



The Role of Multinational Pharmaceutical Companies in the Battle against COVID-19

Sıla Turaç Baykara, PhD., ESI Postdoctoral Fellow, Social Sciences
İzmir Demokrasi Üniversitesi, Turkey

Ricardo Furfaro, PhD., ESI Postdoctoral Fellow, Law

Universidad de Ciencias Empresariales y Sociales, Argentina

Muhammad Arif Rajput, PhD., ESI Postdoctoral Fellow, Law

Assistant Sessions Judge, Golarchi (Thatta) Sindh, Pakistan

Jorge Tenorio Fernando, PhD., ESI Postdoctoral Fellow, Social Sciences

Centro Estadual de Educação Tecnológica Paula Souza, Brazil

[Doi:10.19044/esj.2022.v18n28p35](https://doi.org/10.19044/esj.2022.v18n28p35)

Submitted: 23 May 2022

Accepted: 27 July 2022

Published: 30 September 2022

Copyright 2022 Author(s)

Under Creative Commons BY-NC-ND

4.0 OPEN ACCESS

Cite As:

Baykara S.T., Furfaro R., Rajput M.A. & Fernando J.T. (2022). *The Role of Multinational Pharmaceutical Companies in the Battle against COVID-19*. European Scientific Journal, ESJ, 18 (28), 35. <https://doi.org/10.19044/esj.2022.v18n28p35>

Abstract

This research aims to discuss how multinational pharmaceutical companies have responded to the challenges imposed by the COVID-19 pandemic, which would ideally be translated into supplying vaccines in a timely and efficient manner to fight against that emergency. The theoretical approach relies upon the concept of Corporate Social Responsibility (CSR), implying enterprises are supposed to achieve a balance of economic, social, and environmental deliverables while, at the same time, addressing the expectations of both shareholders and stakeholders. The method consists of scrutinizing secondary data—mainly figures of the vaccines provided by the different companies—and qualitative content analysis of the actions they state they have taken, which have been conveyed in press releases and annual reports. The findings show that major corporations have primarily considered the financial aspects of CSR, leaving out the social component they claim to address in their mission statements. Our critical position is that millions of lives could have been saved and relevant economic downturn avoided, particularly in low- and middle-income countries, had there been true practice

and implementation of the CSR principles on the pharmaceutical company part.

Keywords: Corporate Social Responsibility, multinational pharmaceutical enterprises, COVID-19 pandemic, vaccines

Introduction

Economists have used a simple, all-embracing definition for a multinational enterprise in any field. It is any corporation that owns, in whole or part, controls, and manages income-generating assets in more than one country (Hood & Young, 1979). The process of globalization has generated several problems in the health care and public health areas. Due to the massive fiscal deficits and heavy indebtedness of the public sectors of developing countries, the World Bank (WB.) and the World Trade Organization (WTO) have promoted policies that have encouraged the reduction and privatization of health care and public health services previously provided by the public sector (Stocker et al., 1999). The reforms imposed by the IMF and the WB. have supported the efforts of U.S. and European corporations by facilitating the penetration of private capital in the pharmaceutical business not only in their territories but also in foreign jurisdictions such as Latin America and the Middle East, and Africa. Accordingly, and as a consequence of such policies, those U.S. and European multinational corporations have expanded worldwide. In addition, managed care organizations, health care consulting firms, and pharmaceutical and medical equipment companies have found less stringent requirements to enter foreign markets (Turshen, 1999).

Multinational pharmaceutical companies such as Pfizer, Moderna, Johnson & Johnson, Astra-Zeneca, Sinovac, Sinopharm, and the Russian National Research Centre for Epidemiology and Microbiology have proposed Corporate Social Responsibility (CSR) strategies to help improve the health context in affected communities, thereby softening the pain and harness caused by the pandemic. Since the COVID-19 irruption in late 2019, the world's population has faced strong and unsurmountable challenges, which still demand massive efforts from the population and impose severe restrictions on people's lives. In this context, it is necessary to thoroughly assess multinational pharmaceutical corporations' role in providing on-time relief and adequate remedies to fight such an expansive and deadly disease. Without a doubt, medical science has an unassignable role and a strong responsibility to develop and provide adequate access to safe, trustworthy, and appropriate pharmaceutical products that prevent, limit the spread of, and/or fight COVID-19 during the pandemic.

In quite relevant geographic areas, the detrimental consequences of the pandemic, especially of the unreasonably extended lockdowns and other

government mismanagement actions, are visibly reflected in a deterioration of democracies and violations of basic universal human rights (Beteta, 2020). The crisis has tested political leadership in different geographic regions and, more importantly, the role of multinational pharmaceutical companies, which have developed and distributed anti-COVID-19 vaccines. The effective and on-time research, development, production, and distribution of life-saving pharmaceutical products by multinational corporations in critical emergency situations like the COVID-19 pandemic has often been overlooked. And such very relevant activities are framed and considered under the CSR policies designed and implemented by those corporations within their ethical and transparent decision-making processes.

In such a context, the COVAX initiative has also been addressed in this research, considering that it was merely established to serve only as a safety net of vaccines for all countries. Such an initiative had the sole purpose of preempting the inequitable distribution of vaccines by ensuring coverage for twenty percent (20%) of COVAX member countries' populations and prioritizing vulnerable and high-risk groups such as health-care workers (Binagwaho et al.,2021). The COVAX scheme is just one of the pillars of the Access to the COVID-19 Tools (ACT)-Accelerator initiative, which is a global collaboration initiative to accelerate the development, production, and equitable access to new COVID-19 diagnostics, therapeutics, and vaccines. The COVID-19 pandemic was launched in April 2020 by the World Health Organization (WHO), the European Commission, and France, with the support of multinational pharmaceutical corporations in response to an aggravation of the context in which the COVID-19 pandemic was developing states.

The present research has been structured in such a way that following this introduction, the theoretical background is presented, including the CSR conceptualization and its specific relationships to pharmaceutical companies as far as the pandemic is concerned. The Methodology section describes the approach adopted to tackle the research object using qualitative content analysis of the pharmaceutical companies' initiatives in contrast to the vaccine numbers they have provided. The Results section outlines the effective outcome of pharmaceutical companies' actions in Argentina, Brazil, Pakistan, and Turkey vis-a-vis what they had claimed would be carried out. The discussion section provides a critical analysis of how these companies have ultimately delivered what they had promised from a CSR standpoint. Finally, the Conclusion section shows final considerations, the identification of certain limitations of the research, and suggestions for additional future research.

