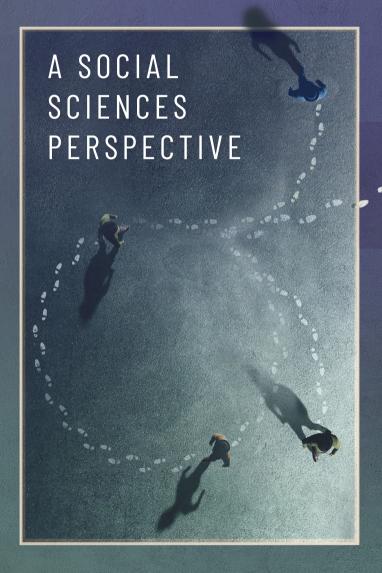
THE WORLD AFTER THE PARDEMIC











A SOCIAL SCIENCES PERSPECTIVE





THE WORLD AFTER THE PANDEMIC

"A SOCIAL SCIENCE PERSPECTIVE"

YTB PUBLISHING: 11

ISBN 978-975-17-4878-2 ANKARA, JULY 2021

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RIHTIM AJANS (www.rihtimajans.com.tr)

PRINTING & BINDING

MİM İÇ VE DIŞ MEKAN BASKI SİSTEMLERİ REKLAM MATBAACILIK LTD. ŞTİ. Zübeyde Hanım Mah. Sebzebahçeleri Cad. 103/8 İskitler-Altındağ/ANKARA (Sertifika no: 48752)

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Presentation

Abdullah EREN
President of YTB

Türkiye Scholarships, which is one of the most popular projects of our country in recent years and prone to producing long-term results, encourage scholarship students to produce academic works while they are still at university stage. These works, which are regarded as one of the success criteria of Türkiye Scholarships program, also contribute to the world academy.

Academic studies, which we accept as one of the main purposes of international student mobility and which are signed by our students, can inform us and our higher education firsthand about other countries or their perspectives on situations. Moreover, in an environment where many different views come together, it is possible to get closer to the right one.

In this context, Türkiye Scholarships rewarded and brought together valuable articles about "International Students's Work Competition", "The World After Pandemic" and "10th Year of YTB (Presidency for Turks Abroad and Related Communities)". It is flattering in itself to witness students' reasoning in the fields of social, science and health sciences, in matters which are significant both for us and for the whole world. Prepared to spread their ideas, this book will also be one of the points in their careers.

I would like to thank those who contributed to the preparation of this study, especially the Istanbul Academy of Sciences Foundation and the evaluation boards, which showed that education is not a unilateral issue and that we have much to learn from our students.

Takdim

Abdullah EREN YTB Başkanı

Ülkemizin son yıllarda gözde ve uzun vadeli sonuçlar doğurmaya yatkın projelerinden biri olan Türkiye Bursları, bursiyerlerini henüz üniversite aşamasındayken akademik eserler üretmeye teşvik etmektedir. Türkiye Bursları programının başarı ölçütlerinden biri olarak görülen bu eserler, dünya akademisine de katkı sunmaktadır.

Uluslararası öğrenci hareketliliğinin temel amaçlarından kabul ettiğimiz ve öğrencilerimizin imzası bulunan akademik çalışmalar, bizleri ve yükseköğretimimizi, başka ülkeler veya onların olaylara bakış açıları hakkında ilk elden bilgilendirebilmektedirler. Dahası, pek çok farklı görüşün bir araya gelmesiyle oluşan bir ortamda, doğru olana daha fazla yaklasabilmek de mümkün olmaktadır.

Bu çerçevede düzenlenen "Uluslararası Öğrenciler Eser Yarışması", "Pandemi Sonrası Dünya" ve "YTB'nin 10. Yılı" hakkındaki değerli makaleleri ödüllendirmiş ve bir araya getirmiştir. Hem bizler hem de tüm dünya için önem arz eden konularda, desteklediğimiz öğrencilerin sosyal, fen ve sağlık bilimleri alanında akıl yürütmelerine şahit olmak bile başlı başına gurur vericidir. Onların fikirlerini yaygınlaştırmak için hazırlanan bu kitap, kariyerlerindeki duraklardan da biri olacaktır.

Eğitimin tek taraflı bir mesele olmadığını, öğrencilerimizden de öğreneceğimiz çok şeyin olduğunu gösteren bu çalışmanın hazırlanmasında emeği geçenlere, özellikle makalelerin değerlendirilmesinde yardımcı olan İstanbul Bilimler Akademisi Vakfı'na ve değerlendirme kurullarına teşekkür ederim.

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Understanding International Policy and the Post-COVID 19 Period

Rasul ALMAMMADOV*

Abstract

The COVID-19 pandemic, which is considered one of the most important events of the new century and according to some, one of the turning points, undoubtedly affects every aspect of social life. The most important factor related to this pandemic is the inhibition of globalization and mobilization as never before. Therefore, the international political consequences of such a devastating crisis are intriguing. In this study, although it is accepted that the financial effects of the pandemic will have serious consequences in the short

Özet

Yeni yüzyılın en önemli olayı ve kimilerine göre dönüm noktalarından birisi sayılan COVID-19 pandemisi tartışmasız toplumsal yaşamın her yönünü etkilemektedir. Bu pandemi ile ilgili en önemli faktör, daha önce hiç olmadığı kadar küreselleşme ve mobilizasyona ket vurmasıdır. Dolayısıyla böyle bir tahribata yol açan bir krizin uluslarasası politik sonuçları merak doğurmaktadır. Bu çalışmada pandeminin kısa dönemde maddi etkilerinin ciddi sonuçlar doğuracağının kabul edilmesine rağmen köklü bir değişime neden olmayacağı savunul-

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term, it is argued that it will not cause a radical change. The study was divided into four sections. In the first and second chapters, the effects of pandemics on world history as an actor and factor are examined and the results of the COVID-19 crisis are shown. The third section shows what the international system and international policy look like and shows in which cases a transformation is necessary for change. In the last section, it is shown that the pandemic cannot cause such a change.

Keywords: COVID-19, International Policy, International System, International Liberal Order, Change

maktadır. Çalışma dört bölüme ayrılmıştır. Birinci ve ikinci bölümde bir aktör ve faktör olarak pandemilerin dünya tarihinde olan etkileri incelenmekte ve COVID-19 krizinin sonuçları gösterilmektedir. Üçüncü bölümde uluslararası sistemin ve uluslararası politikanın neye benzediği gösterilmekte ve değişim için hangi olgularda bir dönüşümün gerekliliği gösterilmektedir. Son bölümde ise pandeminin böyle bir değişime neden olamayacağı gösterilmektedir.

Anahtar Kelimeler: COVID-19, Uluslararası Politika, Uluslararası Sistem, Uluslararası Liberal Düzen, Değişim

*

I. Introduction

"In fact, if there's anything important that can be extracted from the Ebola outbreak, it is that it warned us early to prepare as a warning. If we start now, we may be ready for the next outbreak."

Bil Gates (2015)

The COVID-19 pandemic, which is considered one of the most important events of the new century and according to some, one of the turning points, undoubtedly affects every aspect of social life. It is discussed and written by all authors that it will have very serious financial consequences regarding its short-term effects, narrow the world economy and cause new economic crises with its end. The most important factor related to this pandemic is the inhibition of globalization and mobilization as never before. In other words, the COVID-19 pandemic, unlike the Spanish flu of 1918, which happened centuries ago, affects global relations too much to be overlooked. Therefore, the international political consequences of such a devastating crisis are intriguing.

The new coronavirus pandemic has stronger effects than the 9/11 events, the 2008 economic crisis, and the increasing populist wave in recent years, and its short-term effects are compared to the 1929 Depression. Thus, there are debates that this crisis is a turning point. These discussions show that when the history of pandemics is examined, it can be revealed that epidemics deeply affect the history of the world. If we look at how epidemics affect the history of the world, then the necessity of mentioning another history will also emerge. It is seen that epidemics caused the decline of Ancient Rome and Byzantium, the rise of Islam and transformations in the feudal period. However, as Daniel Drezner showed, Spanish flu has never been discussed, the

2003 outbreak has not affected China's rise, nor has the swine flu and Ebola outbreak changed their power relations.¹

Some authors argue that the pandemic will cause radical changes, some authors argue that it will accelerate history rather than a change, and some authors argue that it will not cause a change in international relations. In this study,

Although it is accepted that its effects will have serious consequences, it is argued that it will not cause a radical change and that international policy will similarly reflect the problems of the pre-pandemic period.

The international system is based on an international liberal order built by the United States, based on power relations involving social and material relations and limited by the structure of the system, which we can define as hierarchy, functional differentiation, power distribution and geo-technical capabilities. The structure of the system limits the perpetrators of the states, and the positions of the states within the system give them a certain status or field of action. Therefore, in order to talk about change or transformation, a transformation must occur in the structure of the system. Although the pandemic causes the acceleration of old problems, it seems that it will not cause a change or transformation in this sense.

The study was divided into four sections. In the first and second chapters, the effects of pandemics on world history as an actor and factor are examined and the results of the COVID-19 crisis are shown. The third section shows what the international system and international policy look like and shows in which cases a transformation is necessary for change. In the last section, it is shown that the pandemic cannot cause such a change.

II. Epidemics and Another World History: Back to the Future

"An epidemic can rival even the giant wars of the past in terms of the number of dead. The economy scollapses. The cost to humanity would be unbelievable, and it cannot be a country unaffected by this problem."

Bill Gates (2019)

When we look at human history, very little has ever been as destructive and transformative as viruses. But the discourses that shaped everyday life and, moreover, very few history books gave way to epidemics. On the other hand, no matter how much scientific discourses such as global warming and climate change are expressed, they cannot trigger the effect that will put us into action. Anthony Giddens describes this travesty as the Giddens paradox.²

Daniel Drezner, 'The most counterintuitive prediction about worldpolitics and the coronavirus', Washington Post. 30 March 2020.

² The Giddens paradox means that many will sit on their hands and do nothing because the dangers posed by climate change are not tangible and visible in everyday life. Anthony Giddens, The Politics of

Nothing in the world's political history has ever been as deadly as viruses.³ It is estimated that at least one billion people have died from these diseases in the last two millennia.⁴ Only the Spanish flu of 1918 is said to have caused as many deaths as the sum of two world wars. Diseases such as the Antony plague, Cybrian plague, Justinian outbreak, Black Plague, smallpox, cholera, etc. have affected the political-social life of their time and caused various changes.⁵ It is even possible to read through political and social historical epidemics and pandemics; the decline of Rome and Byzantine⁶, the rise of Islam, changes in the feudal period⁷, the collapse of the old world, Napoleon's selling Luisiana to the Americans shows that there is actually another world history and what is told to us is incomplete. The most important actor of all these events is microbes.

Microbes can spread quickly as a way to survive. The easiest way to do that is to wait for another victim without doing anything. According to an estimate, there are about 1.5 million viruses in the world, of which only three thousand are known. Epidemics are caused by 80% animal-to-human viruses that can be described as zoonoses. The fact that a pathogen causes an epidemic indicates that humans are close to animals with those viruses. Jared Diamond states that these types of infectious diseases have

Climate Change, Polity, 2009, pp. 2; For a discussion on other and structural factors, Rasul emphasizes that rational reading is contextual, not technical and political. See Almammadov, "İklim Değişikliği Politi-kalarının Başarısızlığı Üzerine I", http://rasulalmammadov.blogspot.com/2020/01/iklim-degisikligi-politi-kaların_31.html (Accessed: 30 Ağustos)

- 3 Bryan Walsh, *End Times: Brief Guide to the End of the World*, Hachette Books, New York, p.9. The existential threats written in this book are either historical or theoretical, but the author's own and our present experience suggests that the epidemics are continuous.
- 4 Nicholas Lepan, 'Visualizing the History of Pandemics', Visual Capitalist, 11 March, 2020; smallpox alone has killed 300-400 million people in 20 centuries. Donald A. Henderson, 'The eradication of smallpox – An overview of the past, present, and future', Vaccine, Volume 29, Supplement 4, 2011, p.7-9.
- For a reading on the history of epidemics, see. Damir Huremovic, 'Brief History of Pandemics: Pandemics Throughout History', Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak, Springer, 2019, p.7-37; Guido Alfani and Tommy Murphy, 'Plague and Lethal Epidemic in the Pre-Endustrial World', The Journal of Economic History, Vol. 77, No. 1, p. 314-44; D. Buchillet, 'Epidemic Diseases in the Past: History, Philosophy, and Religious Thought', Tibayrenc Michel (ed.). Encyclopedia of Infectious Diseases: Modern Methodologiess, J. Wiley, 2007, p.517-24, M. R. Snyder, and , S. J. Ravi, '1818, 1918, 2018: Two Centuries of Pandemics', Health Security, Volume 16, Number 6, 2018, p.1-6; Samuel K. Cohn, 'Pandemics: waves of disease, waves of hate from the Plague of Athens to A.I.D.S. ', Historical Research, Volume 85, Issue 230, 2012, p. 535-555; Nicolas LePan, 'A visual history of pandemics', WEF, 15 March, 2020; Laura Spinney, 'The flu that transformed the 20th Century', BBC Future, 17 October 2018; Warwick McKibbin and Alexandra Sidorenko, 'The Global Cost of an Influenza Pandemic', The Milken Institute Review, 2007, pp.18-27.
- J. Rufus Fears, 'The plague under Marcus Aurelius and the decline and fall of the Roman Empire', Infect Dis Clin N Am 18, 2004, 65-77; Yaron Ayolan, 'Black Death and the rise of the Ottomans', Natural Disasters in the Ottoman Empire Plague, Famine, and Other Misfortunes, Cambridge University Press, 2014, 21-60
- 7 Ömer Karaoğlu, "Salgınların İktisat Tarihi", Dilek Demirbaş ve d. COVID-19 Pandemi 'si 'ni 'n Ekonomi 'k, Toplumsal ve Si 'yasal Etkileri, İstanbul Üniversitesi Yayınları, 2020, pp.10-16; Jason Moore, 'The Crisis of Feudalism: An Environmental History', Organization & Environment, 15(3), 2002, pp. 301-22;
- 8 Jared Diamond, *Tüfek, Mikrop ve Çelik: İnsan Topluluklarının Yazgıları*, Trans.. Ülker İnce, TUBITAK: Popular Science Books, 2001, p. 311-13.
- 9 Diamond, Tüfek, Mikrop ve Çelik, pp,.290
- 10 Gleen McDonnald, 'The Global Virome Project Is Hunting Hundreds of Thousands of Deadly Viruses', Seeker, 30 Jan, 2018. , Netflix: The Next Pandemic, October 2019.

four basic characteristics ¹¹; firstly, the virus spreads among people, then these diseases are severe, acute diseases. The patient will either die soon or survive shortly. Third, the bodies of those who survive the disease produce antibodies and thus provide lifelong immunity to the virus. Finally, he says that these diseases are more common in humans, that is, they do not usually live either in soil or in animals. According to him, roughly the following conclusion emerges from these features; the moment the virus emerges, it will spread to everyone in that region. Therefore, it is clear that these diseases will not live long in small communities. *The Global Virome Project*, established to detect all viruses in the world, points to a similar outcome¹²; the population has increased, living spaces have expanded, animal and crop production and the use of natural spaces have increased human-animal interaction. Research shows that new infectious diseases have increased four times in the last century¹³, outbreaks have increased three times since the 1980s ¹⁴ and at least five different diseases have emerged in a region each year.¹⁵

In this sense, Ian Goldin and Mike Mariathasan explored the risks posed by globalizationand mentioned seven different systemic risks in their study. One of them is epidemics. The book basically shows the consequences of living in a more connected, complex and uncertain world. The authors use globalization in the context of *being connected* and *complex*. Developments in technology and innovation and political and ideological changes define the last wave of globalization. This indicates mutual commitment. For example, global capital flows increased from 1.6 trillion to 6 trillion in the 1990s. Or the number of global passengers reached 4.7 billion. They use complexity in the context of Santa Fe complexity. Increased 'commitment' means growing 'complexity'. As a result, globalization produces various vector and geographical systemic risks.

According to the authors, the intensity of connections between humans and also between humans and animals are the primary determinants of the development and spread of the pandemic. Twenty. With the increase in trade and interdependence in the 21st century, *epidemics* of the past have become *today's pandemics*.²⁰ Along with COVID-19, pandemics have emerged every few years in the 21st century; SARS (2003), Bird flu (2007), swine flu (2009) and finally COVID-19. According to an estimate, a

¹¹ Diamond, Tüfek, Mikrop ve Çelik, pp. 297-8.

¹² The Global Virome Project: A First Step Ending the Pandemic Era', Consortium of Universities for Global Health https://www.cugh.org/sites/default/files/CS34_AllPresentations.pdf (Accessed 22.08.2020)

¹³ Kate E. Jones et al. 'Global Trends in Emerging Infectious Diseases', Nature, Vol 451, 2008, pp. 990-4

¹⁴ Walsh. End Times

^{15 &#}x27;The Next Pandemic', Netflix, October 2019. According to an estimate, a pandemic can kill approximately 33 million people in six months.

¹⁶ Ian Goldin and Mike Mariathasan, The Butterfly Defect: How the Globalization Creates Systemic Risks, Princeton University Press, 2014.

¹⁷ Goldin and Mariathasan, The Butterfly Defect, pp. 41-48

¹⁸ The main characteristics of this concept are dispersed interaction, no global controller, cross-cutting organization, continual adaptaion, perpetual novelty and out-of-equilibrium dynamics.

¹⁹ For risk and systemic risk definition, see. Goldin and Mariathasan, The Butterfly Defect, pp.55-60.

²⁰ Goldin and Mariathasan, The Butterfly Defect, pp.205

possible pandemic could kill about 33 million people in six months.²¹ In this context, the authors say that globalization leads to an increased risk of such crises. In contrast, they reveal the need for more sustainable and transparent globalization.

III. COVID-19: Anatomy of a Pandemic

'The question is not whether the future pandemic is coming, or when the future pandemics will come. The question is, will we be ready for it?' The Next Pandemic, Netlix (2019)

The first symptoms of the COVID-19 pandemic, whose official name is SARS-CoV 2 and can be defined as the most important event of the new century, were seen on December 1, 2019 in Wuhan, China²² and affected all aspects of social life²³. On January 30, the World Health Organization (WHO) declared the new coronavirus outbreak a public health emergency (PHEIC), the WHO's highest alert level, and on March 11 described the outbreak as a pandemic. At the end of March²⁴, a third of humanity was now under quarantine.²⁵

Zoonosis, a disease transmitted through animals, is called coronavirus because it resembles a crown and is generally transmitted from person to person through droplets in the air. ²⁶ The virus develops mild symptoms in 80% of patients, causes severe diseases in 15% and critical respiratory failure in 5%, and its main clinical features are shortness of breath, fever and cough. ²⁷ The outbreak, which has low effects but very strong spread, has spread to approximately 34 million people as of October 2, 2020 and has killed more than 1 million people. ²⁸

The economic effects of COVID-19 are incomparable with the 2008 Economic Crisis.

The International Monetary Fund (IMF) estimates that the global economy will shrink by 3%.²⁹ This decline is described as the worst since the Great Depression of the 1930s. On the other hand, according to Gita Gopinath, the total loss of the pandemic crisis to

^{21 &#}x27;The Next Pandemic', Netflix, October 2019.

²² Yen-Chin Liu et al., 'COVID-19: First Documented Coronavirus Pandemic in History', *Biomedical Journal*, April 2020, pp.1

²³ Damir Huremovic, Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak, Springer, 2019; Souvik Dubey et al. 'Psychosocial impact of COVID-19', Diabetes & Metabolic Syndrome: Clinical Research & Reviews, Volume 14, Issue 5, September-October 2020, p.779-788; Dilek Demirbaş ve d. The COVID-19 Pandemics and its Economic, Social and Political Impacts, Istanbul University Press, 2020.

²⁴ Timeline: WHO's COVID-19 response https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline (Access: 31.08.2020)

²⁵ Holly Secon et al., 'A comprehensive timeline of the coronavirus pandemic at 6 months, from China's first case to the present' *Business Insider*, 1 July, 2020.

²⁶ Dharmendra Kumar et al., 'Corona Virus: A Review of COVID-19', Eurasian Journal of Medicine and Oncology (EJMO), March 2020, pp.8.

²⁷ Ramprakash Kaswa and Indiran Govender, 'Novel coronavirus pandemic: A clinical overview', S Afr Fam Pract., 62(1), a5123, 26 June 2020, pp.2.

²⁸ WHO Coronavirus Disease (COVID-19) Dashboard https://covid19.who.int/ (Access: 02.10.2020)

²⁹ Lora Jones et al., 'Coronavirus: A visual guide to the economic impact', BBC, 30 June 2020.

global GDP in 2020 and 2021 could be around \$9 trillion, more than the combined economies of Japan and Germany.³⁰ The stock market experienced the biggest decline since 1987 in the first three months of the year,³¹ while the travel industry was among the sectors hit hardest. More importantly, according to the UN, the pandemic has left around 138 million people facing the problem of hunger in developing countries.³²

IV. Explain International Policy: A Structural Approach

Understanding global relations in the post-COVID-19 period is³³ years of explaining international policy. Therefore, someone who adopts such a goal needs to show what international politics really looks like and how the structure of international politics affects relationships between actors.³⁴

There is a continuity rather than changes in international politics. If not, material and ideas would constantly change and transform the structure of international relations. In other words, the international system would be subject to change along with the behaviour of actors. Therefore, a systemic and structural analysis in international relations is important international policy theory, on the other hand, is 'interested in explaining why and under what conditions phenomena such as power struggle, the conflicting nature of international relations, international cooperation, competition, continuity and transformation of the international order, hegemonic order exist or occur'³⁵. Therefore, there is a need for a structural approach to understand what changes pandemics can cause and how the actors within this system are limited by the structure of the system or make certain actions possible, hence possible changes.

In this sense, the most important first study was conducted by Kenneth Waltz in 1979³⁶. In order to explain the phenomena in international politics, he envisaged a system with a structure on the one hand and states that he defined as units on the other. Units come together to form the system. Waltz says that by dividing the structures into two as hierarchical and anarchic, they struggle to survive in this anarchic area where there

³⁰ Gita Gopinath, The Great Lockdown: Worst Economic Downturn Since the Great Depression', IMF blog, April 14, 2020.

³¹ Coronavirus: Stock markets suffer worst quarter since 1987, BBC, March 31, 2020.

³² World's poorest being pushed 'closer to the abyss' of famine, warns WFP chief, UN News, 17 July.

³³ This study rejects a rigorous distinction of understanding-explanation. Considering the ontological contribution of scientific realism, he accepts that a similar explanation can be mentioned in the social sciences. For a reading, see Berth Denmark vd., *Toplumu Açıklamak: Sosyal Bilimlerde Eleştirel Realizm*, Phoenix Yayınları, 2018.

³⁴ Considering that these discussions still occupy the basic agenda of the International Relations discipline and exceed the scope of the study, an international policy was defined in this study by referring to the doctoral thesis called *Uluslararasi Politikanın Yapısal Teorisi* (İng. Structural Theory of International Policy) conceptualized by the ontological contribution of scientific realism by Klevis Kolasi, rather than entering into the discussion itself.

³⁵ Klevis Kolasi, *Uluslararası Politikanın Yapısal Teorisi: Kenneth Waltz ve Alexander Wendt'in Uluslararası Yapı Kavramsallaştırmalarının Eleştirisinden Yeni Bir Senteze Doğru*, Ankara Üniversitesi: Yayımlanmış Doktora Tezi, 201 pp. 185-6.

³⁶ Kenneth Waltz, Theory of International Politics, Trans. Osman S. Binatlı, Phoenix, 2015.

are two separate areas within the state and internationally and states have no upper authority. Since the international field is based on sovereign equality and the units that make up it struggle, the states that are the units of the system are functionally the same, but only differently defined as capacity. The problematic part of this theoretical approach is that it ignores social and intellectual factors and defines a passive actor. On the other hand, while trying to understand the structure of international politics by looking at the number of great powers, Waltz does not accept the hierarchical aspect of these relations. As Kolasi said, this inequality of power is covered by the discourse of anarchy; whereas states can be defined as a system in which 'power-unequal states compete among themselves, but a single state does not have full control over the rest.³⁷ As Jack Donnely said, the system of Great Powers consists of basic unequal relations and functionally differentiated actors, unlike Waltz said.³⁸

Therefore, as shown by Klevis Kolasi, we need to consider stratification (vertical differentiation), functional differentiation and institutions that constitute the international structure by accepting that it consists of power relations, which are derived from social relations and are the most important dimension of social relations. This conceptualization is not analytical, it is actually historical and 19. In the 21st century, it emerged with power configurations (ideologies of industrialization bureaucratization and progress).³⁹

In this sense, the second important contribution was made by Alexander Wendt in 1999.⁴⁰ While he was trying to reveal the social dimension of international politics by adopting the ontology of scientific reality, he developed a cultural structure approach based on inter-subjective epistemology by reducing the causality of the structure to the perpetrators' understanding of it (anarchy is what states understand from it⁴¹). In this sense, the structure is conceptualized by an interpretive epistemology based on Anthony Giddens' constructivist theory rather than a scientific realistic conceptualization⁴², which causes the determinant of social conditions to be reduced to the determinant of norms and rules and discourses and neglects the objective dimension of social reality, which cannot be reduced to intersubjective meanings such as hierarchy and commitment.⁴³

³⁷ Christopher Chase-Dunn, Global Formation: Structures of the World Economy, Maryland, Rowman and Littlefield, 1998, p. 142. Quoted in: Kolasi, Ibid, p. 201.

³⁸ Jack Donnely, 'The Elements of the Structures of International Systems', International Organisations, Vol 66, Issue 4, 2012, p.618; Kolasi, Ibid s. 201.

³⁹ Barry Buzan and George Lawson, The Global Transformation History, Modernity and the Making of International Relations, Cambridge University Press, 2015.

⁴⁰ Alexander Wendt, Social Theory of International Politics, Trans. Suna G. Öner and Helin Sarı Ertem, Küre Publications, 2016,

⁴¹ Alexander Wendt, "Anarchy is What States Understand: Social Construction of Power Policies", International Relations, Volume 10, Issue 39 (Fall 2013), pp. 3-43

⁴² Klevis Kolasi, "Uluslararası İlişkilerde Sosyal Ontoloji Kavrayışının Meta-Teorik Eleştirisi", Uluslararası İlişkiler Dergisi, 15 (2018), pp. 931 - 958

⁴³ Klevis Kolasi, 'Uluslararası İlişkiler Teorisinde Bilimsel Realizm ve Yapı Kavramı', Ankara Üniversitesi SBF Dergisi, 2018, Cilt 73, Sayı 4, pp. 931 - 958

In this study, it is emphasized that global policy should be understood through the international system. Based on the ontology of scientific reality, it is argued that the international emerges from the underlying social relations.⁴⁴ However, the international level has distinctive and explanatory features that cannot be reduced to the lower level. This is why a system has a unique feature that distinguishes it from the effects of the units that make it up. The emergence of international relations from the underlying social relations' means that it is driven by law and mechanism in the sense of multiple trends.⁴⁵

In this sense, Klevis Kolasi's conceptualization of international policy was accepted and the system definition of international states following Theda Scokpol was discussed. According to him, this system represents 'a level of analytically autonomous transnational reality which is interdependent with world capitalism in terms of its structure and dynamics but which cannot be reduced to it'. Therefore, the world economy and the international system constitute two relatively autonomous dimensions of the international level. After saying above that we should understand the structure in the context of power relations, which is the most important dimension of social relations, Klevis Kolasi says that we can define the structure as hierarchy, functional differentiation, power distribution and geo-technical capabilities. According to him, 'roles, rules and positioned practices are structural factors mediating between the international structure and states'. Emphasizing hierarchy and functional differentiation in international relations means emphasizing that they emerge as a result of power relations that contain material and intellectual elements.

In the international system, some states are much stronger and cause changes. On the other hand, functional differentiation, which emerges as a product of modernity, implies that some states play certain roles in this system. For example, the USA, the architect of the international liberal order, has different duties than other states. However, hierarchy and functional differentiation are not determinant in themselves; 'they show their effects in interaction with geo-technology and through institutions' Geo-technology, which can be defined as geography and technology, constitutes the superficial and material dimensions of the structure. While mentioning the deterrent power of nuclear weapons, the structural effect of these weapons is already pointed out.⁴⁹

Finally, social positions reproducing from social relations are also a feature of the structure; 'while states are positioned according to power relations, their positioning also affects their behaviour'. 50 As a result, rules and institutions that highlight the international structure, on the one hand, its intersubjective aspect, and, on the other

⁴⁴ Klevis Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 213

⁴⁵ Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 214

⁴⁶ Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 215

⁴⁷ Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 215

⁴⁸ Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 225

⁴⁹ Kolasi, *Uluslararası Politikanın Yapısal Teorisi*, pp. 226

⁵⁰ Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 229

hand, its objective dimension that highlights the hierarchy and functional differentiation arising from power relations and cannot be reduced to intersubjective meanings. Therefore, someone who claims to cause the possible consequences caused by crises such as COVID-19 and, more precisely, any change, needs to explain to what extent it will trigger and influence the changes here.

V. Understanding the Post-COVID 19 Period: International Order Again

Since the new coronavirus has become a pandemic, it is discussed that global policy will have serious transformative consequences. It cannot be compared with any event of the millennium in terms of the scope and impact of the pandemic. According to Lawrence Summers, for example, the COVID-19 crisis is the third major shock to the global system in the 21st century, following the 2001 terrorist attacks and the 2008 financial crisis⁵² and, to him, the most important. Similarly, according to Steven Erlanger, the pandemic will lead to a reorganisation of politics.⁵³ Robert Kaplan says the pandemic is a marker between the two stages of globalization, emphasizing that nationalism has risen with a decline in trade and that geopolitical competition will increase.⁵⁴ Writers like Daniel Drezner say that the 'same terrain' will continue.⁵⁵ Kathleen R. McNamara and Abraham L. A third author, such as Newman, does not join either of these groups, and globalization is not just a win-win game, but rather a deeply transformational game.⁵⁶

Similar to Daniel Drezner's claims in this study, it is argued that the pandemic will not cause a serious change or transformation. Rather than a change, as Richard Hass said, the pandemic will accelerate the ongoing crisis.⁵⁷

While we are looking for answers to the question about what the new period will be like regarding the pandemic affecting the whole dimension of social life, it is important to note that we do not necessarily see 'change' as a separate phenomenon from 'regularity' in the sense. As Colin Wight put it, 'change is constant in social life; the two are not opposite, but rather interdependent' 58 At the same time, 'changes need to have

⁵¹ Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 230

⁵² Lawrence Summers, 'Covid-19 looks like a hinge in history', Financial Times, May 14, 2020.

⁵³ Steven Erlanger, 'Spread of Virus Could Hasten the Great Coming Apart of Globalization', The New York Times, February 25, 2020.

⁵⁴ Robert D. Kaplan, 'Coronavirus Ushers in the Globalization We Were Afraid Of', Bloomberg, 2020.

⁵⁵ Daniel Drezener, The Song Remains the Same: International Relations After COVID-19', International Organisations, Vol 74, Supplement 2020, p.1-18.

⁵⁶ Kathleen R. McNamara and Abraham L. Newman, "The Big Reveal: COVID-19 and Globalization's Great Transformations', International Organisations, Vol 74, Supplemental Issue, 2020, p.1-19.

⁵⁷ Richard Hass, 'The Pandemic Will Accelerate History Rather Than Reshape: It Not Every Crisis Is a Turning Point', Foreign Affairs, April 7, 2020.

⁵⁸ Colin Wight, 'Violence in international relations: The first and the last word', International Relations, 2019, Vol. 33, No. 2, 2019, p.173.

verifiable and significant consequences, or else it will be no more than a quantitative statement, even though it shows that the present is not as it used to be'. ⁵⁹

As shown in this study, Drezner also emphasizes that although the pandemic has short-term significant effects, in order to be a turning point, key factors such as power distribution, interest calculation, or the social structure of actors need to be transformed.⁶⁰

For example, although a significant number of people died, the 1918 pandemic did not occupy an important place in history. According to Drezner, the impact of COVID-19 on international policy will be nothing more than a footnote.

The pre-pandemic status quo was a slow shift towards bipolarity, as well as a slow tendency towards greater closure in the internal interests of great power. These factors help explain the low levels of pandemic cooperation in 2020. However, the first six months of the pandemic give little indication that COVID-19 will cause dramatic changes in these factors. The lack of unexpected changes in key independent variables will leave little to say to most academics about the macro effects of COVID-19 on world politics. Compared to past pandemics, COVID-19 is likely to hit a footnote at the academy of international relations.⁶¹

When defining the structure above, we said that it consists of hierarchy, functional differentiation, power distribution and geo-technical capabilities, which are its three elements. In this sense, the 'size of differentiation' in these three elements of the structure makes strong structural analysis possible and 'pointing to the positions of actors and their characteristics and relationships that make them part of the system' allows us to reveal structural explanation. While the hierarchy points to unequal relations in terms of power, the dimension of the meaning of 'distribution of capacities' points to as long as Drezner says 'a slow shift towards bipolarity'. However, as Klevis Kolasi demonstrates, when we consider 'the distribution of economic power and the rules governing international regimes' based on this differentiation, functional differentiation begins to become evident. Again, as a form of hierarchy, when we consider the concept of hegemony (but not as a superiority in the traditional sense) as' the functioning of

⁵⁹ Ibid, p.177; Set Center and Emma Bates show that 7 themes emerged with the crises in their report. Some of these points to 1. Order don't fall apart with a few conferences. 2. The distortion opens windows for various actors to shape the order. 3. Order is not always an architecture: It can produce a practical problem-solving scheme. 4. Disorder can give old ideas a new life. 5. Contradictions and seeds of future discussions are often transformed into new patterns. 6. Order requires the building of a coalition that strengthens small states. 7. Failed orders can be revised without major disruption. Set Center and Emma Bates, 'After Disruption Historical Perspectives on the Future of International Order', Center for Strategic International Studies, September 2020.

⁶⁰ Drezner, 'The Song Remains the Same: International Relations After COVID-19', pp. 2.

⁶¹ Drezner, "The Song Remains the Same: International Relations After COVID-19", pp. 2.

⁶² Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 217

⁶³ Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 223

socio-economic political and cultural order ', we can reveal the functional differentiation-based appearance of the international order. In this sense, Kolasi says that there is a form of hierarchical differentiation based on power relations, even though it includes both the hierarchical and the functional differentiation dimension of the structure. ⁶⁴In the last context, hierarchy and power relations show their effects through functional differentiation geo-technology and institutions. ⁶⁵ The positions of states based on power relations and having unique causal power also give them a certain status and perpetratorship. The fact that China did not fulfill its role during the US pandemic and that China took part as a more active actor does not displace the superpower of the US.

Although America, seen by many authors as a declining power, has been deeply influenced in recent years as a result of its introverted policies, it is not exposed to a serious impact due to its social position in the international system; on the contrary, it is claimed that the US will return after Trump and fulfill its duties as a hegemon that builds the international liberal order and the most important actor in power inequality arising from functional differentiation. Because the current liberal order is based on 'a hierarchical order of sovereignty', as John Ikenberry has shown.⁶⁶ The liberal international order is therefore "based on a political structure regulated by formal and informal upside-down relations in which states differ in terms of their functions"⁶⁷

The narrowing of the globalization that started before the pandemic, the rise of populism and nationalism, the withdrawal of the US from its global role, the fact that the EU is dealing with passive and internal issues and the problems arising from the neoliberal economic order for many years highlight the claims that it will cause a serious break with the fall of the US that built this economic and political order. However, as John Ikenberry emphasized, this order will continue because it is more than the hegemonic order of the United States. Although the liberal international order was built by America, it deeply embedded and is likely to continue its distinctive characteristic, such as 'openness, rules and multilateral cooperation.⁶⁸

According to John Ikenbery, liberal internationalism is not a synonym for the concept of globalization. As we mentioned above, interdependence is related to the management of this dependence arising from the globalization of the wound. Once the states accept this order, the destructive effects of the rules of the liberal international order arising from open markets are important in soothing the states without losing their suspicions. Therefore, rather than being a turning point of the pandemic, the main question is how

⁶⁴ Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp.224

⁶⁵ Kolasi, Uluslararası Politikanın Yapısal Teorisi, pp. 224

⁶⁶ Çınar Özen ve Klevis Kolasi, "ABD'nin Almanya Politikası ve Yapısal Belirleyenler: Savaş Sonrası Güç Asimetrisi ve Hegemonik Düzen İnşası", Ankara Avrupa Çalışmaları Dergisi, 2016, p.131

⁶⁷ Özen ve Kolasi, "ABD'nin Almanya Politikası ve Yapısal Belirleyenler", pp. 131

⁶⁸ G. John Ikenberry, 'Why the Liberal World Order Will Survive', Ethics & International Affairs, Vol 32, No 1, 2018, p. 17-29.

the ongoing dissatisfaction for years will affect the liberal international order itself rather than a serious change with its consequences such as the economic crisis.⁶⁹

VI. Conclusion

In the seventh month of the pandemic, its psychological, social and political effects are felt more, but it is not yet possible to give a clear answer to its possible effects on global relations. However, although international relations students cannot answer what will happen and when, it provides an opportunity to make a prediction about which factors the international system and its structure limit the phenomena and can cause change – although our foresight history is not good, as Drezner said. Although the devastating effects of epidemics and pandemics have been shown in this study, COVID-19 has not been shown to be a turning point that will cause change in this sense; however, it has also been emphasized that it may cause the dissatisfaction caused by the international liberal order to accelerate.

Although the international liberal order was built by the United States, as John Ikenberry said, it has deep roots that transcend it. Thus, although there is a direct relationship between the decline of the US hegemony and the crisis of the liberal order, the international liberal order is autonomous and, according to it, will be reshaped. The financial factors available suggest that the pandemic cannot affect the perpetratorship of the United States, which is seen as a passive actor and argued to be in decline. Similarly, although the social position of the USA in the international system is affected in the short term by actors such as Trump, other states do not fully focus on cooperation with China due to this position. In this study, although it is accepted that US hegemony has declined following Ikenberry, it is accepted that this will not mean the transformation of the order as he said. On the other hand, it should not be overlooked that the United States, a superpower, can fulfill its obligations based on functional difference by returning to the game after the elections. Hegemon is still a superpower in decline and will be able to take back responsibility for the international liberal order in the fight against the problems arising from globalization. Therefore, the subsequent pandemic will not lead to more consequences than a change, more than the acceleration of the previous crisis.

⁶⁹ While this discussion goes beyond the purpose of the article, if the continuity moves in the direction that Ikenberry says, then we can witness the international liberal order 2.5 or 3.0. John Ikenberry, 'Liberal Internationalism 3.0: America and the Dilemmas of Liberal World Order', *Perspectives on Politics*, Vol 7, No 1, 2009, pp.71-87.

BIBLIOGRAPHY

- ALFANİ, Guido, Tommy Murphy, 'Plague and Lethal Epidemic in the Pre-Endustrial World', *The Journal of Economic History*, Vol. 77, No. 1, pp. 314-44.
- ALMAMMADOV, Rasul, 'İklim Değişikliği Politikalarının Başarısızlığı Üzerine I', http://rasulalmammadov.blog-spot.com/2020/01/iklim-degisikligi-politikaların_31.html (Erişim: 30 Ağustos)
- AYOLAN, Yaron, 'Black Death and the rise of the Ottomans', *Natural Disasters in the Ottoman Empire Plague, Famine, and Other Misfortunes*, Cambridge University Press, 2014, 21-60.
- BUCHİLLET, D., 'Epidemic Diseases in the Past: History, Philosophy, and Religious Thought', Tibayrenc Michel (ed.). *Encyclopedia of Infectious Diseases: Modern Methodologiess*, J.Wiley, 2007, pp.517-24.
- BUZAN, Barry, George Lawson, *The Global Transformation History, Modernity and the Making of International Relations*, Cambridge University Press, 2015.
- CENTER, Set ve Emma Bates, 'After Disruption Historical Perspectives on the Future of International Order', Center for Strategic International Studies, Eylül 2020.
- CHASE-DUNN, Christopher, *Global Formation: Structures of the World-economy*, Maryland, Rowman and Little-field, 1998.
- COHN, Samuel K., 'Pandemics: waves of disease, waves of hate from the Plague of Athens to A.I.D.S.', *Historical Research*, Volume 85, Issue 230, 2012, pp. 535–555;
- CORONAVIRUS: Stock markets suffer worst guarter since 1987, BBC, 31 Mart 2020.
- HUREMOVİC, Damir, 'Brief History of Pandemics: Pandemics Throughout History', Damir Huremovic (der.), Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak, Springer, 2019, pp.7-37.
- DEMİRBAŞ, Dilek ve d. *The COVID-19 Pandemics and its Economic, Social and Political Impacts,* Istanbul University Press, 2020.
- DENMARK, Berth vd., Toplumu Açıklamak: Sosyal Bilimlerde Eleştirel Realizm, Phoenix Yayınları, 2018.
- DİAMOND, Jared, *Tüfek, Mikrop ve* Çelik: İnsan *Topluluklarının Yazgıları*, Çev. Ülker İnce, TÜBİTAK: Popüler Bilim Kitapları, 2001.
- DONNELY, Jack, 'The Elements of the Structures of International Systems', *International Organisations*, Vol 66, Issue 4, 2012.
- DREZNER, Daniel, 'The Song Remains the Same: International Relations After COVID-19', *International Organisations*, Vol 74, Supplement 2020, pp.1-18.
- DUBEY, Souvik ve d. 'Psychosocial impact of COVID-19', *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, Volume 14, Issue 5, September–October 2020, pp.779-788.
- ERLANGER, Steven, 'Spread of Virus Could Hasten the Great Coming Apart of Globalization', *The New York Times*, February 25, 2020.
- FEARS, J. Rufus, 'The plague under Marcus Aurelius and the decline and fall of the Roman Empire', Infect Dis Clin N Am 18, 2004, 65–77
- GIDDENS, Anthony, The Politics of Climate Change, Polity, 2009.
- GOLDÍN, Ian ve Mike Mariathasan, *The Butterfly Defect: How the Globalisation Creates Systemic Risks*, Princeton University Press, 2014.
- GOPINATH, Gita, 'The Great Lockdown: Worst Economic Downturn Since the Great Depression', *IMF blog*, Nisan 14, 2020.
- HASS, Richard, 'The Pandemic Will Accelerate History Rather Than Reshape: It Not Every Crisis Is a Turning Point', Foreign Affairs, April 7, 2020.
- HENDERSON, A., 'The eradication of smallpox An overview of the past, present, and future', *Vaccine*, Volume 29, Supplement 4, 2011, pp.7-9.
- IKENBERRY, G. John, 'Why the Liberal World Order Will Survive', Ethics & International Affairs, Vol 32, No 1, 2018, pp.17-29.
- IKENBERRY, John, 'Liberal Internationalism 3.0: America and the Dilemmas of Liberal World Order', *Perspectives on Politics*, Vol 7, No 1, 2009, pp.71-87.
- JONES, Kate E. ve d. 'Global Trends in Emerging Infectious Diseases', Nature, Vol 451, 2008.
- JONES, Lora ve d., 'Coronavirus: A visual guide to the economic impact', BBC, 30 Haziran 2020.
- KASWA, Ramprakash ve Indiran Govender, 'Novel coronavirus pandemic: A clinical overview', S Afr Fam Pract., 62(1), a5123, 26 June 2020.
- KAPLAN Robert D., 'Coronavirus Ushers in the Globalization We Were Afraid Of', Bloomberg, 2020
- KOLASİ, Klevis, 'Uluslararası İlişkiler Teorisinde Bilimsel Realizm ve Yapı Kavramı', *Ankara* Üniversitesi *SBF Dergisi*, 2018, Cilt 73, Sayı 4, pp.931 958
- KOLASİ, Klevis, *Uluslararası Politikanın Yapısal Teorisi: Kenneth Waltz ve Alexander Wendt'in Uluslararası Yapı Kavramsallaştırmalarının Eleştirisinden Yeni Bir Senteze Doğru*, Ankara Üniversitesi: Yayımlanmış Doktora Tezi, 2016.

- KOLASİ, Klevis. "Uluslararası İlişkilerde Sosyal Ontoloji Kavrayışının Meta-Teorik Eleştirisi". Uluslararası İlişkiler Dergisi 15 (2018): 3-18.
- KUMAR, Dharmendra vd., 'Corona Virus: A Review of COVID-19', Eurasian Journal of Medicine and Oncology (EJMO), March 2020.
- LEPAN, Nicholas, 'Visualizing the History of Pandemics', Visual Capitalist, 11 March, 2020.
- LİU, Yen-Chin ve d., 'COVID-19: First Documented Coronavirus Pandemic in History', *Biomedical Journal*, April 2020.
- MCDONNALD, Gleen, 'The Global Virome Project Is Hunting Hundreds of Thousands of Deadly Viruses', Seeker, 30 Jan, 2018., Netflix: The Next Pandemic, October 2019.
- MCKİBBİN, Warwick ve Alexandra Sidorenko, 'The Global Cost of an Influenza Pandemic', *The Milken Institute Review*, 2007, pp.18-27.
- MCNAMARA, Kathleen R., Abraham L. Newman, 'The Big Reveal: COVID-19 and Globalization's Great Transformations', *International Organisations*, Vol 74, Supplement 2020, pp.1-19.
- MOORE, Jason, 'The Crisis of Feudalism: An Environmental History', *Organization & Environment*, 15(3), 2002, pp.301-22.
- NiCOLAS LePan, 'A visual history of pandemics', WEF, 15 March, 2020.
- ÖMER Karaoğlu, 'Salgınların İktisat Tarihi', Dilek Demirbaş ve d. COVID-19 Pandemi 'si 'ni 'n Ekonomi 'k, Toplum-sal ve Si 'yasal Etkileri, İstanbul Üniversitesi Yayınları, 2020.
- ÖZEN, Çınar, Klevis Kolasi, 'ABD'nin Almanya Politikası ve Yapısal Belirleyenler: Savaş Sonrası Güç Asimetrisi ve Hegemonik Düzen İnşası', Ankara Avrupa Çalışmaları Dergisi, 2016.
- SECON, Holly ve d., 'A comprehensive timeline of the coronavirus pandemic at 6 months, from China's first case to the present' *Business Insider*, 1 July, 2020.
- SMITH, Katherine E. ve d. 'Global Rise in Human Infectious Disease Outbreaks', *Interface: Journal of Royal Society*, 6 December, 2014.
- SNYDER, M. R., ve , S. J. Ravi, '1818, 1918, 2018: Two Centuries of Pandemics', *Health Security*, Volume 16, Number 6, 2018, pp.1-6.
- SPINNEY, Laura, 'The flu that transformed the 20th Century', BBC Future, 17 October 2018;
- SUMMERS, Lawrence, 'Covid-19 looks like a hinge in history', Financial Times, May 14, 2020.
- THE Global Virome Project: A First Step Ending the Pandemic Era, Consortium of Universities for Global Health https://www.cugh.org/sites/default/files/CS34_AllPresentations.pdf (Erişim 22.08.2020)
- THE Next Pandemic, Netflix, October 2019.
- TIMELİNE: WHO's COVID-19 response https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline (Erişim: 31.08.2020)
- WALSH, Bryan, End Times: Brief Guide to the End of the World, Hachette Books, New York
- WALTZ, Kenneth, Uluslararas Politika Teorisi, Cev. Osman S. Binatlı, Phoenix, 2015.
- WENDT, Alexander, "Anarşi Devletler Ne Anlıyorsa Odur: Güç Politikalarının Sosyal İnşası", *Uluslararası* İlişkiler, Cilt 10, Sayı 39 (Güz 2013), pp. 3-43
- WENDT, Alexander, *Uluslararası Siyasetin Sosyal Teorisi*, Çev. Suna G. Öner ve Helin Sarı Ertem, Küre Yayınları, 2016, 2. Baskı.
- WHO: Coronavirus Disease (COVID-19) Dashboard https://covid19.who.int/ (Erişim: 31.08.2020)
- WIGHT, Colin, 'Violence in international relations: The first and the last word', *International Relations*, 2019, Vol. 33, No. 2, 2019, pp.173.
- World's poorest being pushed 'closer to the abyss' of famine, warns WFP chief, UN News, 17 July.

COVID-19 and World Health Organisation (WHO) Institutional Decoupling: the Future of Global Health Governance

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Abstract

The purpose of this research is to show how the question on the origins of the Corona virus (COVID-19) has become a political force behind the decoupling among states which negatively affects world health cooperation. Intensified competition for global leadership of the political system through health affairs points to impending crisis. COVID-19 is a test for the Global Health Governance System (GHGS) since the current pandemic politics are leading towards a state centric health approach. While GHGS is professional the apparent politicisation of the GHGS, raises the critical question about the future of the WHO. The World Health Organisation (WHO)

Özet

Bu çalışmanın amacı koronavirüsün kökenleri ile alakalı soruların dünya sağlık işbirliğini olumsuz yönde etkileyen, devletlerarasında devam eden ayrışmaların arkasında nasıl siyasi bir güç haline geldiğini göstermektir. Sağlık işleri aracılığıyla siyasal sistemde küresel bir lider olabilmek için yapılan gözle görülür yoğun rekabet ortamı yaklaşmakta olan felaketin ayak sesleridir. Mevcut olan COVID-19 pandemi politikaları devlet merkezli sağlık yaklaşımını işaret ettiğinden ötürü Küresel Sağlık Yönetim Sistemi (KSYS) için bir test niteliğindedir. KSYS profesyonel olsa da KSYS'nin siyasallaşması, beraberinde DSÖ'nün geleceğinin ne olacağı hakkındaki kritik soru-

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has been at the centre of the COVID-19 crisis management and the emerging criticisms associated with the WHO's role in the pandemic is that WHO was more theoretical than practical in handling the pandemic; a kowtowing body which failed to effectively use the legal instruments at its disposal to manage the crisis. The guiding research guestion is how will the post-COVID-19 WHO look, given the expression of will to discontinue health cooperation by states. The research used qualitative explanatory case study approach to explore and explain the phenomenon GHGS based competition by states. Through a consistent reflexive process, the study gathered data from legal and policy documents, journal articles and e-sources. The findings reflect that as states fully assume the sovereign role over health security, the WHO has turned into a tool of double standards and propaganda. Conflicts permeating economic, geo-politics and military spheres have extended to health sector and health diplomacy. The study contends that the post-COVID-19 WHO will be characterised by states asserting unfettered sovereign autonomy and the diminishing role of ad-hoc strategies at bilateral and multilateral levels. In case of compromise, the WHO will be a place where the rising confident powers can play a meaningful role.

