoing allows an assumption that the key parameter of survival after obtaining the attributes of statehood, such as territory and institutions, is not only and not so much recognition, but economic and social development. Consequently, for unrecognized states (falling into the third group in our classification), the main challenge is sustainable development precisely in conditions of long-term non-recognition.

An analysis of this issue can be approached from two points of view. The first constitutes a relatively new approach in the IR theory that assesses the stability of a state and its success on the world stage through the lens of status. Although the bulk of the literature on this topic is devoted to sovereign countries, we believe that it can be useful in analyzing the survival of less sovereign actors. The other approach is to explore the experience of dependent territories from the first group in our classification, which successfully combine incomplete sovereignty with

[2] More on the forms and degree of such dependence see A. Tokarev, A. Margoev and A. Prikhodchenko [2021].

long-term development. On this basis, we can formulate a hypothesis about how status influences the survival and sustainable development of international actors with limited recognition.

The Problem of IR Status and Unrecognized States

In one of the classic texts of modern political science, R. Gilpin, noted that status is the ultimate goal of political leaders, many of whom are obsessed with investing in it, achieving it, and defending it [1983].

Let us try to project this postulate to the level of international relations. On the one hand, as is known, relations between states take place under conditions of anarchy, which is one of the key characteristics of the international system. On the other hand, despite the absence of an omnipotent hegemonic authority that might overcome anarchy and dictate uniform rules of the game to everyone, these relations are subject to established hierarchical structures in which some states find themselves under the influence of other, more powerful ones. This situation embraces not only individual institutions (for example, the UN Security Council, where five countries have exclusive veto rights), but also implies the ability of one state to influence the foreign policy of others, both with regard to military issues and economic relations [Lake, 2009]. Consequently, status delineates a state's position in the international system (hierarchy) relative to the position of other states [Renshon, 2017].

Other studies prompt the conclusion that status in international relations is closely related not only to the concept of authority, that is, the ability of a state to project its influence on other actors and impose a certain pattern of behaviour [Lake, 2014], but also to the legitimacy of power. In other words, the image of a state, its authority, and its status, which are created and subsequently maintained through interaction between states, form a kind of superstructure lying over the state's recognition. This suggests that power per se does not determine status as long as it is not recognized, and it is even rejected as illegitimate by other participants in the international system. It is the recognition and belonging to the family of sovereign states that provide the basis for the development and strengthening of status in the international system.

Status and the search for international prestige, as understood by classical and structural realism, were considered the primary tasks of states seeking to increase their influence in the international arena and, in this way, to improve the chances of survival [Mearsheimer, 2001; Morgenthau, 1948]. At the same time, the concept of status in the international system has undergone significant transformation over the past decades as a result of globalization, the spread of the market economy model, and the growing role of economic factors as the main determinants of state power [Gilpin, 1983]. With the development of economic relations, participation in international trade and the international division of labour gradually supplanted territorial expansion as a tool for increasing the strength and maximizing the state's welfare [Ibid.]. Hence a state's status began to depend on its ability to cooperate with other actors in the international economic system, including trade and financial relations.

In sum, status is a country's place in the world or regional hierarchy and its rank in a status-conscious community. This community can be global, regional or local, depending on the reference group used to assess the status of a certain state. In all these cases, status is also understood as a rank, the ordinal number of a country in the eyes of the other members of the community, that is, a group of countries with which the given state competes and compares itself [Renshon, 2017]. Some experts also believe that state status is associated with membership of a status group [Lake, 2014]. For example, Russia in the 1990s aspired to membership in the Group of 7 (G7) mainly to bolster its status. At the global level, the main such group is the UN, which confirms the sovereign status of its members.

Status can be universal and particular. A country may enjoy a high status in a particular area, for instance, serving as a model of economic growth, being led by a charismatic leader, or enjoying acclaim for its computer engineers, but have no status in other respects. This happens because the world system incorporates not one main hierarchy, but a multitude of them (for details, see D.A. Lake [2011]). The country that is rated highly in many hierarchies also possesses a high universal status.

Modern status studies mostly focus on large states and centres of power [Chan, 2007; Johnston, 2003; Krickovic, Weber, 2018; Murray, 2018]. This is not surprising: such countries have not only sovereignty and international recognition, but also power that can be converted and invested in status. Moreover, these countries dictate the rules of the game and the functioning of many international and regional institutions. However, as we have shown above, although power is an important factor, it is only a superstructure compared to the very fact the state interacts with other countries, building an appropriate reputation, authority, and status. In the modern world, we deal with a multitude of statuses, so acquisition of international – as opposed to regional or local – recognition as a mandatory precondition for achieving a status that can be converted into an advantage for economic development no longer appears vital for small (or less powerful) states. Indeed, many studies have noted that even small countries can advantageously use their minor status for economic development. N.Y. Kaveshnikov [2008] pointed to the benefits that small European states (Malta, Cyprus and Luxembourg) derive from their "banker" status, while Hong Kong profits from serving as China's window to the world and a trade gateway to that country for the rest of the world.

If we accept international relations in all their diversity, that is, the entire spectrum of their actors, including unrecognized ones, then the concept of status should be approached more flexibly. This also applies to the geography of recognition (by the whole world or an individual region or subregion) and to its constituent elements, where, alongside absolute and universally recognized sovereignty, there may also be functions that an international entity performs in a particular community of states. Moreover, if these functions are performed in accordance with generally accepted rules, this gives a state not just a mechanical role in the system, but precisely the status of an actor state (regardless of the issues of recognition) that performs this role. Hence, as far as status is concerned, there still is room for self-expression and self-realization both for small countries and for the other political actors we consider in this article. An analysis of the positive and negative experience in the development of their status from this point of view can show how this factor influences the capabilities of other, not quite sovereign entities.

How Dependent Territories and Partially Recognized States Can Use Their Status

Although small states and microstates, as well as dependent territories, have a limited degree of autonomy (since the former are dependent in their actions on the decisions made by large centres of power and the latter are not formally sovereign), many of them are characterized by a relatively high level of economic development and integration into the global economic space. It is precisely economic integration that appears to be the most appropriate strategy for small states and microstates, many of which have successfully established a flexible system of trade with more economically developed countries [Armstrong, Read, 2003]. In some cases, involvement in the global financial system in the capacity of offshore zones (for example, the Faroe and Caribbean Islands) compensates for limited political autonomy. Others focus on developing niche markets, including in finance (some insular nations such as American Samoa, Saint Lucia, and Trinidad and Tobago) and tourism (Fiji and Mauritius). In such a way they attract

foreign capital to offset the limited scale of the domestic market and the lack of a sufficiently rich resource potential.

The ability of small states and microstates with limited autonomy to create an advantageous legal basis for trading and financial transactions with more developed partners ensures their stable economic development, which would be impossible to achieve with only status as a sovereign state to rely on. Sovereignty and a high degree of autonomy are unable to provide additional advantages that dependent territories lack [Armstrong, Read, 2003]. It is no coincidence that only two dependent insular states, Palau and East Timor, have received sovereign status over the past 40 years, which made scholars conclude that "subnational island jurisdictions (SNIJs)" do not seek greater autonomy or sovereign status [Grydehøj, 2020]. Research shows that complete rejection of foreign economic assistance for the sake of achieving full sovereignty looks to be a disadvantageous strategy even to Greenland, which has a sufficient degree of autonomy from Denmark and a fairly high level of economic independence [Grydehøj, 2020].

Many developing small states and microstates, including insular territories with limited autonomy, are also dependent on foreign aid. Firm economic ties with the parent states, most often former colonial empires, help maintain a steady influx of resources to dependent territories [Grydehøj, 2020]. In the second half of the 20th century, after the collapse of colonial empires, some countries, for example Cuba and Taiwan, were involved in a bipolar confrontation, which yielded certain economic benefits [Schmitt, 2021]. However, despite independence (if any), the influence of external actors – in most cases, former colonial empires – did not disappear with the end of the Cold War. Britain's "overseas territories" in the Caribbean region are still under significant economic and political influence of the parent country.

Remarkably, historical examples of using one's niche status and its conversion into a developmental resource can be found both among small and microstates (that is, sovereign) and dependent territories (non-sovereign but recognized), and among partially recognized state entities.

One of the main positive examples is Taiwan, which has shown outstripping economic growth in recent decades, despite the formal non-recognition by many countries due to mainland China's policies. Taiwan successfully maintains economic ties with many countries in Asia, Europe and America, including such major partners as Japan, China, the U.S., Korea and Saudi Arabia, as well as international institutions (Taiwan is a member of the World Trade Organization, the Asia-Pacific Economic Cooperation, the Asian Development Bank and other regional economic organizations). One of the reasons for this success was the establishment of Taiwan's effective control of the group of islands in the Taiwan Strait following a military clash with China in the second half of the 20th century [Shaw, 1985]. Although the contested islands Jinmen and Matsu are close to mainland China's borders, the Taiwanese government's ability to establish and maintain control over these offshore islands enabled Taiwan to subsequently gain the status of one of the leading financial centres in Asia and the world at large. And of course, the political and economic support that Taiwan receives from the United States and Japan is important.

Another example, though far less successful, is Palestine, whose development opportunities have been severely constrained for decades due to the lack of internal governance and political stability. Despite an attempt to resolve the Israeli-Palestinian conflict in the 1990s, the agreements signed in Oslo and the transfer of some responsibilities to the Palestinian National Authority did not resolve the existing differences between Israel and the Palestine Liberation Organization. As a result, recurring hostilities impede the country's development, while a significant part of its population is on the verge of poverty [Farsakh, 2008]. The emphasis on the struggle for independence, which is deeply ingrained in Palestinian society, leads to radicaliza-

tion of the political agenda and an objective lack of conditions for obtaining a status crucial to attracting external resources to the economy, even at the regional level.

Thus, we can conclude that the emphasis on the struggle for full sovereignty not only hinders successful development, but to a certain extent contradicts development goals. Moreover, the rejection of the autarchic model in favour of integration into the international economic (and not necessarily political) system is a prerequisite for economic growth and a higher standard of living. This fully applies to countries and territories whose status is universally accepted and recognized (small states, microstates and dependent territories). Since these functional elements of status are less dependent on the global consensus, it can be assumed that their presence or absence may affect the capability of unrecognized states not only, and perhaps not so much, on the global scale as at the regional level.

Eurasian Unrecognized States: A Problem of Recognition or a Problem of Status?

In the Eurasian space, the emergence of unrecognized states in the second half of the 20th century was, to one degree or another, linked with two events: decolonization and disintegration of multi-ethnic states. In some cases, these processes overlapped. At the same time, in all such cases, the "countries" that failed to achieve prompt international recognition were forced to look for ways of ensuring their stability and development in a situation of limited international sovereignty.