Theoretical Background

The theoretical approach used for this research is built upon the concept of CSR, with a closer look at pharmaceutical companies. Dalhsrud

(2008) raised thirty-seven (37) different definitions of CSR and analysed their various aspects regarding similarities and differences. In this sense, the myriad of conceptualizations can be grouped into five dimensions: 1. environmental, which looks at the impact of activities on nature; 2. social, focusing on the relationship between business and society; 3. economic, whose driver is the financial aspect; 4. stakeholder, with a close look at groups of interest; and 5. voluntariness, in which actions are not enforced by law. For this research, the conceptualization created by the World Business Council for Sustainable Development (2000) is to be used as follows:

Corporate social responsibility is the continuing commitment by businesses to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large (WBCSD, 2000, p.8).

This definition encompasses most, if not all, of the five (5) main dimensions identified. That view is corroborated by the Commission of the European Communities, which states that CSR implies “actions by companies over and above their legal obligations towards society and the environment.” (COM, 2011, p.3). However, Blowfield and Frynas (2005) have a critical approach and advocate that the practical effects of CSR in low and middle-income countries (LMIC) are relatively timid and at times remain at the discourse level, having poor or no positive impact at all where it is most needed.

Regarding CSR related to pharmaceutical companies, Martínez-Palomo (2009) stated that a CSR-oriented pharmaceutical company should have a differentiated approach towards developing countries, particularly regarding patents, joint public-private initiatives, and pricing. This is not, however, the predominant approach among medical-related enterprises. According to Blank and Brauner (2009), certain organizations conceive sick people as mere customers, doctors as intermediaries between companies and the market, and healthcare as a consumption product like any other. That view is corroborated by Leisinger (2005, p.577) when he asserts that the “‘ Big Pharma’ companies have not been living up to their social responsibilities to society” In the case of the COVID-19 pandemic, that would imply, for instance,, a great adherence to the COVAX facility, the well-known alliance led by the World Health Organization to provide vaccines to low-income countries.

In this regard, AstraZeneca Sustainability Report (2022) states that 2.5 billion shots of the COVID-19 vaccine will be delivered in 2021. From that volume, 1.6 billion (about 65%) were supplied to low and middle-income countries (LMICs); and 247 million shots (9,8%) were sent to the COVAX facility during the same year. As for Pfizer (2022), they reported having shipped 2.6 billion shots of their Covid-19 vaccine, out of which 1 billion (about 40%) were sent to LMICs, and 250 million doses (9,6%) were delivered

to the COVAX facility. Pharmaceutical company SINOVAC (2021) reports the distribution of 2.5 billion vaccine shots until December 2021. From that volume, 380 million doses were sent to the COVAX facility. Concerning Sputnik V, the Russian National Centre of Epidemiology and Microbiology (Gamaleya) (2022) has not provided sales figures, just mentioning that their vaccines were authorized in 71 countries with a total population of 4 billion people. None of the companies clearly state their pricing policy, i.e., if they have implemented a subsidized price for the developing countries and the COVAX facility. The degree of congruence between speech and action of pharmaceutical companies was discussed by LaVan et al. (2021). For these scholars, what is frequently reported in companies' communication channels does not always reflect what is stated in the documents. The authors claim that one of the reasons for the discrepancy might be the need to address stakeholders' conflicting interests – like those of the investors, the regulatory authorities, and the communities – in a single document. Nussbaum (2009) sustains that the leading central CSR dilemma for pharmaceutical companies fair pricing since it would imply offering affordable medicines to a substantial portion of the population. However, according to Demir and Min (2019), they are far from providing such wide-reaching benefits for those who need them.

Methodology

The Methodology used herein consists of a combination of a quantitative research method such as numbers and statistics and a qualitative research method such as secondary data. The mixed research methodology aims to collect, analyse, and interpret qualitative and quantitative research data (Leech and Onwuegbuzie, 2009). Therefore, the purpose of using a mixed methodology herein is to try to eliminate the deficiencies of a method by using qualitative and quantitative research methods together (Greene, 2005). Although there are various reasons for using a mixed methodology in studies, the key is enriching the research and organizing it more detailedly (Greene, 1989; Giannakaki, 2005). This can be achieved by designing qualitative and quantitative data to complement each other. As a result, the advantage of a mixed methodology is that both methods can be used together to achieve more reliable results.

Results

This research thoroughly assesses how multinational pharmaceutical companies have approached the challenge of supplying anti-COVID-19 vaccines within their CSR policies in countries like Turkey, Pakistan, Argentina, and Brazil to face the pandemic. Such countries represent the country of origin of each of the authors.

Argentina's COVID-19 history

According to the BBC News Mundo, the Argentine Ministry of Health claimed that the first COVID-19 case in Argentina dated back to the beginning of March 2020, when an Argentine traveler returning from Europe was sent to the hospital after he had tested positive once a Polymerase Chain Reaction (PCR) test had been performed. The Argentine government sadly gave the COVID-19 pandemic a political and ideological characterization from the beginning. Because of this approach, federal authorities' management of the pandemic has been defined as one of the most erratic in the world. Despite official efforts to control the spread of the virus, the number of casualties caused by the pandemic ranked among the ten (10) highest in the world. In addition, Argentina has implemented the longest lockdown ever seen, causing economic and business activities and employment levels to collapse. Lockdown has been implemented to reduce mobility and potential contagion (Larrosa, 2020). Despite this very complex health and economic context, the Argentine government's management of the anti-COVID-19 vaccine campaign was full of ideology and far from acceptable (Forman, 2021).

Argentina's anti-COVID-19 vaccine campaign

Most U.S. and European multinational pharmaceutical companies such as Pfizer, Janssen Pharmaceutical, and Astra-Zeneca have had a business presence in Argentina through direct investment for many years and are still there. Other global anti-COVID-19 vaccine producers such as Moderna, Sinovac, Sinopharm, and Gamaleya do not have a business presence in Argentina. Still, they have played an important, relevant role in the vaccine supply globally, but not necessarily in Argentina. Even before the emergency approval of the anti-COVID-19 vaccines by the health registration authorities, the Argentine government had received a very reasonable and convenient contract offer from Pfizer for considerable security and an almost immediate supply of vaccines. The goal was to launch a vaccination campaign to prevent the massive dissemination of the virus, causing an undue increase in casualties.