Keywords: COVID-19, Institutions, Decoupling, World Health Organisation (WHO), Global Health Governance yu gündeme getirmektedir. Dünya Sağlık Örgütü (DSÖ) kriz yönetiminin merkezinde ver almıstır ve DSÖ'nün pandemideki rolü ile ilgili yapılan eleştiriler onun pandemiyle mücadelede pratikten daha çok teorik olmasıyla alakalı olduğu ve pandemiyi yönetmek için elindeki yasal aracları etkin bir sekilde kullanamadığı yönündedir. Devletlerin sağlık is birliğini sonlandırmak istemesi göz önüne alınacak olursa COVID-19 sonrasında DSÖ'nün nasıl görüneceği yol gösterici bir araştırma sorusudur. Bu araştırma devletler tarafından KSYS'ye dayanan rekabeti keşfetmek ve açıklamak için nitelikli açıklayıcı durum çalışması kullanılmıstır. Tutarlı ve dönüsümlü bir süreç yoluyla çalışma, yasal ve politika belgelerinden, dergi makalelerinden son olarak e-kaynaklardan veri toplandı. Eldeki veriler devletlerin sağlık güvenliği üzerindeki egemenlik rolünü tam olarak üstlenmeye çalıştığını gösterirken, DSÖ'nün bir çifte standart ve propaganda aracına dönüştüğü de görülmektedir. Ekonomik, jeopolitik ve askeri alanlarda etkisini gösteren catışmalar sağlık sektörüne ve hatta sağlık diplomasisine kadar uzanmıstır. COVID-19 sonrası DSÖ'nün sınırsız egemenlik iddiasında bulunan devletler ile iki taraflı ve çok taraflı düzeylerde geçici stratejilerin azalan rolü ile şekilleneceği tartışılmaktadır. Uzlaşma durumunda. DSÖ kendi yükselişine güvenen güçlerin aktif bir şekilde rol alabileceği bir yer olacaktır.

Anahtar Kelimeler: COVID-19, Kurumlar, Ayrıştırma, Dünya Sağlık Örgütü (DSÖ), Küresel Sağlık Yönetişimi

I. Introduction

The COVID-19 has taken triggered social, political and social changes in the world. Crisis permits change, removes normal times, favours the status quo or overturns it.1 COVID-19 has reverberating effects on the institutional setting of the WHO, a post-1945 organisation established under the United Nations (UN) for world health co-operation.² Despite the altruism at the inception of the WHO, in the current COVID-19 pandemic systemic sustainability is under threat. The organisation has played a key role in healthcare in the past; dealing with Smallpox 1980, Adoption of the Convention on Tobacco Control (FCTC) by 2003 and the revision of the International Health Regulations (IHRs) in 2005 and others.³ However, WHO has been criticised for slow and double standard response in the Ebola outbreak in West Africa (2014) and the Congo Ebola crisis which lasted till March 2020.4 With COVID-19, the 72 year old organisation lacked the will to enforce the IHRs effectively in dealing with COVID-19. The available GHGS rules were allegedly side-lined by China and then the western states protested. The dilemma is that the GHS rule-based co-operation system will face a host of challenges and in the worst scenario possible complete breakdown⁵. The novelty attached to the virus is not only non-treatability, but also the locale of emergence (China) where surveillance was difficult because of sovereignty claims.6 The lockdown became the basic response; health issues became really nationalistic, securitised and an existential threat relegating the WHO's role and International Health Regulations (IHRs).

The WHO, Origins and Structure

Attempts at International Health Governance existed since the cholera outbreaks in the 19th century and later intensified by the "Serious Acute Respiratory Syndrome" (SARS) in 2002-2003. Between 1946-48 the WHO started with an Interim Committee on Health and later the WHO conference April 7, 1948 in Geneva where the organisation was established. It is composed of 193 member states. There is a seamless relationship between the functions on the WHO as laid in article 2 of the WHO Charter and the

¹ Nico Krisch, "COVID crisis and the change in Global Governance", *The Global*, 17, April 2020, https://theglobal.blog/2020/04/17/covid-crisis-and-change-in-global-governance/

^{2 &}quot;The WHO is the first established formal frontier of Global Health Governance (GHG) system operating through networking and transformation of health administration across borders." Haremiri Stephen, "COVID-19: Time to Bring back the State", PEP Sydney, 19, March, 2020, https://www.ppesydney.net/covid-19-time-to-bring-back-the-state/.

³ Reddy, Srikanth et al, "The financial sustainability of the World Health Organization and the political economy of global health governance: A review of funding proposals", Global Health Journal 14, (June 2018): 119-1135.

⁴ Glasser Brenard, "Examining China's influence in the World Health Organisation", *Centre Strategy and International Security*, 23, June 2020, www.csis.org/podcast/chinapower/examining.

⁵ Gostin Lawrence, "COVID-19 Reveals the urgent need to strengthen the World Health Organisation", Jama Network, 2, May, 2020, https://jamanetwork.com/channels/health-forum/fullarticle/2765615.

⁶ Babones Salvatore, "Yes Blame WHO for its disastrous Coronavirus Response", Foreign Policy Response, 15, June, 2020, www.foreigpolicy.com/2020/05/27who-health-chna-coronavirus-tedros/.

⁷ Fidler Daveson, "Influenza virus samples, International Law and Global Health Diplomacy", Emerging Infectious Diseases Journal 14(1) (2008), 10.3201/eid1401.070700.

⁸ WHO is the higher "authority of health within the UN system to provide leadership on global health matters" through research, norms, standards and evidence-based policy formulation" World Health Organisation Charter, (1948)

WHO's "Six-Point Agenda" oriented at countering to the problems of an "increasingly complex and rapidly changing landscape" of global public health. In the WHO structure, the Wold Health Assembly (WHA) is the supreme decision-making body. The WHA is established by chapter 5 of the charter to be composed of representing state delegates. The organ has powers ranging from appointment of Director-General to making financial decisions9. Articles 21 and 22 provide for the establishment of rules and enforcement of such rules. The Executive Committee is there to enforce the decisions of the WHA as stipulated by article 28 of the charter among other issues. Secretariat as part of WHO was established in chapter 7 to comprise of the Director General and administrative staff (WHO Charter 1948). The office of the Director General is the epitome of effectiveness and transparency in the WHO.¹⁰ Another important aspect is with regards to the budget and expenses which according to the charter come in two main forms, country contributions (60%) and donations from other organisations or individuals (40%).¹¹ Overally, the set-up is such that the Director-General is the main face of the organisation, through his or her facilitation the organisation can make committees, enforce laws or decisions and contact other international organisations.

II. Conceptualization

COVID-19 is defined as illness caused by a novel coronavirus or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2 or 2019-nCoV) which was first identified amid an outbreak of respiratory illness in Wuhan City, Hubei Province in China.¹² It was originally reported to the WHO on December 31, 2019 and considered in an Emergency Committee on January 30, 2020.¹³ On March 11, 2020, the WHO declared COVID-19 a global pandemic, its first designation since declaring H1N1 influenza a pandemic in 2009.¹⁴ The name COVID-19 was chosen to avoid stigmatizing the virus's origins in terms of populations, geography and animal associations¹⁵.

Institutions-The concept of institutions is useful when describing the WHO in terms of its rules. Institutions are the formal and informal rules that organise social, political and economic relations.¹⁶ They are the system that structure interactions¹⁷. Overlapping networks of interactions and practises whether economic, political or cultural call for the drafting agreed and predictable rules of conduct these rules constitute institutions.

⁹ WHO Charter 1948, Article 18

^{10 &}quot;The Director General and the staff shall not seek or receive instructions from any government from any authority external to the organisation." WHO Charter 1947, Article 37.

¹¹ Babones, "Yes Blame WHO for its disastrous Coronavirus Response"

¹² Harapan Harapan, "Coronavirus disease 2019 (COVID-19): A literature review", *Journal of Public Health. 2020 May*;13(5):667-673, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7142680/.

¹³ Harapan, "Corona disease 2019 COVID-19", pp. 667

¹⁴ New York Times, "Corona Virus: What the Scientists have learnt so far", New York Times, 22, January, 2020, https://www.nytimes.com/article/what-is-coronavirus.html.

¹⁵ New York Times, "Corona Virus: What the Scientists have learnt so far", 2020

¹⁶ Rabinowizc Wlodek, "Are Institutions Rules in Equilibrium? Comments on Guala's Understanding Institutions" Journal of the Philosophy of Social Sciences Vol 11(12) (2018). pp. 19

¹⁷ Reel Dodgson, "Global Governance: Critical Perspectives." In Wilkinson R, Hughes S, Global Health Governance: Practice and Prospects, (London: Routledge) 2002

Institutions are hard to separate from organisations¹⁸ but they can be differentiated this way: If institutions are the "rules of the game", organisations are the playfield. Organisations are shaped by institutions and in turn shape institutional change.

Global Health Governance (GHG) and International Health Regulations (IHRs)- The GHG is the globalization of health needs and disease elimination desire reflected across protective internationally agreed standards.¹⁹ WHO is a GHG institution holding constitutional authority within the UN system to govern the GHG using IHRs.²⁰ The IHRs were established to link and coordinate actions to fight diseases²¹. IHRs are to "prevent, protect against, control and provide a public health response to the international spread of diseases in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade."²². They bind 196 signatory states, including all member states of the WHO. The IHR focus on public health events where 4 key considerations are present: seriousness, novelty of disease, risk of international spread, risk of international travel and trade restrictions²³. Through the IHR states have undertaken a range of obligations, mainly the timely reporting of public health emergencies. A critical question is whether states responses to the COVID-19 pandemic comply with the IHRs?

De-coupling-Decoupling is used here to explain conflict behaviour between states in the WHO due to the handling of the COVID-19 pandemic. Decoupling entails disentanglement of intergroup (states) relational ties from coupling for cooperation to non-cooperation. The process is mediated by emotional intelligence, intergroup relational ties and conflict relevant interactional norms paving way to negative emotionality which results in the emergence of a mutually hurting scenario.²⁴ The critical aspect is that when friction materialises in a cooperation or working relationship regarding rights, rules and position there is a tendency to limit involvement in the institution, in extreme circumstances dissociate and cut relations

III. Statement of the Problem

Although pandemics must be effectively managed using the IHRs, the COVID-19 pandemic coupled with geo-political and interstate hostilities made effective cooperation untenable. Thus COVID-19 became a menace threatening a global disaster in a politicised GHGS. Decoupling in health cooperation reflects the conflictual behaviour in the whole UN System.

¹⁸ Rabinowizc, "Global Governance: Critical Perspectives", pp. 23

¹⁹ Hewson Morris, "The Emergence of Global Governance Theory" in Hewson M. and Sinclair T. eds. Approaches to Global Governance Theory, (New York: SUNNY), pp. 3-22.

²⁰ Ruger John et al, The global role of the World Health Organization", *Global Health Governance Journal*, 2(2) (2008)

²¹ Suthar Amitabh, "Lessons learnt from implementation of the International Health Regulations: a systematic review", *Bulletin of the World Health Organization. 96.* pp. 110-121.

²² World Health Organisation. International Health Regulations Second edition, 2005, pp. 13.

²³ World Health Organisation. International Health Regulation, pp. 24.

²⁴ Yang Jixia and Mossholder Kelvin, Decoupling Task and Relationship Conflict: The Role of Intragroup Emotional Processing. *Journal of Organizational Behaviour*. 25 (2004), pp. 589 - 605.

This research examines how factors raised in the media narrative on origins and management of COVID-19 crisis shapes the decoupling process and the future of the WHO.

Objectives

- a) To explain the lax in enforcing GHGS's attendant laws facilitating global health co-operation
- b) Explain the causes and consequences of the conflictual behaviour
- c) To give a projection about the WHO's future and to give recommendations

Proposition

If there are bloc-based conflicts over the origins of COVID-19 in WHO there will be gradual desolation of the GHGs and the WHO, as states will move to unfettered sovereignty on their health systems.

IV. Theoretical Framework

The study used the liberal institutional theory to explain the existence of the WHO. Secondly, it is the ideal framework to discuss the revival of the realist attitude by states towards the IHRs in the WHO as a result of COVID-19; this demonstrates what happens when liberalism fails. The study is informed by institutional liberalism because it states the indelible role of global institutions in facilitating cooperation on any subject matter and the WHO is a casing in point.²⁵ However, this seems to be in jeopardy now given the conflict occurring within the organisation. Institutions are the ideal platforms but states will always cheat on obligations or compete. 26 Liberal institutionalism emphasises state "cooperation where interests are not fundamentally opposed".27 Furthermore, there is emphasis on interdependence, democratisation and the rising of a trading state. The fore-conception is that states mutually benefit from policies and regulations for managing common areas of cooperation where their interests are not mixed;28 an escape from the state enclave of isolationism. However, when state interests conflict states de-copulate and return to anarchy and self-help.²⁹ In such circumstances, states cheat on the accepted rules to achieve certain goals, which is mainly security. Under this theory the WHO is a formal entity with a charter which describes "when. why the institution came into being, what it is called and which countries can be member to it."30 As such a legal basis dictates the bureaucratic organisation as well as the internal rule that all member states should closely adhere³¹. It also dictates the financing of the organisation. Such analysis is critical in explaining the functionality of the organisation in terms of what it can do or not do, its bureaucratic structure (administrative and political), research bodies

²⁵ Robert Keohane, Power and Governance in a Partially Globalized World, (New York: Mc Millan, 2003), pp. 23.

²⁶ John. J Mearsheimer, "False Promises of International Organisations. International", Security, Vol. 19, No. 3 (Winter, 1994-1995), pp. 5-49

²⁷ Mearsheimer, False Promises of International Organisations, pp. 23.

²⁸ Keohane, Power and Governance in a Partially Globalized World, pp. 34.

²⁹ Mearsheimer, False Promises of International Organisations, pp. 45.

³⁰ Samuel. J. Barkin, *International Organisations: Theories and Institutions (2nd Edition).* New York: Palgrave McMillan, (2013), pp. 35.

³¹ Barkin, International Organisations: Theories and Institutions (2nd Edition), pp. 67

and direct implementation of projects. The institutional set-up and the rules can have an impact on what states expert from these organisations though counterpart states who equally bear the obligations, though they may choose to defer from institutional rules.

V. Methodology

Methodology is as a set of established rules or ideas that are central in social science.³² The study was a literature based explanatory case study. It explained novel actions and events that have occurred since December 2019. An explanatory case study was appropriate in answering how and why conflictual behaviour is exhibited in public health matters. This helps understanding of the conflictual behaviour in the WHO. Explanatory studies form big data that is useful if allowing description and explanation concurrently³³. By use of document review and internet-based survey the study gathered necessary data to answer the research question. To conduct analysis and to project the possible future of the WHO, this paper focused on the WHO and institutional members. It examines the IHRs, how they should have been applied and what the WHO directorate did.

VI. Findings

Causes for Institutional Conflict

Conflicts in the WHO are based on blame game between the USA and China. Especially WHO's failure in disease surveillance and response coordination. Health cooperation proved to be a complex arena with actors operating at different levels of policy, constituencies with varying mandates, resources and authority. There are two theories about the WHO's miss-governance in the COVID-19 pandemic. Firstly, the USA accuse the WHO Director-General Teodros of conniving with China to conceal the gravity of the COVID-19, hence WHO is deemed a mouthpiece for China. USA wants the WHO to serve its purpose or else it exits an organization which speaks for anyone else especially China. Secondly, there is the counter Chinese government view which claims that COVID-19 was imported from USA.34 Conflict also emerged from information management. Information gaps explain why the WHO was somewhat lax in declaring the virus a Public Health Emergency of International Concern (PHEIC) which made a concerted response impractical since WHO is alleged to have accepted China's reports that therewas "no evidence of human-to-human transmission." Hence, the USA's decision to cut funding from the WHO and to pull out. America is abdicating its long-held function as the guarantor of globalization while potentially paving way to China.

Lax Enforcement of IHRs

The study found that there was lax institutional rule enforcement because of diverse reasons. Firstly, the comprehensive IHR, a legal instrument with 66 articles, 19 annexes and 2 appendixes have regulations that are essentially a secondary law of an interna-

³² Allan Bryman, Social Research Methods. 4th Edition, (Oxford: Oxford University Press, 2010), pp. 67.

³³ Hennink Monique et al, Qualitative Research Methods, (London: Sage 2010), pp. 47.

³⁴ James Comer, "China-Centric WHO not entitled to American tax dollars", 4, July, 2020. www.comer.house.gov/media/press-releases/china-centricc-w-h-o.

³⁵ Peng Nian, "New Battleground for China-US competition", *Think China*, 15, June 2020. www.thinkchina.sg/new-battleground-china-us-competition.

tional organization which rendered it to have less direct effect. Hence, the declining confidence in the IHR due to inconsistent compliance by sovereign states which is the core mandate of the legal instrument. Secondly, the WHO failed to exercise global health leadership in exercising power through its rules-based in Article 7, 8 and 9.36 This exhibit WHO bowing to political pressure. The WHO directly collect information on the consent of member states: Article 4 alternatively mentions that data on diseases can be obtained from non-governmental sources and can be verified with the government. Thus, the WHO is dependent on states. Much of the IHR mandates; reporting and monitoring of notifiable diseases outbreaks were non-applicable in China because of state censorship. Article 6 obliges countries to inform the WHO within 24 hours of all events that may constitute a public health emergency of international concern (PHEIC). Article 9 allows WHO to take urgent action based on information from other sources such as social media which is regarded as reporting. The WHO failed to exert its authority to enforce these. Adequate proof to declare COVID-19 a PHEIC existed as early as 23 January 2020, but the lack of consensus in the Emergency Committees that sat to consider the issue caused the declaration to be made in March. Thirdly, there was violation of human rights. Article 18 of the IHR recommends standards for the placing of infected persons in isolation, travel bans and screening procedures³⁷. Contrary to this, some of China's strategies such as mass quarantine violated human rights violating the provision of the mandates of the IHR which affirms the freedom (Article 31 on the respect of traveler's dignity) and respect of human rights. Article 40 affirms that states should not charge international travelers costs of health quarantines, isolations and testing but contrary to this in some African and European countries have violated this.

Decoupling: Race for Superpowership

Firstly, COVID-19 catalyzed the rapidly escalating conflict in the WHO mainly between the West and the East.³⁸ Secondly, the political conflict; from military force to the phenomenon of "Wolf Warrior Diplomacy."³⁹ USA and allies verbally attacking China within and without WHO and Chinese diplomats attacking the rest, hence the diplomatic fall outs with consulate and embassy closures in USA and China. Russia kept low while the West (USA, Australia and others) clashes with China have been vocalized and actioned through state based policy positions and institutional positions directed by political speeches. Third, the conflict is an extension of China's race to attain global leadership through assorted conflicts such as trade war with the USA and regional politics (China Sea).⁴⁰ COVID-19 opened another race for global leadership as conflict change from economic organizations to public health in the WHO. The COVID-19 pandemic will

³⁶ International Health Regulations, 2005, pp. 10.

³⁷ International Health Regulations, 2005, pp. 17.

³⁸ Haas Richard, Relations on the Brink between USA and China. *Irish Examiner*, 20 April 2020. https://www.irishexaminer.com/opinion/commentanalysis/arid-40031882.html.

³⁹ Jiang Shixue, Global Health Governance in post COVID-19 Era, *China Daily, 1 February 2020.* www.chinadaily/kng-global-governance-postcovid-era.

⁴⁰ Drentrup Henry, "How WHO became China's Corona virus accomplice", Foreign Policy, https://foreignpolicy.com/2020/04/03/china-coronavirus-who-helth-soft-power, 12 July 2020.

necessitate the move from a G2 system dominated by China and USA to a G0 without dominance, but much more divided leadership⁴¹.

Fourth, COVID-19 challenges USA's alliances with the European Union (EU). Alliances influence decision making in the WHO, more allies means global public health superpower status yet allies are central in USA's endeavors for global leadership. China is using two strategies in its diplomacy to decouple and outrun USA. First, countries that condemned China for the virus were subjected to trade and economic sanctions while the neutral-ones have received economic and medical support. The USA is focusing on America first security while China began deploying resources to co-opt Western aligned states in the Europe and Africa. This can be inferred from Serbia's presidential speech which stressed the abstractness of WHO and EU but instead declared China the remaining source of help.⁴² This does not represent a common EU position but China is gaining ground in originally USA dominant areas since Europe needs medical and economic help. China is proving beyond the WHO its strength as a global health leader and that USA is a weak ally. The fundamental question that remains for Western policy makers is whether the allies accepting the pandemic assistance will see China the same way the West (especially USA) do.

Fifth, the next vital strategic battle frontier is the search for a cure or vaccine. Though the WHA proposed a "patent free people's vaccine"43, the race for COVID-19 resources and the vaccine is fierce. This is a menace for the West since the COVID material supply chain is connected to China. The way the states are working independently shows the insignificance of the WHO in default realism. USA, Russia, China, Britain and Germany are racing for the vaccine. Turkey, aspiring power for Middle East leadership has also joined the search. The race has become similar to the rocket race during the Cold War (Russia named its potential vaccine Sputnik V after the first space rocket launched in 1957). At the time of the writing, China had 10 companies with vaccines being tested and 4 in the third final stage compared to USA with only 6 companies testing with one in the phase.⁴⁴ On August 11 2020 Russia declared victory on the vaccine race. There is behaviour of self-help like in the armament race. Russia never released data concerning the vaccine that they claimed, while on the other hand USA alleged hacking of its vaccine research data servers. The disarray and apparent absence of cooperation in the race for a vaccine or a cure testifies to the waning value of institutional rules in the wake of the pandemic.

VII. Discussion

The WHO is an embattled organization due to institutional contestation. Controversies on the origins of COVID-19 virus are less scientific but political because of mis-informa-

⁴¹ Nian, "New Battleground for China-US competition", 2020.

⁴² Harapan et al, "Coronavirus disease 2019 (COVID-19)", pp. 669

⁴³ Nian, "New Battleground for China-US competition", 2020.

⁴⁴ Gavine Vaccine Alliance, "The latest in COVID Vaccine Race", 15 September 2020. https://www.gavi.org/vaccineswork/covid-19-vaccine-race.

tion, deflection politics of blame game hoisted in narrative spins. Focus on COVID-politicking by states promoted regulatory deviation. The success of the ideally proactive IHR laws hinged on the WHO became reactive at best, dysfunctional at worst. Under international law states should not act in ways that jeopardise treaty or agreed rules, but the IHRs have been violated during disease surveillance and vaccine search. Overally, surveillance credibility of the WHO as a GHG institution has been lost. Apparently, states can achieve goals effectively than international organisations hence the return to default realist relations. States have been primarily the overseers of their citizens using the expertise in WHO. In this predicament, states have resolved to monopolise health security to the extent of triggering conflict. Complexity of the conflicts fits the description of a "New Colder War" because of mutual sanctions and bellicose official speeches. Different blocs who find themselves in the same COVID-19 pandemic situation and similar organization setup perceive that competition for global leadership must continue in the pandemic. In the great decoupling, USA feels that it invested enormously in constructing global health governing capabilities and that in this seismic shift the system is serving others at their expense which is antithetical to USA dominance; hence threats to exit. Such threats to discontinue agreed commitments to cooperate for global health have created a "middle kingdom" to be explored by the willing. American exit from WHO will allow China's take over as it has done in four of UN's specialized agencies, UNESCO, UNHCR; clearly WHO the next target.

VIII. Conclusion

Through explanatory qualitative approach of the institutionally based conflictual behaviour in the WHO; the paper showed that there are greater power struggles mixed with desire by states to protect populations from COVID-19. This WHO based conflict represents the first instance of a openly securitised pandemic with political overtones of competitional politics in the last decade. WHO's IHRs were violated with impunity, yet they are the pillars of pandemic management. The continual of the competition in health will adversely affect the functionality of the WHO. As states battle for preponderance decision making in the organisation becomes ineffective, IHRs will be diminished to a vanishing point of international law, financial contributions will discontinue and debts to the organisation will increase. The WHO will not maintain a major role as before.

Recommendations

The role of the WHO needs to be protected from being engulfed by one dominant state. WHO ought to convene an international conference to thoroughly analyse the shortcomings of the IHRs. WHO's emergency committee and programs can have a separate governance authority consisting of an oversight and advisory committee. The UN Secretary general should appoint a permanent senior Global Health Security Advisor. This curbs the instances of politicisation of the position of the Director-General of the WHO. States need to build alternative supply chains for drugs and materials or opting for production not entirely relying on the Chinese rooted supply chain. This will increase the flexibility and responsiveness in the global supply of public health related equipment. Supply nationalism associated with the pandemic at national level is detrimental to fighting the pandemic.

BIBLIOGRAPHY

- Babones, Salvatore. Yes Blame WHO for its disastrous Coronavirus Response. Foreign Policy Response, www.foreigpolicy.com/2020/05/27who-health-chna-coronavirus-tedros/. 15, June, 2020.
- Barkin Samuel. J. International Organisations: Theories and Institutions (2nd Edition). New York: Palgrave Mc-Millan, 2013.
- Bryman Allan. Social Research Methods. 4th Edition. Oxford: Oxford University Press, 2010.
- Comer, James. China-Centric WHO not entitled to American tax dollars. www.comer.house.gov/media/press-releases/china-centricc-w-h-o, 4, July, 2020.
- Drentrup Henry. How WHO became China's Corona virus accomplice. Foreign Policy, https://foreignpolicy.com/2020/04/03/china-coronavirus-who-helth-soft-power, 12, July, 2020.
- Dodgson Reel, "Global Governance: Critical Perspectives." In Wilkinson R, Hughes S, Global Health Governance: Practice and Prospects, London: Routledge, 2002, Google Scholar.
- Fidler Daveson. Influenza virus samples, International Law and Global Health Diplomacy. *Emerging Infectious Diseases Journal* 14(1)(2008).
- Glasser, Brenard. Examining China's influence in the World Health Organisation. *Centre Strategy and International Security*, www.csis.org/podcast/chinapower/examining, 23, June 2020.
- Gavine Vaccine Alliance. The latest in COVID Vaccine Race, https://www.gavi.org/vaccineswork/covid-19-vaccine-race, 15, September, 2020.
- Gostin Lawrence. COVID-19 Reveals the urgent need to strengthen the World Health Organisation. Jama Network, 2 May, 2020.
- Haas Richard. Relations on the Brink between USA and China. *Irish Examiner*. www.irishexaminer/opinion/commentaanalysis/arid-40031882.html, 20, April, 2020.
- Haremiri Stephen, COVID-19: Time to Bring back the State, *PEP Sydney*, https://www.ppesydney.net/covid-19-time-to-bring-back-the-state/, 19, March, 2020.
- Harapan, Itoh Nayoa, Yufika Amanda, Winardi Wira, Keam Synat, Te Haypheng, Megawati Dengi, Hayati Zinatu, Wagner Abraham,L and Mudatsir Mudastir. Coronavirus disease 2019 (COVID-19): A literature review, *Journal of International Public Health*. 2020 May;13(5):667-673.
- Hennink, Monique., Hutter, Inge., Bailey, Ajay, Qualitative Research Methods. London: Sage, 2010.
- Hein Webster, Burris Sean, Shearing Cole, Conceptual Models for Global Health Governance. Palgrave Macmillan: A Policy Perspective, 2009. pp. 72–98, Google Scholar.
- Hewson Moris and Sinclair Thomson. "The Emergence of Global Governance Theory" in Hewson M. and Sinclair T. eds. *Approaches to Global Governance Theory* (New York: SUNY): 3-22.
- Ikenberry John, G. Liberal Internationalism 3.0: America and the Dilemmas of Liberal World Order. *Perspectives onPolitics* 7(01;2009):71-87.
- Keohane Robert. Power and Governance in a Partially Globalized World. New York: Mc Millan, 2002.
- Kirsich, Nico. COVID crisis and the change in Global Governance, *The Global*, https://theglobal.blog/2020/04/17/covid-crisis-and-change-in-global-governance/, 17, April 2020.
- Mearsheimer John. False Promises of International Organisations. International Security, Vol. 19, No. 3 (Winter, 1994-1995), pp. 5-49
- Nian, Peng. New Battleground for China-US competition. *Think China*, <u>www.thinkchina.sg/new-battle-ground-china-us-competition</u>, 15, June 2020.
- Rabinowizc, Wlodek. Are Institutions Rules in Equilibrium? Comments on Guala's Understanding Institutions.

 Journal of the Philosophy of Social Sciences Vol 11(12: 2018)
- Reddy Srikanth, Mazhar, Soh and Lencucha, Reel. The financial sustainability of the World Health Organization and the political economy of global health governance: a review of funding proposals. *Global Health* 14,119 (2018)
- Suthar, Amitabh., Allen, Lisa., Cifuentes, Sara., Dye, Christopher., Nagata, Jason. 2018. Lessons learnt from implementation of the International Health Regulations: a systematic review. *Bulletin of the World Health Organization. 96. 110-121E*, 2018.
- Shixue Jiang. 2020. Global Health Governance in post COVID_19 Era. *China Daily*. Available: www.chinadaily/kng-global-governance-postcovid-era, 1, February, 2020.
- Yang, Jixia, Mossholder, Kelvin. Decoupling Task and Relationship Conflict: The Role of Intragroup Emotional Processing. *Journal of Organizational Behavior. 25.(2004) 589 605.*
- Word Health Organisation Charter, 1948.

The Rise of State Authority in the Post-Pandemic World

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Abstract

The article seeks to explain that state authority has risen during the pandemic, which began due to the COVID-19 (Coronavirus) pandemic in the world. State authority has always shown that it will grow in times of crisis, because social order and security are more important to the state than anything else. In the study, the liberal, conservative, socialist views on the state authority were analyzed and the conservative and socialist understanding of the state came to the fore during the pandemic. Countries acting on their own against the pandemic all over the world, closing their borders and strengthening the control system have not only increased the state authority, but perhaps they

Özet

Makale, dünyada COVID-19 (Koronavirüs) salgını nedeniyle başlayan pandemi sırasında devlet otoritesinin yükseldiğini açıklamaya çalışmaktadır. Devlet otoritesi, kriz dönemlerinde büyüyeceğini her zaman göstermiştir, çünkü toplumsal düzen ve güvenlik devlet için her şeyden önemlidir. Çalışmada, devlet otoritesine ilişkin liberal, muhafazakar, sosyalist görüşler analiz edilerek, pandemi sırasında muhafazakar ve sosyalist devlet anlayışının öne çıktığı açıklanmıştır. Dünyanın her verinde salgına karsı kendi başlarına hareket eden, sınırlarını kapatan, kontrol sistemini güçlendiren ülkeler, sadece devlet otoritesini artırmakla kalmayıp, her zaman gündemde olan uluslarüstü kurumlara, küresel köy veya kozmopo-

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have always attacked the supranational institutions, a global village or a cosmopolitan world view. The structure and work of the state proved how important it was in the fight against the outbreak. It seems clear that socioeconomic and employment problems will intensify during and after the outbreak, and restrictions on freedom will trigger social unrest and protests. In this case, it will be more important for the state to ensure social order and eliminate an insecure environment. In addition, how high the state authority will rise will depend on the duration of the pandemic.

Keywords: COVID-19 (Coronavirus),

Pandemic, State Authority

lit bir dünya görüşüne saldırmışlardır. Devletin yapısının ve çalışma biçiminin, salgınla mücadelede ne kadar önemli olduğu kanıtlanmıştır. Salgın sırasında ve sonrasında sosyoekonomik ve istihdam sorunlarının yoğunlaşacağı ve özgürlük üzerindeki kısıtlamaların toplumsal huzursuzluk ve protestoları tetikleyeceği açıkça görülmektedir. Bu durumda devletin toplumsal düzeni sağlaması ve güvensiz ortamı ortadan kaldırması daha önemli olacaktır. Ayrıca devlet otoritesinin ne kadar yükseleceği pandemi süresine bağlı olacaktır.

Anahtar Kelimeler: COVID-19 (Koronavirüs), Pandemi, Devlet Otoritesi

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I. Introduction

The basis of social sciences is to investigate the necessary solutions when the functioning of society is disrupted. The English philosopher Thomas Hobbes wrote that societies would always be at war without a state authority. He proposed the establishment of a state authority with a "social contract" to avoid wars. With the development of liberalism and socialism movements in the Enlightenment period, the concept of "stateless society" (anarchy) also emerged. This understanding suggested that society could solve all kinds of problems without the intervention of the state. However, with the COVID-19 (Coronavirus) outbreak, it has been proven once again that the social order has been shaken globally and, in this case, it is the duty of the state to regulate the functioning of the society.

II. Theoretical Approaches to State Authority

There is a debate about state authority from the past. Plato's State, Hobbes' Leviathan, Enlightenments, especially Kant's "obey" concept, Weber's typology of three authorities and many other ideas and concepts were put forward by various authors on this subject.² Overall, there are three major approaches to invitation authority: conservative, liberal and socialist. Conservativism favors the rise of state authority. Conservatives who believe that the power of God is given to power glorify and defend state authority to obey it.³ Liberalism advocates limited or minimal state thinking and state authority. In

¹ Scott Gordon, Sosyal Bilimler Tarihi ve Felsefesi, çeviren, Ümit Tatlıcan, (Küre Yayınları, 2015), 19-24.

² Aliye Çınar, "Kimin Otoritesi? Hangi Otorite?" Uludağ Üniversitesi İlâhiyat Fakültesi Dergisi, Cilt: 15, Sayı: 1, (2006): 233-246.

³ Fatih Duman, "Muhafazakâr Düşüncede 'Otorite' Anlayışı", Milel ve Nihal, 14 (1), (2017): 135-159; Bekir Berat Özipek, Muhafazakarlık Nedir?, (Ankara: Liberte Yayınları, 2017); Hasan Hüseyin Akkaş, "Muhafazakâr Siyasi Düşünce Kavramı Üzerine", Sosyal Bilimler Dergisi, Cilt 5, Sayı 2 (2003): 241-254.

particular, F.A. Hayek violently attacked the central planning authority in the 20th century with the concept of "spontaneous order". Hayek, who opposed socialist planners in particular, claimed that individuals and groups in market societies can create social order without following the abstract rules of behavior by an authority. A beautiful slogan of the Liberals about state authority: "the best management is the least management". Socialists defend central state authority. However, socialist thinkers such as Kropotkin, who have anarchist views, strongly oppose the authority of the invitation. Communist socialists like Lenin-Stalin and Mao put state authority first. According to them, the state is obliged to fulfill all kinds of duties such as regulator, manager, guard, developer, educator, nutritionist, etc. Socialist socialists argue that social order and equality can be achieved through state intervention against the liberalist liberalism approach. In addition, a real 'anarchy' will prevail in a place where there is no state authority.

We see that the interventionist power of the state has increased due to the epidemic. It can be said that the concept of both conservative and socialist state authority has become increasingly strong and the liberal approach towards state power, which has maintained its effectiveness to date, has caused serious criticism. For example, Germany with a conservative state understanding and China with a socialist-communist state authority could carry out the most successful fight against the epidemic. With a liberal understanding of the state, the United States (US), France and other Western countries failed to provide the expected response to the outbreak. Additionally, even the liberal Western countries, which advanced the idea of a limited state, were able to demonstrate state authority during the pandemic. Therefore, we can say that state authority, whether conservative, socialist or liberal, has increased and will become even stronger during the pandemic. However, the idea of state authority with a conservative and socialist understanding will rise above all else.

III. Coronavirus, Problems and the Rise of State Authority

Emergence of Coronavirus and Problems

The coronavirus crisis has had all kinds of great effects on the world system, countries and people. Although the coronavirus is an expected epidemic, the destruction it will cause is not expected to be this great. World countries and people boasted of the health and treatment methods they developed until this crisis. In particular, the innovations and advances in the health system have been much discussed. However, the coronavirus has shown that much still remains to be done in this area. Another issue is that the area of change to be monitored is not only the health sector.

⁴ Buğra Kalkan. Kendiliğinden Doğan Düzen, (Liberte Yayınları, 2017).

⁵ Peter Kropotkin, Komünizm ve Anarşizm, çeviren. Anarşist Bakış. Erişim tarihi: 28.08.2020 // http://anarsizm.org/komunizm-ve-anarsizm-1901-peter-kropotkin/; Cengiz Çuhadar, "Anarşizm Düşüncesinde-ki Farklılıklar", Dini Araştırmalar, Cilt: 16, Sayı: 43 (2013): 114-115.

⁶ Ludwig von Mises, Sosyalizm, translator. Yusuf Şahin, (Liberal Düşünce, 2004); Scott Gordon, Sosyal Bilimler Tarihi... a.g.e.; Erkin Özalp, Sosyalizm ve Devlet, 2005. Erişim tarihi: 30.08.2020 // https://gelenek.org/sosyalizm-ve-devlet/

The coronavirus, which started in Wuhan, China (in December 2019), spread rapidly around the world. Some experts blame China for this. In particular, the US president D. Trump has been harshly critical of China. Since China is not a democratic country, it states that it hides such outbreaks, does not control them in time and does not warn the world. However, some experts have stated that this coronavirus, which is called 'COVID-19', was actually found 60 years ago and also emerged as SARS in 2003, and that the international health system is particularly careless in spreading and controlling such animal diseases.⁷

What the world will be like after COVID-19 is a subject that makes experts think a lot. Even the most developed and powerful country in the world in every field, the USA, has shown that it remains weak in front of such outbreaks. Politically, COVID-19 has shown the authority, coercive or totalitarian power of the state. The importance of the digital economy, which started with the fourth industrial revolution in economic terms, has moved to a further dimension with the pandemic. In social terms, it has shown that restricted people will experience uncommunicative depression and the concept of free people is very important. Politically, the authority of the state has come to the forefront.

Rise of State Authority

Why does government tyranny rise? In fact, in every crisis period, the state tends to show its authority. One of the most important functions of the state is protection and coercion. In times of crisis, coercion increases even more. Because maintaining order is more important to the state than anything else. However, this is often contrary to human freedom. Human nationality and action show that he is free, but the state criminalizes and punishes the individual by claiming that he violates the "social contract". It is noteworthy that social heritage has also strengthened in spite of the increase in state authority during crisis periods. For example, after the 2008 crisis, social heritage, protests and conflicts emerged in many countries, especially in European countries. In the pandemic crisis, there have been reactions to quarantine in many countries, especially in the USA and European countries. As social movements against transnational institutions and immigrants increased in European countries after the 2008 crisis, in this crisis, states started to make special decisions without looking at transnational institutions and decided not to include immigrants within their borders. It is currently suggested that migration to Europe and the United States will be very limited in at least 1-2 years.

What are the variations in the struggle in the countries during the epidemic? Why have some countries succeeded against the corona outbreak; some have failed? Despite the fact that democratic countries such as the USA, England, Italy and France have failed against the pandemic, some authoritarian countries such as China, Vietnam and so on have fought successfully. However, this does not apply to all democratic and authoritarian countries. For example, the democratic country Germany, Austria, Norway fought very

⁷ For discussions on Coronavirus disease 2019 (COVID-19) Situation Report – 94, https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200423-sitrep-94-covid-19.pdf; https://www.trthaber.com/haber/koronavirus/pompeodan-covid-19-wuhandaki-laboratuvardan-cikti-iddiasi-481355. html (Access date: 16.08.2020)

successfully, and the authoritarian country Russia and Iran failed. It is not true to say that this situation depends on the health system. What we can conclude from here is: ensuring state authority and order is the ability to take important measures in a timely manner.

Max Weber, who has been widely spoken in political science to date, has three authorities: Of the 'traditional', 'charismatic' and 'legal-usual' types, the 'legal-usual' system was always said to be the most efficient. Of course, we can say that the 'legal-usual' system of authority with democratic administration is in many respects the most efficient and effective administration, but we have also seen that this is not the successful administration that is always considered during the crisis period, especially due to this epidemic. On the contrary, some 'charismatic' or dictatorial countries have been able to fight well against the corona outbreak.

Since there is no vaccine or definitive treatment method found, the four main factors used in the fight against the outbreak are quarantine, social distancing, mask use and ensuring adequate hygiene. The only structure that ensures the functioning of these four main factors is the state. Attention can be drawn here on how to demonstrate state authority and maintain order. Therefore, state authority will increase even more during and after the pandemic. Because it is certain that the successful fight against unexpected outbreaks will be possible with the state authority and order, or rather with the meticulous work of the state. This epidemic also refutes or minimizes the understanding of a global and cosmopolitan world. As it seems, the importance of state borders during the pandemic has once again been felt. Even the European Union countries, which have forgotten where their borders are, have closed their borders in this process.⁸

In many countries, companies have forced their employees to lay off. A UN study found that 81% of the 3.3 billion people in the world were completely or partially unemployed due to the pandemic. Researcher Crystal Georgieva said more than 160 countries expected positive per capita income growth in early 2020, but this number reversed due to the pandemic, meaning that more than 170 countries were predicted to experience negative per capita income growth this year, showing the worst economic impact since the Great Depression in the 1930s. In this case, states first try to save their own economies; rather, they encourage them to pursue protectionist or mercantilist policies. German researchers Funke et al. showed that politics was moving sharply to the right in times of financial crisis. As in the past (after the Great Depression, the Nazis came to power in Germany, the Rexists and the Flemish National Union in Belgium, and the National Socialist Workers' Party in Denmark), researchers have suggested that far-right parties and movements have been strengthened in many European countries since the

⁸ Coronavirus: Europe plans full border closure in virus battle, 17.03.2020, https://www.bbc.com/news/world-europe-51918596; Coronavirus latest: EU wants bloc's borders sealed until June 15. Erişim tarihi: 12.08.2020, https://www.dw.com/en/coronavirus-latest-eu-wants-blocs-borders-sealed-until-june-15/a-53366770

⁹ Coronavirus: Worst economic crisis since 1930s depression, IMF says. 9 April 2020, https://www.bbc.com/news/business-52236936

2008 financial crisis.¹⁰ It defines the growth of state power such as shifting to the right in politics, the rise of conservatism, protectionism and the importance of nation-state. Although the pandemic was a health problem at first, the socioeconomic and political challenges that followed may increase in many countries. In this case, it is likely that the state will increase its authority to cope with the crisis or manage or control the crisis. In other words, the rise of state authority is expected.

With the outbreak, many countries have entered a recession and income decline and unemployment have increased. With governments having to reduce social expenditures, the reaction of people living in countries to the state has reached an extreme stage. People have begun to criticize governments excessively, accusing them of failure and incompetence. Demonstrations have emerged in many countries. In such a case, the tyranny of the state increases even more. However, the state's tyranny will not last long. Countries become more difficult if the corona crisis lasts longer. In countries with weak institutions and low GDP, social problems and devastating unrest may increase. At best, the coronavirus crisis could recover rapidly, and more loans would need to be borrowed from international financial institutions and rich countries to prevent states from default. In this case, the countries will owe a great debt.

The European Union (EU), the United States, the United Kingdom and other countries have adopted large amounts of economic support packages to save and help the economy, operators and those who are unemployed due to isolation. For example, the EU provided 500 billion euros and the US provided 2.3 trillion loans. However, many developing Asian, African and Latin American countries did not have the capacity for such a support package and therefore put both their society and economy in a more difficult situation. The prolongation of this outbreak may lead to an increase in social turmoil in developing countries. In this case, whichever country has a stable system will successfully overcome this situation. Otherwise, social demonstrations, civil war and other problems are inevitable to increase. It depends on how long the outbreak lasts. But we also have to say that in some developed countries, there have been resistance and reactions to the conditions of the state, such as quarantine and wearing masks in Germany. In particular, the fact that more than 38,000 people participated in demonstrations and demonstrators attacked the Reichstag in Berlin on August 28-30, 2020 is proof of the depressing extent of society. President Steinmeier and Chancellor A. Merkel criticized this situation harshly and said it was unacceptable. Because the demonstrators' exits were their far-right actions and accused the Central dictatorship with the slogans 'Freedom Day - End of the Pandemic' and opposed COVID-19 measures. But these slogans, the 'Freedom Day' slogan, were the slogans of the National Socialists before they came to power.11

¹⁰ Manuel Funke, Moritz Schularick, et al., Going to extremes: Politics after financial crises, 1870-2014, *European Economic Review*, 2016, Vol. 88, p. 227-260.

For a more detailed look: Corona-Proteste im Aufwind//https://www.dw.com/de/corona-proteste-im-auf-wind/a-54443036 (Accessed: 02.09.2020) Gegen Corona in Protest - Politik eskalieren 29.08.2020// https://www.tagesschau.de/inland/corona-demo-berlin-129.html (Accessed: 02.09.2020)

Overall, state authority is expected to rise even further after the pandemic. The authority of the state is realized through keeping the society in control, taking various measures against the crisis, imposing restrictions on movements and actions, etc. This can lead to the development and strengthening of the authoritarian system in some countries, even in democratic countries. If demonstrations are to emerge in some developing countries, for example in the Middle East, due to economic and social problems, demonstrations will take place in developed countries, such as the US and the EU, against the restrictions imposed on freedom. In this case, the authority of the state will either collapse or increase, at least the change of government will take place.

Another problem is that as the authority of the states gets stronger, the issues of interstate struggle and war can come to the agenda. Because the state authority often goes beyond the framework of various public and international organizations and will try to demonstrate its power and influence in domestic and foreign policy more effectively or aggressively by ignoring social institutions and international organizations. Because what we call the state is an organism and a monster that tries to live and dominate others. The power of this beast will become stronger and more aggressive during a crisis.

We see this clearly from the speeches of many heads of state at the 75th session of the UN General Assembly in September 2020. In particular, US President Donald Trump, as he said earlier, openly called the coronavirus the Chinese virus and advised Americans to put their interests first in the world and to put other heads of state first in the interests of their country, because he said it was right. Chinese President Xi Jinping, on the other hand, showed that world leaders advocated globalization, unlike Trump, while calling for cooperation without falling into the trap of various conspiracy theories during the pandemic. Other countries, for example, have made various accusations and criticisms of Iran against the US, UAE and Syrian foreign ministers about Turkey, indicating that it is difficult for countries to cooperate even during the pandemic. Yes, countries are always ready to criticize and blame each other. But even at a time when humanity faces a global threat and crisis, countries tend to prioritise their own interests, sovereignty and power.

Researcher Oktay Uygun wrote that the narrowing of the sovereignty of the nation state took place in a three-dimensional process. According to him, "the first dimension is the influence of supranational economic and political unions. This effect gained great momentum with the globalization of the economy, which started in the 1970s and is still ongoing. In this top-down process, it is necessary to add the impact of international companies and markets that cannot be controlled by nation states. The second dimension is the process in which the nation-state lives in itself. Understanding and practices based on the new liberal ideology such as the downsizing of the state, privatization, distrust of the public sector, reduction of centralism, decline in social rights have led to a significant decrease in the classical functions of the nation state. The third dimension operates bottom-up and, in some countries, manifests itself as the most effective process that

¹² UNGA75 General Debate Live (USA, Russia, France, Iran and More) - 22 September 2020//https://www.youtube.com/watch?v=yr5YD2pdHJU

melts the nation state. "¹³ This statement by Oktay Uygun was widespread among world political scientists and as we said above, those with liberal views were always said to be restricted and narrowed down the sovereignty and authority of the state. However, this pandemic showed that the sovereignty and authority of the state were still strong and very effective. Because each country deals with the crisis in its own way and some countries do not quarantine without the warnings of supranational organizations (such as WHO-WHO). In addition, there is a contest or challenge for the vaccine.

On the other hand, the pandemic also showed that the world is one. No country in the world is immune to coronavirus and has been proven unable to fight it alone. Combating the virus and the socio-economic crises that arise with it is the most important and urgent problem of today. It is a fact that the problem of food and employment has escalated, and this problem is more serious in developing countries. At the 75th UN General Assembly meeting, the presidents of developing countries, especially African countries, made it clear that food resources were running out, that many people in their communities were below the hunger threshold, and that a major socio-economic and migration crisis would arise if developed countries could not help in this regard in a timely manner. However, some developed selfish countries are careless in this regard. If this is the case, world political processes may deteriorate after the pandemic. Therefore, this epidemic and crisis is a great test for the countries of the world, either they overcome this crisis together or they show that no matter how much time has passed, they do not go beyond the word "man is man's wolf," as Thomas Hobbes once said. Proper use of the rise of state authority will help resolve many problems during and after the pandemic and ensure international peace and prosperity.

IV. Conclusion

The COVID-19 outbreak has shaken countries around the world. Although the outbreak has already had a negative impact on the socio-economic situation of the countries where it originated, the real problem is said to arise after the pandemic. It seems that the authority of the state will increase throughout the world during and after the pandemic. In fact, in times of crisis, the authority of the state is expected to increase in all directions, and this has already happened. The whole world has closed its borders. This happened for the first time in the modern age. Social movements have emerged in Western countries against freedom restrictions. In countries with liberal democracies that thought state power was limited, state authority was placed above all else. In conservative societies and centrist socialist societies that see state power as the power of God, state power has nevertheless increased. Overall, the outbreak increased the state's tyranny.

The authority of the state is increasing during and after the pandemic for several reasons. These may be reasons such as ensuring social order and quarantine, preventing an unsafe environment that can cause various chaos, controlling the spread of the

¹³ Oktay Uygun, "Küreselleşme ve Değişen Egemenlik Anlayışının Sosyal Haklara Etkisi", Anayasa Yargısı, 19 (1), (2003): 11-45.

epidemic, following more protective (protectionist) or mercantilist policies to prevent socio-economic collapse, stopping or slowing down migration movements, etc. If the epidemic continues, the authority of the state will also increase. Because until the pandemic ends globally, no country can be free of the virus. This virus will restrict travel to and from countries where it is common. In addition, the continuation of the pandemic will exacerbate a number of problems such as socio-economic problems, employment and freedom restrictions. A state that understands that this can lead to great shocks and likes to live will nevertheless have to raise its supervisory mechanism, that is, its authority. Therefore, the authority of the state depends on how long the pandemic will last. Globally, state authority has risen today, but how much it will increase depends on when a vaccine against the virus will be found and when the outbreak will be prevented.

BIBLIOGRAPHY

AKKAŞ, Hasan Hüseyin (2003). Muhafazakâr Siyasi Düşünce Kavramı Üzerine, Sosyal Bilimler Dergisi, Cilt 5, Sayı 2, s. 241-254.

Coronavirus disease 2019 (COVID-19) Situation Report – 94 // https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200423-sitrep-94-covid-19.pdf

Coronavirus: Europe plans full border closure in virus battle, 17.03.2020 // https://www.bbc.com/news/world-europe-51918596 (Erişim tarihi: 12.08.2020)

Coronavirus latest: EU wants bloc's borders sealed until June 15 // https://www.dw.com/en/coronavirus-latest-eu-wants-blocs-borders-sealed-until-june-15/a-53366770 (Erişim tarihi: 12.08.2020)

Coronavirus: Worst economic crisis since 1930s depression, IMF says. 9 April 2020 https://www.bbc.com/news/business-52236936 (Erişim tarihi: 12.08.2020)

Corona-Proteste im Aufwind // https://www.dw.com/de/corona-proteste-im-aufwind/a-54443036 (Erişim tarihi: 02.09.2020)

ÇINAR, Aliye (2006). Kimin Otoritesi? Hangi Otorite? Uludağ Üniversitesi İlâhiyat Fakültesi Dergisi, Cilt: 15, Sayı: 1, s. 233-246.

ÇUHADAR, Cengiz (2013). Anarşizm Düşüncesindeki Farklılıklar, Dini Araştırmalar, Temmuz-Aralık 2013, Cilt: 16, Sayı: 43, s. 105- 122.

DUMAN, Fatih (2017). Muhafazakâr Düşüncede 'Otorite' Anlayışı, Milel ve Nihal, 14 (1), 135-159.

FUNKE, Manuel, SCHULARİCK, Moritz, TREBESCH, Christoph (2016), Going to extremes: Politics after financial crises, 1870–2014, European Economic Review, Vol. 88, s. 227-260.

GORDON, Scott (2015). Sosyal Bilimler Tarihi ve Felsefesi, çev., Ümit Tatlıcan, Küre Yayınları.

KALKAN, Buğra (2017). Kendiliğinden Doğan Düzen, Liberte Yayınları.