Today the list of such countries on the Eurasian continent looks as follows. First, there is Taiwan, which isolated itself from mainland China as a result of the civil war caused by the struggle against Japanese colonialism. Second is the Turkish Republic of Northern Cyprus, which emerged following the collapse of the Ottoman Empire and the mandate system of governing territories until they acquired sovereignty. Third, Kosovo. This problem has remained unresolved since the collapse of Yugoslavia. Fourth, Abkhazia and South Ossetia. Their independence and partial recognition are also related to the consequences of the multi-ethnic Soviet Union's collapse.

Such cases as Transdniestria, Nagorno-Karabakh, Palestine, as well as some other separatist movements in European countries (including Catalonia and Scotland) are absent from this list. Our choice was based on the criterion of a high degree of statehood. We attached the tag of an unrecognized state only to those entities that managed to gain control over a clearly defined territory and establish a stable state order there (on their own or with external support). In all other cases, the state entities or political movements in question are supported from the outside, but do not have stable internal sovereignty.

Nevertheless, all these cases indicate that the process of national self-determination in the Eurasian space is far from complete. The system of sovereign states, which we used as the starting point of our discussion, is the main, but not the only, criterion of modern international relations. New states continue to emerge. For some of them, existence without universal international recognition and outside international institutions created by sovereign states becomes an everyday routine. How can unrecognized states ensure not only survival, but also internal stability and development in this case?

Obviously, the struggle for sovereignty as the goal of joining the club of sovereign states with all the attendant benefits such a position implies cannot be regarded as the main strategy. The above examples of unrecognized states in Eurasia clearly confirm the international community's conservatism in this matter. Experience shows that if sovereignty is not recognized in the first months or years following the declaration of independence, the chances of success

in the further struggle for universal international recognition look bleak. It might be logical to assume that in this case focusing all diplomatic and economic efforts on securing the confirmation of independence may be a popular (as well as populist) strategy, but economically such a policy is not quite expedient.

At the same time, the experience of Eurasian unrecognized states, with the exception of Taiwan, shows that partial recognition has clear regional or local specifics: the "core" of the countries that have recognized sovereignty is located in the same region/subregion as the unrecognized state itself. Kosovo is widely recognized by the countries of the European Union; Abkhazia and South Ossetia, by Russia; and Northern Cyprus, by Turkey. Hence unrecognized states may try to integrate into local and subregional trading, economic, and financial organizations, which are currently booming in Eurasia.

Of course, this strategy is not as straightforward as in the case of the dependent territories, whose international status is universally recognized. There are several likely obstacles to this strategy. First, the country's geographic location can make it difficult to select potential partners (though in the case of Switzerland or Luxembourg, as well as insular quasi-states and dependent territories located far away from continents, the geographical position of the state was not an obstacle). Second, some states that not only refuse to recognize the independence of a newly formed state, but also actively fight against its independence, will not hesitate to go to great lengths in an effort to prevent its integration even into non-political structures.

Despite possible obstacles, changing the goals – from the acquisition of international sovereignty (recognition) in favour of strengthening the functional elements of the status of a state that provides services to everyone on equal terms and regardless of the readiness for the political recognition of this state – is seen as more advantageous for several reasons. First, this approach reduces the conflict potential. If the struggle for universal recognition is removed from the agenda, and a state entity enjoys certain security guarantees, for example, from a patron or a partner who has recognized it, and is engaged in the development of economic ties without preconditions, then the global centres of power will be less interested in politicizing and problematizing the issue of recognition. On the contrary, an overemphasis on security and military cooperation to the detriment of the economy may reproduce the conflict in the regional and even international context. Furthermore, giving priority to the economic sphere allows an unrecognized state to focus resources on its internal stability and economic development, which seems more appropriate in the long term, as long as international recognition remains unachievable. Setting global strategic goals would be wrong, likewise. Eurasia is witnessing booming regionalization, including at the local and subregional levels, and it is integration into these processes that an unrecognized entity should begin with.

Conclusion

Through an examination of unrecognized (partially recognized) states that have a certain level of sovereignty and internal stability and resilience, but do not have the full status of a recognized sovereign state and membership in the UN, we have shown that the traditional logic of the relationship between status and sovereignty (sovereignty first, status second) does not always apply to small, unrecognized states in Eurasia. For large, full-fledged states, status is a kind of superstructure over sovereignty. Centuries-old statehood, stable geopolitical interests, and a long history of rivalry and cooperation with partners are the realities that large, historically established states take for granted, and their status develops on this foundation in accordance with their successes and weaknesses at one time or another.

Newly founded, unrecognized states do not have such a solid foundation. Building and strengthening it may take a long time. For unrecognized states, whose sovereignty cannot be finalized quickly enough, the status should be created on a different basis. In this article we expand the understanding of status and include in it (in addition to sovereignty) other components of authority, such as the level of integration in the international (or regional) community and the performance of certain functions. We believe that in the future our approach can contribute to further theoretical study of status in relation to international relations.

Although the issue of sovereignty is important for unrecognized states, its priority and absoluteness (indivisibility of sovereignty) in matters of survival and development is rather factitious. Without full sovereignty and recognition, it becomes more important to create an alternative, non-political status that will help find a niche in other areas, while leaving aside the issue of sovereignty at the international level. This conclusion is based on the positive experience of both dependent territories and individual unrecognized states, primarily Taiwan. And it is indirectly confirmed by the lack of significant economic results in many unrecognized states of Eurasia, which have concentrated their efforts on gaining recognition (international sovereignty) but have not yet exerted any efforts to display their potential in a different capacity.

International recognition (external sovereignty) is not a universal means a young state can employ to win acclaim, while non-recognition is not a critical problem. Moreover, it is very difficult to overcome non-recognition, and sometimes it is completely impossible. On the other hand, it is quite realistic for a young state to achieve a certain status, especially at the regional level, among neighbours and countries interested in certain services it can offer. This is the important factor that confirms the capability of an actor in its own right and may be the first step toward converting a state's internal stability and, in a sense, internal substantiality into full-fledged international recognition.

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10 YEARS OF RUSSIA' ACCESSION TO THE WTO

Ten Years Ago, the World Trade Organization Opened Its Doors to Russia[1]

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Abstract

This article begins with a brief discussion of the background of the USSR/Russia rapprochement with the General Agreement on Tariffs and Trade/World Trade Organization (GATT/WTO) and some of the acute problems of the negotiation process. It is argued that the Russian Federation has received acceptable, balanced conditions of membership. The advantages gained during the first years of WTO membership are listed, both for the national economy and in the foreign arena. However, it is shown that, 10 years later, the benefits of membership are significantly lower in comparison with initial projections. This gap is attributed to the state of the Russian economy and the extinction of the continuing economic model based on the extraction and export of raw materials. The Russian economy still needs real structural reforms and modernization, which would change the structure of exports in favour of finished products and modern services. Only in this case can the benefits of WTO membership increase significantly, justifying the original forecast. The article concludes with a discussion of current challenges in the world economy and trade, the crisis experienced by the WTO, and the active position of the Russian Federation on the future reform of the WTO.

Keywords: GATT, WTO, multilateral trading system, Russia, negotiations, terms of accession, WTO reform

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The Russian Federation was officially granted membership in the World Trade Organization (WTO) on 16 December 2011 at the 8th WTO Ministerial Conference in Geneva.[2] This was globally perceived as a significant and noticeable event because at that time Russia was the last large economy outside the WTO. It should be clarified that Russia's actual membership in the WTO came later, specifically on 22 August 2012 after the ratification process. The ratification

[1] This article was submitted 29.06.2021.

[2] One of the authors of this article, A. Portanskiy, was a member of the Russian delegation at the conference held in Geneva on 16 December 2011.

procedure involved both chambers of the Federal Assembly of the Russian Federation and concerned the package of documents on joining the organization.

While both dates are significant, for the Russian government and the official delegation responsible for accession negotiations, 16 December 2011 was a milestone of utmost importance. This was the finish of a most difficult marathon that had lasted for 18 years.

Reflecting on the 10 years since Russia's accession to the WTO, it is not enough to just summarize the benefits and losses of being a WTO member. Today, it is impossible to ignore new challenges, such as trade wars, the crisis in the WTO itself, and the forthcoming reform of this organization [Portanskiy, 2019]. Russia needs to understand how to design its trade policy in the near future in order to tackle these challenges.

Background to the Issue

Both the historical context and the circumstances in which Russia faced the issue of WTO membership are important for understanding the specifics of Russia's accession to this institution.

After the collapse of the USSR, Russia proclaimed a course toward market reforms. Integration into international economic institutions has become an integral part of those reforms. As a result of the abandonment of centralized control over the economy and the elimination of the state's monopoly on foreign trade, the issue of accession to the WTO spilled beyond the exclusive competence of the government, although it was solely authorized to negotiate with members of the organization.

Negotiations, first, implied shaping a Russian position on the liberalization of goods and services markets, opening them up to some extent. In the circumstances of significant parts of manufacturing being privatized, the problem of market liberalization had to be solved in the course of a dialogue with national business. Nothing like this had previously happened in the country because its participation in any international institution was the prerogative of the highest authorities, and this was perceived by everyone as a natural state of affairs. The need to overcome that tradition of the past was itself a difficult domestic political and psychological barrier. However, the dialogue between the state and business gradually evolved. The Ministry of Economic Development and Trade[3] and the State Duma took an active part in it, on the one hand. Associations of manufacturers (Russian Union of Industrialists and Entrepreneurs, Opora Rossii, Delovaya Rossiya, unions of the RF CCI and its local branches, and others), major companies (Severstal, NLMK, and others) and small and medium-sized enterprises took part, on the other. That dialogue was generally successful.

At the same time, what the top business managers quickly grasped was not always perceived at the grassroots level. Overcoming all sorts of myths and prejudices against the WTO was not at all an easy task. Here is just one example. Since the early 2000s, a team of trade policy experts from Moscow have been actively involved in regional conferences and seminars on the WTO accession. During one such conference in a large Volga city, the main speaker was asked: "You have just told us that there are about 150 countries in the WTO, so is it right that we will be alone there against them?" It sounded like a joke, but the young author of that question was not joking at all – he, like many others, sincerely believed that Russia would have to be "one against all" in the WTO.

Remnants of such thinking, albeit in a less obvious form, are still encountered today, continuing to fuel the sentiments of sceptics and outspoken opponents of Russia's membership in

[3] This is the former name of the Ministry of Economic Development.

the WTO, surprising as it may seem today. And their role is intensified from time to time – they, as a rule, are always ready to blame the WTO for certain problems in the Russian economy.