For ideological reasons and following a so-called multilateral foreign policy, the Argentine health authorities rejected the contract offer from the U.S. pharmaceutical company. They negotiated with Gamaleya, the government-run Russian institution developing the so-called Sputnik vaccine, and promised to supply most of Argentina's vaccine needs. Astra Zeneca would become a second supplier. Unfortunately, due to Gamaleya's failure to supply the agreed volumes based on the lack of reliability of the required manufacturing and auditing infrastructure, the government had to look at Moderna, Sinovac, Sinopharm, and back to Pfizer to cover the necessary COVID-19 supplies. The highly reputable and well-known Argentine political

and research institute under the name Fundación de Investigaciones Económicas Latinoamericanas has published a 2021 report calculating that almost thirty thousand (30,000) lives could have been saved if the Argentine government had accepted Pfizer's initial vaccine contract offer from the very beginning of the pandemic outbreak.

U.S. and European companies indeed have strong corporate social responsibility policies. These are reflected in Johnson & Johnson (Janssen Pharmaceutical)'s Credo values; Pfizer's "working together for a healthier world" initiative, and Astra Zeneca's social approach, demanding that all corporation responsibilities be directed towards the company's stakeholders and ensuring the safety and health of the general public (Boeger et al., 2008). However, the fact that, in the case of the COVID-19 pandemic, pharmaceutical companies had to deal directly with the Argentine government and not with non-governmental organizations and/or donor institutions has hindered pharmaceutical companies' ability to implement open and transparent corporate social responsibility actions in Argentina, such as donations, improvement of vaccine administration centers, and other relevant contributions. There is a lack of trust in the Argentine private sector towards the current government administration, as there is evidence of their involvement in corruption schemes, which included prioritizing relatives and friends in the vaccine administration. Argentina has also made use of vaccines from the COVAX facility.

Brazil's COVID-19 History

The first case of COVID-19 in Brazil was officially reported on February 26, 2020; the patient was a 50-year-old man who had just returned from a trip to Italy. The disease was quickly widespread throughout the country; consequently, hospitals were saturated with an excessive number of patients. At the peak of the pandemic in April 2021, the country counted over 4,000 deaths on a single day (Ministry of Health, 2021). Besides classifying the disease as a "little flu," the Brazilian president criticised the use of masks and social isolation measures recommended by international and local prominent health authorities. Furthermore, he referred to coronavirus as a "Chinese virus" and the Synovac vaccine as a "vaccine," ironically combining the words vaccine and China—implying that China created "biological warfare," a statement that elicited a vehement response from the Chinese government, which delayed delivery of key vaccine raw materials. From the first case notification to April 15, 2022, the country reported over 30 million infection cases and 660,000 deaths. Dr. Pedro Halal, an epidemiologist who conducted the most considerable COVID-19 research in Brazil, claimed that 25% of such deaths could have been avoided had the central government not

minimized the pandemic and treated the situation with proper attention (Guerin, 2021).

Brazil's anti-COVID-19 vaccine campaign

The first vaccine shot in Brazil was on January 17, 2021, when the sanitary regulation agency (Anvisa) approved the emergency use of Coronavac, manufactured by Butantan, a Brazilian centennial research institute with a long tradition of developing vaccines. The AstraZeneca vaccine also got approval from Anvisa and was produced by the Oswaldo Cruz Foundation, another reputable public health research institute in Brazil. Both institutes had capabilities and got into agreements with their partners to manufacture one hundred percent (100%) of the vaccines in the country. Pfizer aJanssen'ssen vaccines were also made available later, on an import basly. Overall, Brazil is world-renowned for its successful immunization campaigns. However, in the case of COVID-19, the whole process was politicized since the central government did not react immediately to the crisis to pull together a coordinated, centralized plan. Instead, the state governors were ahead and tried to acquire vaccines to speed up the process. On top of that, some other issues have contributed to the worsening of the pandemic in the country. The first was the report that seventy (70) million shots of the Pfizer vaccine were offered to the Brazilian government in August 2020, but the proposal letters sent by the company remained unanswered for over two (2) months until November. After the information got public, the contract was signed six (6) months later, and the full batches of the vaccines arrived in the country only in July 2021. Had the agreement been sealed before, Brazil would likely have started the immunization process earlier, which would undoubtedly have spared lives (Leite et al., 2021). Another key factor was that while not responding to the Pfizer offer, a secret negotiation to purchase Covaxin, a vaccine made by Bharat Biotech, an Indian manufacturer, was taking place. The issue was the price negotiated by a third party and signed by the Health Minister and was fifty percent (50%) higher than the original offer presented by the manufacturer (The Economist, 2021).

Pakistan's COVID-19 history

In Pakistan, the first confirmed case of COVID-19 was reported during the last week of February 2020. In the last week of March 2020, a nationwide lockdown was imposed. In early April 2020, the National Command and Operations Centre (NCOC), a joint civilian-military body, was formed to deal with the pandemic at the federal level. Although Pakistan initially imposed a strict complete nationwide lockdown, upon a decreasing number of cases, the lockdown policy was shifted from a complete lockdown to a smart lockdown (identified hotspot). In an intelligent lockdown, the implementation of

Standard Operating Procedures (SOP) like social distancing, the closing of schools, the use of masks in public places, restrictions on large gatherings, etc., were enforced with the assistance of the armed forces (Daniyal, 2020).

Pakistan's anti-COVID-19 vaccine campaign

Vaccines from Pfizer–BioNTech and Moderna were the first to get authorization for emergency use globally in December 2020. However, Pakistan launched its coronavirus vaccination drive on February 3, 2021, when it received half a million doses of Sinopharm COVID-19 vaccines from China. The vaccine was first administered to healthcare workers caring for COVID-19 patients, then to people over sixty (60) years old, and is now available to all individuals free of cost (Siddique et al., 2021). Asad Umar, former head of the NCOC, said China came to Pakistan's rescue as a true friend when it directly needed the vaccine to immunize its population (Feature, 2021).

Pakistan has authorized the use of Pfizer-BioNTech, Moderna, Sinopharm (China), Sputnik V (Russia), Sinovac (China), Cansino, and Oxford AstraZeneca (Siddique & Ahmed, 2021). Pakistan's vaccination programs have been implemented with China's support and through the COVAX initiative during the COVID-19 pandemic. According to The News (2021), the United States of America has donated 46.5 million Pfizer and 5.5 million Moderna vaccines to Pakistan under the COVAX initiative. In addition, Pakistan has procured sufficient COVID-19 vaccines to cater to the country's needs (Siddiqui et al., 2021). Pakistan has also started the co-production of the single-dose Ad5-nCoV vaccine and repackaged the vaccine as PakVac for the general population (Dawn, 2021). In Pakistan, 49.05% of the population (101.8M) was fully vaccinated, and 61.66% of the population (128.07M) was partially vaccinated on March 21st, 2022 (COVID-19 Health Advisory Platform).