KROPOTKİN, Peter (1901). Komünizm ve Anarşizm, çev., Anarşist Bakış // http://anarsizm.org/komunizm-ve-anarsizm-1901-peter-kropotkin/ (Erişim tarihi: 28.08.2020).

MİSES, Ludwig von (1981). Sosyalizm, çev., Yusuf Şahin, Liberal Düşünce, Kış 2004.

ÖZALP, Erkin (2005), Sosyalizm ve Devlet // https://gelenek.org/sosyalizm-ve-devlet/ (Erişim tarihi: 30.08.2020).

ÖZİPEK, Bekir Berat (2017). Muhafazakarlık Nedir?, Ankara: Liberte Yayınları.

Pompeo'dan 'COVID-19 Wuhan'daki laboratuvardan **çıktı**' iddiası // https://www.trthaber.com/haber/koro-navirus/pompeodan-covid-19-wuhandaki-laboratuvardan-cikti-iddiasi-481355.html (Erişim tarihi: 16.08.2020).

Proteste gegen Corona-Politik eskalieren 29.08.2020 // https://www.tagesschau.de/inland/corona-de-mo-berlin-129.html (Erişim tarihi: 02.09.2020).

UNGA75 General Debate Live (USA, Russia, France, Iran and More) - 22 September 2020 // https://www.youtube.com/watch?v=yr5YD2pdHJU

UYGUN, Oktay (2003). Küreselleşme ve Değişen Egemenlik Anlayışının Sosyal Haklara Etkisi, Anayasa Yargısı, 19 (1), 11-45.

Discussions of the Effects of the COVID-19 Pandemic on the Future of International Relations Discourse

Mercy Jelagat ROTINA*

Abstract

The 2019 COVID-19 pandemic has had a profound impact on the world, with extensive social, political and economic consequences. This article examines the effects of the pandemic within International Relations with regards to five key areas; the future of the neo-liberalism ideology, the diminishing strength of multilateralism, the future of china in the International relations world, shift to technological politics and the hardening of the state control systems. By employing secondary data both journaled articles, papers and online sources, the paper has provided valuable insights on the possible changes within the global system as a result of the pandemic. The findings points to the following possible

Özet

COVID-19 salgınının dünya üzerine yayılan sosyal, politik ve ekonomik sonuclarıyla derin bir etkisi olmustur. Bu makale, salgının Uluslararası İlişkiler üzerindeki etkisini bes temel alanda incelemektedir; neoliberalizm ideolojisinin geleceği, çok taraflılığın azalan gücü, Çinin Uluslararası ilişkiler dünyasındaki geleceği, teknolojik politikaya geçis ve devlet kontrol sistemlerinin sıkılaştırılması. Dergi makaleleri, yazılar ve çevrimiçi kaynaklar gibi ikincil verileri kullanan bu araştırma, pandeminin bir sonucu olarak küresel sistemdeki olası değişikliklere ilişkin sonuçları ortaya koymayı amaçlamıştır.

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effects; 1) the key features of the neoliberalism theory used in the 1980s and 1990s by its pioneers has lost its importance and that its current followers might have to fight hard to maintain its exclusivity, 2) the way multilateralism operates might have to change to reflect a different world post the pandemic. New rules might have to be formed for more accountability, 3) China's rise as a strong political and economic superpower might be witnessed, 4) a clear distinct rise in political construction and communication shifting to more virtual realms will also be witnessed, and 5) democracy might be challenged as more and more governments might continue adopting new policies to strengthen their powers and harden state control tools. Overall the article recommends that the world must be more inclusive, resilient. and sustainable in the post-pandemic period. The areas of cooperation between the world powers, the developed and the developing world in managing its consequences within the frameworks of exchanging information, experiences and mutual medical assistance is necessary.

Keywords: COVID-19 Pandemic, International Relations, Neo-liberalism, Multilateralism, State Control systems, Techno Politics

Bulgular, şu beş olası etkilere işaret etmektedir; 1) Öncüleri tarafından 1980'lerde ve 1990'larda kullanılan neoliberalizm teorisinin temel özellikleri önemini vitirdi ve mevcut takincileri onu korumak için mücadele etmek zorunda kalabilir. 2) Pandemi sonrası yeni dünyaya göre çok taraflılığın çalışma seklinin değiştirilmesi gerekebilir. Daha fazla sorumluluk için yeni kuralların oluşturulması gerekebilir. 3) Çin'in güçlü bir siyasi ve ekonomik süper güç olarak yükselişine tanık olunacak. 4) Daha çok sanal zemine tasınacak olan siyasi yapı ve iletişimde belirgin bir artış olacak. 5) Hükümetlerin güçlerini artırmak ve devlet kontrol araclarını sıkılastırmak için yeni politikalar oluşturmasıyla demokrasi testten gecebilir. Genel olarak makale, pandemi sonrası dönem için dünyanın daha kapsayıcı, dayanıklı ve dirençli olmasını tavsiye ediyor. Dünya güçleri, gelişmiş ülkeler ve gelişmekte olan ülkeler arasındaki; bilgi ve tecrübe alışverişi, karşılıklı tıbbi yardım gibi işbirliği alanları, pandeminin sonuçlarıyla başa cıkmada zorunludur.

Anahtar Kelimeler: COVID-19 Pandemisi, Uluslararası İlişkiler, Neoliberalizm, Çok Taraflılık, Devlet Kontrol Sistemleri, Tekno Politik

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I. Introduction Background

Pandemics are known as epidemics based on a global spread which causes massive deaths and disruptions in the social, economic, political situation in countries (Akin & Gozel, 2020). Although history never repeats itself, a parallel can still be drawn from these events. There have existed several pandemics throughout history. The plague also known as the Black Death (1346- 1353), the AIDs pandemic, the flu pandemic of 1918 are some of the world's longest-lasting, repetitive pandemics that caused a large number of deaths. COVID-19, a disease caused by a severe acute respiratory syndrome coronavirus (SARS-CoVs), at the end of its 9th month has infected more than 30 million individuals and has killed more than one million lives worldwide (Worldometre). It has

pushed huge world economies towards depression. Economic stimulus packages and, lockdowns have been imposed by governments all around the world to try to flatten the outbreak curve. On top of this, it has created major social, cultural, and political effects. Such unanticipated events that distraught the lives of humans enable the transition to new political discussions, ideas and practices.

This article will discuss a few areas on the hypothesis that the "COVID-19 pandemic will have an impact on some aspects of the International Relations discourse."

Objective

The main objective of the article is to assess some of the consequences the COVID-19 pandemic and its effects on the future world of International Relations discourse looking at five key areas; - (1) the future of the neo-liberalism ideology, (2) the diminishing strength of multilateralism, (3) the future of china in the International relations world, (4) shift to technological politics and the (5) hardening of the state control systems.

The article will be based mainly on reviewing of secondary data both journaled articles, papers and online sources. There will then follow a few conclusions and recommendations based on the discussions. The article will not be too thorough of conclusive because the pandemic is still unfolding and the possibilities of change is great.

Framework for discussions

The Neoliberal ideology of free markets has over the past few years created an increase in income inequalities and a decline in the living standards throughout many countries in the world. David Harvey discussed the neoliberalism ideology as a political project. He believes that neoliberalism was both an ideological and economic assault (Risager, 2016). The COVID-19 pandemic has currently brought the neoliberalism ideology to question. Neoliberal proclamations about the imperative of 'fiscal austerity' and the limitations of public policy have come to vanish faster than one could spell 'bankruptcy' (Saad-Filho, 2020). COVID-19 has caused many industries and companies around the world to shut down or seek bailouts, many jobs have been lost, and countries have been forced to adopt policies to help lift their economies. Capitalist states like Spain has had to nationalize her hospitals (Payne, 2020). In the discussions, the article examines these effects of the COVID-19 pandemic on neoliberal arguments and conclude that the pioneers might have to fight if at all to maintain the ideology's exclusivity.

The article also discusses and argues that state to state relations have during the pandemic replaced the functions of multilateral organizations and that countries now prefer seeking assistance based on how they relate with a particular state. Furthermore the article points out that the strength of multilateral organizations such as the United Nations are slowly diminishing. Looking at a parallel, the 1918 flu pandemic occurred when the world had not founded strong international cooperation bodies. But after the two world wars, more ambitious and far-reaching forms of multilateral cooperation bodies were formed like the World Health Organization (WHO), the United Nations (UN) and the European Union (EU). These organizations have provided the support for an

open and managed postwar economy and a global order. The COVID-19 pandemic is proving to be a hinder to the trust states have on these cooperation. We have witnessed countries like the United States slowly changing its position and taking a step back in the funding of such organizations like the WHO.

The article also discusses the rise of China in international relations discourse. It argues that though it may not have enough feature to be a global power in terms of technology, military capacity, alliances, ideological appeal, if the United States remains uniquely positioned to provide leadership, and support especially during this pandemic, then multilateralism might inevitably diminish and might boost its rise. It also argues that China's rapid rise to a global economic world and now to a more political power poses an important question to how the world perceives the transformation of the international system. The article concludes that it is very likely that the post COVID political world will be a multipolar world. Several powers will coexist, compete and the state might once again play a central leading role accompanied by the multilateral organizations.

Shift to techno-politics and the hardening of state control policies are also discussed. Looking back to the 1918 flu pandemic; it took place in a completely different time technologically and politically. One of the defining characteristics of the 21st Century in comparison to the 20th century is the effects of technology which enables speedier exchanges of ideas as well as challenges and vulnerabilities. There is now increasing interconnectedness and interdependence among peoples and states, which create opportunities for shared prosperity, challenges, and responsibilities. Calzada argues that the COVID 19 pandemic is pervasively related to data governance that exposes citizens' vulnerability in a potential surveillance state. He recoils the term algorithmic nations, where the states are driven by a new model of governance where algorithms such as facial recognition, data mining, and other technological tools are a cornerstone (Calzada, 2020). The article concludes that the world will see a shift to embracing more of techno-politics and that state control systems will in turn be a norm in the post pandemic era.

II. Discussions

Challenge for pioneers of the Neo-Liberalism Ideology

Neoliberalism is described as involving the priority of "the price mechanism, free enterprise, the system of competition, and a strong and impartial state" (Mirowski & Plehwe, 2009). David Harvey's writes that the well-being of humans can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade (Harvey, 2005). With the ongoing pandemic, Adam Smith's famous mantra 'laissez-passer, Laissez-faire', has dramatically shifted into 'rester chez sois, mourir chez soi' (stay at home, die at home) as Cherkaoui describes it. (Cherkaoui, 2020). More than 300 million people have already lost their jobs worldwide, and many private entities have run out of business. The United States adopted a \$2 trillion plan to help lift its economy and address the challenges of the COVID-19 ((Solomon, Wynia, & Gostin, 2020). The

World Bank Group released \$12 billion to support COVID-19 responses the International Monetary Fund Managing created \$50 billion worth of funds to support low-income and emerging market countries in the response to COVID-19. The European Union was forced to lift its neoliberal fiscal restrictions, allowing national governments to engage in counter-cyclical crisis management (Bonfert, 2020).

Most countries around the world which have prided themselves as being capitalist countries have had to nationalize many industries. Spain nationalized all of its hospitals in the wake of the pandemic (Payne, 2020), Germany set up billions of Euros to buy shares in different struggling industries which has been named the 'biggest post-war aid package' (Nicola et al, 2020). Companies are seeking bailouts. A study by UNIDO compared the Index of Industrial Production (IIP) for April 2020 vs December 2019 and showed that approximately 93 per cent of countries have experienced a decrease in industrial production of 6 per cent on average (Unido.org). These financial alterations are often done disregarding careful assessments of their effect on economies in the long run. So the question deems, where are the fundamental principles of neoliberalism?

Deregulation, privatization, liberalization and fiscal austerity- terms used in the 1980s and 1990s by the pioneers of neoliberalism seems to have lost its value. The COVID-19 pandemic has pulled back the curtain to reveal the power of brutal neoliberalism and its global financial markets in all of its cruelty. It has not only eroded the democratic ideals of equality and popular sovereignty but has also created a political and economic context in which the looming pandemic puts a severe strain on the living standards of humans around the world. In Colin Crouch's words, we are back facing the 'strange non-death of neoliberalism' (Crouch, 2011). Nationalization, state control over industries and state capitalism might continue to take place in the post pandemic era and the pioneers of neoliberalism have to fight to protect their ideals.

The Diminishing Strength of Multilateral Organizations

Multilateral organizations are formed by hegemonic powers and contributes to the management of the global system. The United States (US) is a strong world power and contributes the most support both politically and financially to International organizations. However right in the peak of the pandemic, the president of the US froze its payments to the World Health Organization (WHO) claiming its poor handling of the coronavirus pandemic (Smith, 2020). This act has contributed to more international actors questioning the effectiveness and accountability of multilateral organizations. With this the US is showing that it prefers to practice isolationism and focus on its' domestic policies.

The European Union (EU) as regional multilateral organization has also been affected. Its poor response to the pandemic has now come under great scrutiny by member states. Immediately the first case of the virus attacked Italy, the EU's response was quiet slow and everybody blamed the institution (Alesina & Giavazzi, 2020) and as an example of state to state relations, Italy looked to specific countries such as China and Russia for assistance. The EU failed to act fast and collectively proving its inability to

use the "common good" and "public benefit" in crises such as the unfolding pandemic. While the EU member states exercised their sovereign powers, restricted freedom of movement within the EU and applied the EU's fundamental freedoms to respond to the emerging crisis, the EU remained silent. It might be very hard for the EU to go any further as one Union (Kentas, 2020).

The functions of multilateral organizations have now been replaced by state to state relations and are proving to be more effective than international or regional organizations. It is undeniable that much of the world's momentum appears to be moving away from internationalism, as seen in Brexit, and the U.S. withdrawal from international agreements and UN bodies. (Hatuel-Radoshitzky & Heistein, 2020). This trend is most likely to continue post the pandemic because states seem to have lost their trust in regional and international bodies.

The role of regional/ international organizations might have to be reviewed in the post pandemic period. New rules might have to be formed in multilateral organizations such as the EU for them to be more accountable. Turkey's Deputy Minister of Foreign Affairs explains that there might be two alternatives; (1) increased isolationism where states go their own way or (2) fostered multilateralism in which states reform international organizations and pool their resources to find global solutions to global issues (Kiran, 2020). It should not come as a surprise if the US continues strongly with its isolationism. The way multilateralism operates will have to change to reflect a different world post the pandemic. It is therefore important to consider how to better manage international cooperation in a world that will continue to be deeply interconnected, but whose current international institutions are underperforming especially in the midst of a pandemic.

Future of China in International Relations

The relevance of the debates of neoliberalism used to address the economic impacts and future of the world post COVID-19 pandemic will bring great rivalry between China and especially the United States (Sharfuddin, 2020). This two world powers have shown a brutal global competition and one with no exemptions. But even during the cold war, personal conflicts were put aside to develop a common policy against such great problems as the coronavirus.

From the onset of the pandemic, China managed to reach out globally to many of its partner states through diplomatic soft power channels. In Africa, for example, Ali Baba sent out huge donations of test kits, Personal Protective Equipment, ventilators and masks to states right when the pandemic starting showing signs of a steep increase (African Union, 2020). The Jack Ma Foundation and Alibaba Foundation also donated supplies to both Canada and the United States (Alton, 2020). Beijing sought to assume a leading role in assisting Italy and Spain and capitalizing on the perceived inadequacy and inward focus of U.S. policy (Cherkaoui, 2020). China is taking an opportunity by making investments in international markets especially in dealing with the European

countries. China donated coronavirus testing kits to Cambodia, sent ventilators, masks and medics to Italy and France, Spain (Kuo, 2020)¹.

China is showing monopolistic strengths within the international relations discourse. In an authoritarian 2020 China is outperforming the US's soft power in Europe (Cherkaoui, 2020). Moreover, the international media coverage of pandemic in the global media has positioned China to be a rebel with a post-pandemic description which solidifies its pursuit of global leadership (Chang, 2020). Chinese rise post the pandemic is something that will change in the international relations discourse. No one once imagined that with its slow transformations in the economic and technological industries, that China's soft power will be a disguise for superpower.

Shift to Technological Politics

Another key outcome that is worth looking at in the post pandemic era in the discourse of international relations is the shift to embracing a more techno-friendly political systems. The pandemic has proved that a new style of politics which embraces technology is key. We might start seeing new ministries being formed in governments. Some new formations, organizations, committees and ministries such as Ministry of Cyber Security, the High Commission on Digital Development and Communication or Digital Industrialization Committee (Gasilov, 2020) may be adopted by many states.

We are already also witnessing a significant shift towards digital campaigning, micro-targeting, and online mobilization, by use of social media such as Facebook, Twitter and WhatsApp. The pandemic has pushed the world further in this direction. The 2020 US elections are a great example of this which is to be undertaken online. But this does not mean an end to the noisy political rallies that we are used to seeing in the wake of any elections throughout the world. Sticking to the US as an example, they were locked down for a long time but in the wake of police brutality against African- Americans, thousands gathered in large masses protesting. What we may experience is a change in terms of politicians aggressively using social networks to lure voters and campaigning.

We cannot speak of techno-politics without mentioning how governments are using technology to monitor their citizens which in essence undermines democracy. Some countries have adopted mobile applications which show you how close of a proximity one is to an infected person for example the Tabaud App in Saudi Arabia ((Hassounah, Raheel, & Department of the Common months and years, mass surveillance systems may just be normalized. This mass surveillance will continue and despite it being a temporary measure, governments may hold on to it because of fear of a new wave of the virus, or maybe another pandemic. And let's face it, when people are given a choice between health and privacy, they will always choose health.

Another point to note in this shift is that intergovernmental meetings will now start relying more and more on virtual meetings for much efficiency. In March 2020, the Indian

¹ Kuo L, China sends doctors and masks overseas as domestic coronavirus infections drop

Prime Minister successfully held a virtual conference of the South Asian Association for Regional Cooperation leaders to coordinate the response to the pandemic(Hussain,2020). The EU Foreign Ministers also met virtually to agree on the EU emergency credit share for their member countries. Since then, many high-level international regional and global political and business meetings have taken place virtually in support of this new trend. This trend might continue in the near future even after the pandemic eases out.

Re-hardening of State Control Systems

Michel Foucault defined bio power as a "set of mechanisms through which the basic biological features of the human species become the object of a political strategy, of a general strategy of power (Foucault, 2009)². This concept of bio power helps us to understand the kind of strict state control systems that governments adopted soon after the pandemic hit. In other words, our existence in either a disadvantaged or advantaged social status, our exposure to health and social risks is, according to Foucault, a striking feature of bio political governmentality. It is the "condition of acceptability" of such an exposure to lives in a society in which power is mainly exercised to protect the biological life of the population and enhance its productive capacity (Foucault, 2009).

In the wake of the pandemic, major changes happened in different countries. The use of the pandemic as a means to control the masses was evident right from the beginning when countries declared state of emergencies. (Runciman, 2020). Pandemics such as the COVID-19 provide great incentives for autocrats to take control. Some governments began expanding their powers and using that authority to tighten their grip on power and the masses. Case in point- Hungary where the government immediately enacted a new law that allowed Prime Minister Viktor Orbán to rule by decree indefinitely, without any parliamentary oversight. (Serdült, 2020). The pandemic might end up hardening repression, and challenging democratic ideal in different parts of the world.

III. Conclusion

Many short-term emergency measures become a fixture of life (Harari, 2020). The short-term emergencies being experienced as discussed above, might end up being a norm in the future. It is clear that the International relations discourse shall witness a significant change. The way multilateralism operates might have to change to reflect a different world post the pandemic. New rules might have to be formed in multilateral organizations for more accountability. Nationalization, state control over industries and state capitalism might just continue to take place in the near future and the pioneers of neoliberalism will be forced to fight to uphold their ideals.

China's position as a strong political and economic power is something that might be witnessed. No one once imagined that with its slow transformations in the economic and technological industries, that China's soft power will be a disguise for superpower.

² Foucault Michael. Security, Territory, and Population. Lectures at the College de France, 1977-1978. NY, USA: Picador, 2009.

There might also be a clear distinct rise in political construction and communication shift to more virtual realms. Democracy might faces some challenges as more and more governments might continue adopting new policies to strengthen their powers and harden state control tools.

IV. Recommendations

It might be a little too early to identify the effect of the COVID-19 pandemic on politics and the international relations discourse, but it is not too early to start understanding why state governments are making the decisions that they do. Choices made now will have far-reaching consequences. The world after the pandemic should be more inclusive, resilient, and sustainable. The areas of cooperation between the world powers, the developed and the developing world in managing the consequences of the COVID-19 pandemic within the frameworks of exchanging information, experiences and mutual medical assistance is necessary.

It is time for new visions, public transcripts, and academic narratives to emerge about the meaning of politics, state control systems, mass resistance and democracy in times of pandemics and epidemics. We still have the opportunity to reimagine a world in which the future does not mimic the present.

BIBLIOGRAPHY

African Union: Testing Gap. Africa Research Bulletin: Economic, Financial and Technical Series, 57(3), 2020.

Akin Levent, Gökhan Gözel Mustafa. Understanding dynamics of pandemics. Turkish Journal of Medical Sciences. 50, 515-519, 2020.

Alesina Alberto & Giavazzi Francesco. The EU must support the member at the Centre of the COVID-19 crisis. In R. E. Baldwin & B. Weder (Editors), *Mitigating the COVID Economic Crisis: Act Fast and Do Whatever It Takes* (pp. 51-55). London, UK: CEPR Press, 2020.

Alton Tom. China's Global Aid Blitz and "Mask Diplomacy". China Institute, University of Alberta. April 8 2020 Bonfert Bernd. Political Economy and Politics – Covid-19, Critical Political Economy, and the End of Neoliberalism? *The European Socialist*. Vol. 1, Issue 35. 2 June, 2020.

Calzad Igor, Dr. Will Covid-19 be the end of the global citizen? Apolitical. March 19, 2020.

Chang Yung. The Post-Pandemic World: Between Constitutionalized and Authoritarian orders – China's Narrative-Power play in the Pandemic Era. Journal of Chinese Political Science, 26(1), 27-65, 2020.

Cherkaoui Mohammed. The Shifting Geopolitics of Coronavirus and the Demise of Neoliberalism. Al Jazeera Centre for Studies. March 19, 2020.

Crouch Colin. The Strange Non-Death of Neoliberalism. Cambridge, UK: Polity Press, 2011.

Foucault Michael Security, Territory, and Population. Lectures at the Collège de France, 1977-1978. NY, USA: Picador, 2009

Gasilov Iliyas. How will COVID-19 change the global political system? Rusen. 2020

Harari Noah Yuval. The world after coronavirus. Financial Times. March 20, 2020.

Harvey David. A brief history of neoliberalism. Oxford, Oxford University Press. 2005

Hatuel-Radoshitzky Michal, & Heistein Ari. Global Governance and COVID-19: Why International Cooperation Still Matters. Challenges of Global Governance amid the COVID-19 Pandemic, 10-12., May 2020.

Hussain Nazia. Impetus for SAARC Revival? *Global Health Security: COVID-19 and Its Impact.* Vol. 76 RSIS Commentary, 24, April, 2020.

Hassounah, Marwah, Raheel, Hafsa, & Alhefzi, Mohammed. Digital response during the Covid-19 pandemic in Saudi Arabia, 2020

Kentas Giorgos. Will the EU Disintegrate as a result of COVID-19 Crisis? COVID-19 Outbreak: Political, Economic and Social Repercussions, 17(3), in-depth, 22-23, 2020.

- Mirowski Philip and Plehwe Dieter (eds), The road from Mont Pèlerin: The making of the neoliberal thought collective. Cambridge, MA: Harvard University Press, 2009.
- Nicola Maria et al. The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*. Vol. 78 (185-193). 2020.
- Payne Adam. Spain has nationalized all of its private hospitals as the country goes into coronavirus lockdown. Business Insider: New York; 2020.
- https://www.businessinsider.com/coronavirus-spain-nationalises-private-hospitals-emergency-covid-19-lockdown-2020. Accessed: 18. 07. 2020
- Risager Bjarke Skærlund. Neoliberalism Is a Political Project. An Interview with David Harvey. Jacobin, 2016.
- Runciman, D., 2020. Coronavirus Has Not Suspended Politics-It Has Revealed the Nature of Power. Guardian, 27 March.
- https://www.theguardian.com/commentisfree/2020/mar/27/coronavirus-politics-lockdown-hobbes. Accessed: 20. 07. 2020
- Sharfuddin Syed. The world after Covid-19. *The Commonwealth Journal of International Affairs the Round Table*, 109(3), 247-257. June 2020.
- Serdült Viktoria. Inside story: Hungary's media Silence: What's it like working as a journalist under the new rules introduced By Hungary's Viktor Orban? How hard is it to report? Index on Censorship, 49(2), 64-66, 2020.
- Saad-Filho Alfredo. From COVID-19 to the End of Neoliberalism. Critical Sociology, 46(4-5), 477-485, 2020.
- Smith David. Trump halts World Health Organization funding over coronavirus 'failure'. The Guardian. April 15, 2020.
- Solomon Mildred, Wynia Matthew & Gostin Lawrence. Scarcity in the covid-19 pandemic. *Hastings Center Report*, 50(2), 3-3, 2020.
- Yavuz Selim Kıran. The Post-COVID-19 Era: Will There Be More Competition or More Cooperation? The World after COVID-19: Cooperation or Competition? 2020.



Post-Pandemic World: The Future of the Global Economic Order and the Position of the Great Economic Powers

Sayed Nasim BAHMAN*

Abstract

This study focuses on the future of the world economic order and the position of great powers. In this context, this study analyzes the effects of coronavirus on the current state of the global economy and tries to provide an estimate for the future of the world after the pandemic. The methodology of this study is based on a futuristic approach. The findings of this study emphasize that the future of the capitalist system will change formally. In the post-corona world, the change in the capitalist system increases the role of states more than the private sector. The result of this change paves the way for the emergence of a capitalist state. Similarly, a more competitive and

Özet

Bu çalışma, dünya ekonomik düzeninin geleceğine ve büyük güçlerin konumuna odaklanmaktadır. Bu bağlamda bu çalısma koronavirüsün küresel ekonominin mevcut durumu üzerindeki etkilerini analiz ederek, pandemi sonrası dünyanın geleceği için bir tahmin sağlamaya çalışmaktadır. Bu çalışmanın metodolojisi fütüristik bir yaklaşıma dayanmaktadır. Bu çalışmanın bulguları kapitalist sistemin geleceğinin biçimsel olarak değişeceğini vurgulamaktadır. Korona sonrası dünyada, kapitalist sistemdeki değişim devletlerin rolünü özel sektörden daha fazla arttırır. Bu değişikliğin sonucu kapitalist devletin ortaya çıkışının yolunu açıyor. Benzer şekilde, daha rekabetçi ve

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fragmented system (blocks, mercantilist networks and regional competition) will replace the existing order (unilateral, unipolar and western-oriented). Accordingly, the post-pandemic world is the time to fulfill the main slogan of the Turkish state (the world is bigger than 5). At the same time, regarding the future of the main economic actors, the results of this study emphasize that the US will lose its hegemonic power in the coming years and will be replaced by new forces such as China. But achieving the role of hegemonic power is a long and difficult process.

Keywords: Coronavirus, Global Economy, Great Powers, Capitalist System, World Order parçalanmış bir sistem (bloklar, merkantilist ağlar ve bölgesel rekabet) mevcut düzenin (tek taraflı, tek kutuplu ve batı odaklı) yerini alacaktır. Buna göre, Pandemi sonrası dünya, Türk devletinin ana sloganını (Dünya 5'ten Büyüktür) yerine getirme zamanıdır. Aynı zamanda, ana ekonomik aktörlerin geleceği ile ilgili, bu çalışmanın sonuçları; ABD'nin önümüzdeki yıllarda hegemonik gücünü kaybedeceğini ve yerini Çin gibi yeni güçlerin alacağını vurgulamaktadır. Fakat hegemonik gücün rolüne ulaşmak uzun ve zor bir süreçtir.

Anahtar Kelimeler: Koronavirüs, Küresel Ekonomi, Büyük Güçler, Kapitalist Sistem, Dünya Düzeni

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I. Introduction

The COVID-19 disease has surprised all countries. The rapid spread of the disease around the world has challenged countries' social support systems and market-based crisis management mechanisms. In addition to disrupting the risk management system, the outbreak also increased the likelihood of a global financial and economic crisis. This threat shook the foundations of the world's strongest economies and invited the global capitalist system to a major struggle.

The COVID-19 outbreak has caused a serious recession in the global economy. Despite state support policies, estimates so far suggest that the coronavirus could slow global economic growth by 3.0% to 6.0% this year. This recession is the highest global recession in 90 years.

The current effects of COVID-19 on world order have raised a number of future-oriented questions. For example, can the effects of COVID-19 on the global economy change the balance of power? Or what will be the consequences of the COVID-19 outbreak on world order? The COVID-19 crisis has increased the need to think about such questions. To this end, the main question of this research is: What changes will be made to the position of the major economic forces in the world after the coronavirus and what will be the consequences of the COVID-19 outbreak on the world order?

In this context, the first assumption of this article is that: "With the relative decline of the US economy and the emergence of new non-Western powers, there will be a change in the position of major economic forces in the world after the coronavirus." The hypothesis of this article is based on a synthesis of world system theory and late industrialization theory. In fact, the synthesis of these two theories is based on past experiences, the introduction of new actors into the world economy, and the weakening of the current hegemonic economy.

To explain the lasting consequences of the COVID-19 crisis on the global economy, this study uses a methodologically futuristic approach. The futuristic approach has opened new windows in recent years in the fields of scientific study and research to assess future global crises. The futuristic research approach predicts the future of global developments based on assumptions and statistical data. Futuristic research approach is actually a historical approach. However, it avoids both the determinism of historical studies and the certainty of positivism.

This study coincides with studies in this field to predict the future of the world economic order and the position of major economic powers. In this context, we can point out that The Economist's "Long-term macroeconomic forecasts; Key trends to 2050" study and PWC's research reports titled "The World in 2050" are the most successful studies in the field.

II. Theoretical Framework: A Synthesis of World System Theory and Late Development Theory

The prevalence of COVID-19 disease and its effects on human life have created many speculations about the future of the world. In the economic field, the main speculation is based on arguments that the economic downturn caused by COVID-19 will affect the order of the world economy and the position of global hegemonic power. Therefore, this study presents a synthesis of two different approaches (global system theory and late-development theory) as the theoretical framework.

The theory of the world system is based on the thoughts of Emmanuel Wallerstein (1974). According to this theory, the capitalist system consists of three parts; a center (core), semi-environmental (developing) and environmental (undeveloped). In terms of world system theory, the capitalist system has faced fluctuations and shifting cycles in hegemonic power in its evolutionary course. This cycle of change in hegemonic power was due to the crisis in capital accumulation and the emergence of new powers.

In fact, when central powers face a crisis in capital accumulation on the one hand, and new forces face the challenge of emergence on the other, a change occurs in the hegemonic power of the world system.² Historical evidence suggests that the rise of Great

¹ Immanuel Wallerstein, (1974), The modern world-system: Capitalist agriculture and the origins of the European world-economy in the sixteenth centenary. Academic Press, s. 360-366.

² Immanuel Wallerstein, (1998 a), Liberalizmden Sonra, (Translator: Erol OZ), Istanbul: Metis Yayınları, s. 33.

Britain as a new power challenged the hegemonic power of Spain and Portugal in the 18th century. Thus, the rise of the US in the 20th century challenged British hegemonic power, and there was a shift in the hegemonic power shift of the world system.³

In terms of the theoretical approach of the world system, the emergence of new powers and the decrease of existing powers due to the economic crisis are actually an attempt to get rid of the accumulation crisis of the world capitalist system. During this effort, the capitalist system has to change both its means of production (technology) and its geographical location. In this way, the capitalist system can settle in a new place due to reasons such as cheap labor and the advantage of large sales markets, opening a new space for the reproduction of capital accumulation and avoiding the trend of decline in interest rates. Thus, in the present case, American hegemonic power has been challenged by the emergence of East Asia, especially China. This challenge deepened with the coronavirus outbreak crisis.

Therefore, many international economic theorists agree that the current world economic system, based on the neoliberal approach, is facing increasing crises from the financial crisis to the environmental crisis. The neoliberal approach failed to resolve the current crises, especially the coronavirus crisis made the inadequacy of the neoliberal approach more evident.

Another theoretical framework of this research is late industrialization theory based on Alexander Gerschenkron's (1962) thoughts⁴. The theory of the world system does not give a special place to the role of national states in the development and advancement of technological developments. Therefore, in order to fill the gaps in the first theoretical framework, it was also decided to focus on late development theory. Thus, the theory of late industrialization can provide an explanation of why some economies have reached the leading economies of time and moved them forward.

According to the theory of late industrialization, advanced economies paved the way for technological change. Retrospective economies can quickly reach the limits of a developed global economy by strengthening the technological learning process and transferring scientific knowledge. Therefore, underdeveloped economies can benefit from this advantage as soon as possible for development.⁵ This theory may explain that the economic growth rate of new powers in the future may be higher than the growth rate of central economies in the past. The main reason for late development theory is that central economies have reached the peak of their technological development. However, new economies will have more economic growth in the coming years until they reach the peak of economic development.

³ Immanuel Wallerstein, (1998 b), Jeopolitik ve Jeokültür, (Translator: Mustafa OZEL), Istanbul: Iz Yayınları, s. 178.

⁴ Alexander Gerschenkron, (1962), Economic Backwardness in Historical Perspective, The Belknap Press of Harvard University Press.

⁵ ER Erbay ve M. Özden, (2013), "İktisadi Kalkınma Kuramlarına Eleştirel Yaklaşım", Sosyal Bilimler Metinleri, pp. 3 and pp. 26.

Finally, the first theoretical approach considers the change in the positions of the world's great powers based on the historical needs of the capitalist system. On this basis, according to global system theory, new geographical locations should emerge in order to prevent the downward trend of profit margins on the one hand and to create a basis for capital accumulation on the other. The second theoretical approach introduces late development as an advantage. Because in the short term, countries can develop rapidly with the growth of technological capabilities.

III. Current Position of Great Powers in the Global System

Different classifications have been made about the current position of the great powers in the global economic system. Addressing all categories will remove this article from focus. To assess the current position of the major forces in the global economic system, the author of this paper addresses two levels (macro and micro). At the macro level, attention is paid to the national power of the countries. At this level, the combination of economic power, military power and soft power of countries is discussed. At the micro level, attention is paid to the economic indices of the countries. At the micro level, economic indicators such as GDP, national income and economic growth power are taken into account.

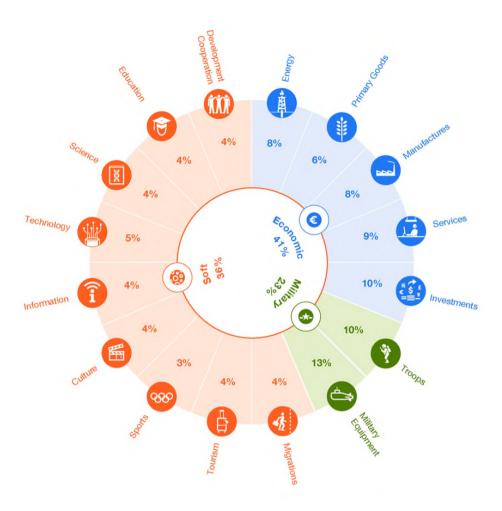
Position of Major Powers at Macro Level

In this article (taking *into account the Global Presence Index and the National Power Index*), it analyzes the position of the main (major) powers in the global economic system at the macro⁶ level. First, the Elcano Royal Institute classified countries according to the Global Presence Index.⁷ The Elcano Royal Institute classifies countries according to economic, military and soft presence indicators.

⁶ The macro level includes the economic, military, geopolitical and soft power dimensions of the countries.

⁷ The Elcano Global Presence Index aims to reflect to what extent (and on what grounds) countries or groups of countries project themselves beyond their borders on the basis of three dimensions (economic, military and soft), that comprise 16 variables from primary goods to military capacities and development cooperation. The Index's objective is twofold. On the one hand, it hopes to contribute to the debate on conceptualization and measuring the globalization process.

Figure 1. Globel Presence Indices



Source: Elcano Royal Institute, Elcano Global Presence Index

According to the Elcano Royal Institute 2019 report, the European Union ranked first in the world in terms of economic presence. Meanwhile, the United States ranked first in the world in terms of military presence. Similarly, China ranks first in the world in terms of soft presence.

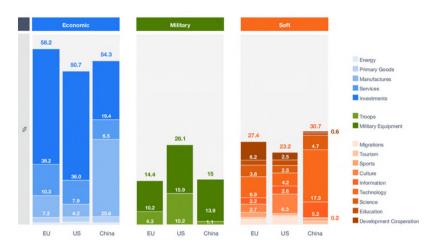


Chart 1. Contributions of Dimensions and Variables to Global Presence

Source: Elcano Royal Institute, Elcano Global Presence Index

According to the Elcano Royal Institute 2019 report, the United States ranks first in three dimensions of the global presence index. According to the table below, China, England, Germany and France are located after the United States, respectively.⁸

Table 1. Global Presence Indices

Global Presence	Position by dimension				
Country	Index value	Position	Economic	Military	Soft
United States	2,494.1	1	1	1	1
China	840.7	2	2	3	2
United Kingdom	636.7	3	4	5	3
Germany	618.5	4	3	13	4
France	531.6	5	6	4	5
Japan	518.1	6	5	6	6
Russia	380.3	7	17	2	8
Canada	337.4	8	7	21	7
Netherlands	297.3	9	8	25	13
Italy	271.1	10	10	8	10
Turkey	106.1	22	32	12	14

Source: Elcano Royal Institute, Elcano Global Presence Index

⁸ Elcano Royal Institute, Elcano Global Presence Index, 2019 report.

Due to the focus of this study on the economic dimension, according to the table above, the major economic forces in the world are the USA, China, Germany, England and Japan, respectively.

Second, Powermetric Research Network Warsaw classified the national powers of countries according to three macro indicators (economic, military and geopolitical). The following table shows the classification of the national power of the countries.⁹

Table 2. National Power Order of Countries

Power status	Economic power	Military power	Geopolitical power
Super power	None	United States	United States
World power	United States & China	None	None
Great power	None	China	China
Regional power	Brazilian India Japan	Russian Federation India	Russian Federation India
Local power	Germany Russian Federation France United Kingdom Canada Indonesia Mexico Turkey Italy Australia Spain Korea, Rep.	Brazil France Japan United Kingdom Korea, Rep. Germany Turkey Iran Australia Italy Canada	Brazilian Saudi Arabia Japan France Germany United Kingdom Korea, Rep. Australia Canada Italy Turkey Iran Indonesia

Source: Powermetric Research Network Warsaw

The table above shows that there is no economic superpower in the world today. The United States is recognized as a global superpower from a purely (military and geopolitical) perspective. The above table shows that economically, the US and China have the Global power capacity. At the regional level, Russia, India and Brazil are considered superior forces. At the same time, Russia and India are known as regional powers in terms of military and geopolitics.

Economically, according to the Powermetric Research Network Warsaw findings, economic growth in the (East Asia and Pacific) regions is increasing, while economic

⁹ Powermetric Research Network Warsaw, National Power Rankings of Countries, 2019 report.

growth in Europe and Central Asia regions is decreasing. According to the graph below, it is noteworthy that the economic growth trend of most geographical regions decreased in 2019.

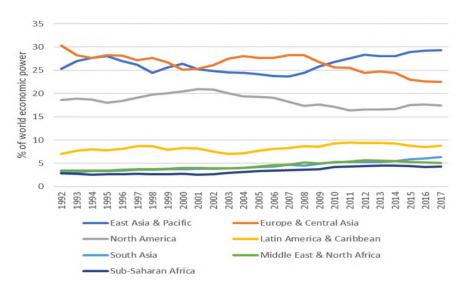


Chart 2. Regions according to economic (general) power (world = 100%)

Source: Powermetric Research Network Warsaw, National Power Rankings of Countries, report 2019

IV. Position of Major Powers at 2 Micro Levels

At the micro level¹⁰, the position of the main forces in the global economic system is assessed based on the findings of institutions such as the World Bank and the International Monetary Fund. The International Monetary Fund and the World Bank classify countries according to their GDP indices. In this context, according to the report of the International Monetary Fund and then the report of the World Bank, the current economic situation of the main actors is evaluated.

The International Monetary Fund's latest report identified the world's largest economic actors. In this report, the International Monetary Fund categorizes countries according to two economic indicators (GDP at PPP and Nominal GDP).¹¹ The United States is at the top of the list with nominal GDP of 21.43 trillion dollars, while China is at the top of the list with nominal GDP of 14. It ranks second with 14 trillion dollars. As shown in the table below, Japan, Germany, India, France, the UK, Italy, Brazil and Canada are ranked respectively; Turkey is ranked 18th in the same ranking.

¹⁰ The micro-level includes the economic dimension of the countries (GDP at PPP and Nominal GDP).

¹¹ International Monetary Fund, World Economic Outlook (October - 2019).

Table 3. GDP (Nominal) Ranking (billions of dollars)

Country/Economic	2019	rank	2020	rank	Continent
United States	27308.86	1	22,321.76	1	North America
China	21,439.45	2	15,269.94	2	Asia
Japan	11,325.67	3	5,413.05	3	Asia
Germany	5,747.50	4	3,982.24	4	Europe
India	4,444.37	5	3,202.18	5	Asia
France	4,349.42	7	2,771.62	6	Europe
United Kingdom	3,737.48	6	2,716.53	7	Europe
Italy	3,456.36	8	2,013.67	8	Europe
Brazil	3,131.20	9	1,893.01	9	South America
Korea, Rep.	3,061.14	10	1,812.46	10	North America
Turkey	743.71	19	813.81	18	Europe

Source: IMF, World Economic Outlook (October - 2019)

One of the most important changes identified in the IMF report is that France is ahead of the UK in 2020. In addition, Turkey has risen from 19th to 18th in its nominal GDP index. It is observed that the rankings of other major economic powers are the same.

The GDP index based on (PPP) is an important factor in the assessment of countries' economic strengths.¹² According to the PPP, China has crossed the United States since 2014. This gap is widening because of China's greater economic growth. Based on the GDP (PPP) index, China will become the world's largest economy, while the United States will be second and India will be third.

Table 4. GDP (PPP) Ranking (billions Int. \$)

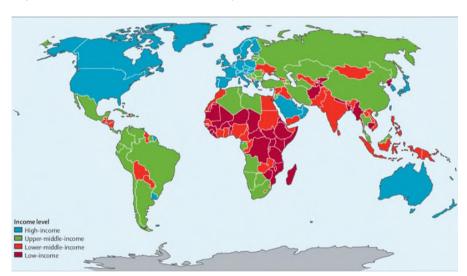
Country/Economic	2019	rank	2020	rank	Share	Continent
0	000000		20/5/		40.70/	
China	27308.86	1	29471.47	1	19.7%	North America
United States	21439.45	2	22321.76	2	14.9%	Asia
India	11325.67	3	12362.81	3	8.27%	Asia
Japan	5747.50	4	5888.91	4	3.94%	Europe
Germany	4444.37	5	4589.12	5	3.07%	Asia
Russia	4349.42	6	4518.72	6	3.02%	Europe
Indonesia	3737.48	7	4004.99	7	2.68%	Europe
Brazil	3456.36	8	3596.84	8	2.41%	Europe
United Kingdom	3131.20	9	3239.58	9	2.17%	South America
France	3061.14	10	3161.34	10	2.11%	North America
Turkey	2346.58	13	2464.61	13	1.65%	Europe

Source: IMF, World Economic Outlook (October - 2019)

¹² Leslie, Kramer, What Is GDP and Why Is It So Important to Economists and Investors, Updated 1 Jun, 2020, available from: https://www.investopedia.com/ask/answers/what-is-gdp-why-its-important-to-economists-investors

In the PPP, there is no change in the ranking of countries according to 2019 and 2020. In this case, according to the purchasing power based GDP index, there was no change in Turkey's position compared to 2019 and 2020. Accordingly, Turkey ranked 13th in the table.

The World Bank classifies countries according to different variables in terms of GDP. In this article, two types of World Bank classification based on Atlas method (GNI) and purchasing power (GDP) are mentioned.¹³ According to the Atlas method, the World Bank divides world countries (high income; medium-high income, medium-low income and low income) into 4 income groups in terms of gross national income(GNIPC).



Map 1. World Bank Classification of Countries by Income

Source: World Bank

In the list of 218 countries evaluated by the World Bank, there are 31 countries in the low income group, 47 countries in the middle-low income group, 60 countries in the mid-high income group and 80 countries in the high income group. Accordingly, approximately 67% of countries are middle-high income or high-income countries.

According to the GNI index, the United States ranks first with a significant distance from other countries. Meanwhile, China ranks first in the world in terms of GDP (PPP). In the coming years, India will have a much better position in terms of purchasing power-based GDP, according to estimates from international institutions. In the table below, countries are listed according to the World Bank report in terms of two economic indicators.

¹³ World Bank, World Development Indicators database, GDP based on PPP and GNI, 1 July 2020.

Table 5. (GNI) and GDP based on (PPP) Ranking

(Millions of US dollars)

Gross national income 2019,			Gross domestic product 2019, PPP			
Atlas Method (GNI)			GDP			
Country/Economic	2019	rank	Country/Economic	2019	rank	
United States	21,584,413	1	China	23,460,170	1	
China	14,554,341	2	United States	21,427,700	2	
Japan	5,263,515	3	India	9,611,679	3	
Germany	4,033,546	4	Japan	5,459,155	4	
India	2,910,840	5	Germany	4,659,795	5	
France	2,843,038	6	Russian Federation	4,281,807	6	
United Kingdom	2,831,800	7	Indonesia	3,329,169	7	
Italy	2,077,674	8	France	3,315,118	8	
Brazil	1,926,332	9	United Kingdom	3,255,484	9	
Korea, Rep.	1,743,709	10	Brazil	3,220,373	10	
Turkey	801,438	18	Turkey	2,325,617	13	

Source: World Bank, World Development Indicators database

As shown in the table above, countries such as France and the UK will fall in terms of GDP(PPP), as predicted by international institutions in the coming years. On the other hand, countries such as Brazil, Mexico and Turkey will increase in terms of GDP(PPP) in the coming years.

V. Effects of the Coronavirus Outbreak on the Global Economy

In the current context, where the global economy is affected by trade tensions and political uncertainty, the spread of the COVID-19 outbreak has had significant effects on the global economy. Addressing all the effects of COVID-19 on the various sectors of the global economy is outside the scope of this article. Therefore, the article focuses only on its main effects.

Effects of Coronavirus Outbreak on Global Economic Growth

The effects of the corona crisis on global economic growth over the past 90 years have never been seen before, according to an assessment by international institutions such as the IMF, the World Bank and the OECD. In this context, the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD) and the World Bank revised all their forecasts from the end of 2019 to mid-2020 following the corona outbreak. This reflects the rapidly deteriorating situation in the global economy and the significant decline in global economic growth forecast.

For example, between October 2019 and June 2020, the IMF reduced its global economic growth forecast from positive 3.4% to negative 4.9%. Similarly, due to a single or double wave of infections, the OECD reduced its estimates from positive 2.9% in November 2019 to negative -6.0% and -7.6% in June 2020. Between January 2019 and June 2020, the World Bank reduced its global growth forecast from positive 2.9% to negative 5.2%. Most estimates predict that developed economies will experience the harshest declines in economic growth from 2019 to mid-June 2020.

 Table 6. Major Economic Espectations

Percentage changes at annual rates

	World			Advanced Economies		oping
	2020	2021	2020	2021	2020	2021
IMF October 2019	3.4%	3.6%	1.7%	1.6%	4.6%	4.8%
IMF April 2020	-3.0	5.8	-6.1	4.5	-1.0	6.6
IMF June 2020	-4.9	5.4	-8.0	4.8	-3.0	5.9
OECD November 2019	2.9	3.0	1.6	1.7	4.0	4.0
OECD March 2020	2.4	3.3	0.8	1.2	NA	NA
OECD June 2020 tek	-6.0	5.2	-7.5	4.8	-4.6	5.6
OECD June 2020 çift	-7.6	2.8	-9.3	2.2	-6.1	3.2
World B. January 2020	2.5	2.6	1.4	1.5	4.1	4.3
World B. June 2020	-5.2	4.2	-7.0	3.9	-2.5	4.6

Source: IMF, OECD and World Bank

¹⁴ International Monetary Fund, **World Economic Outlook**, various issues, June 2020.

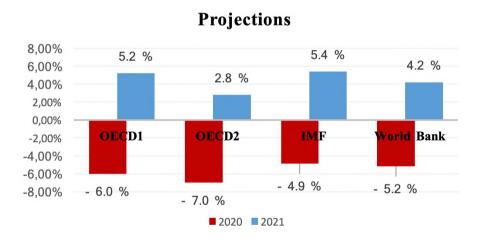
¹⁵ Organization for Economic Cooperation and Development, OECD Economic Outlook, various issues, June 2020.

¹⁶ World Bank, Global Economic Prospects, various issues, June 2020.

The table above shows the effects of the COVID-19 crisis on global economic growth. In particular, it shows changes in the growth trend of the global economy.

According to the International Monetary Fund report, the world economic growth rate in 2020 will decrease by 4.9% due to the widespread explosion of corona and the cessation of many economic activities. The World Bank described the effects of the corona pandemic on the world economy as the biggest economic "shock". According to the World Bank, the world economy shrank by 5.2 per cent in 2020, the biggest recession in the last 90 years. According to the World Bank, the world economy will grow by 4.2% after the end of the corona recession in 2021.

Chart 3. Effects of the COVID-19 crisis on global economic growth (World GDP growth rate)

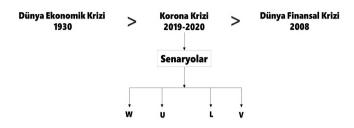


Source: IMF, OECD and World Bank

In 2020, due to uncertainty about the growth of the global economy, the OECD presented two scenarios. The first scenario assumes that the measures taken to stop the corona outbreak are successful. In the second scenario, it is assumed that there is a possibility of a second corona outbreak wave. According to the first scenario, global economic growth is projected to decrease by - 6.0% in 2020. In contrast, according to the second OECD scenario, the global economy will shrink by -7.6% in 2020.

Based on this, it can be concluded that the impact of the COVID-19 crisis has far-reaching effects on the global economy. Therefore, we are facing an economic recession that can take the form of V, U, W and L.

Figure 2. Economic recession scenarios

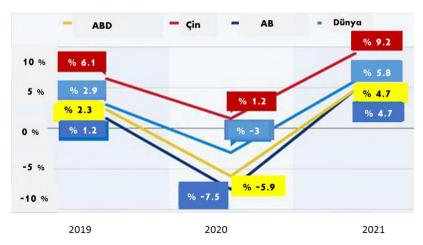


Source: Created by the author of this article¹⁷

As shown in the figure above, scenarios related to the stagnation caused by the corona crisis are defined based on the letters W, U, L and V. These letters are used by economists to describe the recession process until recovery. In fact, these letters represent the shape of the GDP growth curve from stagnation to recovery.