In 1947, the USSR did not become a party to the newly developed General Agreement on Tariffs and Trade (GATT), effectively the predecessor of the WTO. The refusal was not only due to economic, but also to political and ideological considerations. However, later in the mid-1970s, the Soviet authorities nevertheless decided to take a course toward establishing relations with GATT as this was required by the objective interests of entering foreign markets. In this regard, a special resolution was adopted by the Politburo of the Central Committee of the Communist Party of the Soviet Union (CPSU). Meanwhile, over the three decades of the functioning of GATT, the number of its contracting parties has more than tripled. Unfortunately, negotiations were denied to the USSR because of the Soviet troops entry in Afghanistan in December 1979.[4]

Just at the end of the perestroika period in 1990, the USSR acquired observer status in GATT. Meanwhile, the number of parties to the Agreement by that time exceeded 100. The principles and rules of GATT were firmly established in the world trade system, so many countries reformed their legal frameworks in accordance with these provisions. The lag between the WTO members and those still outside the trade negotiations system widened significantly. This itself implied the difficulties of the negotiation process for future candidates for accession to the GATT/WTO.

After the collapse of the USSR, Russia inherited its observer status in GATT and in 1993 applied to join the Agreement. A year later, in April 1994, 104 countries signed the Marrakech Agreement establishing the World Trade Organization (and in 1995 the number of WTO members exceeded 120). In the same year, Russia sent a new application for accession to the WTO. The negotiations started in January 1995, simultaneously with the functioning of the WTO itself. At that time, the loss in time associated with Russia's non-participation in the GATT was already almost half a century. This total loss of time, of course, had a negative impact on the negotiation process on Russia's accession to the WTO.

The establishment of the WTO was an outstanding achievement in the field of building market institutions in the post-war period [WTO, 2002]. But at the same time, the process of joining the WTO has become much more complicated than that of GATT-1947. This complexity logically followed from the differences between GATT-1947 and the WTO. The main reason for the complication of accession was the broader and more stringent nature of the obligations under the WTO. While a member state of GATT-1947 could fulfil some of its provisions to the extent that they did not contradict national legislation, membership in the WTO required the unconditional implementation of all multilateral agreements that make up its legal basis. In addition to binding tariffs, a country has to commit to rules on agricultural subsidies, trade in services, and trade aspects of intellectual property rights.

Benefits of WTO Membership Could Have Been More Significant

In the midst of the accession negotiations, when the voices of the opponents of the WTO were still in place, the representatives of the economic bloc of the government made it clear once again why Russia was joining the WTO. Their explanation boiled down to the fact that the country had exhausted the opportunity of economic growth, let alone economic development, based on the exports of hydrocarbons [Stadnik, 2021]. It was necessary to take a course to-

[4] Such significant interference of politics in the economic sphere has been a rather rare case in the history of GATT/WTO. Another similar case concerned suspension of negotiations on granting China contracting party status in GATT after the events at Tiananmen Square in 1989.

ward increasing exports of finished products and services. To do this, first, requires appropriate modernization within the country, and second, membership in the WTO because it solely provides free and non-discriminatory access to world markets.

To summarize the contents of the many years of accession negotiations, it can be admitted with sufficient confidence that Russia has received quite acceptable, balanced conditions for membership in the WTO, which, on the one hand, provide adequate protection to the national market, and on the other, open up the opportunity for Russian business to expand freely in foreign markets. These acceptable and favourable conditions have not been granted easily though.

At the initial stages, delays of negotiations were to a certain extent due to quite inflated demands of Russia made by the main partners. For example, the European Union (EU) put forward requirements to the Russian Federation in many areas of access to markets of goods and services, similar to those that had been previously imposed on the countries of Eastern Europe. It can be said that in this sense, Russia was perceived as "Greater Estonia" or "Greater Poland," effectively meaning that it should follow approximately the same path as other former socialist countries within the WTO. It took some time to convince partners that their approach was wrong.

In the course of the negotiations, Russia, like some other countries, candidates to accession, after 1995, had to confront exaggerated demands – the so-called "WTO-plus." One of these requirements was the accession of the Russian Federation to the plurilateral agreements of the Uruguay round package, specifically the Agreement on Trade in Civil Aircraft and the Agreement on Government Procurement. Participation in the first would oblige the Russian Federation to set zero rates for import duties on civil aviation production, which for obvious reasons could not be accepted. Russia, according to its own assessment, was not yet ready to participate in the second agreement either. As a result, Russia joined neither the first nor the second agreement [WTO, 2011].

During the negotiation process, some systemic issues that are not really governed by the GATT/WTO rules also had to be discussed. The most pressing of them was the issue of dual pricing of energy in the Russian Federation. It is noteworthy that as soon as the Russian public became aware of the fact of negotiations on this topic, the opinion immediately spread that Russia had allegedly agreed to obligations to change prices for energy. However, this was never true. No obligations concerning changes in prices of gas, electricity, or oil and oil products were taken, although the EU and the United States tried to impose such demands on Russia. In fact, Russian obligations in the WTO boiled down to the fact that Gazprom, in the course of its commercial activities, should make profits from sales of gas on the domestic market, which had already been the case since 2003 [Portanskiy, 2009; 2012].

Persistent demands made by Russian partners regarding equalization of internal and external gas prices had a very specific explanation. The point is that low prices for natural gas enhance the competitiveness of a number of Russian enterprises, for example, fertilizer producers, as that price amounts to about 50–70% of the cost of the final product. Therefore, claims were made toward Russia in relation to providing allegedly prohibited subsidies to fertilizer producers in the form of understated gas prices. However, Moscow managed to prove on the basis of the GATT/WTO rules that low gas prices in our case cannot be considered as prohibited subsidies. At the same time, Russian commitments clearly state that gas sales to private consumers can be carried out at any price. This means that the government can continue to subsidize gas sales to individuals and consumers according to its social commitments.

It took a lot of time and effort to defend Russia's position on a number of other particularly sensitive issues, such as import duties on vehicles, access to the financial services market, and others.

For the sake of fairness, it should be admitted that during the accession process many internal trade and economic concerns had to be overcome by balancing the interests of various market participants. For example, domestic aircraft manufacturers were interested in maintaining high import duties on foreign aircraft, while national airlines, on the contrary, advocated low and even zero duties. This is just one example of a clash of interests.

At least two issues of a political nature, which significantly slowed down the negotiation process, should be mentioned. For instance, as a result of the war with Georgia in 2008, negotiations slowed down and then Tbilisi blocked the approval of the Report of the Working Party on Russia's accession to the WTO until the fall of 2011.

The second event of a negative nature was a spontaneous and ill-considered attempt to make the whole Customs Union the member of the WTO. A statement regarding this was made on 9 June 2009 following the Eurasian Economic Community (EAEC) Interstate Council of Member States summit: "Russia, Kazakhstan and Belarus intend to negotiate on joining the World Trade Organization (WTO) as a single Customs Union" [TASS, 2014]. WTO members were quite reasonably bewildered by such news. First, by the beginning of June 2009, Russia had almost completed the negotiation process. The ways and terms for the settlement of the remaining issues had been outlined, therefore there was no point in drastically changing the scheme of the process, putting the long-awaited completion of the negotiations at risk. Second, the Customs Union within the EAEC had not yet been established. Third, Russia, Kazakhstan and Belarus were at different stages of the accession negotiations, with the latter's lag the most evident. Fourth, serious concern was caused by periodic aggravation of trade, economic, and political relations between the Russian Federation and Belarus, which threatened to undermine the resilience of the Customs Union. Finally, even under the most favourable scenario of the formation of the Customs Union, there was no appropriate legal basis for its accession to the WTO.

As a result, there was a long pause in the negotiations, and the final decision to resume them was only made in May 2010. Negotiations were continued in September 2010. Thus, the aforementioned June 2009 statement on accession to the WTO through the Customs Union cost Russia approximately 15 months extra. A year and a half after the resumption of the negotiations, specifically in November 2011, they were completed. Hence, the matter of Russia's accession to the organization was included in the agenda of the next WTO ministerial conference which took place in December 2011.

The main point that has been widely raised during all these years concerned benefits that Russia is likely to get from its membership in the WTO. Admittedly, this issue causes some delusion. The very next day after gaining the long-awaited membership in the WTO, many, including some high-ranking officials, imagined that the benefits of accession should fall on the country immediately, like manna from heaven, with no effort on Russia's part. After all, there had been 18 years of gruelling negotiations, with some concessions, so there should be a prize after the finish line, they thought. The realization that such good wishes did not coincide with reality did not come immediately.

"Working within the WTO is much more difficult than working on accession" is one of the well-known statements of the main Russian negotiator, M. Medvedkov who is the former deputy minister of Economic Development and Trade, and professor at the Higher School of Economics [RBC Daily, 2012]. In the WTO Secretariat in Geneva, one can hear very similar claims that the WTO provides an opportunity but not a guarantee, that membership contributes to just 20% of the effect, whilst the remaining 80% is to be achieved within the country. So, in general, this is what happened in Russia's case. Yet, immediate effect was undoubtedly obtained. During the first couple years the Russian economy got rid of a number of discriminatory restrictions on foreign markets that directly violated the WTO rules. Their annual volume

amounted to about $2 billion. Within the first years after the accession, an increase in Russian exports of different products, mostly manufactured goods, became evident (see Chart 1). And, for example, the volume of agricultural production in the period 2012–18 increased by more than 12%; since 2012 Russia has become a net exporter of many agricultural products including honey, spice and oilseeds, buckwheat, millet, some root vegetables, pasta, flour confectionery, ice cream, animal by-products, animal and vegetable fats, and oilcake [Government of the Russian Federation, 2018]. This was the result of both domestic production and wider access to foreign markets.

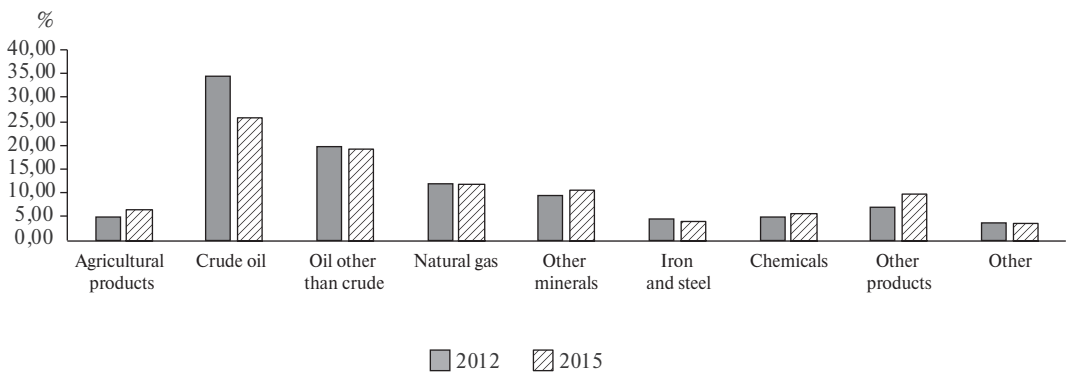

Fig. 1. Growth of Export of Certain Types of Domestic Products, 2012–15

Source: Compiled by the authors based on WTO data [2016, p. 20].

Gradually, Russia got involved in the difficult work of defending its interests in trade disputes within the WTO. Table 1 reflects Russia's participation in trade disputes both as a complainant and as respondent as of mid-2021.