Turkey's COVID-19 history

The first case of COVID-19 was reported on March 11, 2020. Along with the first case, the government adopted various protective measures such as social distancing, curfews, travel bans, quarantines for returning nationals, and the shut-downs of schools, universities, stores, and entertainment venues. On May 4, 2020, the government lifted lockdown measures, opened retail stores, lifted travel restrictions between significant cities, and restarted domestic flights. International flights were also re-authorized on June 10, 2020, and many borders were reopened. The 2020-2021 academic year mainly started virtually in schools and universities. In September 2020, the second wave broke out. Then, protective measures were relaunched and tightened, such as curfews, pre-school shutdowns, and stay-at-home orders. The gradual reopening started in March 2021. In the new phase of the pandemic, regions

in Turkey were divided into four risk groups. Based on the risk assessment result, weekend curfews were lifted, cafes and restaurants were reopened, and face-to-face classes were restarted in schools. The third pandemic wave started at the end of March 2021, and restrictions were tightened again. A full completion was announced to extend from the end of April 2021 to May 2021, when the so-called normalization process starts once more.

In May 2021, Turkey's Health Minister, Fahrettin Koca, announced that Turkey had signed various vaccine supply agreements providing for reasonable volumes of doses that would be sufficient for all the Turkish population. Based on the national vaccination plan of the Ministry of Health, the adult population has started to be vaccinated by prioritizing healthcare, tourism sectors, and teachers. Healthcare sector workers and the adult population in their fifties become eligible to receive the second dose as of June 2021 and the third dose as of July 2021.

Turkey's anti-COVID-19 vaccine campaign

As an American multinational pharmaceutical company, Pfizer has had a business presence in Turkey through direct investment for many years. Chinese Sinovac Biotech Ltd., another global anti-COVID19 vaccine producer, does not have business in Turkey but has played an important role in the vaccine supply at a global level and in Turkey as well. The American Pfizer/Biontech, also known as COMIRNATY, the Chinese CoronaVac, and the Russian Sputnik V, are the vaccines the Turkish Ministry of Health agreed to give to Turkish citizens. Amongst them, Coronavac is an inactive vaccine, Pfizer/Biontech is produced with mRNA technology, and Sputnik V is a viral vector vaccine. However, only Pfizer/Biontech and CoronaVac have been actively administered in Turkey (CNN Türk, 2021). The second dose of Sputnik V, which has different active ingredients when compared to the first dose, did not arrive in Turkey and therefore could not be administered even though the Turkish Ministry of Health gave an emergency use approval and purchased four thousand (4000) doses (Euronews, 2021). In June 2021, Fahrettin Koca announced that fifty billion (50b) doses would arrive later. However, this volume of vaccines never arrived in Turkey (Cumhuriyet, 2022).

In Turkey, CoronaVac, manufactured in China, and BioNTech, produced in the U.S. and Germany, were the vaccines used (Azap, 2020). The Turkish government's vaccine preferences have been CoronaVac first and Pfizer/Biontech in second place because Fahrettin Koca signed the first vaccine contract on December 3, 2020. CoronaVac reached Turkey on December 25, 2020, and it started to be administered free of charge (Özdemir Akcan ve Sütütemiz, 2022). Fahrettin Koca signed an agreement on December 25, 2020, to use Pfizer/Biontech, which was launched on March 18, 2021

(Ministry of Health, 2020a). Pfizer/Biontech is the second vaccine brand that reached Turkey and had previously been approved by the European Union. The Turkish government has had an "emotional" relationship with the Pfizer/Biontech vaccine because the company's founders, Uğur ahin and Özlem Türeci, were originally from Turkey and later moved to Germany. Pfizer, one of the business partners of the Pfizer/Biontech vaccine, also announced the allocation of more than two million Turkish Liras (2M) to be invested in Turkey for medical purposes in the fight against COVID-19 (Pfizer Turkey, 2022). It is also worth mentioning that Turkey has its domestic vaccine, Turkovac, produced by Erciyes University and TUSEB. However, the debate about the effective protection of this vaccine against COVID-19 continues.

From studies conducted in Turkey, it is also possible to see the effects of the so-called "country of origin" on individuals' COVID-19 vaccine preferences. For example, according to Elgin, Galvani, and Kamilçelebi (2021), upon comparison of the vaccine produced in Germany and the U.S. and in China, individuals in Turkey feel a higher level of hesitancy toward the latter, as they think that it has a lower level of protection. Therefore, it could be concluded that the Turkish population has more prejudices against the Chinese CoronaVac vaccine. In addition, Aydın, Özer, and Köse (2021), it is stated that individuals in Turkey have a more positive approach towards the administration of the vaccine produced in Germany and the U.S. when compared to that produced in China. In addition, the Turkish population has prejudices against the CoronaVac vaccine due to the Uyghurs of East Turkestan in China and the unlimited invasion of inexpensive and poor-quality Chinese goods into the Turkish market in the 2000s. The Turkish consumer's demand for cheap Chinese goods first increased, and after a while, consumers started to reject them because they were of poor quality and harmful to health. As a result, it is argued that this experience of Turkish people regarding Chinese goods is one of the most important reasons for the Turkish people's prejudice against CoronaVac (Ataçay, 2022).

In the case of the COVID-19 pandemic, pharmaceutical companies had direct negotiations with the Turkish government. In such a case, pharmaceutical companies could not implement transparent corporate social responsibility actions in Turkey, such as donations or supporting vaccine administration centers. The Turkish administration has personally met with Biontech and Sinovac vaccine manufacturers directly and without intermediaries. On behalf of Turkey, the head of the State Supply Office met with Sinovac's representatives in Turkey (Keymen İlaç A.Ş.), which is the sole authorized distributor of Sinovac in Turkey. As a result, all the agreement's legal, administrative, and financial terms and conditions were agreed with Sinovac's manufacturer and not with its Turkish distributor. The

distributor's authority and responsibility are limited to the vaccine's mere country representation and logistics (Ministry of Health, 2020b).