According to the findings of the International Monetary Fund, from the beginning of the corona crisis to the time of writing this article, the effects of the corona crisis on the global recession were greater than the 2008 financial crisis and smaller than the 1930 economic crisis. IMF experts have shown this as (L) due to the deeper effects of the Great Depression of 1930. However, IMF experts have described the effects of the corona crisis on the global economy as short-term, V.¹⁸

Chart 4. The impact of COVID-19 on the global economic downturn



Source: International Monetary Fund

¹⁷ Dünya Ekonomik Krizi (World Economic Crisis), Korona Krizi (Corona Crisis), Dünya Finansal Krizi (World Financial Crisis)

¹⁸ If the second wave occurs, then it will probably be the W shape.

Based on scenario (V), it can be concluded that stagnation occurs in the form of rapid decline and economic recovery can be achieved at the same rate. Of course, the return of the world economy to the previous path depends on the situation. If "we can control this common disease well or get an effective treatment such as vaccine", the global economy will quickly return to normal.

However, no effective vaccine or treatment has been found for COVID-19 so far. If governments reduce existing restrictions and continue economic activity without taking new measures; a second wave will emerge. In this case, the restrictions will return and the second blow to the global economy will be more severe.

Effects of Coronavirus Outbreak on World Trade

The COVID-19 crisis had a significant impact on global trade. The World Trade Organization predicts that the decline in global trade will be greater than the financial crisis 12 years ago. The corona virus outbreak could reduce global trade by 13 to 32 per cent, according to the latest World Trade Organisation (WHO) report.¹⁹

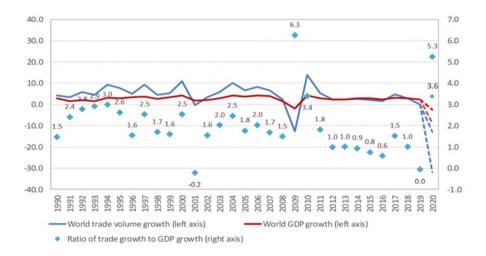


Chart 5. Effects of coronavirus outbreak on world trade

Source: WTO

The economic shock of the COVID-19 pandemic is inevitable and calls for comparison with the 2008-09 global financial crisis. These crises are similar in some ways, very different in some ways. In this crisis, almost all national economic sectors were shut down. In addition, the impact of this crisis may have a significant impact on countries' share of the national manufacturing sector.

World Trade Organization, Trade set to plunge as COVID-19 pandemic upends global economy, 8 April 2020. Avalible from: https://www.wto.org/english/news_e/pres20_e/pr855_e.htm

According to UNCTAD, the value of international trade declined by about 5% in the first quarter of 2020 and 27% in the second quarter of 2020. The following graph shows the effects of COVID-19 on the decline in the value of world trade.²⁰



Chart 6. The impact of the corona pandemic on the value of world trade

Source: UNCTAD

Pioneering indicators, such as the Procurement Managers Indexes (PMI), suggest that international trade worsened in the second quarter of this year. PMIs following international trade showed that contraction rate slowed down in May, while it remained well below the 50-point comparison.²¹

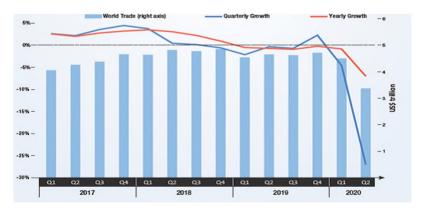


Chart 7. Impacts of the corona pandemic on world trade in goods

Source: UNCTAD

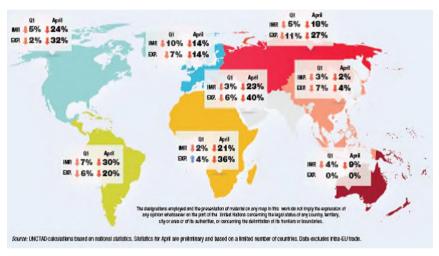
²⁰ UNCTAD, COVID-19 causes international trade to collapse, Global Trade Update, June 2020.

²¹ UNCTAD, COVID-19 causes international trade to collapse, Global Trade Update, June 2020.

International trade is likely to remain below the levels observed in 2019 in the second half of this year. Assuming uncertainty persists, UNCTAD expects a decline of around 20 per cent for 2020. This is in line with the World Trade Organisation (WTO), which expects the drop in international trade to be between 13 per cent and 32 per cent.

No region has avoided a decline in international trade. However, trade in the East Asian and Pacific regions seems to have progressed better than in other regions. Trade declines for these regions remained single-digit both in the first quarter of 2020 and in April. Despite being the first, April data show a sharp decline in all other regions, with declines of up to 40 per cent for countries in South Asia and the Middle East.

Map 2. The impact of the corona pandemic on trade trends in geographic regions of the world



Source: UNCTAD

Global Investment Effects of the Coronavirus Outbreak

In addition to the factors listed above, the COVID-19 crisis also had major effects on global investment. Meanwhile, the effects of COVID-19 on the foreign investment process are inevitable. In this context, with the onset of the coronavirus outbreak, annual investment growth slowed significantly. According to UNCTAD estimates, foreign direct investment in the world decreased by - 40% this year due to the spread of COVID-19 virus in the world (2020).²²

²² UNCTAD, World Investment Report, 2020.

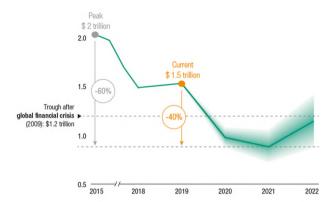


Chart 8. Impact of corona pandemic on foreign investments in the world

Source: UNCTAD

According to the UNCTAD estimate, foreign investment will decline by 5 to 10 per cent in 2021 and will experience a 60% decline in 2021 compared to 2015 (from \$2 trillion to less than 900). According to UNCTAD estimates; All regions and economic groups will see a negative FDI growth rate in 2020. According to this estimate, negative growth of FDIs in developed economies will decrease by between -25 and -40 percent.

Table 7. FDI ratio by Economy Growth and Regions

				Projections
	2017	2018	2019	2020
World	1700	1495	1540	920 to 1080
Development Economies	960	761	800	480 to 600
Europe	570	364	429	240 to 300
North America	304	297	297	190 to 240
Developing Economies	701	699	685	380 to 480
Africa	42	51	45	25 to 35
Asia	502	499	474	260 to 330
Latin America and the Caribbean	156	149	164	70 to 100
Transition Economies	50	35	55	30 to 40
Memorandum: Annual growth rate (per cent)				
World	-14	-12	3	(-40 to -20)
Development Economies	-25	-20	5	(-40 to -25)
Europe	-16	-36	18	(-45 to -30)
North America	-40	- 2	0	(-35 to -20)
Developing Economies	7	0	-2	(-45 to -30)
Africa	-10	22	-10	(-40 to -25)
Asia	7	-1	-5	(-45 to -30)
Latin America and the Caribbean	14	-5	10	(-55 to -40
Transition Economies	-25	-31	59	(-45 to -30)

Source: UNCTAD

The FDI rate will have the highest negative growth rate in Europe (-30% to -45% compared to 2019). Because many major European economies have been affected by the COVID-19 crisis. In this context, it is envisaged that developing economies will have negative FDI growth rates (in the range of 30% to 45%). Emerging economies are more vulnerable to the COVID-19 crisis than the 2008 economic crisis.

Finally, the effects of the corona crisis on the global economy are inevitable. In fact, the corona crisis has also affected other sectors of the economy; increasing unemployment has affected global stock market trends, global supply and demand trends, inflation and monetary and fiscal policies. Addressing all these issues is outside the scope of this article

VI. The Future of the World After Coronavirus

The post-corona world will probably be different from the pre-corona world in every way. COVID-19, like other major crises, has a significant impact on the social, economic and political dimensions of human life. Addressing all these areas is not within the capacity of this article. This study focuses on the economic dimension. On this basis, the future of the world economic order and the position of the great economic powers can be analyzed.

The Future of the World Economic Order After Corona

Various speculations were made about the future of the world economic order after the coronavirus. In summary, speculation about the order of the world economy can be divided into two categories. The first category emphasizes "the continuation of the current order after a temporary break." The second category, however, "highlights a fundamental change in the order of the capitalist world economy."

Various speculations are being made about the future of the world economic order after the coronavirus. In summary, speculation about the order of the world economy can be divided into two categories. The first category emphasizes "the continuation of the current order after a temporary break." The second category, however, "highlights a fundamental change in the order of the capitalist world economy."

However, this study emphasizes that the basic nature of the global economic order will not change. However, the change in the world economic order after the corona will be formal. Post-corona) (in the period, it will continue to be capitalist in terms of the nature of the world economic order. Thus, the change in the world capitalist order seems far from reality.

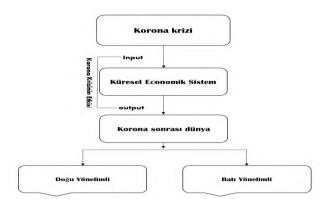


Figure 3. The future of the world economic order after corona

Source: Created by the author of this article²³

The findings of this study emphasize that the global capitalist order is eroded in terms of hierarchy and hegemonic leadership. Thus, the COVID-19 crisis accelerates the erosion process of the "western-centered unipolar and hegemonic order". Countries like China will use this opportunity to improve their position in the global economic system. However, a radical change in the international capitalist system cannot be considered. In fact, for developing countries, the way forward is through the international capitalist order, not out of it.

Given the theoretical framework of this study, the current global capitalist system in the West faces the problem of capital saturation and lack of capacity to absorb plus-value. Accordingly, the capitalist system needs to expand beyond (outside) the West. The decreasing trend of the United States does not mean that this country has completely collapsed. On the contrary, the slowdown in economic growth in the United States and other Western developed countries is due to the reduction in their development capacity.

As historical evidence has shown, Europe, the world's leading economy in the 19th century, declined under the significant growth of the United States in the twentieth century. Because in the 19th century, the development capacities of European countries reached a peak. The United States is experiencing a similar experience today.

Developments in the last three centuries show that economic forces are constantly changing; this change stems from the requirements of the capitalist system. The capitalist system is looking for areas with the capacity for development and growth, and now these areas are outside the US and Europe. Now, there is no doubt that wealth and power move north and west to east and south. In this way, the future world order will have less Western characteristics.

²³ Korona Krizi (Corona Crisis), Korona Krizinin Etkisi (Effect of Corona Crisis), Küresel Ekonomik Sistem (Global Economic System), Korona Sonrası Dünya (Post-corona World), Doğu Yönelimli (East oriented), Batı yönelimli (West oriented)

Finally, the international capitalist order, as it is, faces new challenges today. However, there is still no alternative to the current capitalist order. The Beijing model typically represents a model of state capitalism. In nature, at least from an economic point of view, it is no different from the Western model. Both models are trying to accumulate more wealth, expand their domains and mercantilist networks. At the same time, China is not a full-fledged non-Western hegemon that can rebuild and govern global rules and institutions. Instead, China is trying to travel free of charge, taking extra advantage of the current global capitalist order.

The Future of the Position of Great Economic Forces in the World After Corona

This study emphasizes that there may be a change in the position of major economic forces in the post-corona world. According to the theoretical framework of this research, the growth of the economy and the development of industrial capacity make it possible to change the position of great powers. First, recalling the research findings of PWC and The Economist on the future position of great powers, we then analyze the findings of this research.

According to the PWC, global markets will double by 2050, more than population growth.²⁴ Meanwhile, according to PwC, the economic growth of E7²⁵ countries (China, Brazil, India, Indonesia, Mexico, Russia and Turkey) will gradually increase. According to this report, economic growth and capital accumulation centres are shifting from Western economies to emerging economies in Asia and elsewhere.

As shown in Figure (4), E7 could account for around 50% of world GDP by 2050, while the share of G7 will decrease slightly above 21%. In this way, the share of E7 countries in world GDP will increase.

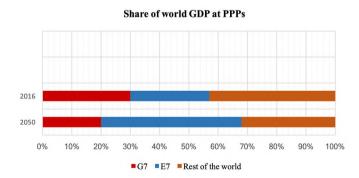


Figure 4. Projected change in shares of world GDP from 2016 to 2050

Source: IMF for 2016 estimate, PwC projections for 2050

²⁴ International Professional Services Company (PwC), The World in 2050: The Long View How Will the Global Economic Order Change by 2050? February 2017.

²⁵ E7: China, India, Indonesia, Brazil, Russia, Mexico and Turkey.

Measurements taken in 2016 show that E7 has not yet exceeded G7 in terms of market exchange rates (MER). However, according to PWC estimates, E7 countries will pass G7 countries in terms of market exchange rates (MER) by 2050. The graph below shows how the economic growth of E7 and G7 will change in terms of GDP and MER.

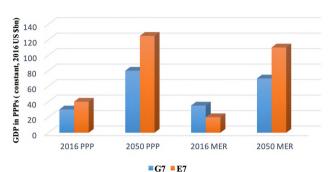


Chart 9. Relative size of G7 and E7 economies, 2016 and 2050

Source: IMF for 2016 estimate, PwC projections for 20

In fact, China has already passed the US in terms of purchasing power parity. In terms of PPP, China is the world's largest economy. India is currently third in terms of PPP. According to the PWC, India will surpass the US in terms of purchasing power parity by 2040. According to THE PWC estimate shown in the figure below, by 2050, the world's first six economies will belong to E7 countries and only 4 G7 countries will remain in the world's top ten economies.

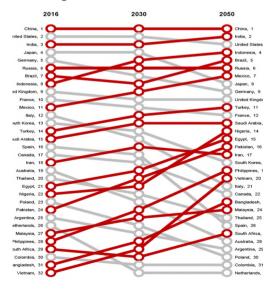


Figure 5. Projected GDP rankings (at PPPs)

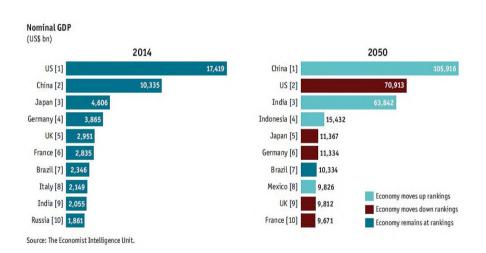
Source: IMF for 2016 estimates, PwC projections for 2030 and 2050

According to the PWC, China, India, the United States, Indonesia and Brazil will be the world's number one economic power by 2050, respectively. Meanwhile, France will no longer be one of the ten largest economies in the world by 2050, and Britain will fall to the tenth place. As can be seen in the figure above, Turkey will be one of the countries that can improve its position in terms of economic growth based on 2050 (GDP in PPP) and have the 11th largest economic power in the world after the UK.

The Economist also assessed the future economic growth of major world powers on the basis of nominal GDP in 2015. According to the economist's findings, we will see major changes in the position of the world's economic forces by 2050.²⁶

China will surpass the United States in terms of nominal GDP in 2026, according to a comparative assessment of nominal GDP by The Economist in 2014. In addition, in 2050, India will be the third largest economy in the world with an average annual growth of 5%. Indonesia and Mexico, ranked 15th and 16th in 2014, will be fourth and eighth in 2050, respectively.

Chart 10. Projected Nominal GDP rankings



Source: The Economist Intelligence Unit.

According to the chart above, representatives of Western economies will still be among the top 10 economies in the world, but they will lose their current position. Currently ranked first, fourth, fifth and sixth respectively, the United States, Germany, England and France will rank second, sixth, ninth and tenth in 2050, respectively. Furthermore, in 2050, Italy and Russia will not be among the top ten economies in the world.

²⁶ The Economist Intelligence Unit, Long-term macroeconomic forecasts; Key trends to 2050, 2015

According to The Economist, the Asian region will continue to grow economically. As shown in the graph below, the share of Asian countries in GDP increased from 26% in 2000 to 32% in 2014. According to these estimates, Asia will account for 53% of world GDP in 2050 with the continuation of the current growth trend.

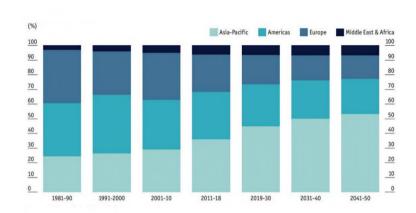


Chart 11. The rise of Asia continues (Regional share of global GDP)

Source: The Economist Intelligence Unit.

However, by 2030, economic growth in all regions of the world will begin to decline. According to The Economist, one of the most important reasons for the slowdown in economic growth is the slowdown in population growth.

Accordingly, the PWC and The Economist reports were published prior to the COVID-19 outbreak. Neither report mentions the effects of COVID-19 on the global economy. So, given the impact of COVID-19 on the global economy; in this case, what future can be envisaged for major economic forces?

This study examines the future of the position of the great powers in the post-Corona world. Therefore, this study is very important. On this basis, based on reliable statistical data of the study, it tries to analyze the future perspective of the position of great powers.

Table 8 shows the impact of Covid 19 on the global economy. In other words, the table below provides a brief comparison of estimates made by the World Bank, the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF) following the corona outbreak. The results of the estimates in Table 8 show the decrease in the growth rate of the world and important countries in 2020.

Table 8. OECD, IMF and World Bank Economic Forecasts

Percentage change in Real GDP Growth

June :	OEC 2020 P	D Projecti	ons	June 20	IMF 020 Pr	ojectio	ons	-	World : 2020 P	Bank rojecti	ons
<	2019	2020	2021	<	2019	2020	2021	<	2019	2020	2021
World	2.70%	-6.00%	5.20%	World	2.90%	-4.9	5.4	World	2.40%	-5.20%	4.20%
Adv. Economies	1.7	-7.5	4.8	Adv. Economies	1.7	-8.0	4.8	Adv. Economies	1.6	-7	3.9
Australia	1.8	-5	4.1	United States	2.3	-8.0	4.5	United States	2.3	-6.1	4
Canada	1.7	-8	3.9	Euro Area	1.2	-10.2	6	Euro Area	1.2	-9.1	4.5
Euro area	1.3	-9.1	6.5	Germany	0.6	-7.8	5.4	Japan	0.7	-6.1	2.5
Germany	0.6	-6.6	5.8	France	1.3	-12.5	7.3	Emerging	3.5	-2.5	4.6
France	1.5	-11.4	7.4	Italy	0.3	-12.8	6.3	E. Asia	5.9	0.5	6.6
Italy	0.3	-11.3	7.7	Spain	2	-12.8	6.3	China	6.1	1	6.9
Japan	0.7	-6	2.1	Japan	0.7	-5.8	2.4	Indonesia	5	0	4.8
Korea	2	-1.2	3.1	United Kingdom	1.4	-10.2	6.3	Thailand	2.4	-5	4.1
Mexico	-0.1	-7.5	3	Canada	1.6	-8.4	4.9	Cen. Asia	2.2	-4.7	3.6
Turkey	0.9	-4.8	4.3	China	6.1	1	8.2	Russia	1.3	-6	2.7
United Kingdom	1.4	-11.5	9	India	4.2	-4.5	6	Turkey	0.9	-3.8	5
United States	2.3	-7.3	4.1	Russia	1.3	-6.6	4.1	Poland	4.1	-4.2	2.8
Argentina	-2.2	-8.3	4.1	Latin America	0.1	-9.4	3.7	Brazil	1.1	-8	2.2
Brazil	1.1	-7.4	4.2	Brazil	1.1	-9.1	3.6	Mexico	-0.3	-7.5	3
China	6.1	-2.6	6.8	Mexico	-0.1	-10.5	3.3	Argentina	-2.2	-7.3	2.1
India	4.2	-3.7	7.9	Mid. East	1.2	-4.7	3.3	Mid. East	-0.2	-4.2	2.3

Source: IMF. OECD and World Bank

The International Monetary Fund's assessment of the effects of the corona crisis shows that developed economies such as the US, the Eurozone, Japan, the United Kingdom and Canada (G7) are becoming more vulnerable than emerging economies such as China, India and some other ASEAN countries. Among the top ten economies available, only China and India have a positive real GDP growth rate in 2020, according to the International Monetary Fund²⁷. Other major economic forces are experiencing negative growth in real GDP.

The International Monetary Fund claimed in the report that its forecasts were realised during the economic crisis (2008-2009) and after the 2008 crisis. At the same time, IMF experts believe their estimates of the effects of COVID-19 on the economy will come true this time. Considering this, it can be concluded that the COVID-19 crisis accelerated the downward trend of Western economic forces, especially the United

²⁷ According to the International Monetary Fund, China and India's real GDP growth rates will be 1.2 per cent and 1.9 per cent in 2020, respectively.

States. Thus, a change in the position of major economic forces may occur even earlier than 2050. Finally, the findings of this study confirm the results of the Economist and PWC report on the change of major economic forces by 2050.

And how is that going to change? What about the change in the position of the main actors of the world economy? Further analysis is needed to answer these questions. In particular, we need to analyze the future position of the great powers on two levels (macro and micro).

At 1 Macro Level: The Future of Great Economic Powers²⁸

The findings of this study are examined under four categories (upper power, great power, major potential power and middle powers) within the framework of the National Power Index of the main actor countries in the post-corona world. The National Power Index is measured by factors such as geography, economy, military capacity, industrial development, leadership, political stability and demographic issues. No country in the post-corona world will be a superpower and a perfect hegemonic power. Therefore, the author of this article suggests a different classification of great powers.

Findings of this study As shown in the figure below, according to the National Power Index in the medium term (2021-2030), the two countries, the United States and China will remain the major powers 1 and 2, respectively. The main reason why the United States and China remain the top power until 2030 is the role of factors such as economic prosperity, military capability, land size, industrial progress (technology) and its strong presence in all global institutions such as UNO, WTO, NSG and IAEA.

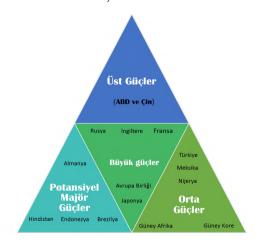


Figure 6. Balance of Power in the World System (2020-2030)

Source: Created by the author of this article²⁹

²⁸ The macro level here refers to the economic, military, soft power dimensions of the actors of the international system

²⁹ Üst Güçler (Super Powers: USA and China), Büyük Güçler (Big Powers: EU, Japan, Russia, France,

European forces II. Although they have lost their sovereignty in world politics and economy since World War II, until 2030 several European countries, such as Britain, Germany, France, Russia and the European Union (as a successful economic bloc), will remain the "great powers" of the world. Japan is also in this group due to its industrial-technological strength and military capability. The reason why the Eurozone (great powers) continues is the existence of strong industrial bases, military forces and their influence on world politics. For example, Britain and France are already permanent members of the UN Security Council. At the same time, Germany is an important economic power.

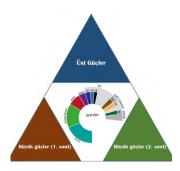
In this decade (2021-2030), India, Brazil and Indonesia may fall into the category of "potential major powers". These countries also have extensive territory and strong economic and military capabilities. However, countries such as Brazil, India and Indonesia need to reform their production structure, economic institution and infrastructures to further strengthen their positions.

At 2 Micro Levels: The Future of Great Economic Powers³⁰

At the micro level, the future of great powers is analyzed through economic indicators. According to the GDP ratio, the future position of the great powers in terms of the economy can be relatively predicted. The future of major economic forces can be predicted according to the time frame (medium and long term).

In the post-corona world based on the GDP index, the main actors of this study are divided into three categories (upper powers, great powers of the first class and great powers of the second class). According to the findings of this study, in the medium term (2021-2030), China and the USA will be the world's first and second largest powers (as top powers), respectively. As shown in the figure below, India, Japan, Indonesia, Brazil, Russia, Germany, Mexico and England will be the great powers of the first class.

Figure 7. Location of Great Powers (2021-2050)



Source: Created by the author of this article

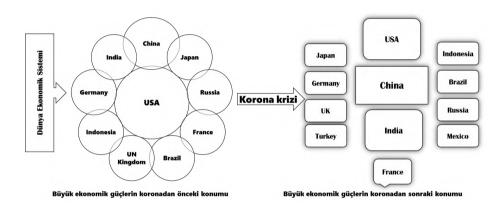
United Kingdom), Potansiyel Majör Güçler (Potential Major Powers:German, India, Indonasia, Brazil), Orta Güçler (Middle Powers: Turkey, Mexico, Nigeria, South Africa, South Korea)

³⁰ Here, the micro-level refers to the economic dimension (GDP index).

According to the figure above; countries such as France, Turkey, South Korea and Italy will be the great powers of the second class. In the long term (2021-2050), the findings of this study are consistent with the data of THE PWC report.

According to GDP in the post-corona world (by 2050), the top ten economies will be China, India, the United States, Indonesia, Brazil, Russia, Mexico, Japan, Germany and the United Kingdom, respectively. The following figure shows the future of the most important major economic powers.

Figure 8. The future of major economic forces in the long run



Source: Created by the author of this article³¹

As seen in the figure above, after the ten largest economic forces in the world, Turkey has the opportunity to become the 11th largest economic power in the world.

Undoubtedly, countries such as Brazil, Mexico and Turkey need to double their efforts to move to higher places. In this context, firstly, these countries should take basic steps to reduce the effects of the COVID-19 crisis on their economic cycles. Secondly, these countries should make the necessary reforms at the basis of their macroeconomic indicators. In particular, Turkey should make the necessary reforms in its economic structure, monetary policy and fiscal policy.

VII. Conclusion

As a result, considering the effects of the coronavirus crisis on the future of the world economic order, it is observed that a new phase has been entered that leads to changes that cannot be ignored in the new balances established under the influence of great economic powers. Contradictory processes of the COVID-19 crisis to reduce the power of some powers and rapidly increase the capabilities of others have radically affected

³¹ World economic system before and after the pandemic.

global balance of power. Influenced by the coronavirus crisis in the world economy, it gave the impression that the centre of gravity of power would eventually shift from the Atlantic to the Pacific.

The findings of this study emphasize that the future of the capitalist system will change formally. In the post-corona world, the change in the capitalist system increases the role of states more than the private sector. The result of this change paves the way for the emergence of a capitalist state. Similarly, a more competitive and fragmented system (blocks, mercantilist networks and regional competition) will replace the existing order (unilateral, unipolar and western-oriented). Furthermore, the welfare state and the neo-Keynesian approach will become more important in the economies of developed European countries.

Western states' poor response to the corona crisis has raised serious doubts about Western states' future positions in the post-corona world. In particular, the corona crisis sounded an alarm about the fall of the United States. In this context, the results of this study emphasize that the USA will lose its hegemonic power in the coming years and will be replaced by new forces such as China. This change in economic power will lead to significant developments in the post-corona world. There is no doubt that China's geopolitical and economic power is growing. But achieving the role of hegemonic power is a long and difficult process. Naturally, it takes at least half a century for another country to reach a position where it can use hegemonic power, and that's a long time in which many things can happen.

Finally, it will be convergent at medium and high levels (center and semi-environment) according to the power equation. However, at a low level (environment), the degree of marginalisation in many countries (Africa, Southwest Asia and Latin America) will increase.

BIBLIOGRAPHY

- Erbay, ER ve M. Özden, (2013), "İktisadi **Kalkınma Kuramlarına Eleştirel Yaklaşım**", Sosyal Bilimler Metinleri, Namık Kemal Üniversitesi yayınları, indirme adresi: https://dergipark.org.tr/tr/download/article-file/781606.
- Elcano Royal Institute, (2019), **Elcano Global Presence Index report**, available from: https://www.globalpresence.realinstitutoelcano.org/en.
- Gerschenkron, Alexander (1962), Economic Backwardness in Historical Perspective, The Belknap Press of Harvard University Press, available from: https://www.hup.harvard.edu/catalog.php?isbn=9780674226005.
- International Monetary Fund, (2020), World Economic Outlook, available from: https://www.lMF.org.
- International Professional Services Company, (2017), **The World in 2050:** The Long View How will the global economic order change by 2050? Available from: https://www.pwc.com/gx/en/issues/economy/the-world-in-2050.html
- Kramer, Leslie, (2019), **What Is GDP and Why Is It So Important to Economists and Investors**, Updated Jun 2020, available from: https://www.investopedia.com/ask/answers/what-is-gdp-why-its-important-to-economists-investors.
- Organization for Economic Cooperation and Development, (2020), **OECD Economic Outlook**, available from: http://www.oecd.org/economic-outlook/june-2020.

- Powermetric Research Network Warsaw, (2019), National Power Rankings of Countries, 2019 report, available from: https://www.researchgate.net/publication/332275399_National_Power_Rankings_of_Countries_2019.
- The Economist Intelligence Unit, (2015), Long-term macroeconomic forecasts; Key trends to 2050, available from: https://www.eiu.com/public/topical_report.aspx?campaignid=ForecastingTo2050.
- UNCTAD, (2020), **COVID-19 causes international trade to collapse**, Global Trade Update, available from: https://www.wto.org/english/news_e/pres20_e/pr855_e.htm.
- UNCTAD, (2020), **World Investment Report,** available from: https://unctad.org/en/pages/PublicationWebfly-er.aspx?publicationid=2769
- Wallerstein, Immanuel (1974), The modern world-system: Capitalist agriculture and the origins of the European world-economy in the sixteenth centenary, Academic Press.
- Wallerstein, Immanuel (1998 a), Liberalizmden Sonra, (Translator: Erol OZ), Istanbul: Metis yayınları.
- Wallerstein, Immanuel (1998 b), Jeopolitik ve Jeokültür, (Translator: Mustafa OZEL), Istanbul: Iz yayınları.
- World Bank,(2020), Global Economic Prospects, available from: https://openknowledge.worldbank.org/han-dle/10986/33748
- World Trade Organization, (2020), **Trade set to plunge as COVID-19 pandemic upends global economy**, Avalible from: https://www.wto.org/english/news_e/pres20_e/pr855_e.htm.
- World Development Indicators database, World Bank, (2020), **GDP based on PPP and GNI**, indrime adresi: https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD.

Coronavirus Depression Scenario and its Post Revisiting Strategy

Muhammad Aiman AWALLUDDIN*

Abstract

This study explores the scenario of COVID-19 from the perspective of microeconomic and macroeconomic. As opposed to the general literature review, the paper adopted systematic review and involve a detailed and comprehensive plan and search strategy ranging from peer-reviewed articles, reports and credible news sources. Around 40 articles and reports, altogether with 20 reliable news sources which are suitable with the flow of study are selected during the construction of study. This study is unique as it empirically narrowed down impacted sectors, draw on real-world observation and examine the affected industries using hard data. Al-

Özet

Bu calısma, COVID-19 senaryosunu mikroekonomik ve makroekonomik açıdan araştırıyor. Genel literatür incelemesinin aksine, makale sistematik incelemeyi benimsedi ve hakemli makaleler, raporlar ve güvenilir haber kaynaklarından ayrıntılı ve kapsamlı bir plan ve araştırma stratejisi içermektedir. Çalışmanın oluşturulması sırasında, toplamda çalışma akışına uygun 20 güvenilir haber kaynağıyla birlikte 40 civarında makale ve rapor seçilmiştir. Bu çalışma; etkilenen sektörleri ampirik olarak belirlemesi, gercek dünya gözleminden yararlanması ve etkilenen endüstrileri somut veriler kullanarak incelemesi bakımından benzersizdir. Vaka sayısı artmaya devam etse

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though the number of cases keeps increasing, economic activities cannot stay dormant for a long time. Some countries are impatiently wanting to reopen their economy to save them from recession. The observed study reveals that tourism, food supply chain and household/individual are severely impacted by the Coronavirus Recession. Additionally, the paper also proposes a critically analyzed revisiting strategy that meets the post-pandemic recovery period so that it can be endorsed by interested parties.

Keywords: COVID-19, Global Recession, Macroeconomic, Microeconomic, Business

de ekonomik faaliyetler uzun süre hareketsiz kalamaz. Bazı ülkeler sabırsızlıkla kendilerini durgunluktan kurtarmak için ekonomilerini yeniden açmak istemektedirler. Çalışma; turizmin, gıda tedarik zincirinin ve hane halkının / bireylerin Koronavirüs durgunluğundan ciddi şekilde etkilendiğini ortaya koymaktadır. Ek olarak, makale ayrıca, ilgili taraflarca tasdik edilebilecek salgın sonrası iyileşme döneminin ihtiyaçlarını karşılayan, eleştirel olarak analiz edilmiş bir yeniden ele alma stratejisi önermektedir.

Anahtar Kelimeler: COVID-19, Küresel Durgunluk, Makroekonomi, Mikroekonomi, İşletme

*

I. Introduction

The COVID-19 pandemic has resulted in more than 10 million cases and over 500 000 deaths around the world. The pandemic not only triggers a global health crisis but also pushed the economy into recession. Notably, many firms had business interruption due to lockdown declared by several countries, which caused trauma on financial markets and slowed down of economic activities (Boissay and Rungcharoenkitkul, 2020). The cost of global influenza pandemic hardly predictable, although worldwide pandemic already took places such as Avian Flu, SARS, Ebola and Spanish Flu. For instance, Avian Flu cost around \$800 billion of the world economy and kills tens of million people (Brahmbhatt, 2005). Although, several predictions have been made based on pandemic 1918, the latest pandemic of COVID-19 evidence that many firms are not ready to meet natural enemies. According to United Nation, the pandemic cost up 1.4 points of Africa's growth (Economic Commission, 2020) and economic loss estimated at \$90 billion to \$200 billion (Jayaram et al. 2020). For Asia and the Asia Pacific estimate economic loss \$1.7 trillion to \$2.5 trillion, and global economic loss could suffer between \$5.8 trillion to \$8.8 trillion (Asian Development Bank, 2020a). The peril of nature's tend to be overlooked by the organization's risk management, and its appearance could challenge the ecology of a business system. Belonged to a group of static risk, the pandemic is not measurable and left firms in a significant uncertainty situation. And, many of them not capable of being resilient due to restrictions of time, highly ambiguous environment and needs of coordination with local governments. The pandemic is affecting the whole business value chain, 360° of business stakeholders, ranging from suppliers to end users.

It can be said that COVID-19 is a "game changer" that put a restart button for the whole business organization, which imply that only survival fittest of an organization may escape from this situation. Additionally, the introduction of social distancing and

new normalization brings all of us into a new era of precaution, where the business can no longer operate as usual. The pandemic changes the structure and standard of industry, market and trends of consumer, forcing management change their business policy drastically, and a vital characteristic of the industry, include geography scope of the industry, boundaries of the industry, dominant characteristic of industry and term and condition of the industry. Perhaps, during this adversity, one of the best way for an organization to survive by quickly adapt to Industry 4.0 and synchronize their business organization with the awakened of intelligence era. Ironically, making instant changing within a short time is impossible due to huge cost, know-how knowledge barrier, cost to cover loss and unknown current state of the organization and also the uncertainty of the future. This paper aims to investigate severely impacted macroeconomics and microeconomic industry and to provide revisiting strategies.

The scenario analysis may not project the exact future but may provide hindsight and revisiting strategy, especially for microeconomic and macroeconomic that have been affected.

II. Literature Review Scenario Analysis

Scenario analysis is a method of predicting future events based on potential events. It is a method for future thinking which designed to broaden and challenge decision-makers perspectives and allowing them to reconsider the standard assumptions of business (van der Heijden et al., 2002). It is considered as one of the best technique available to organizations to solve the hardest problems they face, which is trying to plan for future change in the face of heightened uncertainty. When performing the analysis, ones generate different future states of the business, industry and economy. These alternative future conditions will form discrete scenario that includes assumptions such as product prices, customers metrics, operating cost, interests rates, events likely happening and other events that may drive the business. According to Lexa and Chan one of the benefits of scenario analysis can be seen at an operational level, as ones can be prepared for the scenarios of highest like hood and impact (Lexa and Chan, 2010). Its provide insights into business dynamic (cause and effects relationship) with a narrative description of a consistent set of factors which describe a probabilistic sense alternatives sets of future business conditions (Huss, 1988). A striking example of the accuracy of scenario analysis is that it proved accurate in forecasting two of most notable events in the oil industry of 1970 when Arab oil-producing countries imposed an oil embargo on Western governments in response to their support for Israel in the Yom Kippur war and in the Iranian Revolution of 1979 which decreased oil output (Wack, 1985). The benefits of scenario analysis may provide managements with future planning ideas, being more proactive, avoiding risk and failure, and also projecting investment returns or losses. Scenario methods are often qualitative in approach rather than quantitative, but there are several alternative approaches to scenario analysis (Derbyshire and Wright, 2017). It can be developed using multiple available data such as an official report, raw data, previous case study, historical documents and data, mathematical assumptions and to the extent of intuitive logical (Wright, Bradfield, and Cairns, 2002).

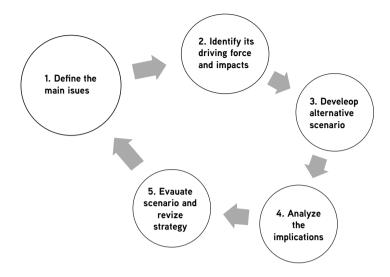


Figure 1. Steps in Scenario Analysis

- 1. **Define the main issues:** identify the prime issues, either current or future events
- 2. **Identify its driving force and impacts:** what is power at the issues that can make a difference? What is the implication of issue towards the organization?
- 3. **Develop alternatives scenario:** create a scenario that likely happens based on analysis; usually, that has a significant impact on organization survival.
- 4. **Analyze the implication:** what is the implication of a scenario that likely will affect the business organization, any change need to be made? Can the organization maintain the status quo?
- Evaluate scenario and revise the strategy: make a judgement from the anticipated happening event, brainstorming, form the opinions and ideas and critically revise your business strategy to adapt to the events.

COVID-19 Implication on Economy

The novel coronavirus not only affect human health's, but it has also been predicted to have a potentially adverse impact on the economic ecosystem as a whole. In response to flattening the curve, several governments have shut down borders and enforced lockdown. The impacts of the lockdown reduce the cases number. Adversely, slow down the economic growth rate, travel restriction and business activities which lead to job losses. Around 1.25 billion workers, representing 38% of the global workforce, face a high risk of a pay cut or lay off (ILO, 2020). While most viable business risk going bankrupt. Indeed, lockdown will likely hurt the business in the short run, and people with no contacts of influenza will experience financial hardships. Nevertheless, a shorter containment period could limit the damage of global economic to \$2 trillion, approximately 2.3% of world output (Asian Development Bank, 2020b). And country who not take it seriously may expose themselves to economic loss such as India, estimate the economic loss at \$29.9 billion (Asian Development Bank, 2020b).

The coronavirus has generated both demand and supply shocks reverberating across the global. The shutdown of some prominence economic provinces in China such as Wuhan, Guangdong, Guangzhou and Shanghai affect the growths of an emerging market that depending on China. It is estimated that around 460 000 Chinese firms shut down their operation, become insolvent and going bankruptcy (Leng, 2020). The pandemic has made China abandoned its GDP target in 2020, which already fall from 6.1% to 1.2% (IMF, 2020). The economic slowdowns, disruption of business activities, and restriction of movement evidence that many employees have been laid off and given unpaid leave. This led to a situation of financial shortage and slump the demand for global. The longer the virus spreads, the more economical and business organization performance will be impacted, raising concerns about debt sustainability, firm's survival ability, and also social unrest in absent of government support. According to IMF report global economy is projected at 3.6% in 2020 and 5.8% in 2021, which is slightly higher than RaboResearch report, a market specialist from Netherland, expect that global economic growth at 1.6% in 2020 and 3.2% in 2021 (Erken et al. 2020). And at the same time, OECD estimate GDP growth at 2.4% in 2020 and 3.3% in 2021(OECD, 2020).

Table 1. GDP Growth Estimation

Organization	2020	2021
International Monetary Fund (IMF)	3.6%	5.8%
RaboResearch-Economic Research	1.6%	3.2%
Organization for Economic Cooperation and Development (OECD)	2.4%	3.3%

The sudden emergence of COVID 19 has been thought will be localized only in China, based on the assumption of the previous pandemic such as H1N1/2009 and Ebola in the Western African. Many countries applied "do nothing" attitudes when outbreak burst in Wuhan, China. The attitude of China in cover-ups the pandemic, and fear of retaliation of countries if they close up their gate to the Chinese brought an unexpected event of large scale economic crisis that led to worst global recessions or Coronavirus Depression since the Great Depression. Several top stock markets had been crashed such as in Asia, Nikkei Index of Tokyo Stock Exchange, Han Seng Index of Hong Kong Stock Exchange and Indonesia Stock Exchange falling to more than 20% below of their 52 weeks highs (Huang, 2020), while most of the European stock markets close more than 20% below of their most recent peak (Aslam, 2020). And it is predicted by Goldman Sachs that US GDP will shrink 24% in the second guarter of 2020 (Reinicke, 2020). To minimize the impacts, some governments have developed various ways to analyze the scenario impact of a pandemic, especially with the assumptions regarding the depth and duration of the outbreak to prevent permanent damage toward the economy. They identified non-essential spending that can be curtailed to create space for pandemic-related spending, including social relief package for the affected households and economy relief package to stimulate economic growth by lowering some taxes and increase subsidies on the essential things and services. Nonetheless, it is best for the government to take strict precaution before announcing reopening of business activities

in order to prevent second wave or major cases rise. The introduction of new normalization and strict standard operating procedure (SOP) act as a best measurement to hinder worst situation of pandemic.

Table 2. Estimation of COVID-19 on Global Impact

Global	Best case	Moderate case	Worst case
	Loss in Million (\$)	Loss in Million (\$)	Loss in Million (\$)
World	76, 693	155, 948	346, 975
China	48, 890	103, 056	236, 793
Developing Asia countries	15, 658	22, 284	42, 243
Rest of the World	17, 145	30 068	67, 938

Source: (Asian Development Bank, 2020a)

The COVID-19 global crisis has a strong territorial dimension, with some region/countries have been harder hit than others. In economic terms, the impact of the crisis will also differ significantly based on their global value chains, and economic specialization such as tourism, manufacturing, agriculture, technology, etc. The spillovers of COVID-19 can be mitigated with immediate actions and effective crisis management to push the spillover impacts on the best-case scenario instead of worst-case which will severely harm economic growths and potential risk of the county to a quick recovery.

III. Methodology

In this study systematically review on journal, reports, and government statements that are directly related to pandemic COVID-19 will be analyzed to investigate scenario events on the industry-specific risk, rather than choosing them randomly. The literature primarily focused extensively on peer-reviewed academic journal articles, government press release (a government agency) and credible reports from market specialist/non-governmental organization. Google Scholar and Social Science Citation Index database will be utilized as they are commonly used in the academic world. The highest/severity impacted sectors scenario will be explored based on the extraction of information after due diligence of consideration.

In order to attain a reliable synthesis of primary research studies, the search is set out by choosing a set of keywords and possible combination that related to events of post COVID-19. The first part of Table 3 shows the number of articles that have been retrieved by the corresponding keywords in the North Carolina State University library database and Google Scholar. Due to the popularity of subjects, the scope of the subject will be narrowed down within the economy and business fields only. The tables are a representation of the challenge and extensive searching applied to obtain articles that related to the aims of the paper. However, because of the accumulated bulk of articles, only the articles that related to studies will be selected. Consequently, a careful selection will be made to obtain related studies specifically on the post-COVID-19 situation on the business sector.

Table 3. Keywords Search

Table 5. Reywords Search				
Search Result in the NCSU library da	itabase			
Key Words Combination	Peer-Reviewed Journal	Reports	Book	Total
COVID-19	339	57	4	400
Post COVID- 19 + Recovery	25	82	0	107
Post COVID-19 + Strategy	45	73	1	119
Post COVID-19 +Recovery	25	82	0	107
Post COVID 19+ business impacts sector	32	127	0	159
Post COVID 19+ scenario strategy	16	22	0	38
Post COVID 19+ critical success + scenario strategy	5	2	0	7
Search Result in Google Scholar				
	Total Result Articles	Matched .	Articles	
"COVID-19"	51 000	N/A		
"post COVID-19" + "business impacts"	78	6		
Post COVID-19" + "business strategy"	11	2		
"post COVID-19" + "economic strategy"	87	12		

Table 4. Example Accepted and Elimination of Articles

Some Accepted Articles	
References	Content Matched
(McKibbin and Fernando, 2020)	Scenario impact of COVID-19 on the global economy
(Gössling et al, 2020)	Impact on Tourism
(Hobbs, 2020)	Food supply chain
(Siche, 2020)	Effect of disease on food supply chain and demand
(Nicola et al., 2020)	Socio-economic implication
Some Elimination Articles	
References	Context Mismatch
(Williams and Kayaoglu, 2020)	Emphasis on the context of policy to support affected people during COVID-19
(Lu et al., 2020)	Assess on SME challenge during COVID-19
(Forsyth, 2020)	Discuss on the labour law, workplace regulation and concern on employees
(Mendoza, 2020)	Proposal on healthcare recovery in the Philippine
(Irimias and Mitev, 2020)	Stressed the importance of green development after post-COVID-19
(Bell and Blanchflower, 2020)	Examined on labour market performance in the US and US before and during COVID-19

Based on scenario analysis, the main issues of this paper is pandemic COVID-19. By using the systematic analysis, the main driving forces of COVID-19 and its impacts can be identified. Before, exploring scenario, another analysis on the press release and news sources which are considered reliable and credible will be made, example news that cited data and uses hard data from "IMF", "OECD", and "World Bank" etc. Media credibility often measures from their credible sources (Jo. 2005). Furthermore, online newspapers are rated more plausible than the printed press (Cassidy, 2007); perhaps more data can be provided and be discussed in it. Journalism data with transparency improves accountability and increase journalism's legitimacy among the audience (Allen, 2008). News sources may obtain verified data from reputed organization quickly, easily access expert opinion, and having stable financial to cover information cost from some paid specialist organizations. In this study, the news will be verified from their sources and be checking into Media Bias/Fact Check (MBFC), a website that factual rate accuracy of news. If the news found out "bias/not factual" from fact check, it will be instantly rejected. The website has been used by research groups at Massachusetts Institute Technology and the University of Michigan. It is also has been supported by several university libraries such as the University of Arizona, University of Georgia and Harvard Library.

Table 5. Some Matched Credible News Sources

Sources on Post COVID-19					
Contributor	Publisher	Data Quoted	Status	Matched	
(McCarthy, 2020)	Forbes	World Travel and Tourism Council	Mostly Factual	Tourism Impact	
(Harvey, 2020)	The Guardian	UN World Food Programme	Generally Factual	Food shortage	
(Morgan, 2020)	Euronews	International Labour Organization	High	Increase of unemployment rate	
(Yen Nee, 2020)	CNBC	Air Transport Association	High	Aviation losses	
(Quinn, 2020)	Foreign Policy	European Federation of Food, Agriculture and Tourism Trade Unions	High	Food Crisis	

Table 6. Severe Impacted Sector

Sector	Google Scholar Finding	Urgency (Requiring Swift Action)	Severely Impacted	Change of Industry Standard
Tourism "(impact of COVID-19 on tourism)" (tourism crisis on COVID-19)"	73 000 + 33 000	Travel and tourism is one of the most negatively affected sectors with worldwide borders closing. UNWTO expects international arrivals to decrease by 70 to 75% over the entire year by 2020, based on current trends. This would have made tourism industry to return to its level three decades ago.	The estimated impacts loss around \$910 billion to \$1.2 trillion and possibility of 120 million workers are going to lose jobs (UNWTO, 2020).	E.g. capacity of airline reduce to 50%.
Food Crisis "(impact of COVID-19 on food security)" "(food crisis covid 19) "	81 300+ 134 000	Roughly estimates one-one-third of the global population is in lock-down, which several countries have put into place, hence global food security alerts have arisen. The food system consists of all stages of food production from farm to fork (production, distribution, and storage), various parts (infrastructure, agricultural inputs, farmers, retailers, and institutions), and this has complicated the interactions among those involved.	The most vulnerable populations will be hard hit by COVID-19. There were 820 million people living with hunger, 2 billion severely malnourished and 700 million living below the poverty line before coronavirus expansion. The UN Coordination Office on Humanitarian Affairs (OCHA) has forecast the need for humanitarian aid in 2020 for 100 million people.	E.g. some countries such as Vietnam banned rice exports to make sure the country has sufficient food.
Household "(impact of covid on household)" (household crisis covid 19)	195 000 + 49200	The pandemic cause many people lost their jobs, thus widened income inequality gap in country. They also hardly to sustain their living expenses and may cause social problems.	According to ILO estimated 1.6 billion workers in the informal economy suffered to earn a living. (ILO, 2020)	E.g. increase poverty and rising of criminal activities.

IV. Discussion

The selected articles, reports and news from credible sources have been critically appraised and studied. From those references, it is found out that the most impacted macroeconomic sectors are tourism and food supply chain, while for microeconomic is household/individual due to employment losses. They were chosen based on urgency, severely impacted, and high probability of change of industry structure and standard.

Scenario Analysis and Revisiting Strategy

Tourism

International tourism is one of the largest industry in the world and important sources of revenue in directing country economic to higher growth. For some countries like Turkey, it is crucial for GDP growth. The COVID-19 has paralyzed world tourism with almost 100% of tourist destinations have been infected, and approximately 80% of drop numbers of international tourist around the world. The estimated impacts loss around \$910 billion to \$1.2 trillion and the possibility of 120 million workers are going to lose jobs (UNWTO, 2020). Also, the aviation and road transportation which considered as interrelated branches of tourism, badly impacted from the pandemic with over 3 billion reductions of passenger and up to \$420 billion potential gross operating revenue loss (ICAO, 2020). Regional and international airlines eagerly seek the mercy of bailout from their respective governments such regional American airlines; Delta, United and Southwest, and international airlines; Lufthansa, Philippine Airline, Brazil Airline and Air France-KLM.

It is suggested that the airline and tourism industry revisit their strategy to greet new tourism normalization by focusing on the domestic before going international. The introduction of travel bubble, which is likely to be enforced by local governments soon, which most of them are likely to focus on local tourism. It is because controlling a new wave of COVID-19 will be easy on local people rather than having infected foreigners. Besides, most people are travelling with their families, and some countries may still restrict child movement. The social distancing norm is not well practised by some countries such as the US, Britain and Indonesia, which may cause a disturbance if those people allow for international travel. In fact, some people are still sceptical to go abroad, unless urgency matters. The increased cost of travel, with some transport operator, reduce their seat number over 50% to follow new normalization likely to increase the cost of travel. Furthermore, people are expected to see spike increase of international flight ticket due to the reduction of seats, cost of new COVID-19 SOP and the possibility of the airline to make more revenue to cover their losses. Also, time-consuming and tedious SOP at the airport, in aeroplane and tourist location makes it less favourable. For tourism agency, promoting caravan vacation should be the opportunity as new normalization requires social distancing. With that, people can travel at ease without having direct contacts with other people than their travel buddies. For the government, to stimulate tourism growths, they can offer mass tourism discount by subsidies travel cost ranging from airline, hotels, ground transportations and introduce "selection optional travel program" by making some location available at one time. The location should be no longer available if the numbers of tourist already exceed quota and only shall be open once the other tourists move to another location. Additionally, travellers must hire formal tourist guide rather than allowing them for backpackers to facilitate controlling and precaution mechanism. The government also can arrange for "specific quota control" and travel duration limit, by allowing specific numbers of tourists that can enter their countries based on quota per each country and duration of stay. Rather than having industry competition, it is time for cooperation and every country should offer vice versa arrangement to attract tourists.

Food Supply Chain

The COVID-19 and the accompanying economic crisis has caused major disruption to world trade food and agricultural products. Production has been dropped out, and labour has been threatened (Torero, 2020), logistics and distribution have become a challenge. Some countries carefully strategize how to ensure their food supply remain sustainable by applying protectionist policies, such as Vietnam and Cambodia banned rice export, Ukraine suspended buckwheat and Russia limits grain export. In these hardest times, food security is a key concern for government throughout the world. In contrast for China, they already prepared for the worst by developed strategic pork reserve, pig production has increased manifold with the backyard system to landless system (Bai et al., 2020). Thanks to a decade of efforts during pandemic China releases around 20 000 tons of their pig reserve to stabilize market prices and to boost supply (Xinhua, 2020).