Table 1. Timeline of Trade Disputes Involving the Russian Federation

Russian Federation as a Complainant	Russian Federation as a Respondent
DS474 23 December 2013 Respondent: European Union Cost Adjustment Methodologies and Certain Anti-Dumping Measures on Imports from Russia	DS462 9 July 2013 Complainant: European Union Recycling Fee on Motor Vehicles
DS476 30 April 2014 Respondent: European Union Certain Measures Relating to the Energy Sector	DS463 24 July 2013 Complainant: Japan Recycling Fee on Motor Vehicles
DS493 7 May 2015 Respondent: Ukraine Anti-Dumping Measures on Ammonium Nitrate	DS475 8 April 2014 Complainant: European Union Measures on the Importation of Live Pigs, Pork and Other Pig Products from the European Union

Russian Federation as a Complainant	Russian Federation as a Respondent
DS494 7 May 2015 Respondent: European Union Cost Adjustment Methodologies and Certain Anti-Dumping Measures on Imports From Russia (Second Complaint)	DS479 21 May 2014 Complainant: European Union Anti-Dumping Duties on Light Commercial Vehicles From Germany and Italy
DS521 27 January 2017 Respondent: European Union Anti-Dumping Measures on Certain Cold-Rolled Flat Steel Products From Russia	DS485 31 October 2014 Complainant: European Union Tariff Treatment of Certain Agricultural and Manufacturing Products
DS525 19 May 2017 Respondent: Ukraine Measures Relating to Trade in Goods and Services	DS499 21 October 2015 Complainant: Ukraine Measures Affecting the Importation of Railway Equipment and Parts Thereof
DS554 29 June 2018 Respondent: United States Certain Measures on Steel and Aluminium Products	DS512 14 September 2016 Complainant: Ukraine Measures Concerning Traffic in Transit
DS586 5 July 2019 Respondent: United States Anti-Dumping Measures on Carbon-Quality Steel from Russia	DS532 13 October 2017 Complainant: Ukraine Measures Concerning the Importation and Transit of Certain Ukrainian Products
	DS566 27 August 2018 Complainant: United States Additional Duties on Certain Products From the United States

Source: Compiled by the authors based on the Trade Disputes Section of the WTO Official Website [WTO, n. d.].

It should be remembered that the settlement of trade disputes is the most important and most essential function of the WTO. The number of cases registered with the Dispute Settlement Body (DSB) has now exceeded 600 since the organization was established in January 1995. Participation in trade disputes is not only difficult, but also a very expensive procedure. It implies involvement of foreign lawyers specialized in WTO law. Immediately after the accession, there was an acute shortage of experts in the trade policy area, as the number of relevant experts amounted only to several dozen. This was just enough to deal with the WTO's mandatory requirements, for example, notifications of the trade regime, and there were almost no qualified lawyers to participate in trade disputes. Therefore, for a certain period, Russia had to hire foreign lawyers. The staff issue could not be resolved instantly, but over the past years the

number of qualified trade policy specialists in Russia's government institutions has largely increased. In 2014, the Centre of Expertise on the Issues of the World Trade Organization (WTO Expertise Centre) was established by order of the Government of the Russian Federation.[5] During recent years, the Centre's lawyers, in cooperation with experts of the Ministry of Economic Development, have successfully coped with the tasks of ensuring the legal defence of Russian interests in trade disputes. Illustrative in this regard, cases of challenging EU and Ukrainian practices of so-called energy adjustments. Such practices do not comply with the WTO rules and are aimed at actually suppressing the competitive advantages of Russian manufacturers of rolled metal products and fertilizers (Table 1: Cases D493 and D494, DS521).

After accession, Russia had the opportunity to fully participate in multilateral trade negotiations, and, consequently, in the development of the WTO's rules. The Russian delegation quite successfully used this opportunity for the first time just a year after the accession at the 9th WTO Ministerial Conference in Bali in 2013. It made a tangible contribution to the adoption of a new multilateral Trade Facilitation Agreement (TFA), which reduces costs for all exporters, including Russian ones. The agreements on export competition in agriculture signed at the next ministerial conference in 2015 provided actual advantages to Russian agricultural producers by levelling the playing field with those foreign producers that had previously been subject to export subsidies.

However, all of the above just relates so far to about 20% of the membership effect. The remaining 80%, as noted above, is to be achieved at the national level. During several years prior to the accession, expectations of potential benefits were quite high. A number of forecasts had been published regarding the upcoming effects of the accession to the WTO. Thus, according to the World Bank estimates, the Russian economy should have annually received up to $19 billion extra five to seven years post accession [World Bank, 2005, p. 17]. According to the statement made by former Deputy Prime Minister and Finance Minister A. Kudrin in April 2011, the total effect of Russia's participation in the WTO in the long term should have amounted to an economic growth rate higher than 14% [Vedomosti, 2011]. Even more optimistic forecasts had been published as well.

All these positive scenarios and projections were based on the expectation of a gradual and steady increase in the export of finished goods, that is, non-oil exports (NOE), which should have happened as a result of economic modernization reforms. International experience has demonstrated that tangible benefits of the WTO membership come seven to 10 years after the accession.

Nevertheless, until recently, there have been no significant changes in the structure of Russian exports. According to the Federal Customs Service, in 2020 the share of fuel and energy products in the export structure amounted to 49.6%. The share of exports of machinery and equipment in January–December 2020 amounted to 7.4% (an increase of 0.8 percentage points compared to 2019). At the same time, within the commodity structure of imports, the largest share was still accounted for by machinery and equipment – 47.6% (in January – December 2019 – 46.1%). Furthermore, within the commodity structure of imports from states outside the Commonwealth of Independent States (CIS), the share of these goods was even higher – 50.8% (in January – December 2019 – 49.3%) [Federal Customs Service of Russia, 2021].

[5] The WTO Expertise Centre was established by the Order of the Government of the Russian Federation No. 78-r on 28 February 2014. Its purpose is expert support for the membership of the Russian Federation in the WTO, including legal support for the participation of the state in procedures related to the WTO dispute settlement. The founders of the Centre are the Russian Federation (its powers are exercised by the ministry of economic development), PJSC Sberbank of Russia, and the NRU Higher School of Economics.

It is especially regrettable that in recent decades Russia has lost leadership positions in some high-tech sectors. This applies, in particular, to space flights or, in trade policy terms, to the supply of international services for launching civilian objects into low Earth orbit.

It is well known that the USSR was a recognized leader in this area. However, in the 21st century the situation began to change for the worse. Particularly, in 1998 the Russian Federation made 25 space launches, compared to 36 by the United States and six by China. By 2017, the American SpaceX accounted for 45% of launches, while the European Space Agency accounted for 40% and Roscosmos for just 15%. In 2018, China made 35 launches, surpassing the United States (30 launches), while Russia came third by a significant margin (16 launches) [Demchenko, 2018]. In 2020, the gap between Russia and China and the United States has not changed. Since the beginning of the 21st century, Elon Musk has demonstrated that private business can operate successfully in the space sector. In 2021, due to the impossibility of overcoming bureaucratic barriers, the private Russian company CosmoCourse, which had specialized in development of space tourism, announced its self-liquidation [Ovsyannikova, 2021]. For similar reasons of a bureaucratic nature, Russia is lagging behind in terms of the fulfilment of modern 5G telecommunication networks, which is a key condition for ensuring technological leadership in the coming years [Balashova, 2021].

Unfortunately, cases mentioned above indicate the absence of any stable trend for modernization in the Russian economy. The Russian economy is still going through a systemic crisis. According to former Minister of Economy A. Nechaev, the main reason for both stagnation and the low level of investment and innovation activity is nationalization of the economy. In its turn, that leads to suppression of competition, insecurity of private property, a high level of administrative and corruption pressure on business, and underdevelopment of many market institutions [Nechaev, 2019]. As a result, Russia is unlikely to achieve global growth rates in the coming years. According to the Organisation for Economic Co-operation and Development's May 2021 Economic Outlook, which reports on the state of the world economy and the forecast of its development until the end of 2022, the growth rate of the world economy is expected to be 4.4% in 2022, while the figure for the Russian economy is 2.8% [OECD, 2021].

The only way out is a switch from the current, outdated economic model to a different model which provides for the necessary structural reforms aimed at modernizing and developing modern manufacturing industries. Such action would be able to change the situation, radically diversify domestic exports, and support entry into new markets. Thus, large-scale benefits of WTO membership could be ensured [Portansky, 2017]. In the meantime, the aforementioned 80% of the membership effect has not been obtained, although enough time has passed in the circumstances of free access for Russian products to foreign markets. The reasons for this are in no way related to the conditions of Russian membership in the WTO or the impact of external factors, rather they have a purely domestic nature.

One more important circumstance that has influence on the ability of a state to benefit from WTO membership should be mentioned. In order for Russian trade diplomacy to work efficiently in the WTO, that is, to protect national interests, it needs to rely on clear economic priorities of the Russian Federation (this, however, applies to any member). There is no need to prove that in the current circumstances of highly developed production and the nature of the international division of labour, no country can produce the entire range of goods. Therefore, specific priorities are needed for the national economy. Consider the following example.

In September 2013, French president François Hollande presented a road map for reviving industry on a new technological basis in 10 years. The government of France has identified 34 priority areas that would allow for the reindustrialization of the economy. Among those priorities were robotics, biotechnology, 3D printing, a new generation of high-speed trains, self-driving cars, and airplanes with electric engines [Kravchenko, 2013].

Attempts to identify priority areas in the national economy took place in Russia as well. Relevant initiatives can be found in the speeches of both Vladimir Putin and Dmitry Medvedev [Medvedev, 2009]. It is widely discussed that such priorities should include nuclear energy, space, metallurgy, telecommunications, and biotechnology. Some experts, the authors included, reasonably believe that agriculture should certainly appear on this list. Relatively recently, specifically in June 2020, the Russian government published a document called The Consolidated Strategy for the Development of the Manufacturing Industry of the Russian Federation until 2024 and for the Period until 2035. It provides an idea of some priorities, for example, in the aviation industry [Government of the Russian Federation, 2020].

The lack of economic priorities has a detrimental effect on the role of Russian business in many prospective areas of trade policy. It also shortens the planning horizon of companies. Meanwhile, as former Director of the Department of Trade Negotiations of the Ministry of Economic Development M. Medvedkov highlighted, all WTO processes are usually long, so it may take at least five, and sometimes 10 or more years to have an effect. Yet, most Russian companies are only looking two or three years ahead [RIA Novosti, 2020]. As a result, trade diplomacy of the Russian Federation is deprived of the opportunity to promote its initiatives in the WTO, as those should come from the national business.

Surely, the sanctions imposed on Russia in 2014 are a constraining factor for development of the Russian economy, especially in terms of acquiring new technologies, which, accordingly, prevents Russia from getting maximum benefits from WTO membership.