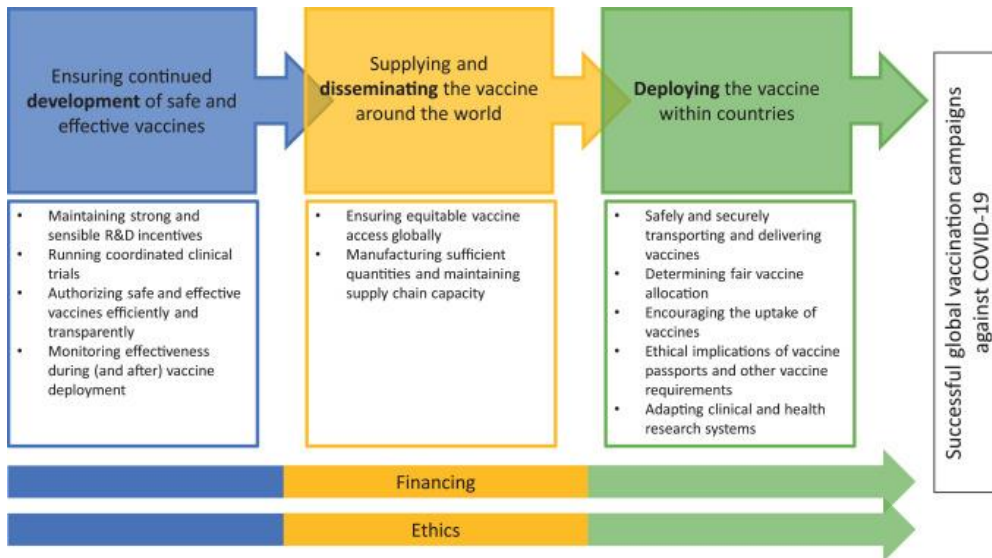
In the design of a series of plans within the scope of fighting against COVID-19, Pfizer Turkey continues its drug and vaccine production and supply processes. Pfizer Turkey donated one of the active principles included in the COVID-19 Turkish Treatment Protocol implemented by the Ministry of Health of Turkey to the latter. It increased the production of this active principle. Pfizer Turkey also provided the necessary equipment and material support for the establishment of two (2) new COVID-19 test centers within the Health Institutes of Turkey (TUSEB) (Pfizer Turkey, 2022).

Dr. Hans Kluge, the WHO Regional Director for Europe, stated that since the beginning of the pandemic, the Turkish government has sent COVID-19 materials to 160 countries and 29 international organizations and donated more than 2 million doses of vaccines to eleven (11) countries. Besides, in November 2021, Turkey announced the donation of ten million (10M) doses of vaccines through Covax (A.A., 2021).

Discussion

Figure 1 contains a framework identified as the ideal global vaccination campaign against COVID-19. The framework consists of three (3) main "D"-dimensions of achieving widespread international COVID-19 immunity via vaccinations. The three D's are: "development," "dissemination," and "deployment"; ensuring the continued development of safe and effective v, vaccines; supplying and disseminating the vaccines around the world; and deploying them in different territories. Under these dimensions, there are eleven (11) challenges to achieving these goals: maintaining strong and sensible research and development incentives; running coordinated clinical trials; authorizing safe and effective vaccines efficiently and transparently; monitoring effectiveness during (and after) vaccine deployment; ensuring equitable vaccine access globally; manufacturing sufficient quantities and maintaining supply chain capacity; safely and securely transporting and delivering vaccines; determining fair vaccine allocation; encouraging the uptake of vaccines; ethical implications of vaccine passports and other vaccine requirements; and adapting clinical and health research systems. Financing decisions and ethical considerations will also need to be made from the start of vaccine research and development to clinical system adaptations. As such, these are represented as cross-cutting challenges in the framework.

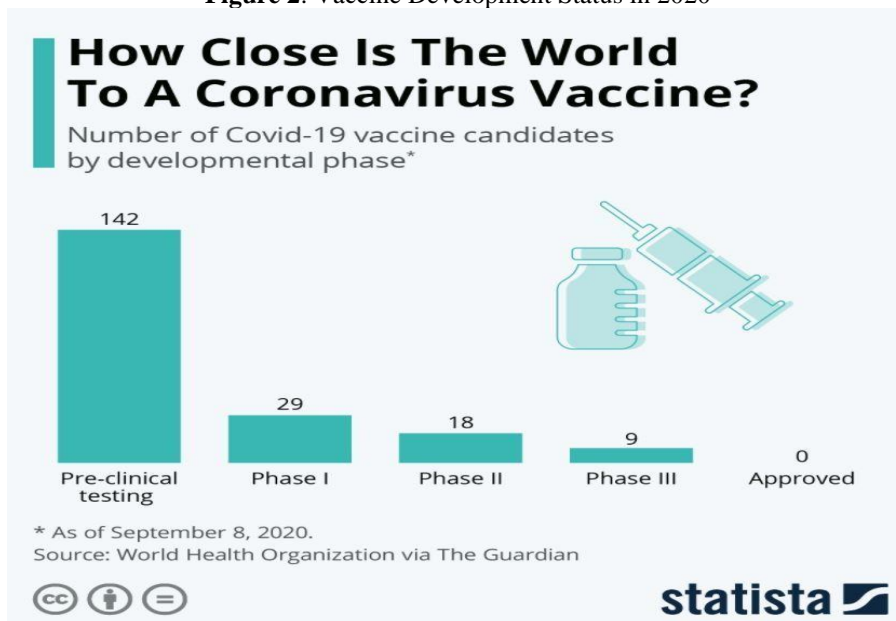
Figure 1. The ideal vaccination framework



Source: Forman R. et al., 2021

Once the COVID-19 pandemic broke out in China in November 2019 and then expanded across Asia, Europe, and the Americas, by September 2020, many anti-COVID-19 vaccine candidates in different developmental stages were reported by the WHO and shown in Figure 2 below.