The pandemic should make government realized that food is a strategic commodity that should be localized no matter what reasons are. Food crisis can put a country at a disadvantage, and they will have difficult terms during negotiations. The industry should be ranked as critical rather than essential, and the workers should be regarded as front liners and be given a critical allowance and free healthcare access to maintain labour forces at all times. Local governments should introduce tax exemption or reduce the tax rate on food industry after post-pandemic, for them to increase their production and make industry favourable to entry. For barren land countries, they may set up a partnership company and leasing farmland from their neighbour countries, which facilitate transportations and ensure stable food supply during any crisis. Also, set up an agricultural village or city with full support from the government with a goal to concentrate on food production, like Felda and Felcra in Malaysia. Last but not least, rethinking agroecology, an approach that needs cooperation from all agriculture stakeholders to acts as a key agent to transform the food and agriculture system into more holistic and long term value creation.

Household/Individual

The COVID-19 has created unprecedented unemployment worldwide. According to (ILO, 2020) estimated 1.6 billion workers in the informal economy suffered to earn a living. The biggest economy in the world US saw jumped of employment rate to 14.7%, and researchers projected that 42% of pandemic-induced layoffs would result in a permanent job loss (Barrero, 2020). The situation possibly on the scale of the Great Depression 1930, which pose significant social and economic challenges. The pandemic has led to sharp declines in household sentiment and increases the feeling of uncertainty about their financial incomes. The dire situation put a strain on household debt, with the full-fledged recession, may put pressure on the household debt to increase.

Although some companies have been shifted to work from home and introduce flexible hours, by the rule of thumbs, no one size fits all. Some jobs, such as site jobs and oils exploration, require physical human resources. Thus, it is suggested that lay off workers should work on their own rather than waiting to be spooned feeding. One of the

jobs that can be done is by doing e-hailing service by own self or working for e-hailing companies such as Grab Food and Panda Food. The e-hailing service provides a big opportunity as some people still traumatized to go out, even to buy their groceries. The ranging of services can be done, such as pick up orders to delivery services. Next, freedom of street entrepreneur should be allowed at its highest level for extra pocket money during COVID-19 recovery. The level of freedom seems higher in Asia countries such as in Malaysia and Indonesia which assist poor and layoff people to earn a living rather than depending on government assistance. The uncivilized street business power should not be undermined as they substantially contribute to local economic (Rishi, 2013). Lastly, moving towards 5G might not be a solution towards unemployment as the economy might go after artificial intelligent that possibly replace unskilled and semi-skilled labour force. Perhaps, investing in e-commerce and make it locally widely known will acts as a leverage for the public to make their fortune.

V. Conclusion

The market for tourism was huge until the 21st century influenza was discovered. A study on travelers reactions based on 75,000 forum posts between December 30. 2019 and March 15, 2020 and 23,515 cases from Europe, and Asia, are employed for analyses. The findings are clear that the tourism industry is highly vulnerable to global crises (Uğur and Akbıyık, 2019). The spread of pandemic news cause travel cancellations or delays of trips on the same day. One of negative side effect of these crises is that it takes travelers a long time to return to their previous mobility. One has to deal with anxiety, fear, and immobility for a long time before they adjust to it. One of best way to attract travelerson post-covid by adopting aggressive ticket discounts and tourism promotion as people also exhausted from the pandemic and needs fresh air to release their tension of long stand still; stay at home for virus containment. Although, COVID-19 is a significant threat to public health. But it could lead to a food insecurity as well. There are food and nutrition issues across the globe at this time. More than 820 million people across the globe are already suffering from hunger and and malnutrion (Shenggen, 2020). Also, in the past several years, wars, mass starvation, worsening income inequality, and climate change have caused hunger and malnutrition to rise in many regions around the world. Additionally, the outbreak prompted many countries to impose various export policies to restrict the export of food products and may causing food prices spiking, making food insecurity to red alert. If this really happening, a complete global famine could be a serious threat. Since the novel coronavirus has not yet been completely contained, it's difficult to predict when it will end. In order to ensure the global food security, authority party must do urgent work at the national and sub-national levels. In the first place, they must closely monitor food prices and markets, ensuring food production remain in operation and never doing food curfew which is important to prevent panic. The government should enact stronger market regulation and guide food producer in their decisions to discourage fear and ambiguity among them. It is important to make sure that international and national food and agricultural supply networks remain operational at all times, by having mutual agreement on food security. As businesses were adversely affected by the COVID pandemic and facility closures, many were forced to lay off their workers. The sad fact is that COVID-19 has significantly increased the gap between the wealthy and the poor in the county. There has been a rise in the lower-middle class since then. The crisis has pushed more families into poverty, and some of them into absolute poverty. A lack of preparedness have made it difficult for this group to deal with the economic consequences of the COVID-19. Forward-looking governments and organisations (like universities) should start considering the implications of COVID-19 as soon as possible, whether it creates long-term or short-term problems, especially with regards to the loss of employment. It would be necessary to carefully assess the individual's external situation including his/her employment status, financial status, family, and living conditions. Additionally, the government should pursue distributive policies aimed at those at the lower-income and vulnerable groups, especially by investing in career training and mobility programmes, and increasing access to high-speed internet and more reliable internet in areas that provides less accessibility to promote digital world of work.

Finally, during the COVID-19 pandemic, a coordinated global response is critical, and national leadership is necessary. In order to overcome the pandemic tension, coordination between countries are needed, and decisions must be made with respect of humanity sense, along with a deep understanding to mitigate impact of the pandemic and ensuring globalization remains as it was. Likewise, everyone needs to be resilience to meet unexpected events during this outbreak to overcome the hardship either at national level or individual level. Moreover it is important to ensure smooth flow of global trade to avoid any further of economic shocks, as smooth flow of trade is essential to protect livehoods.

BIBLIOGRAPHY

- Allen, David S. 'The Trouble with Transparency: The Challenge of Doing Journalism Ethics in a Surveillance Society'. *Journalism Studies* 9, no. 3 (2008): 323–40. https://doi.org/10.1080/14616700801997224.
- Asian Development Bank. 'An Updated Assessment of the Economic Impact of COVID-19', 2020.
- ——. 'Asian Development Outlook 2020: What Drives Innovation in Asia?' ADB, 2020. https://www.adb.org/sites/default/files/publication/575626/ado2020.pdf.
- Aslam, Naeem. 'The Bear Market Is Here! Fastest Plunge Of 20% On Record'. Forbes, 23 May 2020. https://www.forbes.com/sites/naeemaslam/2020/03/12/the-bear-market-is-here-fastest-plunge-of-20-on-record/#2528078a627f.
- Bai, Z. H., L. Ma, W. Qin, Q. Chen, O. Oenema, and F. S. Zhang. 'Changes in Pig Production in China and Their Effects on Nitrogen and Phosphorus Use and Losses'. *Environmental Science and Technology* 48, no. 21 (2014): 12742–49. https://doi.org/10.1021/es502160v.
- Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis. 'COVID-19 Is Also a Reallocation Shock'. *University of Chicago, Becker Friedman Institute for Economics Working Paper No. 2020-59.* Chicago: Elsevier BV, 6 May 2020. https://doi.org/10.2139/ssrn.3592953.
- Bell, David N F, and David G Blanchflower. 'Us and Uk Labour Markets Before and During the Covid-19 Crash'. National Institute Economic Review 252, no. 252 (2020): R52–69. https://doi.org/10.1017/nie.2020.14.
- Boissay, Frederic, and Phurichai Rungcharoenkitkul. 'Macroeconomic Effects of Covid-19: An Early Review'. BIS Bulletin, no. 7 (2020). https://www.bis.org/publ/bisbull07.htm.
- Brahmbhatt, Milan. 'Avian Influenza: Economic and Social Impacts.' .Speech. World Bank, Washington, D.C., 2005.
- Cassidy, William P. 'Online News Credibility: An Examination of the Perceptions of Newspaper Journalists'. *Journal of Computer-Mediated Communication* 12, no. 2 (2007): 478–98. https://doi.org/10.1111/j.1083-6101.2007.00334.x.
- Derbyshire, James, and George Wright. 'Augmenting the Intuitive Logics Scenario Planning Method for a More Comprehensive Analysis of Causation'. *International Journal of Forecasting* 33, no. 1 (2017): 254–66. https://doi.org/10.1016/j.ijforecast.2016.01.004.
- Economic Commission for Africa. 'Economic Impact of the COVID-19 on Africa'. Addis Ababa, Ethiopia, 2020.

- Erken, Hugo, Menno Middeldorp, Raphie Hayat, and Kan Ji. 'Global Economic Outlook : COVID-19 Has Taken a Hold of the Global Economy', 2020.
- Forsyth, Anthony. 'COVID-19 and Labour Law: Australia'. Italian Labour Law E-Journal 13, no. 1 (2020): 24-27.
- Gössling, Stefan, Daniel Scott, and C. Michael Hall. 'Pandemics, Tourism and Global Change: A Rapid Assessment of COVID-19'. *Journal of Sustainable Tourism* 0, no. 0 (2020): 1–20. https://doi.org/10.1080/09669582.2020.1758708.
- Harvey, Fiona. 'Coronavirus Crisis Could Double Number of People Suffering Acute Hunger UN | Coronavirus Outbreak | The Guardian'. The Guardian, 21 April 2020. https://www.theguardian.com/world/2020/apr/21/global-hunger-could-be-next-big-impact-of-coronavirus-pandemic.
- Hobbs, Jill E. 'Food Supply Chains during the COVID-19 Pandemic'. *Canadian Journal of Agricultural Economics/ Revue Canadienne d'agroeconomie*, 2020, 1–14. https://doi.org/10.1111/cjag.12237.
- Huang, Eustance. 'Japan Stocks Follow Dow into a Bear Market as Trump Suspends Travel from Europe; WHO Declares Coronavirus Outbreak a Pandemic". CNBC, 23 May 2020. https://www.cnbc.com/2020/03/12/asia-markets-dow-bear-market-coronavirus-currencies-in-focus.html.
- Huss, William R. 'A Move toward Scenario Analysis'. *International Journal of Forecasting* 4, no. 3 (1988): 377–88. https://doi.org/10.1016/0169-2070(88)90105-7.
- ICAO. 'Effects of Novel Coronavirus (COVID-19) on Civil Aviation: Economic Impact Analysis'. Montreal, 2020. https://www.icao.int/sustainability/Documents/COVID-19/ICAO_Coronavirus_Econ_Impact.pdf.
- ILO. 'ILO Monitor: COVID-19 and the World of Work. Third Edition Updated Estimates and Analysis', 2020. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_743146.pdf.
- IMF. 'World Economic Outlook Growth Projections', 2020. https://www.imf.org/~/media/Files/Publications/WEO/2020/April/English/StatsAppendixIntro.ashx?la=en.
- Irimias, Anna, and Ariel Mitev. 'Change Management, Digital Maturity, and Green Development: Are Successful Firms Leveraging on Sustainability?' Sustainability 12, no. 4019 (2020): 1–13.
- Jayaram, By Kartik, Acha Leke, Amandla Ooko-ombaka, and Ying Sunny Sun. 'Tackling COVID-19 in Africa: An Unfolding Health and Economic Crisis That Demands Bold Action', 2020.
- Jo, Samsup. 'The Effect of Online Media Credibility on Trust Relationships'. *Journal of Website Promotion* 1, no. 2 (2005): 57–78. https://doi.org/10.1300/J238v01n02_04.
- Kees van der Heijden, Ron Bradfield, George Burt, George Cairns, George Wright. *The Sixth Sense: Accelerating Organizational Learning with Scenarios*. Chichester: John Wiley & Sons, 2002.
- Leng, Sidney. 'Coronavirus: Nearly Half a Million Chinese Companies Close in First Quarter as Pandemic Batters Economy'. South China Morning Post, 23 May 2020. https://www.scmp.com/economy/china-economy/article/3078581/coronavirus-nearly-half-million-chinese-companies-close-first.
- Lewis, Seth C., and Oscar Westlund. 'Big Data and Journalism: Epistemology, Expertise, Economics, and Ethics'. *Digital Journalism* 3, no. 3 (2015): 447–66. https://doi.org/10.1080/21670811.2014.976418.
- Lexa, Frank James, and Stephen Chan. 'Scenario Analysis and Strategic Planning: Practical Applications for Radiology Practices'. *Journal of the American College of Radiology* 7, no. 5 (2010): 369–73. https://doi.org/10.1016/j.jacr.2009.12.012.
- Lu, Yi, Jing Wu, Junlin Peng, and Li Lu. 'The Perceived Impact of the Covid-19 Epidemic: Evidence from a Sample of 4807 SMEs in Sichuan Province, China', no. May (2020). https://doi.org/10.1080/17477891.2020.1763902.
- McCarthy, Niall. 'COVID-19's Impact On Tourism: Which Countries Are The Most Vulnerable? [Infographic]'. Forbes, 5 May 2020. https://www.forbes.com/sites/niallmccarthy/2020/05/05/covid-19s-impact-on-tourism-which-countries-are-the-most-vulnerable-infographic/#447dc8e01906.
- McKibbin, Warwick J., and Roshen Fernando. 'The Global Macroeconomic Impacts of COVID-19: Seven Scenarios'. CAMA Working Paper No.19/2020. Elsevier BV, 2 March 2020. https://doi.org/10.2139/ssrn.3547729.
- Mendoza, R U. 'COVID-19: Navigating Inclusive Recovery towards the New Normal'. SSRN Electronic Journal, 2020, 1–35.
- Morgan, Alexander. 'Meet the People Losing Their Jobs amid the COVID-19 Lockdowns | Culture Clash | Euronews', 29 April 2020. https://www.euronews.com/2020/04/03/meet-the-people-losing-their-jobs-amid-the-covid-19-lockdowns-culture-clash.
- Nicola, Maria, Zaid Alsafi, Catrin Sohrabi, Ahmed Kerwan, Ahmed Al-Jabir, Christos Iosifidis, Maliha Agha, and Riaz Agha. 'The Socio-Economic Implications of the Coronavirus and COVID-19 Pandemic: A Review'. International Journal of Surgery 78, no. April (2020): 185–93. https://doi.org/10.1016/j.iisu.2020.04.018.
- OECD. 'Coronavirus: The World Economy at Risk'. *OECD Interim Economic Assessment*, no. March (2020): 1–18. http://www.oecd.org/berlin/publikationen/Interim-Economic-Assessment-2-March-2020.pdf.

- Quinn, Colm. 'Coronavirus Threatens U.S. Food Supply Chain'. Foreign Policy, 6 May 2020. https://foreignpolicy.com/2020/05/06/coronavirus-usa-meat-food-supply-chain/.
- Rahman, Riska, and Esther Samboh. 'Time-out: IDX Halts Trading as Shares Plunge 5%'. *The JakartaPost*, 23 May 2020. https://www.thejakartapost.com/news/2020/03/12/time-out-idx-halts-trading-as-shares-plunge-5.html.
- Reinicke, Carmen. 'Goldman Sachs Now Says US GDP Will Shrink 24% next Quarter amid the Coronavirus Pandemic'. *Market Insider*, 20 March 2020. https://markets.businessinsider.com/news/stocks/us-gdp-drop-record-2q-amid-coronavirus-recession-goldman-sachs-2020-3-1029018308.
- Rishi, Kiran L. A Food Revolution: A Look at How Mobile Food Is Changing Los Angeles. Urban & Environmental Policy, Institute Occidental College., 2013.
- Shenggen, Fan. 'Preventing Global Food Security Crisis under COVID-19 Emergency'. International Food Policy and Research Institute, 2020. https://www.ifpri.org/blog/preventing-global-food-security-crisis-under-covid-19-emergency.
- Siche, Raúl. 'What Is the Impact of COVID-19 Disease on Agriculture?' *Scientia Agropecuaria* 11, no. 1 (2020): 3–9. https://doi.org/10.17268/sci.agropecu.2020.01.00.
- Sin, Noah, and Samuel Shen. 'Hong Kong's Hang Seng Index Plunges into Bear Market'. *NASDAQ*, 23 May 2020. Hong Kong's Hang Seng Index plunges into bear market.
- Torero, Maximo Cullen. 'Press Release: A Battle Plan for Ensuring Global Food Supplies during the COVID-19 Crisis'. FAO. Food and Agriculture Organization of the United Nations (FAO), 2020. http://www.fao.org/news/story/en/item/1268059/icode/.
- Uğur, Naciye Güliz, and Adem Akbıyık. 'Impacts of COVID-19 on Global Tourism Industry: A Cross-Regional Comparison'. *Tourism Management Perspectives* 36 (1 October 2020): 100744. https://doi.org/10.1016/j.tmp.2020.100744.
- UNWTO. 'INTERNATIONAL TOURIST NUMBERS COULD FALL 60-80% IN 2020, UNWTO REPORTS', 2020. https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-04/200428 - Travel Restrictions EN.pdf.
- Wack, Pierre. 'Scenarios: Uncharted Waters Ahead'. Harvard Business Review, 1985.
- Williams, Colin C., and Aysegul Kayaoglu. 'COVID-19 and Undeclared Work: Impacts and Policy Responses in Europe'. The Service Industries Journal 0, no. 0 (2020): 1–18. https://doi.org/10.1080/02642069.20 20.1757073.
- Wright, George, Ron Bradfield, and George Cairns. 'Does the Intuitive Logics Method and Its Recent Enhancements Produce "Effective" Scenarios?' Technological Forecasting and Social Change 80, no. 4 (2013): 631–42. https://doi.org/10.1016/j.techfore.2012.09.003.
- Xinhua. 'China Releases 20,000 Tons of Pork from Central Reserves'. The State Council: The People's Republic of China, 3 April 2020. http://english.www.gov.cn/statecouncil/ministries/202004/03/content_WS5e8699e5c6d0c201c2cc0117.html.
- Yen Nee, Lee. 'Coronavirus Pandemic's Impact on Travel, Tourism in 5 Charts'. CNBC, 6 May 2020. https://www.cnbc.com/2020/05/06/coronavirus-pandemics-impact-on-travel-tourism-in-5-charts.html.

The Impact Of Covid-19 on Consumers and Future Expectations: An Empirical Study in Turkey

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Abstract

Introduction: The outbreak of coronavirus have caused human suffering and significant loss of life in the Turkey and around the world. Measures to prevent the spread of the pandemic have an adverse effect on individual consumption habits, production processes and employment. This study aimed to examine the impact of COVID-19 on consumers and future expectations in Turkey.

Materials and Methods: An online survey was conducted to collect data. E-view and Microsoft excel sheet were used to analyze the collected data graphically, and for forecasting. The survey was conducted from 15th June to the 18th of July, 2020.

Results: The results of the survey show that the coronavirus has changed con-

Özet

Giriş: Koronavirüs salgını, Türkiye'de ve dünyada insanların acı çekmesine ve önemli can kayıplarına neden olmuştur. Pandeminin yayılmasını önlemeye yönelik tedbirler, bireysel tüketim alışkanlıklarını, üretim süreçlerini ve istihdamı olumsuz etkilemektedir. Bu çalışma, koronavirüsün Türkiye'deki tüketiciler ve gelecekteki beklentiler üzerindeki etkisini incelemeyi amaçladı.

<u>Veri ve yöntemler:</u> Veri toplamak için çevrimiçi bir anket yapıldı. Toplanan verileri grafiksel olarak analiz etmek ve tahmin etmek için Eview ve Microsoft excel sayfası kullanıldı. Anket 15 Haziran - 18 Temmuz 2020 tarihleri arasında gerçekleştirildi.

<u>Bulgular:</u> Anketin sonuçları, koronavirüsün tüketicilerin davranışını değiştirdiği-

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sumers' behavior. The findings also indicate that the experienced inflation by the consumer's beliefs will influence the rise of prices of food commodities in the next 12 months. However, if the pandemic will continue up to the next coming months or years, most of the consumers have potential future preparation of the impact.

Conclusions and Recommendations: This study concluded that consumers are experiencing behavior changes due to coronavirus. There is high projection that the consumers are going to face rise of prices of food commodities. The study recommends that the government should maintain already adopted package of policies and also adopt new policies in order to protect the consumers, and Small and Medium Enterprises (SME-s).

Keywords: COVID-19, Consumers, Consumer Behavior, Future Expectations, Inflation, Stockpiling ni gösteriyor. Bulgular ayrıca, tüketicinin inançlarından kaynaklanan enflasyonun önümüzdeki 12 ay içinde gıda ürünleri fiyatlarının yükselişini etkileyeceğini gösteriyor. Bununla birlikte, pandemi önümüzdeki aylara veya yıllara kadar devam edecekse, tüketicilerin çoğu gelecekte olası etkilere karşı hazırlıklıdır.

Sonuçlar ve Öneriler: Bu çalışma, tüketicilerin koronavirüs nedeniyle davranış değişiklikleri yaşadığı sonucuna varmıştır. Tüketicilerin gıda ürünleri fiyatlarının artmasıyla karşı karşıya kalacağına dair yüksek tahminler vardır. Çalışma, hükümetin tüketicileri ve Küçük ve Orta Ölçekli İşletmeleri (KOBİ'ler) korumak için halihazırda benimsenmiş politika paketini sürdürmesini ve ayrıca yeni politikalar benimsemesini önermektedir.

Anahtar Kelimeler: Covid-19, Tüketiciler, Tüketici Davranışları, Gelecek Beklentileri, Enflasyon, Stoklama

I. INTRODUCTION Background of the Study COVID-19 Profile

The 2019 Coronavirus Disease or, as it is now called, COVID-19, is a severe acute respiratory syndrome caused by Severe Acute Respiratory Syndrome (SARS-CoV). It was supposed that in December 2019, SARS-CoV apparently transit from animals to humans at the Huanan seafood market and rapidly spread from Wuhan City of Hubei, Province of China, to the rest of the world (Di Renzo, 2020). As of 19 July 2020, the COVID-19 had infected more than 14 million people, killed more than 500 thousand and spread all over the world⁽¹⁾.

Due to the growing case notification rates at Chinese and international locations, on the 30th January 2020, the World Health Organization (WHO) Emergency Committee declared a global health emergency. Before the COVID-19, there are four pandemics in the last two century: "Spanish Flu" [caused by an Influenza A(H1N1) virus] in 1918, the

^{1 &}quot;World Health Organization data: COVID-19 Update." Accessed July 19, 2020, https://www.who.int/emergencies/diseases/novel-coronavirus-2019.

"Asian Flu" [caused by an Influenza A(H2N2) virus] in 1957, and the "Hong Kong Flu" [caused by an Influenza A(H3N2) virus] in 1968 plus swine flu in 2009 (Baldwin and di Mauro, 2020). It is defined as a pandemic since it has reached the highest level of global health emergency and affecting multiple regions of the world. In general, declaring a pandemic is assumed a historical event since it is not just a health issue, it has also economic, political and social dimensions at the global level (Açikgöz and Günay, 2020).

The disease was confirmed to have reached Turkey on 11 March 2020, after a man who had returned to Turkey from Europe, tested positive ^{2}. Due to this, on March 12, 2020, government announced that all primary, secondary and university schools in Turkey be closed. In order to contrast and contain the spread of the new COVID-19, in March 2020, the Turkish Government decided for more stringent containment measures ^{3}. Furthermore, between the month of March and June, the economic measures were also taken by the government ^{4}. Efforts have been made by central banks to provide liquidity, while measures have been taken to support the households and firms, which were stricken most by the pandemic through fiscal policies. ^{5}

Statement of the Problem

Consumers play a central role in the Turkish economy (Koç et al., 2017), their beliefs and expectations are likely to be crucial for understanding the economy's response to the pandemic. Most Turkish consumers believe that self-care and following the latest trend is important. There is high demand for cosmetic surgery amongst mid-lifers, rising interest in social media use and a tradition of shopping luxury goods and electronics which increases use of credit cards to purchase products. In addition, young age profile consumer seems to spend more time on computers and increasingly going online to buy toys. ⁶³

However, the coronavirus (COVID-19) pandemic has evolved into a significant threat not only against health but also economies across the globe. Measures to prevent the spread of the pandemic have an adverse effect on individual consumption habits, production processes and employment. Between March and July 2020, as COVID-19 spread across the Turkey, we saw a marked shift in consumers' beliefs about the effects the virus would have on the economy: Consumers came to expect that the coronavirus would have a larger negative impact on economic activity than they had previously anticipated.

^{2 &}quot;COVID-19 pandemic in Turkey." Accessed July 19, 2020, https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Turkey#cite_note-29.

³ The ban on mass gatherings and events, as well as the ban on meeting up for no urgent reasons, were issued on the entire national territory. International flights were also banned.

⁴ Emre Aytekin. "Steps taken by countries in fighting COVID-19 pandemic." Accessed August 13, 2020, https://www.aa.com.tr/en/health/steps-taken-by-countries-in-fighting-COVID-19-pandemic.

Tax bulletin. "COVID-19: Update on emergency tax measures." Accessed August 13, 2020, https://www.pwc.com.tr/en/hizmetlerimiz/vergi/bultenler/2020/COVID-19-update-on-emergency-tax-measures.

^{6 &}quot;Turkish Market: Consumer." Accessed September 10, 2020, https://importexport.societegenerale.fr/en/country/turkey/market-consumer?

Some surveys have been conducted on Impact of COVID-19 on Enterprises {Business for Goals Platform (B4G), 2020}. This study paper wants to add more information by focusing and analyzing on the impact of COVID-19 on consumers and future expectations.

Objectives of the Study General Objective

This survey aims at examining the impact of COVID-19 on consumers and future expectations.

Specific Objectives

In order to achieve this main objective, some sub-objectives can be formulated:

- a) To investigate the impact of the coronavirus pandemic on individual consumption and behavior changes, and their future expectations.
- b) To find out if the consumers are experiencing inflation and their perceptions on expected coronavirus impact on inflation in the next 12 months.

Significance of the Study

Consumer behavior plays an important role in providing economic decision-makers and economic forecasters with necessary information about future expectations. Businesses use consumer spending data in their supply and demand economic calculations. Consumer spending helps companies determine which products have the most value in the economic marketplace. Change in consumer consumption can help businesses and governments determine if consumer spending is expanding or contracting based on the number of purchases. Consumer spending is the result of many factors, including monetary or fiscal policy, inflation, purchasing power and supply of goods. While consumer spending plays an important role in the economy, these factors can also provide information for businesses creating corporate or business strategies.

The outcome of this study will help policy makers, government, Non-Governmental Organizations (NGO's) and other stakeholders to come up with better policy formulation. Businesses will also use this information to find unmet consumer needs and develop new technics in order to meet the needs of consumers.

Scope of the Study

The study will be conducted in Turkey. All respondents are required to be residing in Turkey, fluent in Turkish, and 18 or older. The data for the survey will be collected from the 15th June to the 18th of July, 2020.

II. LITERATURE REVIEW

This section brings with some major studies that have been conducted pertaining to the impact of pandemics to Consumers in Turkey and other parts of the world. (Knotek II et al., 2020) conducted a survey in United States of America on consumer expectations for how the economy is likely to be affected by the outbreak and how their own behavior has changed in response to it. They found that the coronavirus has led the

consumers to postpone planned larger purchases, changed their financial planning, or feared that they would lose their jobs. Consumers were also expecting to face decline of economic activity and rising inflation over the next 12 months. It has also established that the consumers started to store more food and medical suppliers during COVID-19 outbreak. Lastly, one-third of respondents expect that the outbreak will last less than 6 months, while the other two-thirds believe it will last 1 year or longer. According to the research conducted by Nielsen ⁽⁷⁾ on the effects of the coronavirus on global consumers, 41% of Turkish consumers have increased their online purchase of food, beverage and household cleaner products after the pandemic. In addition, 49%, indicate that they will continue to buy these products online in the medium and long term.

Study on Coronavirus's Impact on Consumers and Businesses in China ⁽⁸⁾ has established that housebound consumers in China are turning to online groceries for their daily food supply. To increase food delivery services as a way of limiting human-to-human contact, food delivery apps has been innovated.

The survey on Turkish consumer sentiment during the coronavirus crisis ⁽⁹⁾ has found that consumers' income and household finances have been affected by COVID-19. A majority of Turkish consumers are concerned about personal health, the economy, and the duration of the crisis. Both the observed effects and the uncertainty around the situation are manifesting as decreased spending across most categories. A spike in online spending on household essentials and entertainment is expected to continue, at least in the short term.

III. MATERIALS AND METHODS Survey Methodology

The survey was conducted by using an online platform, accessible through any device with an Internet connection. The data from every Turkish region, about consumers behavior (10) change and lifestyle during the COVID-19 pandemic, and their expectations in the future. The tool used to conduct the survey is a self-administered questionnaire. The survey was disseminated through social networks (WhatsApp groups, Facebook, and Instagram), and sending normal messages to individual's telephone numbers. This method of administration provides a statistical collective whose population parameters cannot be controlled as it is the case for probabilistic sampling. However, it was completely effective for the research objectives, because it facilitated the wide dissemination of the survey questionnaire during a period where, due to the pandemic, there are

Nielsen. "Turkish consumers boost online shopping after initial impact of COVID-19 stockpiling fades." Accessed September 19, 2020, https://www.dailysabah.com/business/economy/turkish-consumers-boost-online-shopping-after-initial-impact-of-COVID-19-stockpiling-fades.

⁸ Man-Chung Cheung. "Coronavirus's Impact on Consumers and Businesses in China." Accessed September 11, 2020, https://www.emarketer.com/content/coronavirus-china-us-COVID-19-impact-retail-travel.

⁹ McKinsey and Company (2020). Survey: Turkish consumer sentiment during the coronavirus crisis (Online). Website; https://www.mckinsey.com/business-functions/marketing-and-sales/our insights/survey-turkish-consumer-sentiment-during-the-coronavirus-crisis (Accessed 11 September 2020).

¹⁰ A decision-making of people involved in buying and use products. The choices are made based on; (a) Rationality: maximize one's objectives. (b) Preference: a consumer's situation of choosing one of the two or more goods/services to greater satisfaction [i.e. priority and ranking]. And (c) Utility: satisfaction expected from consuming a good/service that make the forward decision or convince other.

many territorial restrictions. Moreover, the latest data reported by the annual Turkish report on the use of the internet shows that Internet penetration stood at 72% in January 2020; in particular, 63% are active social media users, 53% are active mobile social media users, and 98% of them visited or used a social network or messaging services. Instagram, WhatsApp, and Facebook are most of the active social media platforms such that they stood at 84%, 83% and 82% respectively (11) Therefore, the choice of this particular social media was justified by its high penetration rate in Turkey (12). Furthermore, social media play an important role in the consumer's decisionmaking process in many business areas (Orhan et al., 2018).

COVID-19 Survey Questionnaire

The COVID-19 questionnaire was specifically built by using Google Form (www.google. com). The guestionnaire consisted of 24; one option and multiple choice guestions without sections; and were summarized as follows; (a) demographic information {age, gender, place of residence, place of buying food supplies (before and during coronavirus), date of interview, source of income (specified in terms of; student, farming, formal employment, business, doing piece of work, under social protection program and others)}, (b) future and current expectations (number of years it will last, current experienced and expected inflation of food commodities, and individual expectations to be affected in the future), (c) Magnitude impact to source of income, (d) sources of information (most trusted media to get information, first source of information to hear about coronavirus and most followed up source of information to get updates),(e) If respondents were following restrictions measures imposed by the government; wearing masks in public and observing social distance, (f) lifestyle habits information {grocery shopping, personal savings, financial planning changes, refrained from planned larger purchases, changing means of buying food commodities (bank card, cash or other means), if consumers started to store more food supplies and more quantities of personal protection equipment/medical supplies than before and whether they increased the amount of cash and currency in their wallet or house}. Most of the questions require respondents to answer by selecting; selecting either "Yes" or "No." and "other". Only one question, the respondents were asked to write the name of city they were currently staying within Turkey.

All participants were fully informed about the study requirements and protecting personal privacy before participating in the study. Participants completed the questionnaire directly connected to the Google platform. Participants' personal information, including names, were excluded to maintain and protect confidentiality. Once the respondents completed, each questionnaire was transmitted to the Google platform and the final database was downloaded as a Microsoft Excel sheet.

Data Analysis

After the responses were submitted by the respondents, the results on the Google form were analyzed in percentage using Microsoft excel; either by pie chart or by a bar chart.

¹¹ Digital 2019 Turkey. "Digital 2019 Data report." (2019), Accessed July 20, 2020, https://www.slideshare.net/DataReportal/digital-2019-turkey-january-2019-v01.

^{12 52} million of active users out of 82 million of inhabitants.

To ensure accurate presentation of the outcome, the final database was downloaded as a Microsoft excel sheet. Then, the results were summarized in corresponding to the submission date of surveys' questionnaire. Some of the data of respondents like experienced rise of prices of food commodities, expected rise of prices of food commodities in next 12 months, increased personal savings, changed financial planning, refrain from planned larger purchases, increased cash holdings, store more food supplies, store more medical supplies, preparation for the potential future impact of COVID-19 and expected Coronavirus outbreak durations were accumulatively summarized (Knotek II et al.,2020), and percentages were calculated. Since the data was also involving time series, Eview was used to analyze the results graphically.

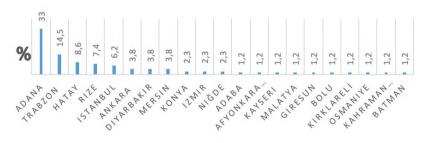
The data quality checks were performed. The participants who filled a city which is not within Turkey were excluded from the analysis because this indicated nonresidents of Turkey.

The sampling methodology uses repeated cross sections; we do not have a panel aspect to the survey to follow individuals' beliefs over time. Finally, individuals in the survey are anonymized to ensure confidentiality.

IV. RESULTS AND DISCUSIONS Participants

On the 18th of July 2020, the online survey was concluded, and the collected data were analyzed. A total of 83 participants completed the questionnaire, and after validation of the data, 82 respondents have been included in the study, aged 18 years and above. The female and male respondents represent 41.5% and 58.5% respectively. According to age range, the respondents represent 72%, 24.4% and 3.7% of 18-25, 26-45 and 46-64 respectively. There was no participants for 65 and above years of age. Territorial coverage spreads over all the Turkish Cities.

Figure 1. Shows the percentage of respondents from different locations in Turkey.



NAME OF LOCATION

Consumer Responses and Expectations

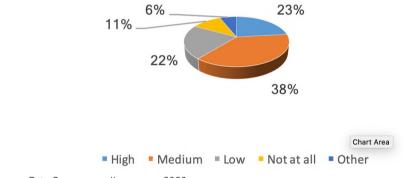
Impact To Source of Income, Means of Buying Food Commodities and Reaction to Preventive Measures Implemented by the Government During Covid-19 Emergency.

With regards to impact to source of income during the COVID-19, 38% of the respondents were medium affected, 23% high, 22% low, 11% were not at all affected and 6% opted to choose "other".

Concerning method used to buy food commodities, 69% of the respondents used Bank card, 26% used cash and 5% responded used neither of the two. This shows that the respondents were using bank card as one way to prevent further transmission of this pandemic. In addition, the country is technologically advanced (Burnmark, 2017).

On preventive measures imposed by government, 66% reacted that they follow the measures completely, 32% follow the measures but, not all of them, while 1% do not follow and other 1% decided to choose other.

Figure 2. Impact of COVID-19 to source of income.



Source: Data Consumer online survey, 2020.

Figure 3. Means of buying food commodities.

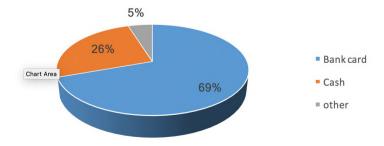
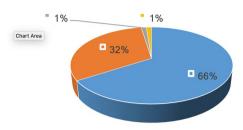


Figure 4. Respondent's reaction to coronavirus preventive measures implemented by the government



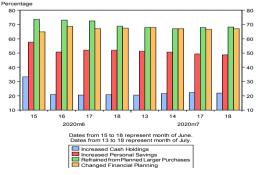
Source: Data Consumer online survey, 2020.

Financial Planning, Cash Holdings, Large Purchases and Personal Savings Changes during Coronavirus Emergency

On the results of consumers who responded "Yes" (Figure 4.2.2.1), roughly 48.78% indicated that they had increased their personal savings, perhaps out of precautionary savings motives, and 21.95% has increased amount of cash and currency in their houses or wallets during the time of COVID-19 emergency. By contrast, we see a strong increase over time in the percentage of consumers who have changed their financial planning by 67% either voluntarily or out of necessity as the coronavirus outbreak intensified.

The overall results of the survey, we see marked increases in the shares of consumers by 68.29% who did not make planned larger purchases. ^{13}

Figure 5. Coronavirus impact on cash holdings, personal savings, refrain from planned larger purchases and financial planning.



¹³ The survey does not ask respondents about the reasons for refraining from planned larger purchases, reasons which could reflect either a lack of opportunity to make such purchases (because some businesses were closed) or a pullback in desired spending among consumers because of uncertainty and movement restrictions implemented by the government to prevent the spread of the pandemic.

Experienced and Expected Inflation during COVID-19 Emergency

We plot the percentage of consumers who responded "Yes" to the question relating to the experienced increase of rise of prices of food commodities (figure 4.2.3.1). On expected inflation, we focused on the percentage of consumers who responded "Higher" to the question relating to the expected rise of the prices of food commodities in the next twelve (12) months.

The survey revealed that 78% of respondents were experiencing price increase during the pandemic period. On the other hand, the trend of expected coronavirus impact on inflation in the next 12 months is high. Thus, the consumers believe that they will experience rise of prices of food commodities.

Percentage

80

84

82

80

78

76

Dates from 13 to 18 represent month of June.

Dates from 13 to 18 represent month of June.

Expected rise of prices of food commodities

Expected rise of prices of food commodities.

Figure 6. Experienced and expected inflation during the time of coronavirus emergency.

Source: Data Consumer online survey, 2020.

Stockpiling Changes during COVID-19 Emergency

We plot the percentages of respondents who answered "Yes" to the questions relating to store more food and medical supplies since the start of the pandemic (Figure 4.2.4.1).

The overall accumulated results of 18th July has shown that there was substantive increases in both store of food supplies and medical supplies by 54.88% and 58.54% respectively.

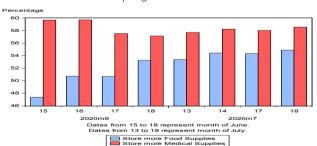


Figure 7. The coronavirus and stockpiling

Consumer Behavior and Market Changes during Coronavirus Emergency

In figure 4.2.5.1, we focus on the market frequency changes of buying food supplies by consumers that occurred before and during the time of coronavirus crisis. Due to restriction measures of movement, we expected most of the consumers to buy their food supplies through online. However, 22% of 82 respondents reported that they used to buy food supplies from online before the outbreak of the coronavirus. 25% randomly responded that during the coronavirus they bought food supplies through online. Therefore, the results show that the consumers are shifting to online shopping.

On the other hand, before the coronavirus outbreak, 57% of consumers responded that they used to buy food supplies from open market, 78% from super market, 35.8% from normal shops (canteen) and 27.2% from restaurant. This shows that most consumers used to buy food supplies from the super market followed by open market.

Since the outbreak of coronavirus, most consumers reported that 42% used to buy food suppliers from open market, 69% from super market, 17% from normal shops and 12.5% from restaurant. It has also been observed that most of the consumers still get their food commodities from super market and open market comparing to online shopping. Nevertheless, the results show that the number of consumers who buy food supplies from open market, supermarket, shops, and restaurant have been reduced due to the outbreak of coronavirus.

Online shopping
Shops
Open Market

0 10 20 30 40 50 60 70
Percentage

Frequently Food supplies were bought during COVID-19
Frequently Food supplies were bought before COVID-19

Figure 8. The Coronavirus and market changes

Source: Data Consumer online survey, 2020.

Consumer Behavior Changes and Sources of Information during Coronavirus Emergency

Our results found that television, Minister of Health press releases and websites or online newspapers are the most source of information for respondents to hear about the coronavirus outbreak by 63%, 49% and 43% respectively (figure 4.2.6.1). At the same time, 39% of respondents heard from Official Government press releases, 38% from friends and family, 37% from Instagram, 35% from WhatsApp group, 31% from twitter, 18% from Facebook, 8% from YouTube, 5% from newspapers and no one re-

sponded from opinion polls. To get frequently updates about the coronavirus, 57% of respondents reacted that they get information from television, 54% from Minister of Health press releases and 43% from Instagram. On the other hand, 63% of consumers responded that they trust Minister of Health, 45% trust official government press releases and 34% they trust television when reporting about coronavirus. Accordingly, the most trusted source of information to update the people about the coronavirus crisis is through the Minister of Health press releases, followed by Official Government press releases. In relating to this, a recent international report on digital media and news consumption has shown that there is increase in public trust in local Turkish media over the past year, despite the government's growing control over this sector ⁽¹⁴⁾.

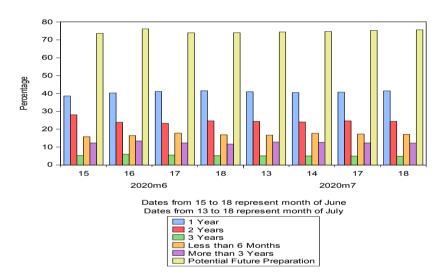


Figure 9. The coronavirus and source of information

Source: Data Consumer online survey, 2020.

The Expected Duration of the Coronavirus Outbreak and Preparation for the Potential Future Impacts

The overall results of the survey shows that 42% of the respondents have realized that the coronavirus outbreak will last 1 year. On the other hand, only about one-third of respondents expect that the outbreak will last 2 years whereas 17%, 5% and 12% responded that it will last less than 6 months, 3 years and more than 3 years respectively. On the potential future preparation of the impact of COVID-19 if they are not yet been significantly affected, 76% of consumers responded that they are preparing for the potential future impact.

^{14 &}quot;Turkish people trust local media more than before, report claims." Accessed: August, 2020, https://insideturkey.news/2019/10/10/turkish-people-trust-local-media-more-than-before-report-claims.

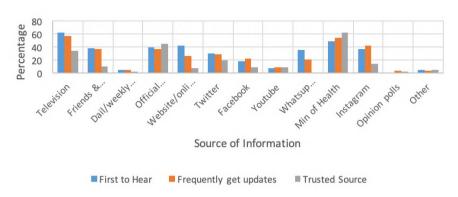


Figure 10. Shows the results of consumers on the expected duration of the coronavirus outbreak and potential future preparations of the impact.

Source: Data Consumer online survey, 2020.

V. SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of Findings

The findings from the survey shows that 38% of consumers' source of income have been moderately affected. It was observed that the COVID-19 pandemic has changed consumers' behavior ⁽¹⁵⁾; refrained from planned larger purchases, changed financial planning and experiencing inflation. Likely, most of the consumers might have shifted their financial planning by not consuming expensive goods ⁽¹⁶⁾ during the time of emergency. Hence, 58.54% and 54.88% of consumers have shifted their budget line by increasing consumption of medical supplies and food supplies respectively. However, the cutting of expenditure has resulted into changes in marketing system such that there is decrease in purchasing of food commodities or other related items from open markets, supermarkets, shops and restaurants. In spite of the decrease in consumption of the food supplies from these markets, there is positive increase in buying of food supplies from online shopping ⁽¹⁷⁾.

¹⁵ Due to movement restriction, reducing person-to-person contact overall via work and school closures and travel bans (social distancing), wearing masks in public places and by removing infected people from the population either by curing them or quarantining them.

^{16 (}Diamond-Water paradox of Value)-Adam Smith and several other economists tried to explain this concept by creating a distinguish between 'Value in use' and 'Value in exchange' for which they referred value in use as utility of a commodity whereas value in exchange as a quantity of a commodity that can be purchased in exchange for the quantity of another commodity. Therefore, water has a large value in use because it is essential for survival although it is very little in value in exchange because it is available in plenty. Similarly on the other hand, Diamond has a lower value in use because its consumption is not necessary for survival whereas its value of the exchange is too high because its supply scarce. In relating to this, since the outbreak of COVID-19, consumers have increased their expenditures in medical supplies and food commodities in order to survive rather than buying expensive things which have no value in use.

¹⁷ The reaction by consumers from some of the preventive measures like social distancing and staying at home imposed by government during the COVID-19 crisis has resulted into purchasing food supplies from online shopping.

The results also shows that moderate number of the consumers did not increase their person savings, only 48.78% of respondents increased (18). In addition, most of the consumers were not holding more amount of cash and currency in their wallets and houses. They are still purchasing food supplies or other related items through the use of the bank cards (19).

Despite the economic measures⁽²⁰⁾ taken by government against the impact of COVID-19, the consumers are still experiencing the rise of prices of food commodities ⁽²¹⁾. In addition, the results shows that there is high possibility of consumers' perceptions to face the increase in prices of food commodities in the next 12 months. However, if the pandemic will continue up to next months or years, 76% of respondents reacted that they have potential future preparation of the impact of COVID-19 if they have not yet been significantly affected.

For the source of information, most of the consumers are still trusting the government press releases and ministry of health for the updates of the coronavirus crisis. Therefore, in this COVID-19 emergency time, the government is a key player to protect consumers.

Conclusion and Recommendations

Our study has established that COVID-19 outbreak has caused respondents to strive toward changing their financial planning, refrained from larger purchases and experiencing rise of price of food commodities. Respondents have developed positive attitudes toward COVID-19 impact prevention; they have started to store more medical supplies and food supplies, increased the use of bank card for shopping, started to shift to online shopping in reaction to COVID-19 preventive measures imposed by the government like movement restrictions and social distance.

The study has also found that some of the consumers have prepared for the potential future impact if the COVID-19 may last up to one or more years. However, in accordance to consumers' perceptions, there is high possibility that some of the consumers may face rise of prices of food commodities in the future due to this pandemic. Therefore, the decrease in personal savings will create a challenge to the consumers for the future preparation of the impact of COVID-19. The shifting of consumers to online shopping may create problems to Small and Medium Enterprises.

The respondents were not asked about the reasons why they did not increase in personal savings. Since the COVID-19 outbreak is an emergency pandemic, individuals or countries were not well prepare to be affected either directly or indirectly. Moreover, the behavior of Turkish people may contribute to not willing in saving and taking financial risk (Copur et al, 2010).

¹⁹ We did not ask the consumers whether they were using the bank card to buy food suppliers from online shopping only or both markets (open market, supermarket, normal shops and restaurants). However, the use of the bank card as a way of shopping is one of the Turkish cashless mission to be achieved by 2023 (Bankalararası Kart Markezi, 2017).

²⁰ Emre Aytekin, "Steps taken by countries in fighting COVID-19 pandemic." Accessed: August 13, 2020; https://www.aa.com.tr/en/health/steps-taken-by-countries-in-fighting-COVID-19-pandemic.

²¹ One of the reason of experiencing inflation may be switching cost of buyers. If households face a cost of switching among brands of a differentiated good, pricing is likely to be more competitive, the greater is the fraction of customers that move into or around the market (Klemperer Paul, 1987).

The strategy adopted by the government on 1 June, 2020 in fight against the disease seems to have worked ⁽²²⁾. Hence, this may help to solve the problems of consumer switching cost. However, the government should support Small and Medium Enterprises (SMEs) to adopt online shopping. This will also fasten the government to achieve 2023 cashless dream. Government should also introduce more digitalization, new trade mechanisms, new supply chain mechanisms, new working conditions and new workforce protection. In order to maintain the positive COVID-19-driven behaviors toward lack of personal savings prevention, education and communication campaigns need to be intensified to raise awareness of lack of saving consequences and to raise awareness of benefits of personal savings during the time of crisis. The government should maintain the already adopted package of policies including fiscal, monetary and financial to support the consumers and Small and Medium-sized Enterprises (SMEs). To achieve these, there is need to monitor them to ensure its effectiveness to the final beneficiaries.

The specific limitations of this study are linked to the data gathering method. Online surveys are cheap, simple to set up and do not require a physical contact between the interviewers and the respondents that was a concern during COVID-19 outbreak. They provide a large view of waste-related issues. However, online surveys raise the limit of sampling method: they cannot reach people that are not comfortable with technology or do not have access to technology or the internet, such low income, poorly educated persons or elderly. Moreover, online surveys do not allow a depth analysis of the results. This can be achieved through qualitative studies. In addition, due to the limited time of data collection, the collected sample is small comparing to the higher percentage of penetration of social networks in Turkey. However, the outcome results from this survey gives the picture that the pandemic has impact to some of the consumers.

In conclusion, our study contributes to a better understanding how a crisis situation affects consumer's behavior and raises awareness regarding economic impact measures. The results from this survey will help policy makers on the best policy alternatives for mitigating the negative impacts facing during the time of high uncertainty and unprecedented policy responses. Therefore, what emerges from this study is that consumers will still be affected by COVID-19 in the future, even if they have a potential believe for future preparation, because they will still face the rise of prices of food commodities. As the COVID-19 pandemic is still ongoing, there is need to investigate more on how the consumers will copy with the use of technology when buying their food commodities or any other related items from online shopping without being negatively affected and how the inflation will be controlled in the future.

²² Reopening of cafes, restaurants, beaches and parks, ordering of the young and the elderly to stay at home and asked everyone else, aside from those in consumer-facing businesses to show up and resuming of domestic flights. The strategy has received applaud for handling the pandemic better than many of its European and American allies, Ahmet Gürhan Kartal (2020).

BIBLIOGRAPHY

- Açikgöz Ö and Günay A. The early impact of the COVID-19 pandemic on the global and Turkish economy. Turk J Med Sci (2020) 50: 520-526.
- Ahmet Gürhan Kartal. Turkey's coronavirus fight receives praise. (2020), Accessed: 21 July, 2020, https://www.aa.com.tr/en/latest-on-coronavirus-outbreak/turkeys-coronavirus-fight-receives-praise.
- Bankalararası Kart Markezi. "Cashless Turkey by 2023." (2017), Accessed: 21 July, 2020, https://bkm.com.tr/ wp-content/uploads/2017/05/cashless-2023.pdf.
- Business for Goals Platform [B4G]. Survey on Impact of COVID-19 on Enterprises-Turkey. (UNDP Turkey, 2020), Accessed: 21 July, 2020, https://data2.unhcr.org/en/documents/details/76803.
- Copur Z, Gutter S. M and Erkal S. "Exploring Saving Behavior of Turkish Families in Ankara/Turkey". International Journal of Economics and Finance Studies, 2, no 2 (2010).
- Knotek II et al.., Consumers and COVID-19: A Real-Time Survey. (Federal Reserve Bank of Cleveland, 2020), Accessed: 22 July, 2020, https://www.clevelandfed.org/en/newsroom-and-events/publications/economic-commentaries/ec-202008-consumers-and-covid19.aspx.
- Koç E, Nart S and Baş O. The Influence of Country of Origin on Brand Image and Brand Attitudes: An Empirical Study on Turkey İşletme Bilimi Dergisi (JOBS), 2017; 5(2): 89-103. Accessed July 21, 2020. dio: 10.22139/jobs.288879.
- Orhan Icoz, Anil Kutuk and Onur Icoz . Social media and consumer buying decisions in tourism: The case of Turkey. 16, no 4 (2018):1051-1066.
- Klemperer Paul. The Competitiveness of Markets with Switching Costs', Rand Journal of Economics, 18 (1987): 138–151.