Strategy for Tomorrow

The previous section explained what changes should take place in the Russian economy in order to ensure the maximum potential benefits of WTO membership. However, taking into account the current state of the global economy and trade, it is necessary at the same time to build Russia's own trade policy in accordance with the existing challenges.

In the 21st century, the multilateral trading system (MTS) is facing new challenges. The most acute of those has been the post-2017 trade conflict between the United States and China, and the inability to resolve it using conventional WTO instruments. At the end of 2019, an internal crisis unprecedented for the WTO arose due to Washington's blocking of new appointments to the Appellate Body of the DSB. As a result, its normal functioning was stalled. This turned out to be the most serious damage to resolution of trade conflicts as the most essential function of the WTO. The impact of the COVID-19 pandemic on global economy and trade, as well as the global technological divide, should be treated as challenges as well. The last two points underscore the need for improvement and creation of rules in new acute areas.

As a result of these challenges, by the end of the second decade of the 21st century, the world trading system found itself in a state of deep stress. The future of the system is critically dependent on the ability of the WTO to adapt to changes and on adjustments in the trade policies of world trade's largest participants. Nevertheless, worst-case scenarios cannot be ruled out. Such scenarios could disrupt global trade and split the world into large trading blocs, where trade relations would be largely based on relative strength rather than on rules.

The aforementioned acute crisis of the WTO inspired some researchers to imagine international trade without this organization, that is, without clear rules. According to a number of well-known scholars and experts in the field of international trade, this might lead to the following consequences [Akman, Armstrong, Dadush, 2020].

First. The potential system is likely to present an ambiguous combination of government interests, bilateral agreements, and current WTO practice. At the same time, in the case of non-

compliance with WTO rules, the balance of power within states would shift from the traditional export interests toward the interests of competing with imports or import substitution, which would cause an escalation of protectionism around the world.

Second. Several centres of power might emerge within the trading system. Most power and influence will be distributed among actors such as the United States, the EU, and China. Attempts to strike bilateral deals within this "big three" are not going to be efficient. At the same time, its members will strive to maintain adherence to the WTO's basic principles and rules and try to maintain a bilateral dispute settlement mechanism on this basis. However, the dispute settlement mechanism will not remain as reliable as under the WTO. This will be fraught with the emergence of continuous and unmanageable disputes that will dramatically reduce predictability in mutual trade, even for the largest players.

Third. Positions of the third countries will turn out to be very difficult. Since they will have only few options, many small countries will be forced to strike highly asymmetric deals with the United States, China or the EU. This could split the system into three economic blocs around these trade giants. As a result, this could lead to a significant infringement of the interests of the third countries, and their bargaining power will seriously decline. Discriminatory measures against them in such aspects as rules of origin and export restrictions will be the likely consequences in this case.

Fourth. In the absence of a multilateral format, the likelihood of designing common rules in areas such as e-commerce regulation, protection of intellectual property rights, subsidies, investments, and the environment will be negligible.

As a matter of fact, these four points describe a potential slide from the current rules-based system toward a power-based system. In this scenario, everyone will lose. Yet, small players, especially those least involved in bilateral or regional trade agreements – will be in the most disadvantageous position. Taking into account the challenges listed above, the occurrence of such a scenario in the 21st century, no matter to what extent, should not be ruled out.

At the same time, despite the described possible negative scenarios, there is a strong belief across the world that in the future the WTO should maintain its key position in regulation of world trade. However, this will require serious measures to maintain the MTS, as well as urgent actions to avoid a situation that could contribute to fragmentation of the system.

In the foreseeable future, one way or another, it will be necessary to begin the process of reforming the WTO. Specific proposals on this matter have been outlined by the European Commission [EC, 2018]. To launch the reform, it is critical to get the U.S. and Chinese positions, which are still very far apart, to converge. The central point of the reform should be the transformation of the consensus mechanism into a different way of decision-making [Portanskiy, 2019]. Consensus has become extremely difficult to achieve in the context of the increased number of WTO members. It should be mentioned right away that this task is going to be not easy at all.

The profound changes taking place in the global trading system, both at the multilateral and at the regional levels, inevitably affect the interests of Russia. Representatives of the Russian Federation, including the president, have repeatedly spoken out in favour of the multilateral format priority and against the risks of fragmentation of international trade associated with the promotion of new forms, particularly mega regional trade agreements (MRTA).

Within the framework of this position, the Russian side proceeds from the fact that WTO reform, as a condition for the preservation of multilateral trade rules, is necessary and inevitable. Hence, in Russian think tanks and expert bodies, in particular, the Institute of Trade Policy of the National Research University Higher School of Economics and the WTO Expertise Centre, some concepts of the future multilateral negotiating agenda are being developed. The following elements may be outlined [WTO Expertise Centre, 2021].

Access to technology. Access to technology determines the development potential of both a state and a company, including participation in global value chains (GVCs). Access to technology is not regulated by multilateral agreements, which boosts right holders' temptation to monopolize it in order to generate extra profits and strengthen technological leadership. Governments, in their turn, use exemptions from the WTO rules to block transfer of technology within goods or services, but those exemptions are rather fuzzy. The task for the WTO is to try to form a relevant (favourable) legal environment for international trade in technologies based on the principles of non-discrimination (fair access), to minimize grey areas in WTO law, and to limit the technological monopoly of companies using the norms of the competition law. It seems that the role of this factor will progressively expand and the struggle for access to technology will increasingly cause new trade conflicts.

Rules for transnational corporations (TNCs). TNCs currently account for about one third of the global domestic product (GDP) and half of world exports. The WTO rules contain requirements for state-owned enterprises implying obligations to purchase and sell on a commercial and non-discriminatory basis. However, TNCs bypass these rules and distort market competition by using the same tools as state-owned enterprises. Those are: proximity to the government and opportunity of getting preferential terms; excessive purchasing power and marketing power to disrupt market principles at certain stages of procurement and sales; control over participation in the GVCs, and technological monopoly. This at least explains the need to extend the same rules that apply to state-owned enterprises to the activities of TNCs.

New rules for multilateral regulation of e-commerce. Negotiations in the WTO currently only concern the rules related to the transfer of content electronically in case a product does not have a tangible form. However, it is clear that the scope of the negotiations will expand. The nature of future rules will determine the effect of Russia's participation in international trade and the implications for national regulatory measures regarding, for example, personal data, Internet access, consumer protection, and intellectual property rights.

This discussion leads to several brief conclusions. The decision on further accession to the GATT/WTO made in 1993–94 was justified and adequate to the task of Russia's integration into the world economy. As a result of 18 years of accession negotiations, Russia received acceptable and balanced terms of membership. The national economy has benefited from the accession. In particular, a number of discriminatory restrictions on foreign markets for Russian goods and services have been eliminated. The Russian Federation also got the right to defend its interests in the DSB and uses it on a regular basis. Having become a full-fledged participant of multilateral trade negotiations within the WTO framework, Russia actively contributes to their effectiveness.

Along with that, benefits of the WTO membership do not yet meet the forecasts made on the eve of joining the organization. The expected, significant increase in the exports of finished products has not yet taken place. The reason for this is related to the state of the Russian economy. Low growth rates, the decrease of its share in world GDP in recent years, extinction of the continuing economic model based on the extraction and export of raw materials, and the absence of systemic reforms and modernization have thus far prevented significant change in the structure of exports in favour of finished products and modern services. That is why the desired effect of Russia's membership in the WTO has not yet been obtained.

At the same time, the complicated situation in world trade, associated, in particular, with trade wars, the WTO crisis, as well as consequences of the COVID-19 pandemic, dictates the need to work out solutions for new challenges. The Russian expert community continues to intensively work on the drafting conceptual elements of the future multilateral agenda of trade negotiations, taking into account the crisis experienced by the WTO. Russia supports the inten-

tion to reform the WTO, proceeding from the fact that reform of the organization is necessary and inevitable. Furthermore, it will serve to maintain multilateral rules of trade.

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The Collapse of the Appellate Body as a Determining Factor of the WTO's Future[1, 2]

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Abstract

The World Trade Organization (WTO) is one of the leading institutions involved in global economic regulation. Its purposes are to ensure multilateral cooperation on the liberalization of international trade, harmonize existing standards and requirements, and peacefully resolve trade disputes between countries. Since 11 December 2019, dispute resolution has been handicapped due to the consistent blocking of the appointment of members to the WTO Appellate Body (AB) by the United States. This has reduced the multilateral trading system's (MTS) predictability and threatens its final decay.

The purpose of this article is to describe the fundamental and formal causes of the collapse and to discuss the circumvention mechanisms and their effectiveness. At the same time, an assessment is given of the possibility to overcome the collapse in 2021, considering the change of the U.S. president and other events. Special attention is paid to Russia's position and its current and potential losses. Finally, the issue of dispute resolution through regional trade agreements is proposed for discussion.

The fundamental reasons for the collapse were the shifting balance of power in the world order and the WTO's inflexibility in adjusting the rulebook and its procedures. There are long-standing, objective reasons for the U.S.' dissatisfaction, but the blockage of the AB is an overreaction. These reasons are now being used to justify the blockage of the AB in order to gain leverage. Moreover, the U.S.' position on this issue has not changed with the new president.

There is abuse of the current situation as WTO members file appeals "into the void." Existing tools to circumvent the collapse are partial and not yet popular among WTO members. Russia needs to resume the AB's work to complete previously started high-profile disputes and to defend its interests in the future.

Keywords: WTO crisis, dispute settlement system, Appellate Body, trade disputes, multilateral trading system

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Introduction

The World Trade Organization (WTO) is in a deep crisis. Until recently, the main manifestations of this crisis were the protracted Doha Round negotiations and non-fulfilment of transparency obligations by a few members. However, at the end of 2019, the collapse of the WTO Appellate Body (AB) was added to this list of problems. It virtually paralyzed the process that

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made it possible for members to challenge the trade policy measures of other members. The blocking of the dispute resolution system creates a critical situation that threatens the existence of the WTO as an influential institution, even if other problems are resolved.

The collapse was caused by the United States, one of the key supporters of the WTO dispute resolution system in its current form. Since 2016, the U.S. has refused to appoint new AB members [WTO, 2016].[3] As a result, the predictability of the multilateral trading system (MTS) is decreasing. Whereas previously any WTO member could challenge measures allegedly inconsistent with WTO norms applied by another member, the AB's collapse makes it possible for any WTO member to freeze a dispute by filing an appeal "into the void."[4]

The purpose of this article is to identify the fundamental causes of the AB's collapse, assess the effectiveness of mechanisms to circumvent it, and determine the likely changes due to the events of the first half of 2021.

The article begins with a description of the place of the AB in the MTS and then identifies the fundamental and formal reasons for the collapse of the AB. Next, it demonstrates how the events of the first half of 2021 affect further development. The current consequences and available methods of circumventing the collapse of the AB are then considered, as is the importance of the resumption of the AB's operation for Russia. It closes with the question of whether regional trade agreements (RTAs) can become the leading platform for resolving trade disputes.