Figure 2. Vaccine Development Status in 2020



Even though Figure 2 shows what may be considered a good start in the research of vaccine candidates, the relevant issue here is that after nearly ten (10) months of the COVID-19 pandemic outbreak, in September 2020, no anti-COVID-19 vaccines had been approved. As casualties continued to increase, these figures constitute a true disappointment regarding multinational pharmaceutical corporations' commitment to protecting health standards. It also reflects that either the multinational pharmaceutical corporations were not proactive enough in their research progress or that their lobbying efforts with health registration authorities for the vaccines' approval practical effective case was, these companies' CSR actions did not meet public expectations on such a sensitive issue. Thousands of lives could have been saved if multinational pharmaceutical corporations had accelerated their vaccine research and approval efforts. Among the multinational pharmaceutical corporations taking the lead in developing vaccines, either individually or in conjunction with other business partners, were Pfizer Inc. (U.S.), Astra-Zeneca (United Kingdom), Janssen Pharmaceuticals (Belgium), Moderna (U.S.), Sinovac (China), Sinopharm (China), and Gamaleya (Russia). Their actions have reflected that they have been far behind the successful standards contained in the framework and have not implemented their CSR policies efficiently and effectively.

In assessing how multinational pharmaceutical companies have contributed to reducing the dissemination of the COVID-19 pandemic, there seems to be some sort of agreement within the WTO to waive patents on COVID-19 vaccines. This initiative, launched at the start of the pandemic, has taken longer than expected and appears nearing completion. However, it may now be too late, as the discussion's progress has been plodding. Moreover, it has been tough to implement as there has been no uniform consent from multinational pharmaceutical companies that hold patent rights over such vaccines. Such companies should have understood and should have cared earlier about the capital relevance that allowing for a secure and steady vaccine supply and distribution has to ensure adequate volumes reach remote countries around the world. The waiver would possibly cover five years and only involve countries that have manufactured less than ten percent (10%) of the number of vaccines exported during 2021. So far, vaccine supply and distribution results have been disappointing. According to the Our World in Data (2021) publication, 64.8% of the world population has now received at least one dose of the anti-COVID-19 vaccine. A volume of 11.42 amounts has been administered globally, and 12.44 million are directly administered daily. Only 14.8 of low-income countries have received at least one dose. The European Union, the US, India, and South Africa have reached an understanding with the sole purpose of geographically extending and diversifying the manufacturing of vaccines around the world. Except for India,

the European Union, the United States, and South Africa would be exempt from the waiver in this first stage because they manufactured more than 10% of the volume of vaccines exported in the calendar year 2021. Additional countries within the WTO are expected to join this initiative when the contagions are steadily increasing again, especially in Asia and Europe. Therapeutically, drugs to fight against COVID-19 and testing devices have been excluded from this first understanding.

South Africa and India submitted a proposal to the WTO to waive patents covering COVID-19 vaccines before any of the COVID-19 vaccines had even received health registration approval from regulatory authorities. The European Union, the United Kingdom, and Switzerland, where several multinational pharmaceutical corporations are based, have made compulsory licensing easier in exchange for the payment of royalties by those pharmaceutical companies with the necessary infrastructure and technology to manufacture generic drugs. Such a proposal has been supported by well-known scientific and non-governmental organizations to allow for the launch of new COVID-19 manufacturing sites globally.

During this time, Germany has detected more than one thousand six hundred (1600) new contagions per one hundred thousand (100,000) inhabitants by mid-March 2022; Italy has detected eighty thousand (80,000) recent cases, and France has seen more than one hundred and twenty thousand (120,000) cases. Moreover, new restrictions have been imposed on the population in China due to a strong increase in OMICRON cases, as well as in South Korea, where four hundred thousand (400,000) new cases have been detected.

Production restrictions and unequal access will increase international inequalities, leaving a large part of the world without access to vaccines until 2024. While advanced purchase agreements (APAs) among pharmaceutical companies and some developed countries are multiplying, the proposed mechanisms for voluntary licensing of technologies and the COVAX facility have not yet achieved their goal of democratizing access to vaccines. In this sense, the current TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights) waiver proposal seems to be the political and institutional response with the greatest potential to guarantee the scaling of the production of pharmaceutical inputs, allowing the adoption of a comprehensive strategy to ensure timely, sufficient, and affordable access to all technologies developed to fight COVID-19 (Menezes, 2021). Global compulsory licensing to manufacture anti-Covid-19 vaccines in exchange for a limited payment of royalties in the first place, and patent waivers on such vaccines in the second stage in those countries with low-income populations, may represent a reasonable and acceptable corporate social responsibility option to allow countries to have secure reasonable volumes to restrict the dissemination of

the disease. Again, progress towards achieving this objective has been plodding.

Research carried out by García-Sánchez and García-Sánchez (2020) suggests that enterprises' behaviour could be clustered into three (3) specific groups in terms of their CSR responses to the pandemic: one group of businesses demonstrated a predominantly commercial drive, translated primarily by the protection of the shareholders' interests; another group of organizations chiefly demonstrated a concern towards society and vulnerable groups, given the pandemic situation; and finally, a third group managed to balance an altruistic attitude combined with that of a commercial nature. Sung et al. (2021)'s study pointed out that the pharmaceutical companies overall made enormous profits out of the COVID-19 pandemic. In addition, they have hardly considered waiving the vaccine patents voluntarily, as a real CSR attitude would require in extreme situations like the current one. Their participation in the global COVAX initiative was hesitant; instead, they prioritized supply agreements on a country-by-country basis. In addition, it was unclear if differentiated pricing was adopted to support the least economically favoured nations. Thus, the CSR principles in their annual reports have not been translated into real actions.

Having an active CSR role when facing extreme situations like that of the pandemic can be positive not only for the community's health but also for having a sustainable business. Koshi et al. (2022)'s research demonstrated that an altruistic corporate approach toward the pandemic correlated with higher equity returns. Besides, it drew investors' attention, thereby helping protect the reputation and value of the companies that followed that path.

Conclusion

This study found that for various reasons, multinational pharmaceutical corporations' CSR actions did not meet public expectations of saving lives by supplying vaccines in sufficient quantity and on time. Had the multinational pharmaceutical corporations accelerated their vaccine research and approval efforts, thousands of lives could have been saved. The study also shows that leading multinational pharmaceutical corporations have been far behind in implementing their CSR policies efficiently and effectively. The COVAX facility has not achieved its goal of providing sufficient volumes of vaccines to the neediest countries. The pharmaceutical companies have generated significant profits out of the COVID-19 pandemic. However, their participation in the COVAX global initiative has been prioritized on a country basis. This shows that the CSR principles in their annual reports have not been sufficiently translated into tangible actions. The CSR actions could be discharged more effectively by providing global compulsory licensing to manufacture anti-COVID-19 vaccines in exchange for a nominal payment of

royalties and patent waivers on such vaccines in low-income countries. This would represent a reasonable and acceptable corporate social responsibility attitude to allow countries to have secure reasonable volumes to restrict the dissemination of the disease in their countries, benefiting not only their population but the entire world.