APPENDICES

Survey Questionnaire

Questions	Answers
1. How old are you?	18-25/26-40/41-64/≥65
2. What is your gender?	Male/Female
3. Date of interview?	Date in Number
4. Currently, are you staying in Turkey?	Yes/No
5. Which city do you stay?	City name
6. What is your source of income/ livelihood?	Student/Farming/Official Employment/Business/Part time jobs/under social protection program/other
7. How has COVID-19 affected your main source of income/livelihood?	High/Medium/Low/Not at all/Other
8. Since the outbreak of the COVID-19, have you increased your personal savings (keeping more money in your account)?	Yes/No/Other
9. Has your financial planning changed due to the outbreak of the COVID-19?	Yes/No/Other
10. Have you refrained (avoided) from planned larger purchases due to the outbreak of the COVID-19?	Yes/No/Other
11. Since the outbreak of the COVID-19, have you started to store larger quantities of food supplies/ commodities at home than before?	Yes/No
12. Since the outbreak of the COVID-19, have you started to store larger quantities of medical suppliers or personal protection equipment (mask, gloves) at home than before?	Yes/No

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13. Before the outbreak of the COVID-19, where did you buy food supplies or commodities frequently? {you can tick as many answers}	Open market/Super market/Shops/ Restaurant/Online Shopping/Other
14. Since the outbreak of the COVID-19, where do you buy food supplies or commodities frequently? {you can tick as many answers}	Open market/Super market/Shops/ Restaurant/Online Shopping/Other
15. Since the outbreak of COVID-19, which method do you use commonly to buy your food supplies/ commodities?	Bank card/Cash money/Other
16. Have you increased the amount of cash and currency in your wallet or your house due to the outbreak of the COVID-19?	Yes/No/Other
17. After the first confirmation of corona virus (COVID-19) case in March, 2020, the government immediately implemented some restrictions; and currently, it is adopting some measures as a way of preventing the further spread of this pandemic (e.g. wearing masks in public places, observing social distance, etc). Do you follow these measures?	Totally yes/Yes but not all/No
18. For the first time to hear about the outbreak of COVID-19, which sources of information did you hear from? { you can tick as many answers}	Television/Friends and Family/ Daily or weekly newspapers/Official Government press release/Websites or online newspapers/Twitter/ Facebook/YouTube/WhatsApp Group/Minister of Health/Instagram/ Opinion polls/Others
19. Which of the following sources of information do you use frequently to follow up the updates of COVID-19? { you can tick as many answers}	Television/Friends and Family/ Daily or weekly newspapers/Official Government press release/Websites or online newspapers/Twitter/ Facebook/YouTube/WhatsApp Group/Minister of Health/Instagram/ Opinion polls/Others
20. Which of the following sources of information do you trust most in their reporting about the COVID-19? { you can tick as many answers}	Television/Friends and Family/ Daily or weekly newspapers/Official Government press release/Websites or online newspapers/Twitter/ Facebook/YouTube/WhatsApp Group/Minister of Health/Instagram/ Opinion polls/Others
21. Since the outbreak of COVID-19, have you experienced any increase of prices of food commodities/ suppliers?	Yes/No/Other
22. If Corona virus (COVID-19) will continue up to next 12 months, do you think will cause the prices of food commodities to be higher or lower?	High/Low/Not at all
23. How many years do you think the corona virus (COVID-19) will last?	<6 months/1 year/ 2 years/3 years/>3 years
24. If you have not yet been significantly affected, are you preparing for the potential future impacts of COVID-19?	Yes/No

Socio-Economic Impact of Coronavirus (COVID-19) on Households Worldwide

Yann Emmanuel MIASSI* Fabrice Kossivi DOSSA**

Abstract

This study is part of an analysis of the socio-economic impact of the Coronavirus (COVID-19) on global households. This research focused on 940 households in Africa, Asia, Europe and Latin America. Depending on the continent, this research was based the comparisons of incomes and analyzed the effect of the Coronavirus on the household economy. At the same time, a logistic regression model based on the demographic and socioeconomic characteristics of the respondents was utilized to assess the parameters that are likely to influence the populations' perception of the impact of the Coronavirus on their monthly income. Analysis of the information obtained shows that the pandemic of

Özet

Bu çalışma, Koronavirüs'ün (COVID-19) küresel hanehalkları üzerindeki sosyo-ekonomik etkisinin analiz incelemek amacıyla yapılmıştır. Afrika, Asya, Avrupa ve Latin Amerika'daki 940 hanehalkları üzerinde yapılmıştır. Hanehalkların gelirlerin karsılaştırılması dikkate alınmış ve Koronavirüs'ün hanehalkların ekonomisi üzerindeki etkisi kıtalara göre analiz edilmiştir. Aynı zamanda, Koronavirüs'ün hanehalklarının aylık geliri üzerindeki etkisine ilişkin algısını etkileyen parametreleri değerlendirmek için hanelerin demografik ve sosyoekonomik özelliklerine dayalı bir lojistik regresyon modeli kullanılmıştır. Araştırma sonuçları; Koronavirüs salgınının genel olarak ekonomik ve sosyal düzeyler üzerinde

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Coronavirus (COVID-19) has a generally negative impact on the economic and social levels: these consequences can also be considered in the long term. However, some positive aspects of the crisis have been raised. Parameters such as age, sex, household size, and characteristics of the field of professional intervention of the respondents were identified as factors likely to influence their perception of the impact of Coronavirus on monthly income. With this current crisis situation, it is important to ensure the effective implementation of the measures taken as part of the control of this pandemic and then reinforce them in order to protect populations in a sustainable way from the harmful socio-economic effects of the Coronavirus.

Keywords: Coronavirus (COVID-19), Household, Pandemic, Socio-Economic Impact olumsuz bir etkiye sahip olduğunu ortaya konulmuştur. Bu sonuçlar uzun vadede de düşünülebilir. Ancak krizin bazı olumlu yönleri de gündeme gelmiştir. Yaş, cinsiyet, hanehalkı büyüklüğü ve profesyonel müdahale alanının özellikleri gibi parametreler, hanehalkların koronavirüsün aylık gelir üzerindeki algısını etkileyen muhtemel unsurlardır. Bu mevcut kriz durumunda, koronavirüsün zararlı sosyo-ekonomik etkilerinden toplumları sürdürülebilir bir şekilde korunabilmesi için, uygulanan önlemlerin etkin bir şekilde uygulanmasını sağlamak ve güçlendirmek önemlidir.

Anahtar Kelimeler: Hanehalkları, Koronavirüs (COVID-19), Salgın, Sosyo-Ekonomik Etki

I. Introduction

The Coronavirus (COVID-19) is a pandemic spreading around the world at an alarming rate and is raising more than one question. The term pandemic comes from the Greek etymology "pandemos", meaning "global epidemic"; then differs from an epidemic according to the size of the public and the areas concerned (Açıkgöz and Günay, 2020). Originated in China in the province of Wuhan (Limaa et al., 2020; Souza et al., 2020), it is a mild illness, similar to the common cold manifested by symptoms such as: fever, cough, and difficulty breathing (ASPC, 2020; Graham Carlos et al., 2020; Anonymous, 2020). It attacks vertebrates, especially mammals and birds, and is seen as a major cause of respiratory viral infections worldwide (Unhale et al., 2020; Giwa and Desai, 2020). The growing direct impact of Coronavirus (COVID-19) affects health, in terms of morbidity and mortality, and results in rapid saturation of health services, with negative repercussions on health problems not linked to the coronavirus (FAO and UA, 2020).

This pandemic is giving way to an unprecedented crisis affecting the economy of all countries of the world, without sparing the manufacturing and service sectors, with significant repercussions on the working population (ESCAP, 2020). The trade and tourism sectors remain by far the most affected. Bloom (2018) suggests that the spread of disease can lead to a decline in trade while discouraging foreign direct investment.

The Ebola virus, for example, has been a threat to the economies of many countries in the past. In addition to the decision throughout Africa of borders closing due to the fear of the virus spreading, advanced western countries have also opted for generally radical restrictions in order to limit entry to their territory (Faber and Conde, 2020; McCandless and Bouchet, 2015; Lohman, 2014).

The current situation with the Coronavirus (COVID-19) gives ways to a much more critical situation, in the sense that we are witnessing the cancellation of air transport, the closure of borders, and the limitation of movement within countries. Tourism and all forms of travel are in turn limited or canceled. The effects of COVID-19 in the hospitality and leisure sectors are also unprecedented. In the accommodation sectors, for example, quarterly revenues are 75% down (Maliszewska and Mattoo, 2020). A lot of protracted epidemics also deter foreign direct investment (Bloom, 2018).

In order to limit physical contact, a good number of policies are implemented. Highlights include school closings, strategic targeting of high-incidence travelers and paid sick leave in some countries to keep contagious workers at home (Qiu et *al.*, 2020). The risks of such a pandemic on the economies of nations and especially at the microeconomic level cannot therefore be overlooked.

At the macro level, the COVID-19 global public health emergency has immediate and long-term economic and social impacts (UNICEF, 2020); and then one wonders what it would be at the micro level. Its impact on vulnerable individuals and households that are already on the brink of poverty can lead to significant inequalities within the social strata and even increase the poverty line (ESCAP, 2020). In addition to the measures previously mentioned in the fight against the spread of the pandemic, let us also highlight the strict confinement imposed by the state authorities which could have an impact at the micro-economic level, in particular on households.

It is therefore for this purpose that the present paper aims to analyze the socioeconomic impact of the Coronavirus (COVID-19) on households.

II. Methodology Sampling and database

This study focused on households in Africa, Asia, Europe and then Latin America. In order to assess the effect of the Coronavirus (COVID-19) on the economic situation of the respondents, this study focused on the characteristics of the respondents, on the populations' perception of the effects of the pandemic on their income as well as the factors that can influence this impact. The socio-demographic characteristics mainly concerned age, continent of residence, country of residence, gender, etc. As for the analysis of the impact perceived by the populations, the respondents were asked to answer with "yes" when they perceive the impact of the Coronavirus (COVID-19) on their monthly income or with "no" otherwise.

Given the confinement imposed by state authorities and all the directives given following the advent of the Coronavirus (COVID-19), the data were collected remotely from a Google Forms questionnaire.

Social media is nowadays one of the best ways to instantly reach large numbers of people around the world (De Carvalho and Nasratullah, 2017; Ghebali-Boukhris, 2018). To this end, the internet link allowing access to the questionnaire was spread through certain communication channels. Almost 1500 respondents were obtained, but given the fact that there was no longer a variation in the responses provided, there was therefore what is known as a saturation of information (Bloor and Wood, 2006; Kohn and Christiaens, 2014). Due to this, only the first 940 respondents with various responses were selected for this study. 36% of the respondents came from the African continent, 27% from the European continent, 12% from Latin America and 25% from Asia.

Europe 27%

Africa 36%

Asia 25%

Africa - Asia - Europe - Latin America

Figure 1. presents the proportion (in percentage) of respondents by continent in the total sample.

Source: Survey, 2020

Figure 1. Distribution of respondents according to continents

The respondents are from 16 countries, including 8 from Africa, 3 from Asia, 5 from Europe, and then 1 from Latin American. The statistics (frequencies and percentages) are given in table 1.

Table 1. Number of people surveyed by country

Continent	Countries	Frequency	Percent
	Benin	90	9.6
	Cameroon	30	3.2
	Ivory Coast	40	4.3
Africa	Niger	20	2.1
Airica	Nigeria	70	7.4
	Democratic Republic of Congo	40	4.3
	Togo	30	3.2
	Uganda	20	2.1
	China	100	10.6
Asia	India	90	9.6
	Iran	50	5.3
	Germany	80	8.5
	Spain	80	8.5
Europe	France	40	4.3
	Turkey	50	5.3
Latine America	Brazil	110	11.7
Total		940	100.0

Source: Survey result, 2020

In this study, the American dollar (US) is the monetary currency considered for the analysis, given the different types of monetary currencies from one country to another.

Data analysis

First, the monthly incomes before and during the crisis were recorded and then followed a comparison of their means per continent. A correlation analysis between these monthly incomes was also made in order to assess the evolution of the two forms of income.

In a second step, the parameters likely to influence the respondents' perception of the impact of the Coronavirus on their monthly income was assessed. To this end, a logistic regression model based on the demographic and socioeconomic characteristics of the respondents was performed. The variables included in the model are: the continent of residence of the respondent, the country of residence, the age of the respondent, the sex of the respondent, the size of the household, the sector of intervention, ownership of the respondent's business, and existence of a secondary activity.

Miassi et al. (2020) present the regression model by the following equation:

$$E (Yi) = P (Yi) = \frac{e^{\alpha + \beta Xi} e^{\alpha + \beta Xi}}{1 + e^{\alpha + \beta Xi} 1 + e^{\alpha + \beta Xi}}$$
[1]

When the respondent does not perceive the impact of the Coronavirus (COVID-19) on his monthly income:

P (not perceived) = 1- P(Yi) =
$$\frac{1}{1+\epsilon^{\alpha+\beta Xi}1+\epsilon^{\alpha+\beta Xi}}$$
 [2]

Where:

P (Yi): The probability for respondent i to perceive the impact of the Coronavirus (COVID-19) on their monthly income; P (Yi) = 1 if the respondent perceives a negative impact and 0 if the impact is positive.

e: The exponential function

Yi: the dependent variable; perception of the impact of Coronavirus (COVID-19) on monthly income,

 β : The vector of the parameters to be estimated, the sign of which allows the interpretation of the results

 α : The constant

Xi: characteristic of respondent i; it represents the vector of the independent variables

With:

$$X = \beta_0 + \beta_1$$
 Continent + β_2 Country + β_3 Age $_{\downarrow}\beta_4$ Sex $_{\downarrow}\beta_5$ HousehS+ β_6 IntSect + β_7 PAccoW $_{\downarrow}\beta_8$ SecAct [3]

Where:

Continent = Continent of residence of the respondent, **Country** = country of residence, **Age** = Age of the respondent, **Sex** = Gender, **HousehS** = Household size, **IntSect** = Business sector, **PAccoW** = Self owned work, **SecAct** = Existence of a secondary activity.

The variables introduced into the model are summarized in the table 2.

Table 2. Variables used in the logistic regression model

Va	Variable Explanation		Measurement			
	Dependent variable (Y_{ij})					
Assessment by the respondent of the impact of COVID-19 on his monthly income		of the impact of COVID-19 on his	0 = Positive 1 = Negative			
		Independent vario	ables (Xi)			
X ₁	Continent	Continent of residence	Coded from 1 to 4 depending on the number assigned to the continent			
X ₂	Country	Country of residence	Coded from 1 to 14 depending on the number assigned to the country			
X_3	Age	Age	In year			
X ₄	Sex	Gender	0 = female 1 = male			
X_{5}	HousehS	Household size	In number			
X ₆	IntSect	Work sector (Main activity)	0 = Public sector 1= Private sector			
X ₇	PAccoW	Self-owned work	0 = No 1 = Yes			
X ₈	SecAct	Existence of a secondary activity	0 = No 1 = Yes			

Excel and SPSS softwares were used to analyze all the socio-economic and demographic characteristics of the respondents as well as to assess the differences in average monthly income of the respondents per continents. SPSS software was also used to analyze the correlation between the monthly income of respondents before and during the crisis. STATA software, on the other hand, helped to carry out the logistic regression model necessary for the evaluation of parameters likely to influence the respondents' perception of the impact of Coronavirus on their monthly income.

III. Results and Discussions Socio-demographic Characteristics of the Respondents

The age of the majority of the surveys falls between 20 and 35 years with an average age of 28. These people are mostly men (75.5%), where 73.6% are married with 3 people per household. It should also be noted that 87.2% of the respondents have a university education level, and a significant proportion of them (72.2%) work in the private sector. Only 38.3% of respondents work on their own account with 61.3% having a secondary activity.

Table 3 presents a summary of all the socio-economic and demographic characteristics of the respondents.

Table 3. Socio-economic and demographic characteristics of respondents

Variable		Percentage	Mean
	20 - 35	85.1	25.3
	36 - 55	11.7	45.0
Age	More than 55	20.8	58.3
	Total	100.0	28.8
	Male	75.5	-
Sex	Female	24.5	-
	Total	100.0	
	Single	12.8	-
	Married	73.6	-
Marital status	Divorced	12.3	-
	Widowed	1.3	
	Total	100.0	-
	1 – 3	56.4	2.0
Household size	4 – 6	30.9	4.7
Household Size	More than 6	12.8	7.5
	Total	100.0	3.5
	Primary and lower level	3.2	-
Level of education	Secondary level	9.6	-
Level of education	University level	87.2	-
	Total	100.0	-
	Public sector	27.7	-
Activity sector	Private sector	72.3	-
	Total	100	-
	No	61.7	-
Self-owned work	Yes	38.3	-
	Total	100.0	-
	No	61.3	-
Secondary activity	Yes	38.7	-
	Total	100.0	-

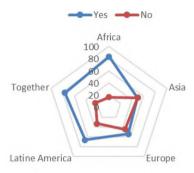
Source: Survey result, 2020

Effect of COVID-19 on the Household Economy

The impact of the coronavirus (COVID-19) on household incomes is a common reality around the world. The statistics in Figure 2 indicate that in Africa and Europe, there are 83.58% and 54.55% respectively of respondents confirming the impact of COVID-19 on their income. The trend remains the same in Latin America, with 66.67% of respondents answering with "yes" compared to 33.33% responding with "no". However, on the Asian continent, there are as many respondents answering with "yes" as respondents with par "no"; or 50% for each of the options. In general, 76.60% of the respondents answered with "yes", compared with 23.40% who answered with "no".

It should therefore be noted that in general, on all four continents the Coronavirus (COVID-19) is perceived as having a negative impact on the income of populations. Furthermore, although this study focused on individual households, the Coronavirus would also have effects at the macro level. According to WANEP (2020) and OIT (2020) reports, the Coronavirus is having a negative impact on the economies of countries affected by this pandemic. Given that household income is essentially dependent on the macroeconomic policies in force, it is understandable to record this negative appreciation of the populations surveyed as to the status of their income during the pandemic.

Figure 2. shows all the statistics obtained in this regard.



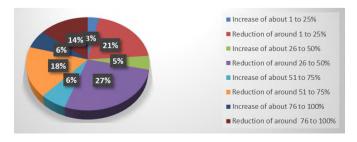
Source: Survey result, 2020

Figure 2. Respondents' perception of the impact of COVID-19 on their economy (a)

The magnitude of the economic effects of the pandemic (COVID-19) on households is much more evident having a look at the statistics in Figure 3.

From the information in Figure 3, it appears that the advent of the Coronavirus (COVID-19) has a negative impact on the income of 79.5% of the population. More specifically, 48.0% of the population reports a reduction of about 1 to 50% in their monthly income. However, 6.0% saw a 76 to 100% increase in their monthly income.

Figure 3. Shows the statistics obtained.



Source: Survey result, 2020

Figure 3. Respondents' perception of the impact of COVID-19 on their economy (b)

A comparative analysis of the average monthly income of respondents before and during the advent of COVID-19 is presented in Table 4.

Analysis of the information obtained shows that the average monthly income before the crisis was \$ 225.99 in Africa, \$ 248.29 in Asia, \$ 885.7 in Europe, and \$ 294.03 in Latin America. With the advent of the Coronavirus (COVID-19), these average monthly incomes decreased from 225.99 to 167.8 \$ in Africa, from 248.29 to 106.23 \$ in Asia, from 885.7 to 527.4 \$ within the European continent, and from 294.0 to 147.0 \$ in Latin America. We are therefore witnessing a drastic drop in income within households. This impact seems to be varied depending on the extent of the crisis in the country. According to Deluzarche (2020), Asia, Europe, and Latin America, unlike Africa, are the most affected continents by the crisis. In addition, the strict confinement enforced on all of these continents hinders the development of income-generating activities.

These results therefore confirm the previous ones according to which COVID-19 has a negative impact on the economy of the populations.

Table 4 shows the distribution of average monthly incomes (in US \$) for households according to the continents.

Table 4. Distribution of average monthly income (in US \$) of households per continents

	Continent				
	Africa	Asia	Europe	Latin America	
Before the crisis	225.99	248.29	885.7	294.0	
During the crisis	167.8	106.23	527.4	147.0	
Average difference	58.19 (25.7%*)	142.06 (57.2%*)	358.3 (40.4%*)	147.01 (49.9%*)	

^{*}Average difference expressed as a percentage

Source: Statistics obtained from SPSS software

The correlation test performed between the monthly incomes of respondents before and during the crisis in Table 5 confirms that there is indeed a close relationship between these two incomes. This test is statistically significant at the 1% threshold with a positive sign. The positive sign obtained indicates that these two incomes are moving in the same direction. All other things being constant, this test confirms that the coronavirus (which in this specific case constitutes the determining factor) has indeed effects on the respondents' income. Thus, the higher the income obtained before the crisis, the greater the impact on the income obtained during the crisis. The effect of the Coronavirus crisis on the household economy can once again be highlighted.

Table 5 presents the results of the correlation analysis.

Table 5. Summary of the correlation analysis

		Before the crisis	During the crisis
	Pearson correlation	1	0.943**
Before the crisis	Sig. (2-tailed)		0
	N	94	94
	Pearson correlation	0.943**	1
During the crisis	Sig. (2- tailed)	0	
	N	94	94

^{**} The correlation is significant at the 1% threshold (bilateral).

Source: Results of estimates made with SPSS software

Determinants of the perception of the impact of Coronavirus

The results of previous sessions have shown that Coronavirus has a negative impact on household incomes. The logistic regression model presented in Table 5 reveals the factors influencing the perception of this impact. The variables introduced into the model are: the continent of residence of the respondent, the country of residence, the age and sex of the respondent, the size of the household, the sector of activity, the ownership of the respondents business, and the existence of a secondary activity.

The estimated regression model is globally significant at the 1% threshold (P $\langle 0.01 \rangle$). In addition, the R² obtained is equal to 0.5909. This stipulates that the variables introduced into the model explain to 59.09% the respondents' perception of the impact of the Coronavirus (COVID-19) on their monthly income.

The variable "Age" has a positive and significant impact at the threshold of 10% (P = 0.066 <10%) on the respondent's perception of the impact of the Coronavirus on their monthly income. Thus, the older the respondent, the more he perceives the negative impact of the Coronavirus on his income. This result can mainly be explained by the strict confinement measures imposed by the countries authorities around the world on the elderly. It is a risk reduction and anti-Coronavirus (COVID-19) measure that involves staying in your own house or in any location to avoid contact with the outside. However, in countries where strict confinement is not observed, there is nonetheless a strong awareness of the confinement of certain age groups. This age group is generally that of those who are 65 and above (ARS, 2020). People in these age groups were targeted because of their very high risk of contamination (Garnier-Crussard et al., 2020; Maryland Department of Health, 2020).

Gender has a positive and significant impact at the threshold of 1% (P = 0.003 <1%) on the respondent's perception of the impact of the Coronavirus on their monthly income.

From the codification made, it can be deducted that male respondents feel the most the negative impact of the Coronavirus on their monthly income. On the basis of the data collected, a significant number of women undertake, in addition to their main activity, income-generating activities at home. These are generally food products and miscellaneous (Menoux, 2013; Doubogan, 2016); which partially reduces the impact of confinement on their monthly income.

Likewise, the size of the household also has a positive and significant impact at the threshold of 1% (P = 0.002 <1%) on the respondent's perception of the impact of the Coronavirus on his income. monthly. Thus, the larger the size of the respondent's household, the more they perceive the impact of the Coronavirus. Indeed, the confinement imposed by the authorities followed by the closure of education and training centers (schools, colleges, universities and others) induces an increase in household food consumption and, consequently, an increase in the quantities of the usual foodstuffs purchase. As a result, respondents with a large family are carrying much greater burdens. Especially in this period of crisis where there is a drastic increase in the selling prices of agro-food products; the impact is much more significant. In addition to this, there is also the increase in electricity, water and internet consumption.

The business sector also positively and significantly impacts at 1% threshold (P = 0.003 (1%) on the respondent's perception of the impact of Coronavirus on their monthly income. We therefore deduce from this result that the respondents working in the private sector are those who perceive the most the negative impact of the Coronavirus (COVID-19) on their monthly income. In fact, unlike public sector agents, respondents working in the private sector do not have a guaranteed salary. It should also be noted that some respondents working in the private sector and paid per hour of service have been forced to reduce their hours of service. At the same time, other agents in this sector found themselves in a situation of partial unemployment. The case of certain employees working in the French private sector is a perfect example (CGT, 2020).

The variable "secondary activity" also has a positive and significant impact at the threshold of 5% (P = 0.041 (5%)). Respondents with a secondary activity are those who perceive the most the negative impact of the Coronavirus (COVID-19) on their monthly income. This is due to the fact that 80% of respondents with a secondary activity are traders. However, in this period of crisis, it was observed the cancellation of air transport, a closure of the borders of the countries and the limitation of inter-regional and regional mobility. This led to the increase in the acquisition and resale prices of all products; resulting in a slump then a fall in income. Starting from the definition of Spurk (2012), we are therefore in presence of a vicious circle. However, this remains an opportunity for some traders and entrepreneurs to improve the economic and financial profitability of their business, in the sense that they resell at higher price the products they acquired before the crisis. The positive impact of this crisis is therefore felt by certain economic agents (20% of respondents perceiving the impact of Coronavirus on their income, see Figure 3). Table 6 presents the results of the estimation of the logistic regression model.

Table 6.	Estimation	of the	logistic	regression	model

Va	riable	Coefficient	Std error	z	P
	Constant	-6.389	2.462	-2.63	0.008***
X ₁	Continent	-0.347	0.405	-0.86	0.391
\mathbf{X}_{2}	Country	-0.074	0.124	-0.60	0.547
X_3	Age	0.089	0.049	-1.84	0.066*
X_4	Sex	3.543	1.194	2.97	0.003***
X_5	HousehS	1.686	0.543	3.10	0.002***
X_6	IntSect	5.091	1.437	3.54	0.000***
X_7	PAccoW	0.570	0.920	0.62	0.535
X_8	SecAct	2.641	1.290	2.05	0.041**

Number of observations = 94

LR chi2 (8) = 60.44

Prob > chi2 = 0.0000 ***

Log pseudolikelihood = -20.9262

Pseudo R2 = 0.5909

Source: Results of estimates made with STATA software

IV. Conclusion

This research consisted of an analysis of the socio-economic impact of the Coronavirus (COVID-19) on households on different continents. Analysis of the information obtained shows that the advent of the Coronavirus (COVID-19) has both a negative and a positive impact on populations. This impact starts from economic problems resulting in the drastic drop in income of the populations up to social problems such as short-time working hours. However, although very little, some positive effects of this crisis remain to be raised on certain economic and health aspects. On the one hand, this period represents for some economic actors, an opportunity to improve the economic and financial profitability of their business. On the other hand, this crisis situation not only forced the populations to improve their hygienic condition but also pushed them to abandon certain more or less inconvenient practices; which changes will be anchored over time in the habits and behaviors of the populations. Regular hand washing is a perfect example. However, the impact of Coronavirus is mostly negative. It is therefore imperative to implement policies during and after COVID-19 that will help to mitigate effectively the harmful effects of the pandemic on the macroeconomic and microeconomic levels. At the macroeconomic level, governments should, for instance, set up assistance funds for the unemployed and the poor people; maintain or extend the duration of contracts for contract workers; improve workers' wages or increase the amount of Interprofessional Guaranteed Minimum Wage; develop, strengthen or promote the digital cluster and numeric economy; avoid or reduce non-priority spending;

^{***:} significant at the 1% (P $_$ 0.01); **: significant at 5% (0.01 \langle P $_$ 0.05); *: Significant at 10% (0.05 \langle p $_$ 0.10).

revive the import-export sector which is a vital sector for economies of many countries of the world; encourage private investment by facilitating administrative procedures; reduce or eliminate taxes and charges for production and manufacturing companies. At the microeconomic level, households must develop parallel businesses which will be feasible online with the use of Internet. Household heads also need to make a financial planning that includes daily expenses and the household economy in order to proportionately restructure their budgets. After the pandemic, households will have to diversify their sources of income by placing particular emphasis on online businesses. It will also be necessary to take out loans from financial institutions and boost their volume of investment, since the economic environment of countries would be favorable.

REFERENCES

- Açıkgöz Ö, Günay A. 2020. The early impact of the Covid-19 pandemic on the global and Turkish economy, *Turkish Journal of Medical Sciences*, TÜBİTAK, doi:10.3906/sag-2004-6, **50**: 520-526.
- Anonyme. 2020. Covid-19 frequently asked questions, https://www.un.org/sites/un2.un.org/files/new_dhmosh_covid-19_faq.pdf.
- ARS. 2020. Stratégie de prise en charge des personnes âgées en établissements et à domicile dans le cadre de la gestion de l'épidémie de covid-19, Fiche.
- ASPC.2020. About coronavirus disease (covid-19), Public Health Agency of Canada.
- Bloom DE, Cadarette D, Sevilla JP.2018. Les maladies infectieuses, nouvelles ou résurgentes, peuvent avoir de profondes répercussions économiques, Finances & Développement,
- Bloor M, Wood F. 2006. Keywords in qualitative methods. A vocabulary of research concepts, Thousand Oaks, Sage.
- CGT. 2020. Mesures concernant le coronavirus : adaptation du dispositif d'activité partielle,
- Fiche 1: Activité et chômage partiel.
- De Carvalho LR, Nasratullah S. 2017. L'utilisation des réseaux sociaux (Snapchat, WhatsApp et Instagram) et le cyberbullying. Mémoire professionnel. Haute Ecole Pédagogique
- Deluzarche C. 2020. Coronavirus en Afrique: pourquoi la catastrophe annoncée n'a pas eu lieu? https://www.futura-sciences.com/sante/actualites/coronavirus-coronavirus-afrique-catastrophe-annoncee-na-pas-eu-lieu-79699/
- Département de la Santé du Maryland. 2020. Questions Fréquemment Posées : La Maladie à Coronavirus 2019 (COVID) et les Personnes Agées.
- Doubogan YO. 2016. Déterminants de l'entreprenariat féminin au Bénin, revue des études multidisciplinaires en sciences économiques et sociales, REMSES N°2.
- ESCAP. 2020. The Impact and Policy Responses for COVID-19 in Asia and the Pacific, Nation Unies, Rapport.
- Faber J, Conde A. 2020. Impact de la maladie à virus Ebola sur l'agriculture et la sécurité alimentaire, Ministère de L'agriculture, Guinée, Rapport.
- FAO, UA. 2020. Protection sociale: Garantir une réaction efficace et une reprise inclusive dans le contexte de la covid-19 en Afrique.
- Garnier-Crussard A, Forestier E, Gilbert T, Krolak-Salmon P. 2020. Nouvelle épidémie de coronavirus (COVID-19): Quels sont les risques pour les patients âgés? *J Am Geriatr So*, DOI: 10.1111/jgs.16407.
- Ghebali-Boukhris L. 2020. Analyse de la contribution d'un nouvel usage des réseaux sociaux numériques à la connaissance organisationnelle : la curation de contenu, Réseaux sociaux et d'information, Docteur du Conservatoire National des Arts et Métiers, École Doctorale Abbé-Grégoire.
- Giwa A, Desai A. 2020. Novel Coronavirus COVID-19: An Overview for Emergency Clinicians, Rapport Spécial.
- Graham Carlos W, Dela Cruz CS, Cao B, Pasnick S, Jamil S. 2020. What is COVID-19? (formerly "the Novel 2019-nCOV Coronavirus"), Patient Health: Information Series.
- Kohn L, Christiaens W. 2014. Les méthodes de recherches qualitatives dans la recherche en soins de santé: apports et croyances, De Boeck Supérieur, Reflets et perspectives de la vie économique, Tome LIII, 67-82.
- Limaa CKT, de Medeiros Carvalhoa PM, de Araújo Araruna Silva Limab I, de Oliveira Nunesb JVA, de Souzab JSSRI, da Silvab CGL, Netob MLR. 2020. The emotional impact of Coronavirus 2019-nCoV (new Coronavirus disease), *Psychiatry Research 287*, 112915, Letter to the Editor, Elsevier.

- Lohman A. 2014. Quelles stratégies pour lutter contre Ebola ? Approfondir tous les aspects du développement, Rapport, FES Sénegal.
- Maliszewska M, Mattoo A. 2020. The Potential Impact of COVID-19 on GDP and Trade: A Preliminary Assessment, *Document de politique*, Banque Mondiale.
- Menoux M. 2011. Le Genre comme soutien des activités génératrices de revenus des femmes de l'alimentation de rue à Ouagadougou : Etude de cas du projet AGLAE. Science politique.
- McCandless E, Bouchet N. 2015. Combattre et prévenir le virus Ébola
- Consolider la paix et la résilience sociétale, Enseignements et priorités pour l'action de la société civile dans les pays du New Deal touchés par l'épidémie d'Ébola, CSPPS, *Rapport*.
- Miassi YE, Dossa FK, Adegbola PY, Enete AA, Akdemir S. 2020. Modelling perception and economic performance of teak (tectona grandis) production in rural plant nurseries of Benin republic, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, 20 (1): 1-10.
- OIM. 2020. Qu'est-ce qu'un Coronavirus ? IOM Coordination Office for the Mediterranean
- OIT.2020. Le COVID-19 et le monde du travail : Répercussions et réponses, Observatoire de l'OIT, 1ère édition.
- Qiu Y, Chen X, Shi W. 2020. Impacts of Social and Economic Factors on the Transmission of Coronavirus Disease 2019 (COVID-19) in China, medRxiv, doi: https://doi.org/10.1101/2020.03.13.20035238.
- Souza MC, do Nascimento Neto LA, Saraiva LAB, Saraiva CVAB, de Morais AA, Ramos TMB, de Matos Barbosa Jordão JR. 2020. The new coronavirus (COVID-19) and the social impact on the elderly population in Brazil, MOJ Gerontol Ger, 5(2):47 48.
- Spurk J. 2012. Contre la résignation et la mauvaise foi pour les sciences sociales publiques, *SociologieS*, http://journals.openedition.org/sociologies/3771.
- Unhale SS, Ansar QB, Sanap S, Thakhre S, Wadatkar S, Bairagi R, Sagrule S, Biyani KR. 2020. A Review on Corona Virus (Covid-19), wipls. 6(4):109 115.
- UNICEF. 2020. UNICEF Social Protection Response to COVID-19, Note technique, 6 p.
- WAEP. 2020. Pandémie du coronavirus 2019 (COVID-19) en Afrique de l'Ouest: Vulnérabilités, menaces, risques et scénarios, West Africa Network For Peacebuilding.





Economies after Pandemic. Towards Islamic National Cryptocurrency

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Abstract

A global economic recession seems to be inevitable, looking at how pandemic affected employment level, financial markets, purchasing power, and other economic variables. A significant shift in the world is forecasted and those countries who could successfully handle pandemic and post-pandemic periods are those countries that will have leading positions afterward. As an example, according to the last reports Turkey experience a USD 1,817 million deficit in the balance of payments by July 2020. One of the solutions to decrease this deficit would be an introduction of a national cryptocurrency. It is not a secret that many countries work on the development of their national cryptocurrencies, and the goal of

Özet

Pandeminin istihdam düzeyini, mali piyasaları, satın alma gücünü ve diğer ekonomik değişkenleri nasıl etkilediğine bakıldığında, küresel bir ekonomik durgunluk kaçınılmaz görünüyor. Dünyada önemli bir değişim öngörülüyor. Hem pandemi hem pandemi sonrası dönemleri başarılı bir şekilde idare edebilen ülkeler, lider ülke konumuna sahip olacaklardır. Örnek olarak, son raporlara göre Türkiye'nin Temmuz 2020'ye kadar olan ödemeler dengesinde 1.817 milyon ABD doları açık verdiğini görüyoruz. Bu açığı azaltmanın çözümlerinden biri, ulusal bir kripto para biriminin devreye sokulması olabilir. Pek çok ülkenin kendi ulusal kripto para birimlerini gelistirmek için çalıştığı gizli olmamakla birlikte, bu

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most of them is to bypass the influence of the dollar on their economies. The freedom to adopt independent national and international policies is the target of not only Muslim countries, but also of all countries that strive to improve their well-being and economy. World economies are moving towards the transition to cryptocurrencies and this should be a warning signal to Muslim countries. Nowadays, the heaemony of US dollars is not a matter of debate. Digital currencv can pose a major threat for the US dollar, an undisputed American asset for decades. The redistribution of power in the world economy can happen after the implementation of cryptocurrencies, and it is important to develop a safe and well thought out cryptocurrency for Islamic countries to have a strong position. The process of implementation of cryptocurrency should be analyzed. The research question of this paper is whether it is possible to implement Monetary policy tools offered by Umer Chapra to cryptocurrencies. The purpose of this article is to analyze the internal use of Sharia-compatible national cryptocurrencies within countries and to discuss their external use in international transactions in operations between countries.

Keywords: National Cryptocurrency, Islamic Cryptocurrencies, Monetary Policies, Islamic Economics

çalışmaların çoğunun amacı doların ülke ekonomileri üzerindeki etkisini azaltmaktır. Bağımsız ulusal ve uluslararası politikaları benimseme özgürlüğü sadece Müslüman ülkelerin değil, aynı zamanda refahlarını ve ekonomilerini iyileştirmeve calısan tüm ülkelerin hedefidir. Dünva ekonomileri kripto para birimlerine geçişe doğru ilerliyor ve bu Müslüman ülkeler için bir uyarı sinyali olmalıdır. Günümüzde ABD dolarının ekonomiler üzerindeki hegemonyası tartışma konusu deăildir. ABD doları hem ticaret hem de döviz piyasalarına hakim olmaya devam ediyor. Bazı analistlere göre dijital para birimi, ABD doları için büyük bir tehdit oluşturabilir. Kripto para birimlerinin uvaulamava aecmesinden sonra dünva ekonomisinde gücün yeniden dağıtılması söz konusu olacaktır ve İslam ülkelerinin güçlü bir konuma sahip olması için güvenli ve iyi düsünülmüş bir kripto para birimi geliştirmek önemlidir. Kripto para biriminin uygulama süreci analiz edilmelidir. Bu makalenin arastırma sorusu. Umer Chapra tarafından sunulan Para politikası araclarının kripto para birimlerine uygulanmasının mümkün olup olmadığıdır. Bu makalenin amacı, islam hukukuna uvaun ulusal kripto para birimlerinin ülkeler icindeki kullanımını analiz etmek ve uluslararası islemlerde kullanımlarını tartısmaktır.

Anahtar Kelimeler: Ulusal Kripto Para, İslami Kripto Para, Para Politikaları, İslam Ekonomisi

I. Introduction

As Recep Tayvip Erdogan at 12th International Conference on Islamic Economics and Finance claimed that Islamic Finance is the key to "getting out of crisis" after global coronavirus pandemic, development of Sharia compliant currency should be a goal of Islamic economies. The creation of National cryptocurrencies can be considered as a chance and a "new page" to implement those policies. All leading economies in the process of creating national cryptocurrencies, for Islamic countries to have strong and "influential" national cryptocurrencies and being able to make independent international transactions it is important for Islamic economies to think thoroughly over their cryptocurrencies and regulations. Umer Capra assumes the existence of an ideal Islamic economic model in his book "Towards a just monetary system" and tells about how to use monetary policies within that framework. Chapra describes ideal Monetary policies that would be implemented in Islamic economies, as an economic model to countries, that want Islamization of their economies, should strive. In addition, guidance given by one of the prominent scholars, of Islamic finance – Umer Chapra, of how money should be regulated in the Islamic economy can be used with the implementation of National cryptocurrency. The research question is whether it is possible to implement instruments of Monetary policy offered by Umer Chapra to cryptocurrencies. The paper hypothesizes - it is possible to apply suggestions of Umer Chapra when the national cryptocurrencies will be introduced, and the usage of cryptocurrency will contribute to the development of Islamic Economies. The purpose of this paper is to analyse the internal usage of the national cryptocurrencies that are Sharia-compliant within countries and discuss its external usage in international transactions in operations between countries. First the concepts of cryptocurrency, money, Mal will be given, in order to answer the question of Sharia compliancy of the national cryptocurrencies. In the next section, suggestions given for governments by Umer Chapra in his book "Towards a just Monetary system" how to apply monetary policies will be considered to apply for the new Islamic national cryptocurrencies. Lastly, the importance of the creation of national cryptocurrencies in the international arena will be discussed.

The attempts to create cryptocurrency had started since the 90s with the development of computers and digital programs. The creation of Bitcoin was a remarkable event in the history of cryptocurrencies. In 2008 Satoshi Nakamoto presented his cryptocurrency - Bitcoin and outlined The Bitcoin encryption protocol. In order to be able to answer if Bitcoin or any other cryptocurrency is Sharia-compliant, in the next part conceptualization of Cryptocurrency, Bitcoin, money in Islam, and Mal in Islam will be made.

II. ConceptualisationCryptocurrency

Definition of cryptocurrency given by Merriam-Webster dictionary - "any form of currency that only exists digitally, that usually has no central issuing or regulating authority but instead uses a decentralized system to record transactions and manage the issuance of new units, and that relies on cryptography to prevent counterfeiting and fraudulent transactions."

• Bitcoin

Bitcoin is a cryptocurrency issued by Satoshi Nakamoto, but it does not have a central authority to control it. As well as the amount of the gold on Earth is limited, there a finite number of Bitcoins- 21 million. (There are different explanations of this number, but none of them were officially confirmed.)

There are several characteristics of Bitcoin is given, to conceptualize it, given by Abu Bakar:

- The value of Bitcoin is affected by the laws of natural supply and demand in economics. Since there is no central issuing authority as government, which could "print" bitcoins and only 21 million bitcoins, that could be mined, side influence to the value of bitcoins is not possible.
- 2. To make payments with bitcoins is faster and cheaper than with other fiat money because banks and other intermediary parties do not participate.
- 3. In order to provide transparency and fairness, all transactions made are recorded in the blockchain, which are stored publicly.
- 4. Using bitcoins provide more anonymity, than using credit cards and making online transactions, since the identities of the users are not revealed. ¹

Mal

The majority of scholars agree in defining *Mal* as a thing that is desirable and valuable, which can be stored and possessed or transferred to another.² Contradictions in the definition of *Mal* is only about intangible things, should they be considered as *Mal*? According to Hanafi scholars such as Al-Haskafi, Shaykh Zarqa *Mal* should be tangible (*ayn*)³. According to other Madhhabs and the majority of scholars, *Mal* can be *manfaha* (usufruct) and intangible, including such things as benefits, copyrights, patents, and rights.⁴ In the case of intangible things such as benefits and rights become desirable and valuable to people, then it can be treated as *Mal* according to the contemporary Hanafi scholar Shaykh Taqi Usmani ⁵. The essential condition for something to be considered as a Mal is *Mutaqawwam*, which is permissibility in Sharia.

Money

Abu Bakar using given definitions by Al-Mausuah, Al-Fiqhiyah, Al-Kuwaitiyah, Turki, Merriam-webster dictionary defines Money as:

¹ Abu-Bakar, Mufti Muhammad. "Shariah Analysis of Bitcoin, Cryptocurrency and Blockchain." 2018, pp. 6.

² Al-Isfahani, Al-Raghib "Mufradat Alfaz Al Quran." Dar Al-Qalam (1992); Al Qardawi, Yusuf. Fiqh Al Zakah. Vol. 1: King Abdulaziz University Jeddah, 2000, 53-54.

³ Al-Zarqā, Muhammad "Syarh Al-Qawā'id Al-Fiqhiyyah." Damaskus: Dar al-Qalam (1989).

⁴ Al-Zuhayli, Wahbah, and Abdul Hayyie Al-Kattani. Fiqih Islam wa adillatuhu. Gema Insani, 2010.

⁵ Abu-Bakar, Mufti Muhammad. "Shariah Analysis of Bitcoin, Cryptocurrency and Blockchain." 2018, pp. 10.

- 1. medium of exchange
- 2. unit of account
- 3. measure of value
- 4. widely accepted as a means of payment 6

There are two types of money: natural money, such as gold and silver, and customary money which becomes money due to the acceptance of people. Customary money can be commodity money and fiat money. Cryptocurrency falls under the category of Customary money since it has all features of money and Mal. There are some specific features of cryptocurrency in comparison to fiat money, that does not have any intrinsic value, only common acceptance by people. First is the cryptocurrencies' trackability, which is not possible for printed fiat currency.

III. Is Cryptocurrency Sharia Compliant?

There are some scholars and authorities such as Grand Mufti of Egypt Shaykh Shawki Allam, the Turkish government's religious authority, the fatwa center of Palestine, Shaykh Haitam from the UK⁷, who consider Bitcoin to be Haram and if summarised reasons are as following:

- 1. Bitcoin is not a legal tender
- 2. Bitcoin's issuer is unknown
- 3. Bitcoin has no central authority or government backing it
- 4. Bitcoin is highly speculative and not stable
- 5. Bitcoin can be easily used for money laundering and illegal purposes

The purpose of this paper is not to prove that Bitcoin is Halal, and there are number of scholars who support it to be halal, but to answer whether National cryptocurrency is Sharia-compliant. In case a National cryptocurrency is issued as for example crypto Lira, by Turkish government all the reasons that make Bitcoin Haram according above-mentioned scholars is not applicable to the National cryptocurrency. There is government backing the National cryptocurrency, issuer is known, the cryptocurrency becomes legal tender after government issues it. After the government declares the National cryptocurrency's protocol and regulations issues related to speculatively and laundering come under control. In addition, it is worth to mention that most of fiat money as US dollars and Euros experienced speculations and were used in illegal purposes, and those facts does not make fiat money impermissible to use.

It is important to distinguish the purposes of the application of currencies as internal and external. Internally circulation of currency may not require specific features of cryptocurrency that help to make big oversea transactions. Internally inside of the country cryptocurrency can be a digital representation of fiat money. While exchange rate of those national cryptocurrencies will be balanced in the exchange market of the national

⁶ Abu-Bakar, Mufti Muhammad. "Shariah Analysis of Bitcoin, Cryptocurrency and Blockchain." 2018, pp. 12.

⁷ Abu-Bakar, Mufti Muhammad. "Shariah Analysis of Bitcoin, Cryptocurrency and Blockchain." 2018, pp. 15.

currencies after the creation of the national cryptocurrencies by leading economies. As China introduced its digital currencies for the testing regime in four provinces without blockchain technology there can be two features of the national currencies defined: for internal use inside of the country and external on the international market.

IV. Instruments of Monetary Policy of Umer Chapra

Mechanics for monetary policy are mostly related to the money circulated inside of the country because most of the countries' currencies do not have international power as the US dollar has. So here we will consider a national cryptocurrency as digitalized existing currency. Here the question of the readiness of citizens to digitalization may occur, in the book "Blockchain, Fintech, and Islamic Finance. Building the Future in the New Islamic Digital Economy" there is statistics provided for Islamic countries. So, for example, Turkey has unique demographic characteristics, with populations below 25 (41%), the highest mobile penetration (95%), a growing Internet users rate (67%) as well as remarkable rates of adult literacy (95%). In mobile banking and electronic payment transfers, Turkey has risen exceptionally. Turkey has outpaced the share of digital payment transactions in Spain, Germany, and the United States in 2016. Fintech investment in Turkey stood at US\$ 4.6 million in 2012, increasing by 175% in 2016 and hitting US\$ 29 million8. (Mohamed & Ali, 2018)9

Those in the following section the national cryptocurrency will be considered as a digitalized version of existing currency, even though it is possible that Islamic countries will add some specific features. As the protocol of Bitcoin claims that the maximum number of bitcoins possible to exist is 21 million, and not all of them are mined, each country should protocol features of their national cryptocurrency, whether it is a digital representation of existing fiat currency, is it linked to the national gold reserves, or if there is a finite number of the national currency.

It is logical to suppose that all policies that could be implemented to fiat money can be implemented to cryptocurrency. Thus, the question arises whether the implementation of the national cryptocurrency will contribute to these policies.

Umer Chapra in his book "Towards a just monetary system" offers the mechanics for monetary policy, that help to achieve several goals:

- 1. in harmony regulate money supply with real money demand
- 2. financing the government's 'genuine' deficits
- 3. achieve socio-economic goals of the Islamic society.

From this, we can say that implemented national cryptocurrency should contribute to the achievement of these goals. Related to the first goal, the protocol of the national

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⁹ Mohamed, H., and H. Ali. *Blockchain, Fintech, and Islamic Finance: Building the Future in the New Islamic Digital Economy.* De Gruyter, 2018, pp. 101.

cryptocurrency should be written specifically to each country. Considering that national cryptocurrency is the digitalized version of fiat currency, with the application the national cryptocurrency regulation of money supply with real money demand can become smoother, due to the trackability of money and easiness of analyzing. As well as those factors contribute to the second goal, as it will allow distinguishing areas that are underfinanced. In the begging stages of implementation of the national cryptocurrency, it is possible, in order to encourage people to switch from fiat money to crypto, introduction of some kind of advantages of the second, as banks encourage its customers to use its debit/credit cards with bonuses. Naturally arising advantages of cryptocurrencies is increasing the speed of the transaction. As for example right now for transferring money between banks one day can be required. While cryptocurrency transactions require less time and it should "pass" fewer workers to be approved. In order to promote the socio-economic goals of the Islamic society, it is possible to implement focused financing and allocation of funds to encourage citizens to make business based on Sharia practices, that contribute to the real economy in comparison to interest-bearing transactions.

The mechanics consists of six elements:-

(a) Target Growth in M and Mo

Chapra defines M – money supply (M), and Mo - high-powered money, defined as currency in circulation plus deposits at the central bank. Thus Mo – here can be considered as digital currency in circulation.

- Within national economic objectives, the central bank should determine the desired annual increase of the money supply (M)
- The velocity of the income of money in an Islamic economy over relevant periods is relatively more predictable. This is explained by the absence of interest rate. Cryptocurrency makes money trackable, and if in Islamic economy income velocity of money is more predictable, transactions of cryptocurrency are transparent.
- The growth in M is closely linked to Mo growth or to high-powered money defined as the circulating currency plus central-bank deposits and growth in Mo shall be carefully regulated by the central bank. This would, of course, require adequate target-oriented fiscal policies and proper regulation of access to central bank lending by financial institutions.
- As the creation of Mo is the product of the central bank 's exercise in the solely social prerogative of producing currency, the wealth obtained from this power should be used within the social-welfare-oriented value frame of Islam.

- The central bank 's profit from these advances should be made partially available to the government for the financing of projects aimed at eradicating poverty and reducing income inequalities, partially retained by the Central Bank to meet expenses.
- In order to make the above goal a reality, the central bank should make complete Mo set up by the central bank partly accessible to the government and partly to commercial banks and specialized financial institutions.
- The portion of Mo made available to the government would be an interest-free
 loan to allow the government to fund its social welfare programs, including
 the provision of accommodation, medical services, and schooling for the
 poor. It is worth no note, that all usage of cryptocurrencies allotted to social
 welfare projects can be thoroughly controlled that eliminates the possibility of
 corruption.
- The portion of Mo made available to commercial banks would be used by the central bank as a big quantitative as well as a qualitative tool of credit management, which should be primarily in the form of mudārabah advances and not bill discounts. Also, in Mudarbah several parties are present that work on the common project, that requires transparency and fairness of actions, that cryptocurrency can provide. As well as smart contract can be used so that all negotiated conditions of the contract are fulfilled.
- The portion of Mo made available to specialized financial institutions would also be in the form mudārabah. This should be used mainly to finance the productive operation of self-employed individuals, farmers, cottage industries and other small businesses who may not be able to access sufficient funds from commercial banks and the NBFIs, while feasible and socially required.