The Place of the Appellate Body in the WTO Dispute Resolution System

One of the features of the creation of the WTO was the transition to a more stringent dispute resolution process. This became possible due to the improvement of the dispute resolution system and the creation of a compliance mechanism [Chorev, 2007]. As a result, a rules-based approach to dispute resolution replaced the outdated "diplomatic" format [Ehlermann, 2003] because the former has many advantages over the latter [Foster, 2000].

The AB is a vital element of the WTO dispute resolution system. It consists of seven members elected for four years by consensus of WTO members, with the possibility of a one-time extension. When appeals are filed a division of three AB members is formed, which must consider the legal aspects of the dispute and the Panel conclusions[5] being challenged by the parties.

Appeals are considered if one of the parties to the dispute is not satisfied with the Panel report and submits an appeal. As of 1 June 2021, approximately 65% of published Panel reports were appealed. At the same time, the AB corrects at least one of the Panel's conclusions in approximately 83% of cases [Pauwelyn, 2019]. This confirms the critical importance of the AB in resolving disputes, and the collapse of its work threatens the stability of the entire MTS.

The AB is considered an independent element of the dispute resolution system and has broad freedom. This is due to several features. First, there is no possibility to file an "appeal on appeal," and the negative consensus rule applies.[6] As a result, the AB's report will necessarily be accepted, and the members are obliged to implement its prescribed measures. Second, the AB's freedom is explained by procedural features. Article 17.9 of the Understanding on Rules and

[3] In 2016, the U.S. blocked the extension for a second term of the AB member from Rep. of Korea, Seung Wha Chang, "following a thorough review" of his activities in the first term.

[4] This refers to appeals filed when there is no possibility of their consideration by the AB. Thus, the dispute is frozen for an indefinite time.

[5] The consideration of the dispute by the Panel occurs during the first stage of the dispute, although it can be settled by consultations preceding it. Panels are formed on an ad hoc basis, unlike the AB.

[6] This means that the DSB must approve the decision unless there is a consensus against it.

Procedures Governing the Settlement of Disputes (hereinafter the DSU, Dispute Settlement Understanding)[7] [WTO, n. d., c] allows it to independently develop Working Procedures for Appellate Review (hereinafter Working Procedures) in consultation with the Chairman of the Dispute Settlement Body (DSB) and the Director-General of the WTO [WTO, n. d., d]. That is, there is no provision for the involvement of WTO members in this process as such [Fabri, 2017]. Therefore, the issue of the AB's activity that could lead to the emergence of new rules and obligations was raised from the beginning of its existence [Barfield, 2002].

Thus, the AB plays a crucial role in consideration of disputes. This is evidenced by both the share of appeals filed and the fact that the arbitrators changed at least one conclusion of the Panel reports in most of them. The rule of negative consensus on the adoption of AB reports provided it with certain independence in interpreting WTO agreements and making decisions. In this context, the U.S.' actions to block the appointment of new AB arbitrators was an effective way to overcome this independence. However, in doing so, the U.S. jeopardized the functioning of the entire dispute resolution system and reduced the level of predictability of the MTS. If the WTO negotiation crisis is overcome and new multilateral agreements are adopted, an imperfectly functioning dispute resolution system will not guarantee that WTO members fulfil their obligations under the old and new agreements.

Reasons for the Collapse of the WTO Appellate Body

The General Agreement on Tariffs and Trade (GATT) and the WTO were created during a surge of liberalism in the world order. The former started its work after World War II, and negotiations on the latter occurred at the same time as relations between the USSR and western countries were becoming warmer and as the USSR later collapsed. Both institutions are part of the liberal world order, the destruction of which we have seen in recent years. An increasing number of countries are becoming economically and politically more influential, which has led to an increase in competition between the "old" and "new" leaders. In this context, the fundamental reason for the AB's collapse was a change in the balance of power and a shift in the relative benefits of maintaining the stability of international institutions.

There is no doubt that the U.S. has received, and continues to receive, benefits from the current MTS. Nevertheless, with the development and growth of competitors, and primarily of China, the relative benefits for the U.S. began to decline. The new economic giants continue to question the leadership of the U.S. and other developed countries in the modern world's architecture. This is also evident at the institutional level: for example, the decisions of the G7 summits are of less interest than those of the G20 summits. In the WTO's case, the growing contradictions were already being felt at the beginning of the century and manifested in the lack of progress on the Doha Round agenda.

The same is true for the WTO DSB. The U.S. was one of the key creators of the WTO in its current form and of the more stringent dispute resolution format. Additionally, the U.S. is the most frequent complainant in the WTO.[8] However, many developing countries have joined the WTO since 1995. They have been actively using the dispute settlement system and have gained much experience, which makes it possible for them to effectively challenge developed countries' measures. Although the U.S. and the European Union (EU) remain the leading complainants in WTO trade disputes (Figure 1), developing countries, including China, Brazil, and India, actively use this mechanism to defend their goals, including challenging American measures.

[7] The main document regulating the WTO dispute resolution process.

[8] According to the WTO, out of 600 initiated disputes, the U.S. acted as a plaintiff in more than 20% of cases [2020].

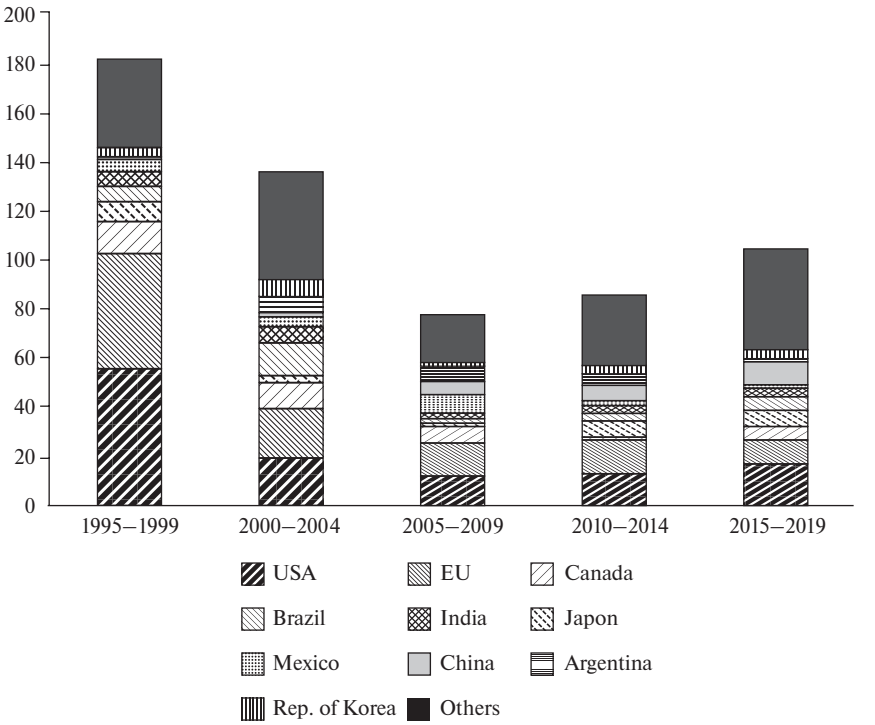

Fig. 1. The Number of Disputes Initiated by Individual Countries in 1995–2019

Source: Compiled by the author on the basis of WTO [2020].

In this context, special attention should be paid to the U.S.' practice of using trade remedies – anti-dumping, special protective, and countervailing measures. As noted by Bown and Keynes (2020), the U.S. made several compromises when creating the WTO, one of the consequences of which was the prohibition of voluntary export restrictions. The U.S. did so because trade remedies remained legal, and they are actively used by the U.S. even now. However, other countries began to actively challenge U.S. trade remedies between 1 January 1995 and 19 January 2017, and about two thirds of the 141 disputes against the U.S. relate to these issues.

From the U.S.' point of view, the MTS has begun to provide China and other developing countries with relatively more benefits and does not correspond to American interests. Blocking the AB is one of the steps it has taken to maintain its dominance in the MTS and impose its priorities. Thus, the fundamental shift in the balance of power in the global economy explains the emergence of the legal reasons for AB blockage by the United States.

Grigoryev and Kurdin (2013) note that one of the main problems when creating an effective mechanism for global regulation is the difficulty of adjusting it and providing feedback. As a result, the institution ceases to meet modern challenges and passes into a stage of institutional inertia: it does not disappear but creates additional risks for the world community.

This problem can be observed in the practices of the WTO and the AB. The main reason may be the current rule of consensus, which is extremely difficult given the growing number of WTO members. During the existence of the WTO, none of the multilateral agreements has been supplemented by authoritative interpretations [Boklan, Bahri, 2022]. This means that, despite significant changes in the nature of world trade since the establishment of the organization and the discovery of numerous ambiguous provisions and grey areas in the WTO rulebook,

rules have remained the same. According to Article 17.2 of the DSU, AB members must be appointed by WTO members by consensus, making it possible for the U.S. to block the process. At the same time, the need to correct the DSU was stated in 1994 – even before the WTO began functioning as such. The deadline for this process has been postponed several times,[9] and it is currently continuing without a set deadline [WTO, n. d., b]. Thus, another fundamental reason for the AB's collapse is that the WTO got into an institutional trap due to the inability to update the rulebook, the DSU, and the Working Procedures.

The lack of flexibility of the WTO in the formation and adjustment of rules led to the Appellate Body's abuse of powers and non-compliance with the specified time frame. It is precisely these shortcomings in the work of the AB that are addressed in a report by the U.S. Trade Representative [Office of the United States Trade Representative, 2020]. The report provides convincing legal arguments about actions by the AB that are inconsistent with WTO rules, including the consolidation of case law, the interpretation of the domestic legislation of the parties to the dispute and the creation of "new rules," and consideration of issues that are not related to the essence of the dispute, as well as exceeding the fixed time frame for considering an appeal and the terms of office of the members of the AB.

Most of these AB "abuses" are explained by the unelaborated DSU and the WTO multilateral agreements. For example, considering the problem of creating new rules, the AB cannot always give an unambiguous interpretation of specific provisions of multilateral agreements [Ehlermann, 2003]. However, the DSU and Working Procedures do not explain how the AB should act in such a situation. Moreover, the issue cannot be postponed until interpretations are received because interpretations can only be adopted by the WTO Ministerial Conference or the General Council. At the same time, Dennis Shea, while U.S. ambassador to the WTO, stated that the problem is not the existing rules but the AB's non-compliance [Pauwelyn, 2019]. As a result, the AB finds itself in an impasse: the existing rules do not answer critical procedural questions, but the U.S. does not see the point in changing them.

Separately, it is worth considering the issue of non-compliance of the AB's activities with the regulations. According to Article 17.5 of the DSU, appeals must be considered within no more than 90 days. However, this requirement was not always fulfilled even in the first years of the WTO (Figure 2). Most of the appeals were considered within 90 days before 2009, but then the situation changed. Moreover, consideration of all 25 appeals filed in 2015–19 took more than 90 days – on average, 286 days passed between the filing of an appeal and the publication of the AB's report. This is more than three times longer than allowed by the DSU.