The main limitation of the study refers to the time frame since the research covered the pharmaceutical companies' initiatives carried out until the end of 2021, but their actions have continued until the year 2022, including in the referred countries. In terms of future research, there is a definite possibility to extend the analysis to different countries, comparing the approaches taken by the same companies to identify similarities and differences, which could provide additional information and data for the analysis.

References:

1. Anadolu Ajansı (A.A.). (2021). <https://www.aa.com.tr/tr/koronavirus/saglik-bakani-koca-turkiye-ihiyac-sahibi-ulkeler-icin-10-milyon-doz-asi-hibesi-yapacak/2429780>.
2. Astra-Zeneca (2022). Sustainability Report 2021. Available at https://www.astrazeneca.com/content/dam/az/Sustainability/2022/pdf/Sustainability_Report_2021.pdf.
3. Aydın, K., Özer, E. and Köse, E. (2021). We are analyzing attitude towards COVID-19 vaccine in the context of the health industry: The role of country image. *Düzce Tıp Fakültesi Dergisi*, 23, 122-130.
4. Ataçay, M. N. (2022). Türk Toplumunun Çin Covid-19 Aşısına Olumsuz Tepkisini Açıklamak: Türkiye-Çin İlişkilerinin Rolü. *Avrasya Uluslararası Araştırmalar Dergisi*, 10 (30), 35-54.
5. Azap, A. (2020). COVID-19 Aşıları: Tünelin Ucundaki Işık. *Arşiv Kaynak Tarama Dergisi*, 29, (Özel Sayı 1)
6. BBC News Mundo (2020). Coronavirus: Argentina confirma su primer caso de Covid-19. <https://www.bbc.com/mundo/noticias-america-latina-51728654>
7. Beteta, H. (2020). ¿Cómo encontró la pandemia del Covid-19 a América Latina? *Journal of Economic Literature*, 17(51), 180-193.
8. Binagwaho, A., Mathewos, K. & Davis, S. (2021). Time for the ethical management of Covid-19 vaccines. *The Lancet Global Health* 9,(8), 1169-1171.
9. Blank, D. M. P., & Brauner, M. C. C. (2009). Medicalização da saúde: biomercado, justiça e responsabilidade social. *JURIS*, 14: 7-24
10. Blowfield, M., & Frynas, J. G. (2005). Setting New Agendas: Critical Perspectives on Corporate Social Responsibility in the Developing

- World. *International Affairs* (Royal Institute of International Affairs), 81(3), 499–513.
11. Boeger, N., Murray, R., & Villiers, C. (2008). *Perspectives on corporate social responsibility*. Cheltenham, Glos, UK: Edward Elgar
 12. Brasil. Ministério da Saúde. Coronavirus Panel. Available at: <https://covid.saude.gov.br/>.
 13. CNN Türk (2021) <https://www.cnnturk.com/saglik/son-dakika-inaktif-ve-mrna-koronavirus-asilari-hangileri-neler>.
 14. COVID-19 Health Advisory Platform by Ministry of National Health Services Regulations and Coordination <https://covid.gov.pk/>.
 15. Cumhuriyet (2022). <https://www.cumhuriyet.com.tr/turkiye/bakan-kocadan-yanit-yok-400-bin-doz-asi-uctu-gitti-1898576>.
 16. Dahlsrud, A. (2008). How corporate social responsibility is defined: an analysis of 37 definitions. *Corporate social responsibility and environmental management*, 15(1), 1-13.
 17. Daniyal, S., 2020. Coronavirus: Why is Pakistan doing so much better than India? [online] Scroll.in. <https://scroll.in/article/972694/coronavirus-why-is-pakistan-doing-so-much-better-than-india>.
 18. Dawn, 2021 Pakistan to import Chinese Cansino vaccine in bulk to packaging 3m doses locally: Asad Umar, <https://www.dawn.com/news/1615482>
 19. Demir, M., & Min, M. (2019). Consistencies and discrepancies in corporate social responsibility reporting in the pharmaceutical industry. *Sustainability Accounting, Management and Policy Journal*.
 20. Elgin, C., Galvani, A. and Kamilçelebi, H. (2021). Country-of-origin bias towards COVID-19 vaccination: Evidence from Turkey. *OSF Preprints*. <https://bit.ly/2VOMZAv>
 21. Euronews (2021). (<https://tr.euronews.com/2021/09/29/turkiye-de-sputnik-light-as-s-n-n-acil-kullan-m-onay-icin-sagl-k-bakanl-g-na-basvuru-yap-l>
 22. COM - European Commission (2011). A renewed E.U. strategy 2011-2014 for Corporate Social Responsibility. Available at <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0681:FIN:EN:PDF>.
 23. Feature: Chinese vaccines an effective tool in Pakistan's fight against COVID-19. Xinhua. (n.d.). http://www.xinhuanet.com/english/2021-06/24/c_1310026009.htm
 24. Forman, R. et al. (2021). Covid-19 vaccine challenges: What have we learned so far, and what remains to be done? <https://doi.org/10.1016/j.healthpol.2021.03.013>

25. Fundación de Investigaciones Económicas Latinoamericanas (2021). El rechazo a Pfizer causó treinta mil muertes adicionales en Argentina. <https://alerta140.com/segun-un-estudio-de-fiel-el-rechazo-a-pfizer-causo-30-mil-muertes-adicionales-en-argentina/>
26. García-Sánchez, I. M., & García-Sánchez, A. (2020). Corporate social responsibility during COVID-19 pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 126.
27. Giannakaki, M. S. (2005). Using Mixed-Methods to Examine Teachers' Attitudes to Educational Change: The case of the Skills for Life Strategy for Improving Adult Literacy and Numeracy Skills in England. *Educational Research and Evaluation*, 11(4), pp. 323- 348.
28. Greene, J. C., Caracelli, V. J., and Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), pp. 255- 274.
29. Greene, J. C. (2005). The generative potential of mixed methods inquiry. *International Journal of Research & Method in Education*, 28(2), pp. 207- 211.
30. Guerin, O. (2021). Covid-19 pandemic: 'Everything you should not do, Brazil has done.' BBC News, 9 July 2021. Available at <https://www.Bbc.com/news/world-latin-america-57733540>. Retrieved on April 16, 2022.
31. Hood, N. & Young, S. (1979). *The Economics of the Multinational Enterprise*. London: Longman.
32. Johnson & Johnson (2022). Our Credo. <https://www.jnj.com/credo>
33. Koshi, H., Ashrafi, M., Abbasi, E., & Gorganli Davaji, J. (2022). The protective role of corporate social responsibility performance during the coronavirus pandemic disease: Performance evaluation using a mathematical model of the directional distance function. *International Journal of Nonlinear Analysis and Applications*.
34. Larrosa, J. (2020). SARS-CoV-2 in Argentina: Lockdown, mobility, and contagion. <https://doi.org/10.1002/jmv.26659>
35. LaVan, H., Cook, L. S., & Zilic, I. (2021). An analysis of the ethical frameworks and financial outcomes of corporate social responsibility and business press reporting of U.S. pharmaceutical companies. *International Journal of Business Governance and Ethics*, 15(3), 326-355.
36. Leech, N. L. and Onwuegbuzie, A. J. (2009). A typology of mixed methods research designs. *Qual Quant*. 43, pp. 265–275.
37. Leisinger, K. M. (2005). The corporate social responsibility of the pharmaceutical industry: idealism without illusion and realism without resignation. *Business Ethics Quarterly*, 15(4), 577-594.