(b) Public Share of Demand Deposits

To allow the government to fund socially-beneficial ventures where profit-sharing is not feasible or acceptable, a certain proportion of commercial bank demand deposits, for example up to 25 %, should be transferred to the government.

(c) Statutory Reserve Requirement

There should be a requirement for commercial banks to hold, for example, 10-20 percent of their demand deposits as statutory reserves with the central bank. Part of the funds received by the requirements of the Central bank through the statutory reserve will be used to allow it to act as a last-resort lender. In case currency digitalized, individuals' money is held in the bank, which increases the liquidity of the bank.

(d) Credit Ceilings

- While the aforementioned instruments would make it easier for the central bank to produce the desired expansion of high-powered capital, credit growth could also surpass the desired limit.
- Thus, to ensure that the overall production of credit conforms with monetary goals, it would be advisable to place ceilings on bank loans.

(e) Value-oriented Allocation of Credit

As with other God-given resources, the criteria for credit allocation should be, first, the realization of Islamic society 's objectives and then the maximization of private profit. This can be done by the following:

- allocation of credit results in optimum goods and services production and distribution for the majority of the society;
- credit is beneficial to an optimal number of businesses in society.

It can be concluded that most of the Instruments of Monetary Policy determined for fiat money can be also suitable for cryptocurrencies, because of common features. In addition, the application of cryptocurrency makes it even more effective.¹⁰

V. The Different Steps Suggested By Umer Chapra

There are a variety of steps to be taken along with the Muslim society's socio-economic transition to allow the transformation of the traditional money and banking system into the Islamic one. Some of the key steps suggested by Umer Chapra are as following:

- 1. The illegality of Interest should be declared, allowing for a limited amount of time during which it can be accepted as a necessary evil, which should be removed from all domestic transactions. In case of the existence of cryptocurrency alongside with fiat currency, it is possible to allow using the national cryptocurrency only for interest-free transactions, which would encourage organizations to become more Sharia-compliant.
- 2. In Muslim countries, the equity/loan ratio should be significantly increased to shift the loan-based structure of the economies. There should be requirements overall businesses-corporations, partnerships, or sole proprietorships to gradually increase the equity ratio of their total financing and reduce their reliance on loans. They may have some access to finance through alternative leasing, murābahah, and hire-purchasing techniques. It is also possible to allocate the majority of crypto money for projects that work according to Islamic finance standards, which work with profit/loss sharing principles in order to support projects that have a beneficial effect on the real economy.

¹⁰ Chapra, M.U. Towards a Just Monetary System. Islamic Foundation, 1985.

3. The tax system reform will undoubtedly help speed up that process. An irrational tax regime pushes even legitimately gained income into black money, which causes capital flight and excessive spending, deplored by Islam, rather than being diverted into constructive uses by growing equity and savings. The reform of the tax system and control over wasteful consumptions become easier with cryptocurrency. Also, the collection of Zakat for the elimination of poverty and socially beneficial projects becomes easier. Zakat, which is a compulsory religious obligation, paid at a fixed rate and applicable to eligible Muslims, is equivalent to 2.5 percent of his money or tradable goods holdings. Also, Zakat is a means to narrow the gap between rich and poor and to ensure that the needs of all are met in society.

A smart contract can automate Zakat's collection and distribution with complete accountability, which is currently not fully automated, particularly with regard to the use of Zakat funds. Smart contracts can automate the end-to-end process where fiat currency or digital assets can be used to collect the funds¹¹.

- 4. The restructuring of the stock market along non-speculative Islamic lines is a crucial move, such that stock and bond prices adjust rationally as determined by economic conditions and not erratically under the control of unreasonable speculative forces. Introducing the Islamic cryptocurrency would contribute to the reorganization of the stock market along with non-speculative Islamic lines.
- 5. All public-sector projects affected by commercial pricing should be converted to such a basis to reduce their burden on the public treasury. It becomes easier to track public sector project's purchases with cryptocurrency.
- 6. Interest that is present in government-sponsored specialized credit institutions that operate in different sectors of the economy should be eliminated. This does not imply the development of interest-free loans without profit-and-loss sharing. The national cryptocurrency would provide control over government-sponsored specialized credit institutions
- 7. All interest-bearing financial institutions should gradually be converted to profitsharing institutions, regardless of whether they are of domestic or foreign origin. As well as conversion to national cryptocurrency should be gradual.
- 8. In order to facilitate private sector investments of funds and also promote the operations of commercial banks, a certain number of supporting financial institutions should be established. Those financial institutions can be based on the national cryptocurrency¹².

¹¹ Alam, N., L. Gupta, and A. Zameni. *Fintech and Islamic Finance: Digitalization, Development and Disruption.* Springer International Publishing, 2019, pp. 132.

¹² Chapra, M.U. Towards a Just Monetary System. Islamic Foundation, 1985.

VI. The Benefit of Aplication of National Cryptocurency to Country's Political Independence and Power on International Area

Chapra highlights the domestic and foreign debt of most Muslim countries and sees it as the major obstacle to the Islamisation process and the independence of the Muslim countries. According to Umer Chapra, the Islamisation process of their economies and the independence of the Muslim countries are the main goals of countries who strive to apply Sharia principles in their economies. Deliverance from debts gives the political independence of the Muslim countries. Freedom in adoption independent national and international policies is not a goal of only Muslim countries, but of all countries who strive to improve their well-being and economies.

In April 2020 China has issued its first crypto Yan in 4 provinces. Following many years of preparations, China's government released a timeline for rolling out the new digital currency in four regions. Government employees in these cities will use a mobile program in the coming month to receive at least a portion of their salaries in the form of digital payment.

The digital money, to some analysts, may pose a significant threat to an American asset that has ruled unchallenged for decades: the US dollar.From 2014, China is seeing digital currencies as a means to move away from U.S. dollars. Since then it has made the development of digital currency technologies a primary strategic national objective. Tim Morrison, a senior fellow at the Hudson Institute who worked as Donald Trump's special assistant, told about Beijing's possibility of "dominating this emerging financial technology should be alarming." ¹³

The European Central Bank has also formed a working group on the cross-border interoperability of national digital currency programs with central banks of Canada, Japan, Sweden, Switzerland, and the UK. Canada's and Singapore's central banks are already investigating the use of smart contracts to pass messages between digital currency systems. Governments of Hong Kong and Thailand have tested bilateral payments without intermediaries in their respective currencies. These measures show the potential for completing transactions across borders without SWIFT and U.S. correspondent banks, two crucial pillars of U.S. financial supremacy.

Chapra in his work "Monetary management in an Islamic economy" explains how historically the US gained the hegemony of the dollar. During the gold coin standard, the gold bullion standard, the Bretton Woods system, after the Second World War period the US always strived and had a leading position.

Historically, three variants of the gold standard existed: the gold coin standard when gold coins were in active circulation; the gold bullion standard when gold coins were not

^{13 &}quot;China's Digital Currency Takes Shape; Will It Challenge Dollar?", 2020, https://www.voanews.com/economy-business/chinas-digital-currency-takes-shape-will-it-challenge-dollar.

in circulation but the monetary authority agreed to sell gold bullion at the official rate against the local currency; and the Bretton Woods regime when the monetary authority was needed to trade domestic money for US dollars, that could be changed to gold.

The gold standard rules required countries with deficits to deflate and countries with surpluses to reflate their economies. During the Great Depression, this seemed impossible since deficit countries had no choice but to reflate their economies in order to reduce unemployment. Also, the US and France, the two big surplus countries, did not find it necessary to obey the game's rules. They did not reflate their economies, their balance of payments surpluses has been persistently sterilized, thereby accentuating the deflationary effect on the deficit countries. These policies weakened the gold standard 's successful service and were abandoned after the Great Depression.

The financial demands of the Second World War and post-war rebuilding made it much more difficult to return to the gold standard and then the Bretton Woods system was widely accepted after World War II. The US Dollar was the corner-stone of this system as about two-thirds of the world's physical gold was owned by the US.

By the end of the 1950s, the rise of the world 's monetary gold supply was inadequate to fund the development of global production and trade. The ongoing US deficits have contributed to a gradual fall in its gold holdings and weakened the capacity to retain the convertibility of the currency to gold. Finally, in August 1971 the US was forced to de-monetize gold.

Bretton Wood system came to the end and that marked the beginning of fully-fledged money-managed standard that had absolutely no connection with gold. Exchange rates are now floating with no formal par value. This scheme, which was originally implemented on the basis of circumstances, became legal after the adoption of the Articles of Agreement of the IMF in April 1978.¹⁴ **P.3**

Nowadays hegemony of the US dollar is not an issue of discussion. The US dollar continues to dominate both the trade and foreign exchange markets. In 2019, circulation was dominated by the US dollar 90 percent of the daily volume of forex trading. Half of the 185 currencies worldwide are within a close trade band to the dollar. About \$1 trillion in US bills are in circulation and approximately 60 percent of this (\$600 billion) is spent outside the US in countries like Russia, where economies are surrounded by risk. ¹⁵ **P.11**

World economies are moving in the direction of transition to cryptocurrencies and that fact should be a warning signal to Muslim countries. Redistribution of power in

¹⁴ Chapra, M Umer. "Monetary Management in an Islamic Economy." *Islamic economic studies* 4, no. 1 (1996).

¹⁵ Taskinsoy, John "Pure Gold for Economic Freedom: A Supranational Medium of Exchange to End American Monetary Hegemony as the World's Main Reserve Currency." (2019).

the world economy may happen after the implementation of cryptocurrencies, and for Islamic countries to have a strong position, the development of secure and well thought out cryptocurrency is essential. Uncertainty in "halal" ness of cryptocurrency should not be the obstacle on the way when the necessity of implementing the national cryptocurrency will come there already commonly accepted fatwa about cryptocurrency should be present.

To conclude, many countries consider the development of their cryptocurrencies in order to use in international transactions, as a chance to receive economic independence from dollar hegemony. It is logical to suppose that those countries which will have precedence in the successful creation of their cryptocurrencies, will have a leading position in global economic order.

VII. Conclusion And Recommendations

In conclusion, the research question is answered, and the hypothesis can be confirmed that it is possible to apply instruments offered by Umer Chapra when the national cryptocurrencies will be introduced, and the usage of cryptocurrency will contribute to the development of Islamic Economies.

In order to the national cryptocurrency to be allowed to use in Islamic Finance, this currency should be halal. For the cryptocurrency to be halal and Sharia-compliant, there should be government backing the National cryptocurrency, so that issuer is known, the cryptocurrency becomes legal tender after government issues it. After the government declares the National cryptocurrency's protocol and regulations issues related to speculatively and laundering come under control.

In the paper, we have shown that the mechanics for the monetary policy of Umer Chapra can be applicable to cryptocurrencies since they have the same features as fiat money has. The transition from fiat money to the cryptocurrency should be gradual. In case of instant and a sharp transition from fiat money to crypto, there is a big economic crisis may occur, that is known from history. Those to not be in the condition when the country has to switch to crypto, because all other countries already implemented their national currency and it becomes a necessity, it is better to be among first who implement national cryptocurrency. That will also contribute to the higher exchange rate of the national cryptocurrency and its value in the international market and will have a chance for the country to make a gradual transition. It is logical to suppose that those countries which will have precedence in the successful creation of their cryptocurrencies, will have a leading position in the global economic order.

How transactions between two countries and based on which national cryptocurrency should be determined. Experiences of other countries in the creation of National cryptocurrencies **should be analyzed**. Freedom in adoption independent national and international policies is not a goal of only Muslim countries, but of all countries who strive to improve their well-being and economies.

World economies are moving in the direction of transition to cryptocurrencies and that fact should be a warning signal to Muslim countries. Redistribution of power in the world economy may happen after the implementation of cryptocurrencies, and for Islamic countries to have a strong position, the development of secure and well thought out cryptocurrency is essential. Uncertainty in "halal" ness of cryptocurrency should not be the obstacle on the way when the necessity of implementing the national cryptocurrency will come there already **commonly accepted fatwa about cryptocurrency should be present.**

There can be analogy made between Cryptocurrencies and electro cars or solar energy technologies which have enormous benefits over using fuel energy, but due to side conditions and political will, their universal implementation is postponed.

BIBLIOGRAPHY

Abu-Bakar, Mufti Muhammad. "Shariah Analysis of Bitcoin, Cryptocurrency and Blockchain." 2018.

Al Qardawi, Yusuf. Fiqh Al Zakah. Vol. 1: King Abdulaziz University Jeddah, 2000.

Al-Isfahani, Al-Raghib "Mufradat Alfaz Al Quran." Dar Al-Qalam (1992).

Al-Zarqā, Muhammad "Syarh Al-Qawā'id Al-Fighiyyah." Damaskus: Dar al-Qalam (1989).

Alam, N., L. Gupta, and A. Zameni. Fintech and Islamic Finance: Digitalization, Development and Disruption. Springer International Publishing, 2019.

Az-Zuhaili, Wahbah, and Fiqih Islam Wa %J Ke-1 Adillatuhu, Jakarta: Gema Insani. "Alih Bahasa Abdul Hayyie Al-Kattani, Dkk, Cet." (2010).

Chapra, M Umer. "Monetary Management in an Islamic Economy." Islamic economic studies 4, no. 1 (1996).

Chapra, M.U. Towards a Just Monetary System. Islamic Foundation, 1985.

Mohamed, H., and H. Ali. Blockchain, Fintech, and Islamic Finance: Building the Future in the New Islamic Digital Economy. De Gruyter, 2018.

Muhhammad, Al-Haskafi. "Al-Durr Al-Mukhtar with Hashiyat Ibn Abideen, Vol. 4." Dar Al-Fikr, Lebanon (2000).

Taskinsoy, John "Pure Gold for Economic Freedom: A Supranational Medium of Exchange to End American Monetary Hegemony as the World's Main Reserve Currency." (2019).

"China's Digital Currency Takes Shape; Will It Challenge Dollar?", 2020, https://www.voanews.com/economy-business/chinas-digital-currency-takes-shape-will-it-challenge-dollar.

The Effects of COVID-19 Pandemic on Life: View from Digitalization and Digital Marketing Perspective

Dmytro BABUKHIN^{*}

Abstract

The COVID-19 pandemic not only put society in the face of new global problems, but also caused the development of some technological trends - for example, such as online payments, telemedicine, online education, remote work, and robotization. These technologies help to reduce the spread of the coronavirus enable businesses to sustain their operations. In addition, such technologies can help societies become more flexible and resilient to a pandemic and other threats. The COVID-19 pandemic has pushed the society to implement and utilize not only digitalization in many spheres of life, but also digital marketing as a tool to advertise, interact, and finally sell products to people under lockdown via the Internet. This is the reason why such a topic has been analyzed while conducting the

Özet

COVID-19 salgını yalnızca toplumu yeni küresel sorunlarla karşı karşıya bırakmakla kalmadı, aynı zamanda bazı teknolojik eğilimlerin gelişmesine de neden oldu. Bunlara örnek olarak çevrimiçi ödemeler, teletıp, çevrimiçi eğitim, uzaktan çalışma ve robotlaştırma gösterilebilir. Bu teknolojiler, koronavirüsün vayılmasını azaltmaya yardımcı olurken, aynı zamanda işletmelerin faaliyetlerini sürdürmesini sağlamaktadır. Ek olarak, bu tür teknolojiler toplumların pandemi ve diğer tehditlere karşı daha esnek ve dirençli olmasına yardımcı olablir. CO-VID-19 salgını yalnızca toplumu yaşamın pek çok alanında dijitallesmeye itmekle kalmamış, aynı zamanda reklam verme, etkileşim kurma ve nihayetinde karantinadaki kisilere internet üzerinden ürün satmak için bir araç olarak dijital pazarlamayı uygulamaya ve kullanmaya

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following research. The purpose of this research is to demonstrate and analyze the relations and interrelations among COVID-19 pandemic, digitalization, and digital marketing, being current variables of today's life. To do that, many articles, books, websites were reviewed and analyzed. The majority of the resources were found by means of reliable and valid databases and websites, such as ProQuest (for theses), Scopus, Springer, Web of Science, and Science Direct Google Scholar, Research Gate (for articles). Moreover, the study contains some statistics of the world situations as well as the case of Turkey.

Keywords: COVID-19, Digitalization, Digital Marketing, Online Environment, Digital Inequalities, Social Media.

itti. Bu değişim, böyle bir konunun analiz edilmesinin temel gerekçesi olmuştur. Günümüz yaşamının güncel değişkenleri olan; COVID-19 pandemisi, dijitalleşme, dijital pazarlama arasındaki iliskileri göstermek ve analiz etmek bu araştırmanın amacını olusturmaktadır. Bunu yapmak için birçok makale, kitap, web sitesi incelenmis ve analiz edilmistir. Araştırılan kaynakların çoğu; ProQuest (tezler için), Scopus, Springer, Web of Science ve Science Direct Google Scholar, Research Gate (makaleler için) gibi güvenilir ve geçerli veritabanları ve web siteleri aracılığıyla bulunmuştur. Ayrıca çalışmada, dünyadaki durumun incelemesinin yanı sıra Türkiye örneği ile ilgili bazı istatistikler sunulmuştur.

Anahtar Kelimeler: COVID-19, Dijitalleşme, Dijital Pazarlama, Çevrimiçi Ortam, Dijital Eşitsizlikler, Sosyal Medya.

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I. Introduction

The scientific community continues to debate the origin of the coronavirus, whether it is specially designed, or inadvertently released into the environment from the laboratory, where it was studied, or arose naturally. The time will come and we will discover the reason behind it. But for now, looking at the powerful economic and social consequences of the new coronavirus, it is, in fact, a weapon of the 21st century, namely viruses in combination with the information technology. In the present day and in the future: to spread panic that destroying everything in the world, it will be enough to "throw" something out of the laboratory, and the Network will do its job, spreading the information transmitted to each of the millions of feared people in their own way.

We see that after the outbreak of the coronavirus, the world has already changed, as it changed after the pandemics of the plague of the XIV-XV centuries, the revolutions of the XVIII-XIX centuries, the two world wars of the XX century and so on. The good news is that such global upheavals, together with the negative economic and environmental consequences, have led to a stronger development of humanity and the awakening of human consciousness.

For the scientific and medical world, it seems that the current experience of countering the COVID-19 outbreak will be extremely valuable. The rapid spread of the coronavirus

has prompted scientists and physicians from around the world to join forces in realtime, simply online.

II. COVID-19 and Digitalization

Digitalization is quite a new term that has arisen in the past decade. Many scientists have studied the Digitalization topic itself and its correlations with other variables. The totally new variable named by COVID-19 has arisen. According to Noussan M. and Tagliapietra S., Digitalization might be thought as a reformation of things from real to virtual (digital) shape, allowing them to communicate and cooperate with one another¹. Looking at the details, Kagermann H. suppose that Digitalization involves the encountering of the tangible and intangible environments that is facilitated by information and communication technology². In accordance with some researchers, there are four separated stages of historical Digitalization process including:

- 1. The installation of computers in the 1990s,
- 2. The appearance of the internet,
- 3. The invention of mobile internet,
- 4. The implementation of the Internet of Things (IoT), which still goes on³.

"Business Dictionary" defines Digitalization as a process of implying digital technologies into people's and organizational daily life by the way of digitization of everything that is able to be digitized⁴. Autio E. interprets the sense of Digitalization as the employment of digital technologies and infrastructures in business, economy, and community. Digitalization is modifying entrepreneurship in two directions. First of all, it is changing the place of entrepreneurial opportunities in the economic environment. Secondly, Digitalization is shifting business proprietor activities namely, the ways to seek and catch those opportunities. These two trends exist in bough the business environment and in associations of stakeholders and functional resources that promote the establishment and augmentation of new business enterprises and companies⁵. Evangelista R., et al., represent the meaning of Digitalization as the expanded connections and networking of digital technologies to widen interaction, services, and commerce between people,

Noussan, M., Tagliapietra, S., "The effect of digitalization in the energy consumption of passenger transport: An analysis of future scenarios for Europe". Journal of Cleaner Production, Vol. 258, 12092, 2020, pp. 1-15.

² Kagermann, H., "Change through digitization value creation in the age of industry 4.0", In. Management of Permanent Change, Springer, 2015, pp. 23-45.

³ Davidsson, P., Hajinasab, B., Holmgren, J., Jevinger, Å., Persson, J.A., "The fourth wave of digitalization and public transport: opportunities and challenges". Sustain 8. Online article Available at: https://doi. org/10.3390/su8121248 Access date: 08.09.2020, 2016, 1

⁴ Business Dictionary, "Digitalization" (2020). Available at: http://www.businessdictionary.com/definition/digitalization.html, Access date: 12.08.2020.

⁵ Autio, E., "Digitalisation, Ecosystems, Entrepreneurship and Policy", Government's Analysis, Research and Assessment Activities Policy Brief, Vol. 20., 2017, pp. 1-4

businesses bodies, and commodities. The Digitalization activity is actually regularly correlated (directly or indirectly) with an improvement in the workforce productivity level⁶.

There are three similar words (an adjective, a verb, and a noun) including "digital technologies", "digitization" and "digitized everything". Those terms are combined in order to determine that digitalization is an activity that encompasses economy as a whole, rather than sole one business or a commodity or even an organizational activity. Digitalization refers to the application of technologies, outputs, and information with an eye to proliferate profits, develop business models, shift or modify entrepreneurial activity. Digitalization engenders an ecosystem for digital enterprises and e-commerce.

Nowadays, technology is commonly used instead of face-to-face communication, even politicians in countries that track viruses, particularly in Asia, have recognized the Internet as a lifesaving agent. Some press reports indicate that a 20-year period of technology growth has turned into a pandemic just in 24 hours. Science and technology have started to be a priority since scientists, modelers, and scientists have received direct funding for vaccine research, antibody testing, and virological modeling. As stated by Aydoğan S., while the share of e-commerce in 2011 was only 3.6% of total retail trade, in 2016 it increased to 8.5%. By the end of 2021, this growth rate is anticipated to reach 13%. Total e-commerce volume has risen by 50% and online sales have increased by 52%. Many customers prefer e-commerce to physical purchases. Because of this reason, people who were not engaged in e-commerce shifted to the Internet, and this rate grew by 8.8%. The contemporary situation people around the globe are in implies that one of the most significant and most visible effect of COVID-19 is that it pushed both social and business life to digitize remarkably.

The principal fields where digitalization is revolutionizing are marketing and communication. Nearly 90% of businesses are reviewing and revising their marketing budgets. Now it is more necessary for them to use new digital methods and tools¹⁰.

Digital technology refers to binary code and computational tools, which become widespread in the world after World War II. Digitalization indicates the expanded usage of digital technology in the world¹¹. It also involves the digital inequality term. As

⁶ Evangelista, R., Guerrieri, P., Meliciani, V., (). "The economic impact of digital technologies in Europe". Economics of Innovation and New Technology, vol. 23, 2014, pp. 16

⁷ Mäkiö, J., Miroliubov, A., Zhgun, V., "Digitalization – quo vadis?". EDP Sciences, SHS Web of Conferences 44, Available at: https://doi.org/10.1051/shsconf/20184400056, 2018, pp. 3.

⁸ Alshaketheep K.I., Salah A.A., Alomari K.M., Khaled A.S.D., Abu Jray A.A.. "Digital Marketing during COVID 19: Consumer's Perspective". Wseas Transactions on Business and Economics Journal, 2020, Vol 17, pp. 834

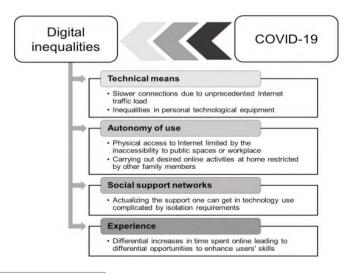
⁹ Aydoğan S., "COVID-19 AND E-COMMERCE", Ankara: Gazi Kitabevi, 2020, pp. 53-78.

¹⁰ Medda S., "Top trends that can drive digital marketing strategy in the COVID-19 world". Available at: https://yourstory.com/2020/07/trends-drive-digital-marketing-strategy-covid-19 2020.

¹¹ Sundberg, L.. "Digitalization: Rise of the (Mega) Machines". IEEE, 2020, pp. 114.

indicated by Beaunoyera E., et al., digital inequality might be interpreted as a result of the distinction in real access to technology, as well as distinction in digital literacy¹². If looking at the details the term includes the stage to which people have the capability, knowledge, motivation, and competence to access, process, engage and understand the data required to get benefits from the utilization of digital technologies namely, computers, the Internet, mobile phones and apps. These distinctions in access and digital literacy are dramatically implanted in social, economic, cultural, and global contexts.

Digital inequalities have already existing, but due the COVID-19 pandemic those inequalities have been considerably sharpened compared to the past. On the one hand, the crisis engaged by COVID-19 will make digital inequalities worse throughout the whole population. On the other hand, digital inequalities might be imagined as a powerful risk factor of vulnerability for the virus pandemic, and for the outcomes of the current crisis¹³. Considering the study of Beaunoyera E., et al., it can be emphasized that there are certain mutual effects and impacts between Digital inequalities and COVID-19. If it comes to the situation when the COVID-19 pandemic is affecting on Digital inequalities (Figure 1) there are four main issues, one of them is technical issues. It involves the cases where there is a possibility of generating some difficulties for families and people with low-income due to the lockdown or losing the job. On the other hand, there was a problem of low connection and disconnection to the World Wide Web because of an overfull number of users accessed the internet. The autonomy of use includes cases where people were restricted in their connection to the Internet because many public leisure places and workplaces were closed during the quarantine. Moreover, some people witnessed the constraints of using digital devices or connecting to the Internet during the lockdown period at homes, it especially concerns young generation. Social

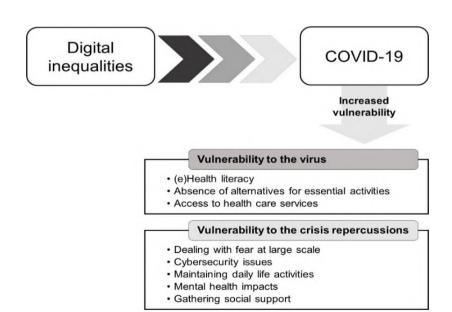


¹² Beaunoyera, E., Dupéréb, S., Guitton, M.J., "COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies". Computers In Human Behavior Journal, Volume 111, 106424, 2020, pp. 1.

¹³ Beaunoyera, et al., "COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies", pp.1

support networks detect the ability of individuals who need support and advices within digital issues and people with higher digital knowledge willing to help. During the lockdown period, many people experience problems related to digitalization including the digitalization of education and work. However, at the same time, they have obtained many crucial digital skills at searching and finding information and navigating online vital for the digital world we live in now. Which is a positive experience that people could get from being under quarantine restrictions and locked down at their homes. If looking at how Digital inequalities influenced COVID-19 (Figure 2) it should be said that Digital inequalities effects COVID-19 in an indirect way, namely through the weak and sometimes impossible access to the digital healthcare system, news, social media. Digital inequalities inside the society have engendered the situation and cases where people could not reach the information about the virus, pandemic, quarantine, selfcare rules, preventive activities, treatment, etc. Those cases involve people witnessing difficulties to enter, find information on the internet, related to the income-level, number of family members using digital devices, and age of an individual. Digital inequalities have born fear to the virus, mental problems (especially because of lockdown), and cybersecurity regarding personal information, trustable data, and reliable news, as a huge number of processes became digitalized at once.

On the one hand, digitalization assists the world community and is defined as a factor of a future, sustainable progress society facilitated by industrialization and the World Wide Web. On the other hand, the cost people pay for this upcoming society is enhanced dependence on digital technology; people should produce, maintain, and adapt to the



devices, as much rapid as possible¹⁴ (Sundberg L., 2020, p. 117). Rungi M. (2019, p. 741) states that the Digitalization has high potential and the number of advantages. The main benefits are listed below:

- 1. Outstanding.
- 2. Automation of regular, boring, but necessary work.
- 3. Decreasing the time spent to accomplish a task.
- 4. Cut of costs.
- 5. Improved efficiency.
- 6. Increasing quality of a product, environmental sustainability, employee' safety
- 7. Proper application of knowledge¹⁵

If we take the current world situation into consideration we can observe that the spread of COVID-19 fell on the active phase of digitalization in different countries and unwittingly accelerated the implementation of the accumulated potential of using information and communications technology (ICT) technologies in many sectors of economy. Much more intensively than before the pandemic, ICT began to be used in the spheres of health, education, government, finance, trade, etc., approaches to the development of telecommunications infrastructure, personal data protection and other related issues are being actively revised. If talking about education system, it should be said that some universities are now switching completely to the online mode for the coming academic year.

If looking at the statements provided by Deloitte, the interesting observations can be pointed out. Firstly, more than ever the cohesive networks and customer service became extremely important in the contemporary environment as not the first priority companies suspend their work, work partially or just remotely with the aim somehow to stop the COVID-19 pandemic. From this point, it is understandable that both retailers and consumers had to shift to digital reality and digital relationships in the blink of an eye. Secondly, digital revenue in the first quarter of 2020 was 18% higher than the first quarter of 2019. The traffic volume in the first quarter of 2020 consisted of 13% compared to the first quarter of 2019. Mobile and social traffic showed significant growth. Mobile traffic declined 9% in the first quarter of 2019 but grew 9% in the first quarter of 2020. There is a noticeable turnaround in internet traffic and transactions inside the internet. One more trend, that has been observed, is the rapid rising in traffic on social media. In the first quarter of 2019, the percentage of social media transport was 6%. In the first quarter of 2020, this number increased to 8%¹⁶.

In accordance with Fahey R.A. and Hino A. the phenomenon of Teleworking technologyenabled certain parts of the economy and academic work to keep their activities on

¹⁴ Sundberg, L., "Digitalization: Rise of the (Mega) Machines", pp. 117.

¹⁵ Rungi, M., "Digitalization: Size Doesn't Matter, Put Focus on Product-and-Service, Not on Process". IEEE Xplore, 2019, pp. 741.

¹⁶ Deloitte. Available at: https://www2.deloitte.com/tr/tr.html Access date: 22.03.2021

utilizing wide national- and regional-level shutdowns. Digital communication jointly with social media platforms took an essential part in supporting people's psychic health and sustaining their social and family relationships within the continuous periods of social distancing and isolation. Moreover, they became a battleground for competing narratives around the pandemic involving the guidance from health authorities and experts frequently trying to unmask conspiracy theories and providing inaccurate or outdated information¹⁷.

New customers involved in the digital transformation, engendered by COVID-19, develop certain standards and new opportunities linked to providing trust and relevance to businesses. For instance, advanced search functionality with features like dynamic range design allows customers to describe their own product perception and experience. Defining and tracking goods shortages and offering sufficient alternatives, goods returning times, using alternative goods offer a satisfying level of client support and comfort¹⁸.

In accordance with the online statistics portal "Statista", in 2020 worldwide expenses on digital transformation are expected to achieve 1.3 trillion U.S. dollars by raising 10.4 percent year-on-year¹⁹. It is a considerable increase in spite of the economic recession sprang from by the COVID-19 pandemic. The coronavirus has triggered the recognition by companies to raise operational efficiency and improve customer experience, which are included in the principal aims of digital transformation initiatives. This is what businesses have started and still keeping on namely, the digitalization of their business.

While considering Niemand T., et al., it should be said that in accordance with the active technological progress, the majority of financial service companies, and especially the banking sector, exponentially shift towards online and digitalized value creation²⁰. In 2019, countries with the most expanded online banking penetration rates are Norway 95%, Iceland - 94%, Denmark - 91%, Finland - 91%, Netherlands - 91%, Sweden - 84%, and Estonia - 81%. The trend of digitalization in the banking industry is significantly apparent in the Scandinavian countries. If we examine the most developed European countries, we can conclude that their online banking penetrating rates are not extremely high, but still exceed half of all banking operations. Those countries are in the process of transformation to online banking and with the following rates: United Kingdom - 78%, France - 66%, Austria - 63%, Germany - 61%, and Spain - 55%. Looking at the

¹⁷ Fahey, R.A., Hino, A., "COVID-19, digital privacy, and the social limits on data-focused public health responses". International Journal of Information Management, 102181, 2020, pp. 1-2.

¹⁸ Alshaketheep K.I., Salah A.A., Alomari K.M., Khaled A.S.D., Abu Jray A.A.. "Digital Marketing during COVID-19: Consumer's Perspective". Wseas Transactions on business and economics Journal, 2020, Vol 17, pp. 831-841.E-ISSN: 2224-2899, DOI: 10.37394/23207.2020.17.81. pp. 839.

¹⁹ Statista, Available at: https://www.statista.com Access date: 09.09.2020

²⁰ Niemand, T., Coen Rigtering, J.P, Kallmünzer, A., Kraus, S., Maalaoui, A., "Digitalization in the financial industry: A contingency approach of entrepreneurial orientation and strategic vision on digitalization". European Management Journal Available at: https://doi.org/10.1016/j.emj.2020.04.008 Access date: 29.08.2020, 2020, pp. 1.

situation in Turkey, the online banking operations rate accounts for 35%. The countries with the least rate of online banking operations (less than 10%) are as follows: Bulgaria - 9%, Romania - 8%, Bosnia and Herzegovina - 5%, Kosovo - 5%, Montenegro - 3%²¹.

According to Xiarewana B. and Civelek M.E., COVID-19 has stepped up the digitalization. 5G is a vital tool within the digital economy, offering high-speed communications networks for the communications of vast quantities of information and data. Artificial intelligence has a strong impact, and along with 5 G and data centers, it can facilitate industrial transition and change in the modern economy age²². The enormous impact of the pandemic would be a dramatic and permanent weakening of the world economy. The number of individuals working from home increased, rates of unemployment hit an unparalleled level, and demand declined during the pandemic period. Much of this has intensified the disruptive impact of the new economy. And the planet is at the dawn of a new age. Post-digital ecosystem can be used as a term to explain today's world situation.

To sum up, governments, major tech companies, and even ordinary citizens are driving digital solutions to tackle the pandemic and its devastating socioeconomic impact. International structures, in particular the European Union and the Organization for Economic Co-operation and Development, have also adjusted their plans for further prospects for digital development. Thus, the changes affected the draft decisions of the EU Council on shaping the digital future of Europe, initiatives in the field of industrial digitalization, artificial intelligence, conditions for protecting data privacy when using online applications and biometrics, taxation of digital companies.

Within the current situation of COVID-19, the consequences of digitalization take place in various fields in economic, political, social, cultural, military, diplomatic and legal spheres, the most essential and significant effect is achieved through the person²³.

III. Impact of COVID-19 on Digital Marketing

Digital Marketing, as the new field of marketing, was born thanks to digitalization processes. As a business term, Digital Marketing was discussed in numerous studies by scientists around the globe. For this reason, the term has various definitions with similar and dissimilar parts. According to Business Dictionary, Digital Marketing is a process of using one or several internet media in order to promote certain goods, services, or brands²⁴. For instance, advertising intermediaries that can be utilized as an element of the digital marketing strategy of a company might involve promotional forces made through the Internet, social media, mobile phones, and electronic billboards, other

²¹ Statista, Available at: https://www.statista.com Access date: 09.09.2020, 2020

²² Xiarewana, B., Civelek M.E., "Effects of COVID-19 on China and the World Economy: Birth Pains of the Post-Digital Ecosystem". Journal of International Trade, Logistics and Law, Vol. 6, N. 1, 2020, pp. 156.

²³ Şen, E, "Global Virus of the Digital Village Covid-19 and Senism". Eurasian Journal of Researches in Social and Economics (EJRSE), 2020, pp. 178.

²⁴ Business Dictionary, "Digital Marketing" (2020). Available at: http://www.businessdictionary.com/definition/digital-marketing.html Access date: 25.08.2020.

digital, television and radio channels. According to the definition of the Digital Marketing Institute, Digital Marketing is marketing activities by means of utilizing electronic tools or involvement of online platforms, therefore, the importance of digital marketing cannot be overlooked. If considering the thesis of Raghuraman A., she indicates that many scientists have accepted that Digital Marketing has a positive impact on a business's performance and its competitive advantage. In concordance with the author, Digital Marketing is applying digital technology to accomplish a company's strategic goals, also to assist in building and strengthen long-term relationships with its target audience. It might be done by means of digital tools namely, e-mail marketing, marketing automation, social media marketing, and search engine optimization that will enable organizations to obtain measurable results²⁵.

Digital marketing might be an assisting part in numerous aims of the business which differ from company to company. Those aims are extremely important in today's world regarding the COVID-19 pandemic. The most prevalent goals completed by the use of Digital Marketing are listed as follows:

- 1. Rising the number of visits to your website,
- 2. Pushing sales up,
- 3. Obtaining crucial information about clients,
- 4. Fortifying the company's brand image,
- 5. Augmentation of brand awareness,
- 6. Creating strong relationships and trust with your customers,
- 7. Engendering value to potential customers and old clients (Digital Marketing Institute).

Above counted purposes can be accomplished by utilizing specific Digital Marketing tools. Those tools involve following digital platforms namely:

- 1. Search Engine Optimization,
- 2. Content marketing,
- Email marketing,
- 4. Social media marketing,
- 5. Search engine marketing²⁶.

In accordance with American Marketing Association, Digital Marketing is the usage of digital or social channels for brand positioning or to achieve target audience. This type of marketing might be performed by means of social media, search engines, internet, mobile gadgets, and other ways²⁷. Setkute J. supposes that the Digital marketing is

²⁵ Raghuraman, A. "Entry-Level Employees' Views of the Skills Gap in Digital Marketing". Rochester Institute of Technology, ProQuest Dissertations Publishing. ProQuest Number: 10284314, 2017, pp. 8.

²⁶ Digital Marketing Institute. "Digital Marketing Made Simple - a Guide". Available at: https://digitalmarketinginstitute.com/blog/digital-marketing-made-simple-a-guide Access date: 20.08.2020.

²⁷ American Marketing Association. Available at: https://www.ama.org/topics/digital-marketing/ Access date: 10.05.2020.

the same as another part of marketing, just implemented in a digital context, which is controlled and should be suitable according to the main marketing principle. Considering the study the scholar emphasizes three inherent challenges for digital marketers including:

- 1. The capacity to gather and utilize customer ideas,
- 2. Brand strength and reputation management within the digital milieu
- 3. Assessment of Digital Marketing effectiveness²⁸.

When it comes to Digital Marketing strategy Leung K.H. and Mo D.Y. define three kinds of Digital Marketing strategies used by marketers to promote a product/service or a brand. The list of strategies involves:

- 1. Word-of-Mouth advertising. İt is verbal communication between a recognized non-commercial communicator and a customer regarding a brand, a good or a service extended for sale. One of the prevailing and most common sub dimensions of Word-of-Mouth is Social media marketing. It involves online services that enable businesses to build a public or semipublic page inside a bounded system, create a roster of other users they communicate and interact, also observe their list of connects and those made by other users inside the system
- 2. Email Marketing. It is one of the most prosperous ways of sending deeply relevant marketing messages to followers.
- 3. Search Engine Marketing. It involves the kit of tactics and capabilities that are utilized in order to direct internet users from search engines to the marketing website²⁹

Considering the Li C. and Hall S., it might be emphasized that Coronavirus has caused a new trend namely, an abrupt decrease in commercial expenditure. Where market behavior has changed, promotional spending has been modified in reaction. It makes absolutely no sense for brands to invest on ads that have no viewers at all. When control initiatives were enforced around the globe, out-of-home and cinema ads nearly instantaneously shrank; newspaper advertisements also declined³⁰.

Meantime, in-home media usage went up. TV viewership has climbed, but digital consumption has increased even more: the use of social platforms and streaming services have risen almost everywhere; gaming has also grown dramatically. Advertisers have evolved by tracking customers, which means giving preference to digital ads.

²⁸ Setkute, J., "In search of digital marketing communications success: the case of oil and gas industry B2B SMEs". Robert Gordon University, PhD thesis, 2018, pp. 20-22.

²⁹ Leung, K.H., Mo, D.Y., "A Fuzzy-AHP Approachfor Strategic Evaluation and Selection of Digital Marketing Tools". IEEE Xplore, 2019, pp. 1422-1423.

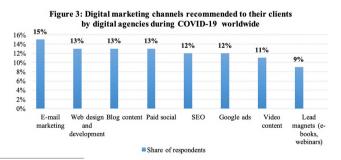
³⁰ Li, C., Hall, S.,. "This is how COVID-19 is affecting the advertising industry". World Economic Forum. Online article, Available at: https://www.weforum.org/agenda/2020/06/coronavirus-advertising-marketingcovid19-pandemic-business/ Accessed on: 04.09.2020.

The online milieu is conducive to "direct reaction" initiatives – those promoting fast transactions by customers – an enticing proposition for marketers to invest prudently and to increase sales. Facebook and Google in the first quarter had higher sales than expected. In China in the first quarter, where buyers spend almost two-thirds of their media time online, Tencent's digital advertising sales rose by 32% year-on-year.

As the world re-opened, the advertisement market is expected to rise by 8.4% – even after COVID-19 is taken into consideration, an amount much higher than the 8% increase is estimated for the US pre-coronavirus. It is clear that life in the time of coronavirus is primarily an online existence that has contributed to the explosion of Internet penetration and e-commerce. Time spent on some media channels has risen since the lockout, so businesses are adjusting to these shifts, moving to a stronger emphasis on in-home and out-of-home networks.

Digital marketing has been especially appropriate during the COVID-19 pandemic due to the fact that people are more likely to be involved in such type of marketing thanks to the expanded use of social media during social distancing^{31,32}. It has been observed that the branding approach to digital marketing was widespread during the COVID-19 pandemic, implying that an important part of digital marketing efforts was given to creating positive brand associations³³.

According to a report of the online statistics portal "Statista", a study conducted in 2020 surveyed a total of 130 advertising companies globally and looked at the digital marketing channels that they proposed to their clients during the COVID-19 worldwide. The study showed that the most preferred medium was 15% e-mail marketing, followed by web design and development, blog content, and paid social services, each preferred by 13% of digital agency practitioners. The following bar chart (Figure 3) shows the results of the research conducted³⁴ (Statista, 2020).



³¹ Scarmozzino, F., Visioli, F. "Covid-19 and the subsequent lockdown modified dietary habits of almost half the population in an Italian sample".2020, Foods 9, pp. 675.

³² Sheth, J. Impact of Covid-19 on consumer behavior: will the old habits return or die? 2020, Journal of Business Research, Vol. 17, pp. 280–283.

³³ Antúnez, Lucía, Florencia Alcaire, Gerónimo Brunet, Isabel Bove, and Gastón Ares. "COVID-Washing of Ultra-Processed Products: the Content of Digital Marketing on Facebook during the COVID-19 Pandemic in Uruguay." Public Health Nutrition, 2021, 1–11. doi:10.1017/S1368980021000306.

³⁴ Statista, 2020. Available at: https://www.statista.com Access date: 09.09.2020.

After the lockdown regarding COVID-19 is over, Facebook is less used now and with certain age groups, this social media is not at first either. According to Forbes data, 41% of them are users over the age of 65³⁵. We know that it can be clearly seen that young demographics are weakening. As a result of visual interaction provided by Instagram, users are changing the preference trend. It might be seen that Instagram is the fastest growing social media platform and exceeds 1 billion users. We know that the young population, most of the users under the age of 30, causes an increase in content quality, regular sharing and interaction on Instagram. If it comes to numbers it can be observed that leaders among countries with the highest Instagram audience reach as of July 2020 were Brunei and Kazakhstan reached 68% of the whole population each. When it comes to Turkey, it is on the sixth place with 63% of population who was currently using Instagram³⁶ (Statista, 2020).

IV. Conclusion

There is a concept called before and after COVID-19 in our lives now. People around the globe are going through a process that seriously changes the history and consumption habits of people. Due to the coronavirus epidemic, life on Earth has changed to a digital one, where the majority of the business world has switched to the home-working model, as jobs are moved online. For most of us, it has become our new normality to carry out our work and meetings over Zoom, Adobe Connect, and similar video conferencing platforms. Although this situation is perceived as a transition period for businesses, when we look at the people, it is possible to say that many things will not work as before after the pandemic, especially in some sectors such as shopping, education, work, and sport. While some companies have adapted to working remotely due to the digital investments they have made before, some of these companies have discovered that it is more comfortable and economically less costly to run some business remotely after the pandemic. There are also more important motivation topics that concern the whole world for companies that have started working remotely, wanting to carry this change after the pandemic remotely, for example, remote meetings or events, zoom, etc. Doing it on one platform means saving time and energy for everyone. Moreover, of course, it should be added that this situation would reduce carbon emissions.

Many managers who were only present in digital media before, especially after the pandemic, made demands for intense communication from advertising agencies. Most importantly, it was understood that social media is a medium that is not only shared on special occasions, but it is also much more than that, and brands must be positioned on professional strategy. The word D2C (Direct to Customer) was added next to the words B2B (Business to Business) and B2C (Business to Customer), which we often pronounce. Now, companies would like to reach their consumers directly through e-commerce or social media channels and take all necessary actions for this.

^{35 &}quot;Forbes" Business Magazine, Available at: https://www.forbes.com/ Accessed on: 14.09.2020.

³⁶ Statista, 2020. Available at: https://www.statista.com Access date: 09.09.2020.

Digital marketing has already made significant progress in the last 10 years. Before COVID-19, no one could say that digital marketing was unimportant. Today, we spend 2-3 hours a day on Instagram, Facebook, and Twitter. We spend 1-2 hours watching videos on Youtube. However, it was absurd for brands to delay digital adaptation processes.

In the recent past, when people go to a cafe or restaurant, they used to sit by the window, today visitors prefer to sit by the socket. Moreover, it is not enough for us anymore. While Youtube is open on smart TVs, we shop on the phone while checking our emails on our computer. To sum up, the digital adjustment was vital, but COVID-19 appeared it by slapping us.

BIBLIOGRAPHY

- Alshaketheep K.I., Salah A.A., Alomari K.M., Khaled A.S.D., Abu Jray A.A.. «Digital Marketing during COVID 19: Consumer's Perspective». Wseas Transactions on business and economics Journal, 2020, Vol 17, pp. 831-841, 834. E-ISSN: 2224-2899, DOI: 10.37394/23207.2020.17.81
- American Marketing Association. Available at: https://www.ama.org/topics/digital-marketing/ Access date: 10.05.2020.
- Antúnez, Lucía, Florencia Alcaire, Gerónimo Brunet, Isabel Bove, and Gastón Ares. "COVID-Washing of Ultra-Processed Products: the Content of Digital Marketing on Facebook during the COVID-19 Pandemic in Uruguay." Public Health Nutrition, 2021, 1–11. doi:10.1017/S1368980021000306.
- Autio, E., "Digitalisation, Ecosystems, Entrepreneurship and Policy". Perspectives into Topical Issues Is Society and Ways to Support Political Decision Making. Government's Analysis, Research and Assessment Activities Policy Brief, Vol. 20., 2017, 1-4
- Aydoğan S., "COVID-19 AND E-COMMERCE", Gazi Kitabevi, 2020, pp. 53-78. ISBN 978-625-7727-33-4
- Beaunoyera, E., Dupéréb, S., Guitton, M.J., (2020). "COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies". Computers in Human Behavior journal, Volume 111, 1, 106424.
- Business Dictionary, "Digital Marketing" (2020). Available at: http://www.businessdictionary.com/definition/digital-marketing.html Access date: 25.08.2020.
- Business Dictionary, "Digitalization" (2020). Available at: http://www.businessdictionary.com/definition/digitalization.html Access date: 12.08.2020.
- Davidsson, P., Hajinasab, B., Holmgren, J., Jevinger, Å., Persson, J.A., "The fourth wave of digitalization and public transport: opportunities and challenges". Sustain 8. Online article Available at: https://doi. org/10.3390/su8121248 Access date: 08.09.2020, 2016,
- Deloitte. Available at: https://www2.deloitte.com/tr/tr.html Access date: 22.03.2021
- Digital Marketing Institute. "Digital Marketing Made Simple a Guide". Available at: https://digitalmarketinginstitute. com/blog/digital-marketing-made-simple-a-guide Access date: 20.08.2020.
- Evangelista, R., Guerrieri, P., Meliciani, V., (). "The economic impact of digital technologies in Europe". Econ. Innov. New Technol, vol. 23, 2014, 16
- Fahey, R.A., Hino, A., "COVID-19, digital privacy, and the social limits on data-focused public health responses". International Journal of Information Management, 102181, 2020, 1-2.
- Kagermann, H., "Change through digitization value creation in the age of industry 4.0. In: Management of Permanent Change". Springer, 2015, pp. 23-45.
- Leung, K.H., Mo, D.Y., (2019). "A Fuzzy-AHP Approachfor Strategic Evaluation and Selection of Digital Marketing Tools". IEEE Xplore, 2019, 1422-1423.
- Li, C., Hall, S.,. "This is how COVID-19 is affecting the advertising industry". World Economic Forum. Online article, Available at: https://www.weforum.org/agenda/2020/06/coronavirus-advertising-marketing-covid19-pandemic-business/ Accessed on 04.09.2020. 2020.
- Mäkiö, J., Miroliubov, A., Zhgun, V., «Digitalization quo vadis?». EDP Sciences, SHS Web of Conferences 44, 00056 (2018) CC-TESC2018 Available at: https://doi.org/10.1051/shsconf/20184400056, 2018, 3.
- Medda S., "Top trends that can drive digital marketing strategy in the COVID-19 world". Available at: https://yourstory.com/2020/07/trends-drive-digital-marketing-strategy-covid-19 2020.
- Niemand, T., Coen Rigtering, J.P, Kallmünzer, A., Kraus, S., Maalaoui, A., "Digitalization in the financial industry:

 A contingency approach of entrepreneurial orientation and strategic vision on digitalization".

- European Management Journal Available at: https://doi.org/10.1016/j.emj.2020.04.008 Access date: 29.08.2020, 2020, 1.
- Noussan, M., Tagliapietra, S., "The effect of digitalization in the energy consumption of passenger transport: An analysis of future scenarios for Europe". Journal of Cleaner Production, Vol. 258, 12092., 2020, pp. 1-15.
- Raghuraman, A. (2017). "Entry-Level Employees' Views of the Skills Gap in Digital Marketing". Rochester Institute of Technology, ProQuest Dissertations Publishing. ProQuest Number: 10284314, 2017, 8.
- Rungi, M., "Digitalization: Size Doesn't Matter, Put Focus on Product-and-Service, Not on Process". IEEE Xplore, 2019, 741.
- Scarmozzino, F., Visioli, F. "Covid-19 and the subsequent lockdown modified dietary habits of almost half the population in an Italian sample".2020, Foods 9, 675.
- Şen, E. (2020). "Global Virus of the Digital Village Covid-19 and Senism". Eurasian Journal of Researches in Social and Economics (EJRSE), pp. 176-204. ISSN:2148-9963, 2020, 178.
- Setkute, J., "In search of digital marketing communications success: the case of oil and gas industry B2B SMEs". Robert Gordon University, PhD thesis, 2018, 20-22.
- Sheth, J. Impact of Covid-19 on consumer behavior: will the old habits return or die? 2020, Journal of Business Research, Vol. 17, 280–283.
- Statista, 2020. Available at: https://www.statista.com Access date: 09.09.2020.
- Sundberg, L.. "Digitalization: Rise of the (Mega) Machines". IEEE, 2020, 114.
- Xiarewana, B., Civelek M.E., "Effects of COVID-19 on China and the World Economy: Birth Pains of the Post-Digital Ecosystem". Journal of International Trade, Logistics and Law, Vol. 6, N. 1, 2020, 156.