The U.S. insists that non-compliance with the deadlines is primarily due to the abuse of power mentioned above, which causes a more extended consideration of appeals. At the same time, it should be borne in mind that disputes and appeals of WTO members have become more extensive and include an increasing number of requests for consideration by a Panel and the AB. The arbitrators must consider all of them, which causes delays. Thus, the AB needs a mechanism for filtering requests from WTO members to optimize the process.

The U.S. is not the only member that sees the need to reform the AB and the WTO as a whole. However, publicly, none of the other WTO members supported the idea of blocking. Moreover, the issue of AB reform was raised long before its collapse – some members submitted proposals to adjust the DSU in 2018 but these were rejected by the U.S. [Baschuk, 2018]. Therefore, the question about the ultimate goal of blocking the AB remains open.

[9] At first, the DSB reform process was due to be completed by 1998. Then, within the framework of the Doha Round, the countries agreed to continue working on it (outside the main agenda) and complete the reform by May 2003; this deadline also passed without a resolution of the issue.

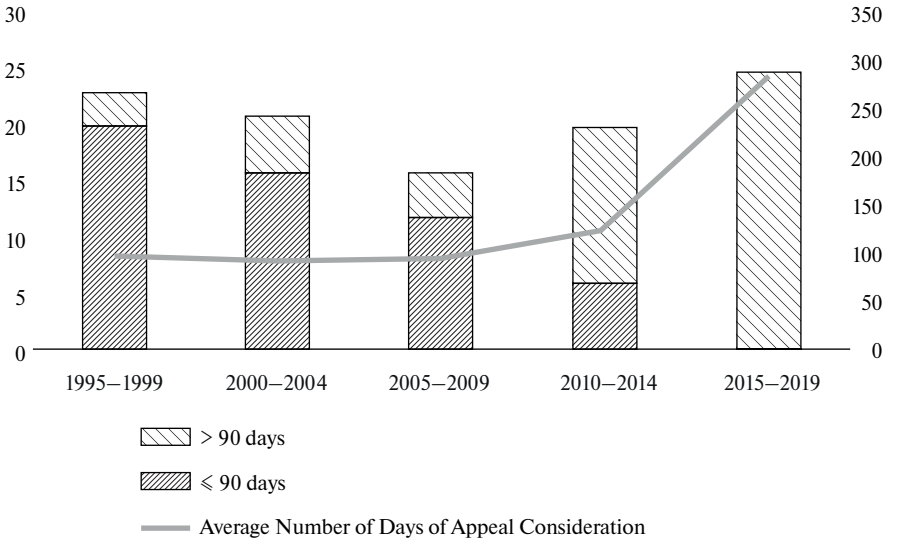

Fig. 2. The Number of Appeals Considered Within 90 Days or More, and the Average Number of Days of Appeal Consideration in 1995–2019

Notes: (a) The left scale is the number of appeals; the right scale is the number of days; (b) The appeal relates to the year in which it was filed

Source: Compiled by the author based on data from the WTO [2020].

Thus, the growing confrontation between developed and developing countries and the WTO falling into an institutional trap are the fundamental reasons for the AB's collapse. The relative benefits of the U.S. from maintaining the MTS in its current configuration began to fall rapidly. Therefore, it used legal justifications to stop the activities of the AB. Most of these are based on imperfections in the DSU and WTO rulebook and the expansion of the range of issues raised within each dispute and appeal. In light of the U.S.' refusal to consider proposals for reforming the system in previous years, it can be argued that the ultimate goal of blocking the AB was not to launch the reform of the AB or the WTO, but rather to bring about its ultimate destruction. However, this goal could be adjusted with the change of the U.S. president.

2021: What Has Changed?

The beginning of the third decade of the 21st century can be called a turning point in many aspects: countries have started vaccination against coronavirus, and their economies are beginning to recover from the pandemic. For many reasons, the change of the U.S. president was quite promising for the world community and the WTO in particular.

The change of the U.S. president gave many people hope that there would be a return to the former pattern of interaction in the WTO, without dubious unilateral measures and the blocking of the AB as an instrument of pressure. President Biden assured the world, in his speech at the Munich Security Conference, that "America is back" [New York Times, 2021]. However, in the case of the WTO, this is not very noticeable. Apart from the fact that the process of appointing a new WTO Director-General has been unblocked, unilateral measures on steel and aluminum have not been cancelled; the U.S. continues to block the appointment of new AB arbitrators and file appeals "into the void".

The U.S. is linking the unblocking of the AB with a full-fledged WTO reform. However, the question remains open as to how much other WTO members are ready to accept American requests. In this context, the recent change of the EU's rhetoric on the issue is essential. In 2019, the EU did not share the U.S.' position [Behsudi, 2019], but the situation has changed in 2021. The EU now publicly declares the validity of the U.S.' claims and its desire to come to a mutually acceptable solution [EC, 2021].

For the reform of the AB, an agreement between the U.S. and the EU alone is not enough. However, the fact of such a convergence of positions indicates the possibility of resolving the current situation. At the same time, it is necessary to take into account the requirements of other WTO members, for example, China, India, Japan, Brazil and Russia. There may be problems with this. Before his European tour in June 2021, Biden said that market democracies should write the rules of trade of the 21st century, and "not...China or anyone else" [Washington Post, 2021]. If the U.S.' position on the reform of the WTO and the AB is equally confrontational in relation to the interests of individual members, normalizing the WTO's activities will be almost unattainable. It will be possible to objectively assess how valid this assumption is by the end of 2021, following Geneva's WTO Ministerial Conference results. If a "rescue plan" for the WTO and the AB is not presented at that Ministerial Conference (30 November–3 December 2021), it is not likely ever to be seen.

Thus, in the first half of 2021, there were no fundamental shifts in the U.S.' position on the AB, despite the change of president. At the same time, the Biden administration's focus on cooperation and overcoming differences with its allies led to a change in the position of the EU concerning U.S. claims. However, this is not enough, because the consensus rule and the need to consider the interests of other countries will make it difficult to find a compromise.

Current Consequences and Methods Used to Circumvent the Collapse of the AB

Several remarkable events have occurred in the year and a half since the formal collapse of the AB. First, the work of the AB was completed in June 2020 by inertia,[10] when the last AB report on the DS435[11] dispute was released. None of the arbitrators whose term has ended has continued working on the remaining disputes, appeals for which were filed before 11 December 2019 [WTO, n. d., a].

Second, as of 1 June 2021, nine appeals were filed "into the void," that is, at a time when the AB could not consider them. This is equivalent to freezing disputes indefinitely. This has two types of consequences: it removes incentives to make any changes by respondents, whose measures the Panel found inconsistent with WTO rules, and it demotivates WTO members to continue playing by the rules.

Third, in 2020, the minimum number of disputes in the history of the WTO was started – five.[12] As of 1 June 2021, two of them are still at the consultation stage. This means that WTO members do not see the expediency of applying to the DSB or moving from consultations to the next step since there are no guarantees that the dispute process will be completed.

[10] According to Rule 15 of the Working Procedures, members of the AB may continue their activities after the expiration of their term to complete work on unfinished appeals. That is, formally, after 11 December 2019, it was possible to complete work on all appeals filed before that date.

[11] DS435 Australia – Certain Measures Concerning Trademarks, Geographical Indications and Other Plain Packaging Requirements Applicable to Tobacco Products and Packaging.

[12] The previous record was in 2011, when only eight disputes were started. As of the beginning of May, two disputes had been initiated in 2021, and consultations were initiated on both of them in January.

Fourth, in 2020, Panel reports on disputes launched after Trump's unilateral measures began to be published. For example, as part of the DS543[13] dispute between the U.S. and China, the Panel recognized the U.S. measures as non-compliant with WTO rules. The U.S. filed an appeal "into the void," thereby protecting itself from the need to take any actions to defend its position or to cancel the measures.

Finally, some WTO members launch initiatives that allow the introduction of countermeasures against countries that prevent the conclusion of WTO disputes. For example, the EU adopted Regulation (EU) 2021/167 [European Parliament, 2021], which provides for the possibility of introducing retaliatory measures against those WTO members who freeze a dispute by filing an appeal "into the void." Their form is the suspension of obligations toward specific partners under the WTO's multilateral agreements.[14] It is noted that countermeasures will be introduced only after the publication of a Panel report and in case of refusal of the second party to accept it or to consider the appeal through arbitration. Furthermore, the Regulation determines that countermeasures will be proportionate to the damage suffered and that they will be announced in advance with another proposal to reach a mutually acceptable solution. This is a new direction of development of the MTS crisis, as there is a transition to unilateral measures caused by the AB's collapse. Soon, we may witness a kind of domino effect in the form of the development of similar legislation by other WTO members, the consequences of which are difficult to predict.

Several proposals have been made on what measures can be taken to circumvent or overcome the AB's collapse. The range is quite broad: from the creation of a DSB alternative without the U.S. [McDougall, 2018] to the use of specific provisions of the Marrakesh Agreement to use the WTO Ministerial Conference to appoint AB members without consensus [Boklan, Bahri, 2022]. Several provisions have already been used; of course, these measures cannot overcome the collapse, but they can partially maintain the predictability of the multilateral trading system.

Bilateral Agreements on Non-Appeal. At the initial stages of the dispute, the parties may agree that, regardless of the decisions of the Panel, they will not file an appeal and will comply with all measures prescribed in the Panel's report. This mechanism prevents the filing of an appeal "into the void" and the freezing of disputes. As of 1 June 2021, the parties to four ongoing disputes (DS488, DS490, DS496 and DS529[15]) came to such agreements. It is worth noting that in all these cases, the non-appeal agreements related to disputes where the AB considers the issue of the sufficiency of the changes made by defendants to their measures.[16]

During the existence of the DSB, there were many cases of incorrect interpretation of WTO agreements by Panels, which were then corrected at the appeals stage. Therefore, the closure of a dispute after the publication of the Panel's report may neutralize the expediency of using this system for individual members, which, in turn, increases the incentives to use unilateral protectionist measures.

Multilateral Interim Appellate Arbitration Agreement. Article 25 of the DSU allows WTO members to use arbitration as an alternative method of dispute settlement. It is also possible to

[13] DS543 United States – Tariff Measures on Certain Goods From China.

[14] The changes also apply to regional trade agreements with the participation of the EU, but this aspect does not relate to the topic of the article. Further, only aspects related to the settlement of WTO disputes are considered.