38. Leite, J., Rosati, A., & Iglesias, SP (2021). Brazil let 70 million shots get away and sealed its covid fate. Bloomberg. Available at: <https://wwwWBloomberg.com/news/articles/2021-05-28/brazil-let-70-million-shots-get-away-and-sealed-its-covid-fate>. Retrieved on April 16, 2022.
39. Martinez-Palomo, A. (2009). Social responsibility and health. The UNESCO universal declaration on bioethics and human rights: Background, principles and application, 219-230.
40. Menezes, H. (2021). The TRIPS waiver proposal: An urgent measure to expand access to the COVID-19 vaccines. <https://www.econstor.eu/handle/10419/248628>
41. Ministry of Health, (2020a). Available at: <https://covid19bilgi.saglik.gov.tr/tr/covid-19-yeni-koronavirus-hastaliginedir> (accessed 28.03.2022)
42. Ministry of Health, (2020b). Available at: <https://www.saglik.gov.tr/yazdir?7948798142D36333A29E19767E3242E3> (accessed 05.05.2022)
43. Nussbaum, A. S. K. (2009). Ethical corporate social responsibility (CSR) and the pharmaceutical industry: A happy couple. *Journal of Medical Marketing*, 9(1), 67-76.
44. Our World in Data. Coronavirus (COVID-19) Vaccinations. <https://ourworldindata.org/covid-vaccinations>
45. Özdemir Akcan, E. ve Sütütemiz, N. (2022). "Analysis of Brand Perceptions of Covid-19 Vaccines By Sentiment Analysis on Social Media", *Pamukkale University Journal of Social Sciences Institute*, 49, Denizli, ss. 145-162.
46. Pfizer (2022). Environmental, Social & Governance Report 2021. Available at https://www.pfizer.com/sites/default/files/investors/financial_reports/annual_reports/2021/files/Pfizer_ESG_Report.pdf.
47. Pfizer Turkey (2022). <https://www.pfizer.com.tr/pfizer-t%C3%BCrkiye-bilim-ila%C3%A7-ve-nakdi-kaynaklar%C4%B1yla-covid-19-ile-m%C3%BCcadeleye-tam-destek-veriyor>
48. Siddiqui, A., Ahmed, A., Tanveer, M., Saqlain, M., Kow, C. S., & Hasan, S. S. (2021). An overview of procurement, pricing, and uptake of COVID-19 vaccines in Pakistan. *Vaccine*, 39(37), 5251–5253. <https://doi.org/10.1016/j.vaccine.2021.07.072>
49. Siddique, S., & Ahmed, S. (2021). COVID-19 Vaccines in Pakistan: Efficacy, Adverse Effects, and Availability. *Journal of Islamabad Medical & Dental College*, 10(2), 125–130. <https://doi.org/10.35787/jimdc.v10i2.723>

50. Sinovac (2021). First Half of 2021 Financial Results. Available at <http://www.sinovac.com/news/shownews.php?id=1367&lang=en..>
51. Stocker, K., Waitzkin H. & Iriart, C. (1999) The Exportation of Managed Care to Latin America. *New England Journal of Medicine*,340.1131–36.
52. Sung, M., Huang, Y., Duan, Y., Liu, F., Jin, Y., & Zheng, Z. (2021). Pharmaceutical Industry's Engagement in the Global Equitable Distribution of COVID-19 Vaccines: Corporate Social Responsibility of EUL Vaccine Developers. *Vaccines*, 9(10), 1183.
53. The Economist (2021). What does Brazil's vaccine scandal mean for Jair Bolsonaro? Available at: <https://www.economist.com/the-economist-explains/2021/07/07/what-does-brazils-vaccine-scandal-mean-for-jair-bolsonaro>.
54. The News (2021) U.S. donates over 50m COVID-19 vaccines to Pakistan.. <https://www.thenews.com.pk/print/932164-us-donates-over-50m-covid-19-vaccines-to-pakistan>
55. Turshen, M.(1999) Privatizing Health Services in Africa. New Brunswick, NJ: Rutgers University Press.
56. United Nations Industrial Development Organization. What is CSR? <https://www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr#:text=Corporate%20social%responsi...%20What%20is%20CSR3F%20What%20is%20their%20business%20operations%20and%20interactions%20with%20their%20stakeholders>.
57. World Bank Organization (2021). Debt Transparency in Developing Economies. <https://www.worldbank.org/en/topic/debt/publication/report-debt-transparency-in-developing-countries>
58. World Business Council for Sustainable Development (2000) Corporate Social Responsibility: making good business sense. Geneva, WBCSD. <http://www.ceads.org.ar/downloads/Making%20good%20business%20sense.pdf>. Retrieved on April 4, 2022.Clancy, T., Stiner, C., & Koltz, T. (2002). *Shadow Warriors: Inside the special forces*. New York, NY: Putnam
59. World Health Organization. Access to COVID-19 Tools (ACT) Accelerator. [https://www.who.int/publications/m/item/access-to-covid-19-tools-\(act\)-accelerator](https://www.who.int/publications/m/item/access-to-covid-19-tools-(act)-accelerator)

60. World Trade Organization. New USD 50 Billion health, trade, and finance roadmap to end the pandemic and secure a global recovery. https://www.wto.org/english/news_e/news21_e/igo_01june21_e.htm