[15] DS488 United States – Anti-Dumping Measures on Certain Oil Country Tubular Goods From Korea; DS490, DS496 Indonesia – Safeguard on Certain Iron or Steel Products; DS529 Australia – Anti-Dumping Measures on A4 Copy Paper

[16] That is, this is the next stage of the dispute, which can be launched if the plaintiff considers that the defendant did not fully perform the actions prescribed to it based on the results of the report of the arbitration group and/or the AB.

transfer certain stages of the dispute, including the consideration of appeals. Thus, arbitration may support a two-stage dispute resolution process (which cannot be achieved by the non-appeal agreements discussed above).

In April 2020, the EU, China, and several other countries launched a Multi-party interim appeal arbitration arrangement (MPIA) to circumvent the collapse of the AB [EC, 2020]. As of 1 September 2021, 24 WTO[17] members are members of the MPIA, and the parties agreed to its use in five disputes (DS522, DS524, DS537, DS591, DS598[18]) if an appeal is necessary.[19]

The MPIA provides for maximum compliance of arbitration with the appeals process. MPIA arbitrators are 10 recognized experts in the field of international law and international trade, who are elected by consensus for a two-year term.[20] Three arbitrators consider each appeal by analogy with the AB. The MPIA is open to all WTO members. MPIA participants can withdraw from the agreement on the condition that the appeals with their participation are completed.

MPIA also includes separate improvements compared to the AB. In particular, arbitrators can take measures to streamline the process, for example, by limiting the number of pages of the report and excluding from consideration issues on which there are not enough facts for an objective assessment.[21]

There are MPIA critics. The most critical issues are MPIA legitimacy and a secretariat. From the point of view of legitimacy, it is worth noting that the DSB will not consider MPIA decisions. According to paragraph 15 of Annex 1, the MPIA provides only for notification of WTO members about the arbitration results, without the need for their approval. With this in mind, there is no clear understanding of what legal force the MPIA reports will have, unlike the reports of Panels or the AB, which the DSB approves. Another critical issue is the MPIA secretariat. The AB had a separate secretariat, which was engaged in supporting all appeals. The MPIA assumes that its secretariat will be independent of the WTO secretariat, but the funding will be from its budget. However, to date, the WTO budget is not designed to support the MPIA secretariat.[22]

As a result, the MPIA seems to be an adequate temporary substitute for the AB, taking into account certain shortcomings of the latter's work. However, it will be possible to judge its work more objectively after considering the first appeals – the first of them may be filed in the second half of 2021 on the DS524 dispute.[23]

Based on all the above, it can be concluded that, since the collapse of the AB, many events have occurred that signal both the abuse of the current situation by WTO members and the prospect that the situation will be aggravated. At the same time, there are several ways to bypass the collapse of the AB, but not everyone is ready to use them. Moreover, it is premature to conclude their effectiveness – there were no completed disputes in which they were used at the time of writing. Each of the mechanisms only curbs the problem, which indicates the need for rapid

[17] Russia is not among them.

[18] DS522 Canada – Measures Concerning Trade in Commercial Aircraft; DS524 Costa Rica – Measures Concerning the Importation of Fresh Avocados From Mexico; DS537 Canada – Measures Governing the Sale of Wine; DS591 Colombia – Anti-Dumping Duties on Frozen Fries From Belgium, Germany and the Netherlands; DS598 China – Anti-Dumping and Countervailing Duty Measures on Barley From Australia.

[19] Of these five disputes, the parties to the DS537 dispute (Canada and Australia) have reached a partial agreement, so it is likely that the report of the arbitration panel on this dispute will not be published.

[20] It is worth noting that among the first 10 arbitrators chosen by the participants of the initiative, there are no ex-members of the WTO AB.

[21] According to paragraphs 13 and 14 of Annex 1 of the MPIA.

[22] The WTO budget is also adopted by consensus and if the MPIA costs were included in it, the U.S. would block it.

[23] DS524 Costa Rica – Measures Concerning the Importation of Fresh Avocados From Mexico

reform of the WTO dispute resolution system. Finally, the current situation is complicated by the ambiguous position of some members. For instance, the EU is simultaneously the initiator of the MPIA, has developed a mechanism for forcing disputes to end, and files appeals "into the void."

Russia's Position and Interests

In this context, it is essential to note the position and interests of the Russian Federation. One of the reasons for its accession to the WTO was to gain access to the WTO DSB to defend its interests. Almost 10 years after joining, the goal has justified itself: despite the first "lost" disputes, the Russian Federation has sought solutions in its favour in recent years. Among the key disputes are the DS512[24] dispute against Ukraine, in which Russia was the defendant, and two disputes against the EU, involving "energy adjustments" and the third energy package.

The dispute over "energy adjustments" (DS494[25]) confirms the importance of the dispute resolution system for Russia. The Panel report indicates violations by the EU. According to the Ministry of Economic Development of the Russian Federation, "[t]he arbitration group has put an end to the three-decade-long dispute with the EU regarding the allegedly non-market nature of the Russian economy" [2020]. Based on the method of "energy adjustments," the introduction of specific anti-dumping measures was argued, which reduced the competitiveness of Russian products in the EU market and the profits of Russian companies. Russia was close to cancelling such long-term discriminatory measures, but the EU filed an appeal "into the void," thereby freezing the dispute.

Another critical dispute, DS476,[26] affects the interests of the Russian Federation in the context of the "Third Energy Package." The Panel also supported Russia's position on many important aspects, such as the illegality of the EU's actions regarding the supply of Russian gas through the OPAL pipeline. An appeal was filed in September 2018, but the report was not published due to the AB's blockage. As a result, Russia is losing hundreds of millions of euros [Interfax, 2019].

Hypothetically, Russia has the opportunity to complete both of the disputes mentioned above without unblocking the AB. To do this, it needs to join the MPIA and get the consent of the EU to consider appeals in arbitration. Russia has not publicly expressed its position on joining the MPIA, so there is no way to assess how possible this is. In the framework of the dispute over "energy adjustments", the EU offered to consider appeals through arbitration, but the Russian Federation refused. The procedural features of the MPIA make it possible to consider a dispute on the third energy package. However, in the future, this may lead to an ambiguous situation. The appeal on this dispute has already been taken up by the AB. If it is unblocked, the parties may request the continuation of the process, even if the MPIA report has already been released.

In addition to the existing disputes, Russia needs to take into account potential ones. Currently, much attention is focused on the EU's carbon border adjustment mechanism (CBAM). Its entry into force carries high potential costs for many large Russian companies. According to the Institute of Problems of Natural Monopolies, the additional annual costs to Russian exporters could range from $700 million to $1.8 billion [IPEM, 2021]. At the moment, it is impossible to say unequivocally whether these measures can be challenged on the grounds of

[24] DS512 Russia – Measures Concerning Traffic in Transit.

[25] DS494 European Union – Cost Adjustment Methodologies and Certain Anti-Dumping Measures on Imports From Russia – (Second complaint).

[26] DS476 European Union and its Member States – Certain Measures Relating to the Energy Sector.

inconsistency with WTO rules. However, this is not so important in the case of an incomplete dispute resolution system since there are no guarantees that the dispute will not be frozen by an appeal "into the void."

Thus, the resumption of the AB's work is important for Russia, both to complete the launched disputes and to defend its interests in the future without resorting to retaliatory measures.

Can RTAs Become a Platform for Dispute Resolution?

Given the high uncertainty of the AB's unblocking, countries are looking for ways to circumvent this problem. As mentioned earlier, the practices of not filing an appeal and joining the MPIA are currently the main options. However, it is possible to use another mechanism – regional trade agreements (RTAs).

The conclusion of RTAs was intensified against the background of the WTO's inability to make progress on the Doha Round agenda and further trade liberalization. As of 1 June 2021, there are about 350 active RTAs, most of which are free trade area agreements. In most of these agreements, the parties provide for the possibility of challenging each other's trade measures, which makes them a potential dispute resolution tool. However, despite the fact that RTAs were able to partially satisfy the countries' need for further liberalization and improvement of trade relations with partners, the issue of dispute resolution is debatable. They may be helpful in some cases, but they will not achieve the results of this scale. This statement has several arguments.

First, there are no existing RTAs between the primary "opponents" within the framework of the WTO dispute resolution system. These pairs include the U.S.-EU, U.S.-China, China-EU, Brazil-EU,[27] Brazil-U.S., Japan-U.S., Japan-Korea, and Russia-EU. Second, in RTAs some provisions or articles are excluded from challenge. Third, the experience of NAFTA (now USMCA) shows that countries prefer to apply to the WTO DSB to resolve their differences: out of 600 WTO disputes, 45 were launched by its members against each other. Thus, RTAs are unlikely to be effective in resolving disputes to the same extent as eliminating tariff and non-tariff restrictions.

Similarly, Russia is unlikely to be able to use the RTA format to resolve its trade disputes. The main reason is the lack of these agreements. At the same time, the primary opponents in the WTO disputes are the EU, Ukraine and the U.S. – the level of political relations excludes the possibility of concluding an RTA in the long term.

Conclusion

This article has highlighted the key causes of the collapse of the WTO AB and identified possible consequences for the entire MTS. Due to its procedural features, the AB performs the role of the last instance in resolving WTO disputes. Therefore, its blocking jeopardizes the completion of all current disputes and thereby violates the predictability of the system.

The current collapse of the AB has several causes, both fundamental and formal. The former are the shifting balance of power and the WTO having fallen into an institutional trap. Therefore, the arbitrators' exceeding their powers and violating the rules are only formal reasons for blocking the AB. Many WTO members support the need to reform the AB, but no one agrees with the measures taken by the U.S. for this.

[27] Disputes between them can be resolved on the basis of the EU-MERCOSUR FTA, but it has not yet entered into force.

The first half of 2021 has not shown whether it is possible to overcome the AB's collapse. The key aspect is linking the AB's reform with a full-fledged WTO reform and the willingness of countries to make compromises. The next WTO Ministerial Conference will clarify this situation. If the WTO members do not move from confrontation to compromise on this issue, this will signal the final degradation of the predictable MTS represented by the WTO.

The AB's collapse has already led to abuses: countries file appeals "into the void," which automatically frees the parties from the need to change the applied measures and undermines the system's integrity. Against this background, it is necessary to highlight the tendency of countries to introduce legislation that allows introducing countermeasures against appeals "into the void." If this practice becomes widespread, we may witness dozens of targeted trade wars that will contribute to the decline of the MTS.

At the same time, there are two mechanisms to circumvent this problem: bilateral agreements on the non-filing of appeals and the transfer of appeals to arbitration. Each is currently unable to replace the AB fully. However, the latter method seems to be more effective since it allows for a two-stage dispute resolution procedure. However, questions remain about its effectiveness from the point of view of legitimacy. The format of dispute resolution through RTAs deserves a separate discussion. In our opinion, it is currently hopeless for the majority of WTO members.

Russia needs to resume the work of the WTO AB. Again, the reasons are disputes, which represent years of disagreements about the nature of the Russian economy and may cancel multi-million dollar discriminatory measures for Russian companies. At the same time, with the development of new foreign trade initiatives, for example, the CBAM, it is important for Russia to have a platform for defending its interests following WTO norms.

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