Industry 4.0 Technologies and the Behavior of Manufacturing Companies in the Post-COVID-19 Pandemic Period

Jaures BADET^{*}

Abstract

The world experienced a great disruption in the registration of the first case of COVID-19 in Wuhan, China. The use of modern technologies by governments as well as companies has therefore become indisputable to face the health crisis which has created significant damage in all areas of life. So this paper aims to discuss the importance of the use of Industry 4.0 technologies in the manufacturing companies in the post-COVID-19 period. Research-based on data and information relating to Industry 4.0 technologies are carried out. Also, a discussion on the importance of the use of Industry 4.0 technologies by companies and manufacturers in the post-pandemic period is carried out through data and

Özet

Cin'in Wuhan kentinde ilk COVID-19 vakasının görülmesiyle birlikte dünya büyük bir yıkım yaşamıştır. Modern teknolojilerin hem hükümetler hem de firmalar tarafından kullanılması, yaşamın her alanında önemli hasarlar yaratan sağlık kriziyle yüzleşmek için tartışılmaz hale gelmiştir. Bu çalışmanın amacı, COVID-19 sonrası dönemde firmalarda Endüstri 4.0 teknolojilerinin kullanımının önemini tartısmaktır. Endüstri 4.0 teknolojileri ile ilgili veri ve bilgiye dayalı araştırma çalışmaları yapılmaktadır. Ayrıca, pandemi sonrası dönemde firmalar ve üreticiler tarafından Endüstri 4.0 teknolojilerinin kullanımının önemi üzerine bir tartışma yapmak amacıyla, kurumlar, araştırmacılar ve/veya akademis-

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information obtained from numerous professional reports and studies carried out by institutions, researchers, and/or academics. It was concluded after research that in the post-pandemic period, companies to face the many challenges, can turn a little more to Industry 4.0 technologies. To increase their agility and flexibility, companies will rely more on Industry 4.0 technologies. We believe that the digital transformation using Industry 4.0 will also enable companies to weather any other health crises in the future. An adaptation and use of Industry 4.0 technologies will be necessary for companies in working together remotely on projects, in sharing knowledge on projects, in remote training of employees, in communication with customers, and monitoring production. It was also concluded that in the post-COVID-19 period, the use of these technologies will lead to the advent of new skills which will lead to an increase in new job profiles because companies will need employees who can master the use of these technologies. The advent of new professions will also lead to the disappearance of certain job profiles.

Keywords: COVID-19, Companies, Industry 4.0 Technologies, Post-Pandemic Period.

yenler tarafından yürütülen çok sayıda profesyonel rapor ve calismalardan elde edilen veriler ve bilailer kullanılmaktadır. Araştırmanın ardından, pandemi sonrası dönemde firmaların pek çok zorlukla yüzleşmesinin belki biraz daha Endüstri 4.0 teknolojilerine yöneleceği sonucuna varılmıştır. Firmalar gelişim potansiyelleri ve esnekliklerini artırmak için Endüstri 4.0 teknolojilerine daha fazla aüveneceklerdir. Endüstri 4.0 kullanan dijital dönüşümün, firmaların gelecekte başka herhangi bir sağlık krizinden de kurtulmasını sağlayacağına inanıyoruz. Firmaların projeler üzerinde uzaktan birlikte çalışmaları, projeler hakkında bilgi paylasmaları, calısanların uzaktan eğitilmesi, müşterilerle iletişim halinde olmaları ve üretimin izlenmesinde Endüstri 4.0 teknolojilerinin uyarlanması ve kullanılması gerekli olacaktır. Ayrıca, COVID-19 sonrası dönemde, bu teknolojilerin kullanımının, yeni iş profillerinde artışa ve yeni becerilerin ortaya çıkmasına yol açacağı sonucuna varılmıştır. Çünkü firmalar bu teknolojilerin kullanımında ustalasabilecek çalışanlara ihtiyaç duyacaklardır. Yeni mesleklerin ortaya çıkması, belirli iş profillerinin de ortadan kalkmasına yol açacaktır.

Anahtar Kelimeler: COVID-19, Firmalar, İndüstri 4.0 Teknolojileri, Pandemi Sonrası Dönem.

*

I. Introduction

There is always a period of economic transformation and innovation after any war and health crisis. For example, the First World War and the Spanish influenza pandemic spawned the invention of the loudspeaker in 1924, the refrigerator, television and talking movies in 1927, and finally laundry in 1930 that changed our daily lives. More than a century later, the world is witnessing another health crisis: the COVID-19 pandemic. The first case of coronavirus (COVID-19) was reported at Wuhan, the city of China in December 2019. Since the declaration of this virus case as a PHEIC (Public Health

[&]quot;Covid-19: le monde d'après sera innovant ou ne sera pas", Date of Acess: 25.09.2020, https://www.latribune.fr/opinions/tribunes/covid-19-le-monde-d-apres-sera-innovant-ou-ne-sera-pas-844559.html.

Emergency of International Concern) by WHO (World Health Organization) at the end of January 2020, the world as we knew before has completely changed. This pandemic has affected almost all countries around the world and caused great damage in all areas of life. It had an enormous influence on our activities, our exchanges, our work, our relations with others, our way of producing goods, our training and learning, our entertainment, and our way of taking medical services.

This unexpected pandemic has caused the slowdown or even the cessation of activities in the industrial sector. Even after the lockdown period, the major challenge for manufacturers is how to restart business and how to improve productivity to cope with the new trend in the post-pandemic period. Faced with these challenges, companies have found a remarkable solution in the use of Industry 4.0 technologies. The COVID-19 pandemic is causing a high-speed outbreak of innovative technologies. The technologies of Industry 4.0 have played a very important role in the management of the health crisis in all areas of life in general and in the field of production in particular. the post-pandemic period will not escape these technologies as well.

The concept of Industry 4.0 involves blurring the differences between the work of people and the work of machines. With the improvement of the operation of manufactories in the first industrial revolution, the introduction of electricity in the industry in the second, and the automation of uniform tasks of line workers in the third, the fourth is based on improving information management and decision-making.² Industry 4.0 technologies already existed before the pandemic. But the advent of the pandemic has further accelerated the use of these technologies. These technologies are of great help in the current situation and we can thus predict the importance they will have in the future especially for companies and activities of production of goods and services.

There is always a period after in any pandemic. Even if it is not clear what the future holds after the pandemic, one thing is certain: the world will no longer be like the one before the COVID-19 pandemic. Companies will face many challenges such as trying to recover from the crisis, trying to survive in the post-pandemic trend, ensuring continuity of the supply chain, maintaining productivity at a high level, and ensuring employee's safety. So this study aims to discuss the importance of the use of Industry 4.0 technologies in the manufacturing companies in the post-COVID-19 period.

In this study, section 2 provides an overview of Industry 4.0. In particular, section 2.1 focuses on the categories of Industry 4.0 technologies; Section 2.2 presents the technologies of Industry 4.0. Section 3 presents the fundamental characteristics of Industry 4.0. Section 4, discusses the advantages of Industry 4.0 technologies. Section 5 sheds light on the weaknesses of Industry 4.0 technologies. Section 6 presents the effects of the COVID-19 pandemic on manufacturers. Finally, in section 7 a discussion on companies in the use of Industry 4.0 technologies in the post-COVID-19 period was conducted.

² Beata Ślusarczyk, "Industry 4.0-are we ready?", Polish Journal of Management Studies, 17:1 (2018), pp. 232.

II. Industry 4.0

Industry 4.0, still called "smart factory (factory 4.0)" was first discussed in Germany in 2011. Industry 4.0 aims to produce better and produce smarter. The world has known until today the 4 industrial revolutions. While the first industrial revolution was characterized by mechanization, the second was marked by electrification in industries. The third industrial revolution is characterized by digitization and automation. Today, the development of information and communication technologies (ICT) is leading us towards the fourth industrial revolution. Its technologies are based on advanced connectivity (IoT functionalities), robotization, and smart automation.³

a) Industry 4.0 technologies categories

We can group the technologies of Industry 4.0 into four fundamental categories which are: connectivity, data computational power; analytics and intelligence; human-machine interaction, and advanced engineering. Figure 1 presents the four categories of Industry 4.0 technologies.

Industry 4.0 is characterized by 4 foundational technologies applied along the value chain. 1. Connectivity, data, computational power 3. Human-machine interaction Virtual and augmented reality Robotics and automation Cloud technology (collaborative robots, AGVs*) Blockchain RPA² chathots 2. Analytics and intelligence 4. Advanced engineering Advanced analytics Additive manufacturing (eg, 3D Machine learning printing) Artificial intelligence Nanoparticles McKinsey & Company

Figure 1. Industry 4.0 technologies categories

Source: Mayank agrawal et al, McKinsey & Company, 2020.

b) Industry 4.0 technologies

There is a lot of Industry 4.0 technologies. We have the old technologies that already existed like robotics, the Internet of Things (IoT), drones, and new technologies such as artificial intelligence (AI), 5g data networks, autonomous vehicles (AVs), Blockchain technology... Table 1 summarizes most of the Industry 4.0 technologies and their descriptions.

³ Andreja Rojko, "Industry 4.0 Concept: Background and Overview", International Journal of Interactive Mobile Technologies, 11:5 (2017), pp. 79-80.

Table 1. Industry 4.0 technologies

Technologies	Descriptions
Internet of Things (IoT)	The IoT is important in the interconnection of machines, various systems, and the information system.
Cloud Computing	The cloud is the combination of several technologies that make it possible to harness the computing and storage power of remote computer servers.
Big Data	Big data is a set of data so large that humans and even traditional tools can't analyze. Big data plays an important role in the processing of voluminous information which constitutes today the industry's information system.
Blockchain	Blockchain plays an essential role in ensuring the security of data transferred digitally from a single source of data to a single recipient.
Artificial Intelligence (AI)	Artificial intelligence is important in using available data to deduce trends and make predictions about the behavior of the data over time.
Augmented Reality (AR)	Augmented reality uses digital tools (glasses, tablets, smartphones, etc.) to view objects or physical environments live in an improved manner.
Virtual Reality (VR)	Virtual reality immerses users in a virtual or semi-virtual world where users can interact with the elements that compose it.
Robotics	Robotics are increasingly becoming an essential technology in the industry. Beyond automation, robots are more and more agile, autonomous, and capable of "intelligent" reactions and have a central place in certain industrial innovations.
The 5G network	$5\mbox{G}$ is a wireless communication technology that is up to 100 times faster than $4\mbox{G}.$

Source: Integral system (2017): https://blog.integral-system.fr/nouvelles-technologies-industrie-4/.

Other technologies such as nanotechnology, biotechnology, drones, 3D printing, and 4D also deserve to be mentioned.

c) Main characteristics of Industry 4.0

There are four main characteristics of Industry 4.0:4

✓ Vertical networking of smart production systems: To respond to changing demand, inventory levels, or correcting faults, vertical networking factories use Cyber-Physical Production Systems (CPPS). Smart factories organize themselves and enable production that is customer-specific and individualized. The CPPS autonomously organize the management of production and that of maintenance.

^{4 &}quot;Industry 4.0 challenges and solutions for the digital transformation and use of exponential technologies", Date of access: 16.08.2020, https://www2.deloitte.com/content/dam/Deloitte/ch/Documents/manufacturing/ch-en-manufacturing-industry-4-0-24102014.pdf.

- ✓ Horizontal integration via a new generation of global value chain networks: provide transparency, offer a high level of flexibility in the rapid correction of faults, and the elimination of problems. These networks optimized in real-time also facilitate better overall optimization.
- ✓ Through-engineering across the entire value chain: The third main characteristic of Industry 4.0 is cross-disciplinary through-engineering across the entire value chain and the full life cycle of both product and customers.
- ✓ Acceleration through exponential technologies: The fourth main characteristic of Industry 4.0 is the impact of exponential technologies as an accelerant or catalyst that allows individualized solutions, flexibility, and cost savings in industrial processes.

d) The advantages of Industry 4.0 technologies

Industry 4.0 will be very important for businesses in the future. This 4th industrial revolution presents many advantages for manufacturers. Here are five of the most important advantages that manufacturers can expect from Industry 4.0 technologies:⁵

- Optimized processes: the main objective of Industry 4.0 technologies is to optimize manufacturing processes. These technologies allow manufacturers to work faster, make decisions about increasing efficiency, and save a little more time in production.
- Greater asset utilization: Industry 4.0 technologies make manufacturing activities
 and operations more flexible which facilitates better use of assets. For example,
 autonomous mobile robots (AMR) can handle menial tasks such as product
 transportation, leaving skilled human workers to do more higher-value tasks.
- *Higher labor productivity:* Workers wear sensors that are constantly monitored to ensure their security. Since workers feel secure, they can concentrate better and work better. Which increases the productivity of work.
- Supply chain and inventory: IoT enables sensors and data analytics to give
 manufacturers insight into the entire supply chain and production process.
 This level of visibility combined with AI and machine learning capabilities
 means that supply chain optimization can be achieved in real-time.
- After-sales services: Pillars of Industry 4.0 such as predictive analytics, virtual reality, and remote monitoring also translate to the consumer space after manufacturing. While this doesn't directly impact a manufacturer, if they

^{5 &}quot;Industry 4.0: Technologies, Outcomes, and the Future of Manufacturing", Date of access: 16.08.2020, https://global.hitachi-solutions.com/blog/industry-4-0-technologies-outcomes-and-the-future-of-manufacturing.

create goods that are capable of IoT connectivity, they can drastically improve customer and field service offerings.

e) The threats of Industry 4.0 technologies

Among the threats that manufacturers could face, we can cite:6

- Hardware cannibalization due to preventive maintenance and remote control;
- Change in service intervals, the extended replacement cycle;
- New business models:
- Cyberattacks;
- Compatibility may lead to a situation where customers focus on few suppliers.

f) COVID-19 pandemic's effect on manufacturers

The surprising arrival of the pandemic has put businesses in an unexpected situation. Faced with the pandemic, which was spread mainly through human contact, measures relating to social distancing and employee safety have been taken. This has forced manufacturers to reduce their workforce on worksites by almost 40 to 50%. In some countries, companies providing personal care services and consumer goods delivery companies, for example, have struggled to meet the growing demand. On the other hand, companies that provide services that require human contact have experienced a rapid decline in demand in other countries.⁷

Other companies have even been forced to close their doors. These situations put great pressure on manufacturers to either continue operations without the majority of their employees or to stop operations. This harmed economic activity and the supply chain. The supply chain has taken a severe hit. Even some countries have been confronted with the problem of a lack of consumer products. It was easy for office companies to use remote work to face the pandemic. But we can't say the same for manufacturing companies that are not designed to be managed remotely. Other companies have been confronted with the problems of the unavailability of tools and digital infrastructures necessary to maintain their activities⁸.

^{6 &}quot;What is the future for Industry 4.0 in the post-COVID-19 world?", UBS, Date of access: 16.08.2020, https://www.ubs.com/global/en/wealth-management/chief-investment-office/life-goals/executives-and-entre-preneurs/2020/industry-4-point-zero-after-covid-19.html.

^{7 &}quot;What Will Manufacturing's New Normal Be After COVID-19?", Date of access: 16.08.2020,

^{8 &}quot;What Will Manufacturing's New Normal Be After COVID-19?".

III. Discussion On Industry 4.0 Technologies: The Behavior of Manufacturing Companies in the Post-Pandemic Period

The arrival of COVID-19 has shown us the importance of industry 4.0 technologies and has already pushed some companies into digitalization. Industry 4.0 technologies have allowed companies to continue operating in the COVID-19 period. We can say that these companies will rely more on these technologies in the post-COVID-19 period.

First, we believe that artificial intelligence (AI) will play a very important role in companies in the post-COVID-19 period to keep production level. That is to say, companies will turn a little more towards AI technology. According to PwC analytics, one of the leading consulting companies, by 2030 AI products will contribute more than \$15.7 trillion to the global economy. Some technological innovations such as data processing, and face and speech recognition have become possible due to Al.9 The world may not be like the one we knew before COVID-19 arrived. The use of AI will allow manufacturing companies to adapt to the new trend. Faced with a change in consumer behavior, with the surge in demand and purchase of goods and services online in the post-pandemic period, companies must also change strategies to best respond to the expectations of consumers. We believe that AI will therefore be useful through machine learning and advanced data analysis. Artificial intelligence will be able to help these companies detect new buying patterns and deliver a more personalized experience to online customers.¹⁰ Al can analyze large amounts of data, can learn and adapt quickly and continuously. Al can analyze and predict consumer behavior, can help companies organize efficient logistics. With chatbots, Al can also provide support to customers 24/7. Al is more precise, more efficient, and makes less error than humans. It can also work 24 hours a day in difficult and risky conditions without getting tired. These capacities will be very important and will be able to help companies to adapt to the new trend which emerges after the pandemic.11

Second, after production, companies need to be able to sell even in unstable times such as COVID-19. Thus, in the post-COVID-19 period, we believe that companies can rely on autonomous vehicles (AVs) to provide the delivery service. For fear of not being contaminated by other viruses, we think that consumers will not only try to make purchases online but also to have them delivered to their homes without risk of another contamination. Faced with this challenge that existed also before, companies may have to turn to AVs that perfectly meet this expectation. Indeed, the AVs work by artificial intelligence and without the intervention of the human being. This technology will therefore be able to keep consumers and workers safe to avoid the risk of disease transmission. We can thus say that AV can be a technology of the post-COVID-19 period

^{9 &}quot;The future of IT in a New covid-19 Reality: 5 Technology Trends", Sharp Minds, Date of access: 25.09.2020, https://www.sharpminds.com/news-entry/the-future-of-it-covid-19-reality-5-technology-trends/.

^{10 &}quot;8 Key Tech Trends in a Post-COVID-19 World", Openmind, Date of access: 15.08.2020, https://www.bbvaopenmind.com/en/technology/digital-world/8-key-tech-trends-in-a-post-covid-19-world/

^{11 &}quot;The future of IT in a New covid-19 Reality: 5 Technology Trends", Sharp Minds

in the delivery of contactless service. The delivery of food and medical equipment by drones and autonomous vehicles especially in areas at high risk of COVID-19 in this period of the pandemic has increased considerably and especially in China.¹² This technology is used more and more and could be of great help to companies in the future

Thirdly, in the post-COVID-19 period, companies in the search for new solutions will rely heavily on robots which are becoming essential. But robots can't do everything with finesse. So we believe that collaboration between humans and robots will be more developed. Using the tireless ability of robots to perform tasks and human finesse will benefit for companies. The latter understood it in this period of a sanitary crisis and we think that this collaboration between robots and humans will be even more developed in the period after COVID-19 to better improve productivity and to predict a little more consumer behavior and needs. The robots will take care of production and production-related tasks in companies and humans can "monitor them remotely. As Matthias Schindler, head of AI innovations (BMW) said," robots can do repetitive tasks which are physically demanding. But an only human being can see our products through the eyes of the customer and bring the finesse that we need to our cars", a complementary relationship between humans and robots can be more privileged and benefit for companies in the post-pandemic period.

Besides, many companies around the world have closed their doors or reduced the number of employees in the period of the pandemic. Thus a solution has been found in remote work to keep the field of work activities. Companies have turned more to remote work thanks to cloud computing technology. We believe that in the post-COVID-19 pandemic period, companies can continue to use this technology. We think also that companies can use virtual and augmented reality a little more in the context of remote work after the pandemic. Indeed, these technologies will allow companies to offer new ways of interacting with customers, to offer a new shopping experience. Workplaces may become smaller with the growth of virtual collaboration tools (Slack, Zoom), which have started to replace the need for expensive office space.¹³

Virtual and augmented reality can also play a very large role in employee training and remote machine support. Companies have already used the CoR as a tool to improve staff training, but the use of this technology could become more widespread in the post-COVID-19 period. According to a Perkins Coie survey, almost 49% of companies try to use virtual reality and other augmented reality tools to create realistic training conditions. Also, thanks to virtual and augmented reality, conferences that can allow workers to share knowledge about a project can be organized. This technology will thus facilitate remote work, collaboration, and communication in companies.¹⁴

¹² Mihalis Kritikos, Ten technologies to fight coronavirus, *European Parliamentary Research Service*, PE 641.543 (2020), pp. 17.

^{13 &}quot;The future of IT in a New covid-19 Reality: 5 Technology Trends", Sharp Minds

¹⁴ György Czifra and Zsolt Molnár, "Covid-19 and Industry 4.0", Research Papers Faculty of Materials Science and Technology Slovak University of Technology, 28:46 (2020), pp. 40.

However, the purchase of goods and services online, remote work, use of robots, artificial intelligence, autonomous vehicles (Avs), virtual and augmented reality in companies need a high speed and fast connection to function properly. So we believe that the 5G connection will be very important in the future to take advantage of the benefits of technology. 5G is acknowledged as the future of communication and the cutting edge for the entire mobile industry. According to a Huawei Technology vision, deployment of 5G networks will emerge between 2020 and 2030, making possible zero-distance connectivity between people and connected machines. This type of mobile internet connectivity will provide us super-fast download and upload speeds (five times faster than 4G capabilities) as well as more stable connections.¹⁵

IV. Industry 4.0 Technologies and Labor Market

In the post-COVID-19 period, companies have to change the way they produce to maintain production levels and meet consumer expectations. Thus the technologies of Industry 4.0 will have a strong influence on the labor market. They will have a direct influence on jobs and skills. Technology, which was considered a potential cause of job destruction, can be understood differently in the post-COVID-19 period since the pandemic has allowed governments and companies to understand the importance of the use of technology. Technology is a solution and an opportunity to alleviate the problems caused by forced removal in the workplace in the period of the pandemic. So we think that manufacturers can see in the technology an opportunity to be competitive, to increase productivity, to meet the expectations of the consumers, and to follow the new trends in the post-COVID-19 period. Companies need employees who master the use of Industry 4.0 technologies. So having employees who have digital skills will become more and more necessary in companies. which will lead to the advent of new skills and the increase in new job profiles.

After the pandemic period and in the future, it is evident that the advent of Industry 4.0 technologies will lead to the displacement of many jobs in companies. However, this displacement can be counterbalanced by another factor like the productivity effect, the capital accumulation, and the deepening of automation, which tend to increase the demand for labor, even though they do not generally restore the share of labor in national income to its pre-automation levels. Indeed, firstly the displacement of human labor by cheaper machines creates a productivity effect: a decrease in the production cost of automated tasks will lead to the development of the economy and an increase in the demand for labor in non-automated tasks. Second, increased automation will trigger capital accumulation. This will also increase the demand for labor. Third, with the deepening of automation, the tasks previously performed by the workforce will not only be replaced but the productivity of machines in already automated tasks will also be increased. This phenomenon also tends to increase the demand for labor 16. However, these factors do not act on the share of labor in national income. The creation of new jobs is an important factor in increasing the share of labor in national income. We

^{15 &}quot;The future of IT in a New covid-19 Reality: 5 Technology Trends", Sharp Minds

¹⁶ Daron Acemoglu & Pascual Restrepo, "Artificial Intelligence, Automation and Work", NBER Working Papers 24196, (2018), National Bureau of Economic Research, Inc.

believe that the key to solving the displacement effect caused by the use of technologies of Industry 4.0 is the creation of new jobs. The use of Industry 4.0 technologies not only displaces jobs but also creates many.

Industry 4.0 technologies (automation) will harm the demand for labor but at the same time, will leads to the creation of new jobs and new tasks¹⁷. According to Atkinson and Wu (2017), the emergence of technology may eliminate certain professions, leaving room for other more productive professions¹⁸. Even according to some studies, the use of Industry 4.0 technology in the company will create more jobs than it eliminates. Automation will result in more job creation than job loss (21% and 33% of the global workforce, or 555 million and 890 million jobs until 2030)¹⁹. Amit Chowdhry (2018) also supports the idea that "the growth of artificial intelligence could create 58 million net new jobs in the next few years"²⁰. We also believe that all sectors can not be automated. The decrease in demand for the job in some businesses leads to an increase in demand for the job in others. Automation causes jobs to be lost in some industries and jobs to increase in others²¹.

Besides, we believe that a total displacement of jobs in companies in the post-pandemic period is almost impossible due to the speed of diffusion of Industry 4.0 technologies. Indeed, the cost of new machines and the policy of investing in new technology in each country influence the speed at which these technologies spread. Therefore, these new technologies spread slowly and do not represent a reel danger for job in the near future. As Paul Wellener vice-chairman (Deloitte) said, "in a recent study, only 1 on 10 of the respondents said their organizations are using automation and AI to replace workers, while 60% are harnessing it to support the workforce", it is not sure that robots can replace humans in companies but technology can lead to the disappearance of certain job profiles.

V. Conclusion

The sudden and unexpected arrival of the COVID-19 pandemic has changed the way we live. These changes thus push companies to review their way of producing and adopt new strategies to survive. Companies have four challenges to meet in the pandemic period and the post-pandemic period: trying to recover from this crisis, maintaining productivity at a high level, ensuring the continuity of the supply chain, and ensuring employee safety. The solution can be found in the use of industry 4.0 technologies.

¹⁷ Acemoglu & Restrepo, "Artificial Intelligence, Automation and Work".

¹⁸ Robert Atkinson & John Wu, "False Alarmism: Technological Disruption and the U.S. Labor Market, 1850-2015", Information Technology and Innovation Foundation, (2017), May:1–28.

^{19 &}quot;AI, automation, and the future of work: Ten things to solve for", McKinsey Global Institute, Date of access: 30.01.2021, https://www.mckinsey.com/featured-insights/future-of-work/ai-automation-and-the-future-of-work-ten-things-to-solve-for#.

^{20 &}quot;Artificial Intelligence To Create 58 Million New Jobs By 2022 Says Report", Forbes, Date of access: 04.02.2021, https://www.forbes.com/sites/amitchowdhry/2018/09/18/artificial-intelligence-to-create-58-million-new-jobs-by-2022-says-report/?sh=1f0b27e24d4b.

²¹ James Bessen, "Automation and Jobs: When Technology Boost Employment", Law and Economics Research Paper no. 17-09, (2017), Boston University School of Law.

Industry 4.0 still called the industry of the future was first discussed in Germany in 2011. Industry 4.0 aims to produce better and produce smarter. The world has known until today the 4 industrial revolutions. The fourth industrial revolution was born from the convergence of digital technologies and industrial production techniques. This concept has gained in importance after the advent of the COVID-19 pandemic that has demonstrated how often it is important to rely on technology to continue life without feeling too much the effect of the pandemic.

In this study, the importance of the use of Industry 4.0 technologies in the manufacturing companies in the post-COVID-19 period is discussed. Research shows that in the postpandemic period, companies to face the many challenges will turn a little more to Industry 4.0 technologies. To increase their agility and flexibility, companies can rely more on Industry 4.0 technologies. The digital transformation using Industry 4.0 can also enable companies to weather any other health crises in the future. An adaptation and use of Industry 4.0 technologies can be necessary for companies in working together remotely on projects, in sharing knowledge on projects, in remote training of employees, in communication with customers, and monitoring production. At the same time, the use of these technologies will influence the labor market. To better learn how to use these technologies, having employees who have digital skills will become more and more necessary in companies. So the advent of new skills will lead to an increase in new job profiles. The advent of new professions and the use of these technologies in the manufacturing companies will also lead to the disappearance of certain job profiles. Therefore, after the pandemic period, the use of Industry 4.0 technologies will lead to a drop in job demand but will also lead to the advent of a multitude of jobs. We, therefore, think that the problem of job loss caused by the use of new technologies can be compensated by the creation of other jobs that may be more complex than the old ones. However, those tasks created by these new technologies will need a new skill or a higher level of education. The level of education, the cost of new machines and the investment policy of each country in Industry 4.0 technologies will play a very essential role in the speed of diffusion of these new technologies in the post-COVID-19 period. New technologies spread slowly and do not represent a reel danger for job in a near future.

We may be moving towards an era where innovative technologies like artificial intelligence (AI), big data, 5G technologies, Internet of Things (IoT), cloud computing, Autonomous Vehicles (AVs), 3D Printing, Blockchain will prevail in industries. Preparing for a more digital world and using the latest technology will be important for countries as well as for companies to be more competitive in the post-COVID-19 period. This is why less developed countries and developing countries must prepare for the emergence that may be inevitable in the post-pandemic period of these technologies to better adapt.

REFERENCES

- Acemoglu Daron & RESTREPO Pascual, "Artificial Intelligence, Automation and Work", NBER Working Papers 24196, (2018), National Bureau of Economic Research, Inc.
- Agrawal Mayank et al., "Industry 4.0: Reimagining manufacturing operations after COVID -19", https://www.mckinsey.com/business-functions/operations/our-insights/industry-40-reimagining-manufacturing-operations-after-covid-19, (Date of access: 16.08.2020).
- Chowdhry Amit, "Artificial Intelligence To Create 58 Million New Jobs By 2022, Says Report", Forbes, https://www.forbes.com/sites/amitchowdhry/2018/09/18/artificial-intelligence-to-create-58-million-new-jobs-by-2022-says-report/?sh=1f0b27e24d4b, (Date of access: 04.02.2021).
- Atkınson Robert & WU John, "False Alarmism: Technological Disruption and the U.S. Labor Market, 1850–2015", Information Technology and Innovation Foundation, (2017), May:1–28.
- Bessen James, "Automation and Jobs: When Technology Boost Employment", Law and Economics Research Paper no. 17-09, (2017), Boston University School of Law.
- Boggess Martin, "Industry 4.0: Technologies, Outcomes, and the Future of Manufacturing", https://global. hitachi-solutions.com/blog/industry-4-0-technologies-outcomes-and-the-future-of-manufacturing, (Date of access: 16.08.2020).
- Czifra György and MOLNÁR Zsolt, "Covid-19 and Industry 4.0", Research Papers Faculty of Materials Science and Technology Slovak University of Technology, 28:46 (2020), p36-45.
- Deloitte, "Industry 4.0 challenges and solutions for the digital transformation and use of exponential technologies", https://www2.deloitte.com/content/dam/Deloitte/ch/Documents/manufacturing/chen-manufacturing-industry-4-0-24102014.pdf, (Date of access: 16.08.2020).
- Integral system, "Les nouvelles technologies au cœur de la 4ème révolution industrielle", https://blog.integral-system.fr/nouvelles-technologies-industrie-4/, (Date of access: 25.09.2020).
- Kritikos Mihalis, Ten technologies to fight coronavirus, European Parliamentary Research Sevice, PE 641.543 (2020), p1-20.
- Kroupenev Artem, "What Will Manufacturing's New Normal Be After COVID-19?", https://www.industryweek.com/technology-and-iiot/article/21129334/what-will-manufacturings-new-normal-be-after-covid19, (Date of access: 16.08.2020).
- Menga David and DALLOZ Xavier, "Covid-19: le monde d'après sera innovant ou ne sera pas", https://www.latribune.fr/opinions/tribunes/covid-19-le-monde-d-apres-sera-innovant-ou-ne-sera-pas-844559. html, (Date of access: 25.09.2020).
- Manyıka James & SNEADER Kevin, "Al, automation, and the future of work: Ten things to solve for", McKinsey Global Institute, 2018, https://www.mckinsey.com/featured-insights/future-of-work/ai-automation-and-the-future-of-work-ten-things-to-solve-for#, (Date of access: 30.01.2021)
- Openmind, "8 Key Tech Trends in a Post-COVID-19 World", https://www.bbvaopenmind.com/en/technology/digital-world/8-key-tech-trends-in-a-post-covid-19-world/, (Date of access: 15.08.2020).
- Rojko Andreja, "Industry 4.0 Concept: Background and Overview", International Journal of Interactive Mobile Technologies, 11:5 (2017), p77-90.
- Sharp Minds, "The future of it covid-19 reality 5 technology trends", https://www.sharpminds.com/news-entry/the-future-of-it-covid-19-reality-5-technology-trends/, (Date of access: 25.09.2020).
- Ślusarczyk Beata, "Industry 4.0-are we ready?", Polish Journal of Management Studies, 17:1 (2018), p232-248.
- Ubs, "What is the future for Industry 4.0 in the post COVID-19 world?", https://www.ubs.com/global/en/wealth-management/chief-investment-office/life-goals/executives-and-entrepreneurs/2020/industry-4-point-zero-after-covid-19.html, (Date of access: 16.08.2020).





Research on Reverse Migration Due To Pandemic and Its Effects on Life After the Pandemic: Case of Azerbaijan (Baku)

Lala NAGHIYEVA*

Abstract

Today, the epidemic clearly shows its effects in the field of migration while affecting many aspects of life. At a time when migration occurred mostly on the village to city axis, an inverse migration started to occur with the emergence of the epidemic. In other words, during the pandemic, people now tend to migrate from large cities where the transmission rate might be high. From this point of view, Baku, the capital of the Republic of Azerbaijan, is also among the target cities of migrations taking place on the axis of village to city and city to city within the country. For this reason, in the study, it was investigated what kind of mobility there was during the pandemic from Baku, which received the most migration, and how this could affect the life after the pandemic.

Keywords: Migration, Pandemic, Reverse Migration, Azerbaijan

Özet

Günümüzde salgın, hayatın bir çok yönünü etkilediği gibi göç alanında da etkilerini açık bir şekilde göstermektedir. Göçün daha çok köy-kent ekseninde gerceklestiği bir zamanda salgının ortaya çıkmasıyla tersine bir göç de söz konusu olmaya başlamıştır. Başka bir deyişle, pandemi sürecinde insanlar bulaşma oranının yüksek olabileceği büyük şehirlerden göc etme eğiliminde bulunmuşlar. Bu açıdan bakacak olursak, Azerbaycan Cumhuriyeti`nin başkenti olan Bakü de ülke dahilinde köv-kent ve kent-kent ekseninde gerçekleşen göçlerin hedef şehirleri arasında yer almaktadır. Bu nedenle çalışmada en çok göç alan Bakü`den Pandemi zamanında nasıl bir hareketliliğin olması ve bunun pandemi sonrası yaşama nasıl etkide bulunabileceği araştırılmıştır.

Anahtar Kelimeler: Göç, Pandemi, Tersine Göç, Azerbaycan

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I. Introduction

Historically, while the Hawaiian Islands had never been exposed to diseases in Europe and America until 1778, the population of Hawaii, which encountered diseases such as flu, tuberculosis and syphilis after Captain James Cook's first steps on the island, decreased from half a million to 70,000 in 1853 as a result of typhoid and smallpox virus transmitted to the region by Europeans (Harari 2016, 21). Therefore, it is very difficult to think of these epidemics and diseases as a concept far from migration. Throughout history, there has been a movement in diseases as a result of human mobility, and as a result, the world has had to fight against diseases. To date, humanity has faced many epidemics such as Plague, smallpox, Typhus, Flu, Cholera, Malaria, SARS, Ebola, MERS, and millions of people have lost their lives as a result of these diseases. Today, we are at war with a strain of Coronavirus, which we call COVID-19. Although the coronavirus or Covid-19 disease, which emerged in Wuhan, China in December 2019 and affected the whole world, spread to the world as a result of an immigration, the interesting thing is that it undertook to restrict migration (Kasapoğlu 2020). In other words, when the epidemic began to spread rapidly around the world, foreign and domestic migration began to be controlled in order to prevent it from spreading.

In addition, one issue that we should pay attention to is the question of how much migration can be controlled. Migration, which continues its existence from the day humanity exists, refers to the geographical temporary or permanent displacement of individuals or social clusters (Özcan b.t., 185). In other words, we can state that limiting and stopping migration during the time that people live and exist seems to be a significantly difficult issue. Thus, migration is an indestructible human mobility that can sustain itself in different axes. Accordingly, it is worth saying that it is inevitable for epidemics and diseases to spread to a larger area as a result of human mobility. We can say that migration to larger and crowded cities also occurs a lot. As a result, we can say that epidemics can increase at a higher rate in such cities. At the same time, the spread of the epidemic in large cities triggers reverse migration and causes the epidemic to spread to smaller cities and villages.

As it seems, migration and epidemic should be examined as the concepts that affect each other the most. Therefore, our study aimed to address this directly. The main purpose of the study titled "Research on Reverse Migration Realized Due to Pandemic and Its Effects on Living After Pandemic: The Case of Azerbaijan (Baku)" is to reveal the relationship of migration and epidemic with each other and its effect on people's lives with the research conducted

Our study consists of a total of 5 headings and their subheadings, including Introduction and Conclusion. Other titles, Theoretical Framework, Methodology and Methodology are shaped as the Findings of the Research.

II. Theoretical Framework

From a prudent point of view, immigration is considered to be a situation of resettlement of people to a remote place, at least a place far from the city or town where they currently live (Bartram, Monforte va Poros 2017, 13). According to studies conducted by Dufoix, migration is also considered as a mobility that started thousands of years ago with the spread of people from Africa to the world (Dufoix 2008). Therefore, we can also explain migration in the form of an innate situation (Marsella and Ring 2003, 3). On the other hand, it is worth expressing that although migration is described as an innate and instinctual situation, we can also consider the concept of migration itself as compulsory and optional migration in 2 dimensions (Kasoğlu 2015, 498). While reasons triggering migration such as war, conflict and natural disasters are sought in the realization of forced migration, such situations are not in question in the realization of voluntary or voluntary migration. However, it is worth saying that some factors have a triggering role in the realization of voluntary migration. If we take this situation in terms of our study topic, we should say that although the migration from Baku during the pandemic is made on voluntary basis, we cannot ignore the existence of the factors that make this migration mandatory.

On the other hand, it is useful to write that since migration theories have a very large role in understanding why people migrate, it is quite foreseeable to interpret migration mobilities through migration theories (Wimalaratana 2017, 21). Therefore, migration theories have a very important role in terms of examining why migration occurs and even the consequences of this migration in the next stage. From this point of view, in our study titled "Research on Reverse Migration Due to Pandemic and Its Effects on Living After Pandemic: Case of Azerbaijan (Baku)", it would be useful to examine the migration in question based on a specific migration theory in terms of understanding migration. The migration theory, which is the most cited in the field of migration and which will explain the migration mentioned in our study, is known as Lee's "pull/push factors" in terminology (Castles, De Haas and Miller 2008, 28 -29). In some sources, the terminology of "pull/push factors", which is also considered as the "pull/push" theory, generally focuses on certain factors in the realization of migration. Namely, the theory explaining that there are certain attractive factors for the region receiving migration also expresses the existence of driving factors for the country giving migration. When we examine the subject of the study, the main reason for the migration from Baku during the Pandemic is seen as the epidemic, which is the driving factor. Therefore, it should be said that this pandemic is one of the main reasons to spend its period outside Baku, as the rate of transmission of the virus is high in large and crowded cities. On the other hand, the fact that the migrated region is not crowded, the air is cleaner, the forests and other positive conditions are among the attractive factors.

As we have seen, it becomes easier to explain this migration while addressing the causes of reverse migration from Baku through the push-pull theory.

III. Method And Methodology Of The Research Method of the Research

Considering that the subject of the study mostly aims to investigate the changing migration aspects depending on today's events, the study also includes the information obtained as a result of interviews with the people who carry out migration. Within the scope of the rules of scientific research and scientific ethics, a "Google survey" was conducted using quantitative research method and sent to students who lived in Baku before the pandemic. We also have to say that some of them continue to live in Baku today, in other words, during the pandemic.

On the other hand, one of the main reasons why the study is a quantitative research is that it is difficult to have face-to-face interviews with people during the pandemic for qualitative research, and technical problems may arise through social media. However, it is worth mentioning that internet problems have been experienced for quantitative research due to recent events in Azerbaijan.

The questions in the survey aimed to reveal the pre-pandemic, pandemic and post-pandemic behaviors, migration mobility, reverse migration during the pandemic, migration-pandemic relationship and the effects of this relationship on each other.

Purpose of the Study

The main purpose of our study titled "Research on Reverse Migration Due to Pandemic and Its Effects on Living After Pandemic: The Case of Azerbaijan (Baku)" is to reveal the mutual relationship between pandemic and migration. In addition to the spread of the epidemic to the whole world due to migration, the existence of migration due to the epidemic considers the existence of a mutual connection and relationship between the epidemic and migration. Accordingly, it is known as the most important purpose of the study to reveal how such a situation affects domestic migrations in Azerbaijan.

Population and Sample of the Research

Our study includes students who lived and trained in Baku before the pandemic. Some of these students continue to live in Baku during the pandemic and issues related to this will be discussed in the following section. The main reason for the research to be conducted only among the students living in Baku is that Baku is known as the region receiving the most migration in the migrations taking place on the village-city and city-city axis and has assumed this role. Because of the pandemic, choosing the research area as Baku to examine the existence of a migration on the city-village axis is seen as an important step in terms of learning whether there is mobility from Baku during the pandemic.

In addition, although studies on quantitative research are expected to constitute a large randomly selected sample, our study has some limitations. Since the study was conducted in Ankara, the questions were expected to be communicated to randomly selected participants via social media. However, due to the occupation of Nagorno-

Karabakh and surrounding provinces by Armenia and the "Armenia-Azerbaijan, Nagorno-Karabakh War", which has been in existence for years, the events in the Republic of Azerbaijan since September 27 have also affected the fate of the study. As a result of the restriction of internet connection for security reasons, there were difficulties in communicating quantitative research to the participants through social media. Therefore, cluster sampling technique was included (Taylan 2015, 70 -71). Namely, the questions were forwarded to people through their e-mail addresses. A total of 50 e-mail addresses were reached and all of the people reached participated.

Of the 50 participants living in 14 different provinces during the pandemic, 44% were between the ages of 16 and 25; 42% were between the ages of 26 and 35; 12% were between the ages of 36 and 45; and 2% were between the ages of 46 and 55. In addition, 50% of the participants answered male, 2% answered other and 48% answered female to the question when we asked about their genders. 62% of the participants consisting of students studying at high school, 26% undergraduate, 48% graduate, 22% doctoral education level stated their marital status as single, 28% married and 10% other.

More detailed information will be included in the participants' responses and findings section of the study.

IV. Findings And Discussion

The coronavirus, which spread to all countries in the world as a result of migration from the Wuhan region, which is home to the Virology Institute, has caused serious changes in the social, political, economic and so on lives of both people and institutions (Wuhan Institute Of Virology 2020). Coronavirus, also known as COVID-19 and known for its symptoms such as loss of appetite/ weight, fever, weakness and stagnation, swelling of the abdomen, vision problems, watering of the eye and discoloration of the eye, respiratory problems and cold, balance problems, change in the general psychological state, unhappy expression, has become an epidemic in which the world has difficulty in fighting with its rapid spread as well as loss of life (Corona Virüs nedir, nasıl bulaşır? Koronavirüs belirtileri nelerdir, nasıl olur? Wuhan virüsü bilinmeyenleri 2020). If we look at the reports of the World Health Organization for October 4, 2020, a total of 34 804 348 coronavirus cases have been identified worldwide.

At the same time, the number of deaths due to coronavirus was 1,030,738. If we look at the regions where the number of cases is high, America ranks first. Then, Southeast Asia, Europe, Eastern Mediterranean, Africa and Western Pacific regions follow this order. If we look at another report of the World Health Organization, the top 10 countries according to the number of cases are known as USA, India, Brazil, Russia, Colombia, Peru, Spain, Argentina, Mexico, South Africa (WHO Coronavirus Disease (COVID-19) Dashboard 2020).

As it seems, in countries known as large and crowded countries or countries receiving immigration, the number of cases is known at a high rate. The Republic of Azerbaijan, where its first case was detected on February 28, 2020, ranks 69th according to the

current number of cases. According to the statements dated October 04, 2020, a total of 40,691 cases were identified in Azerbaijan. The total number of people who died due to the coronavirus is known as 596 (Azərbaycanda cari vəziyyət 2020). If we look at the spread regions of the coronavirus, also known as COVID-19, within the country, Baku city assumes more than 50% of the total number of cases. Accordingly, we will examine where the reverse migration from Baku took place and what kind of mobility existed before, during and after the pandemic.

Findings of the Research

At the time of the questionnaire, the first question asked to the participants after personal information was to learn whether their birthplace should be Baku or elsewhere. The main purpose here is to reveal whether students have previously migrated in the villagecity or city-city axis. As can be seen from Table 1, only 26% of the participants were born in Baku. The remaining parts were born in regions other than Baku and came to Baku later. Therefore, there is an immigration in the direction of "other city-Baku" and "village-Baku" before the pandemic.

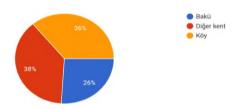


Table 1. Place of Birth

As can be seen from Table 2, since the question was made with the students who lived in Baku before the pandemic, all participants answered "Baku" to the question of "Where you lived before the pandemic", in other words, 100%.

We also asked the question of whether the main causes of reverse migration were the pandemic or a general dissatisfaction with life in Baku, which could clearly show the degree of satisfaction with where they lived before the pandemic.



Table 2. Where you lived before the pandemic?

As we mentioned earlier, we asked students to evaluate their satisfaction with life in Baku. According to the results given in Table 3, the majority of the participants, i.e. 56%, stated that they were sufficiently satisfied with their lives in Baku. In addition, 34% express their satisfaction with Baku. Therefore, we cannot say that there is a situation of dissatisfaction with Baku before the pandemic for reverse migration.

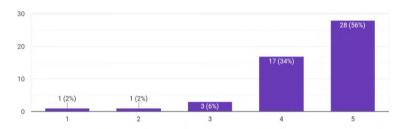


Table 3. Evaluate your satisfaction with where you lived before the pandemic

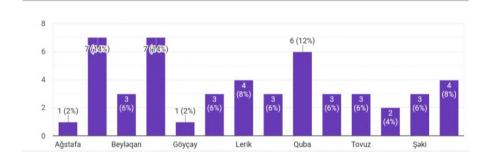


Table 4. Where were you during the pandemic? (Specify as province) (Because their names do not appear in the table, from left to right the provinces are: Agstafa, Baku, Beylagan, Fuzuli, Göyçay, Gence, Lerik, Neftçala, Guba, Gebele, Tovuz, Zagatala, Shaki, Shamkir)

As can be seen from Table 4, the students who participated migrated from Baku during the pandemic and resided in 13 different provinces. Only 14% of the participants preferred Baku as their place of residence. Other preferred regions are regions where the epidemic is less common and the number of cases is low.

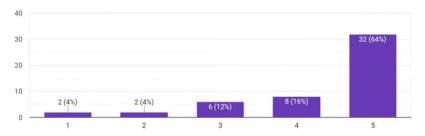


Table 5. Evaluate your satisfaction with where you left off during the pandemic

If we pay attention to Table 5, we can see that the rate of satisfaction of the participants in the place they live during the pandemic is higher than the rate of satisfaction with Baku. However, the number of people who are not satisfied at all or are very satisfied is also higher than Table 3. On the other hand, as can be seen in Table 6, 54% of the participants answered "Yes" when asked whether they want to stay in the place they want to stay in the time of the pandemic after the pandemic. Therefore, we can comment that this situation varies depending on the migrated regions.

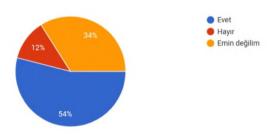


Table 6. Would you like to stay where you are during the pandemic after the pandemic?

In addition, it is noteworthy that 54% of the participants who want to stay in the migrated regions think about not wanting to return to Baku. Namely, as shown in Table 7, only 30% of the participants answered "No" about the return to Baku, while 56% stated that they were not sure about the return. If we compare, we can say that there is a crisis caused by the migration-related epidemic.

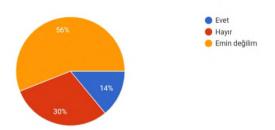


Table 7. Would you like to stay where you were before the pandemic?

Table 8 and Table 9 show the working status of the students before the pandemic. As can be seen from the tables, 46% of the students worked before the pandemic, of which only 13% were involved in online jobs.

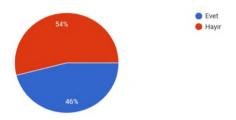


Table 8. Were you working before the pandemic?

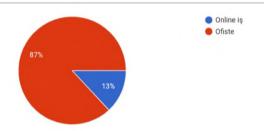


Table 9. If yes, how did you work?

When the students were asked whether they worked during the pandemic, we can see that their employment rates increased despite the economic problems caused by the pandemic, and at the same time, there was an increase in the rate of online job opportunities. That is, half of the participants are already working. And 80% of them work online.

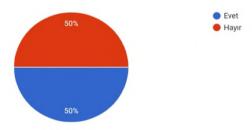


Table 10. Do you work during the pandemic?

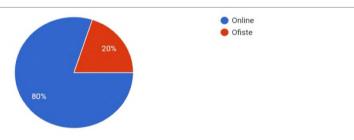


Table 11. If yes, how do you work?

On the other hand, when we ask how the participants want to work after the pandemic, a large proportion of the participants prefer to work in the office. That is, 46% of the students prefer online work. The rest express their willingness to work face-to-face in the office.

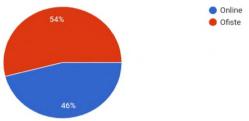


Table 12. How would you prefer to work after the pandemic?

As can be seen from Table 12, despite the increase in online job offers at a time when unemployment growth and economic conditions are in a crisis stage, the participants are not very satisfied with working in these conditions.

Another question asked to students studying in Baku to reveal the relationship between the pandemic and migration was related to educational conditions. Namely, if the education is face-to-face, students are expected to return to Baku. In this respect, students were asked whether they were educated online, face-to-face or how they wanted this to go after the pandemic. We can also see in Table 13 and Table 14 that 94% of the students received face-to-face education before the pandemic, but all students continued their online education during the pandemic.

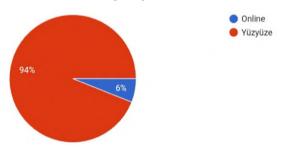


Table 13. How was your education before the pandemic?

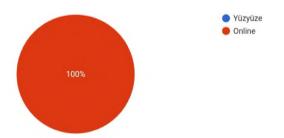


Table 14. How does your education take place during the pandemic process?

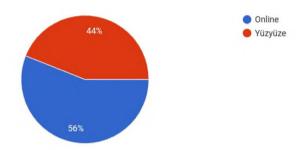


Table 15. How would you like your education to take place after the pandemic?

On the other hand, 56% of the participants want the education to take place online after the pandemic. This shows that the participants are determined not to want to return to Baku. Therefore, we can see with this preference that even after the pandemic, most students do not show much enthusiasm to be in the city where the pandemic is rapidly increasing.

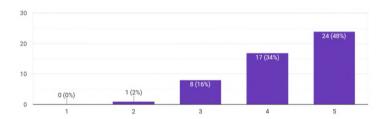


Table 16. Evaluate your social life in terms of communicating with people before the pandemic

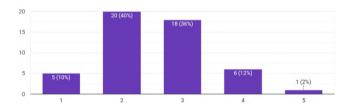


Table 17. Evaluate your social life in terms of communicating with people during the pandemic process

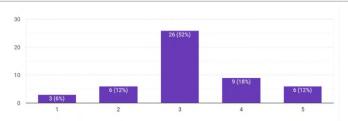


Table 18. Evaluate your social life in terms of communication with people after the pandemic

In addition, in order to reveal the changes that may occur in human relations after the pandemic, we asked our students about the intensity of communication with other people before, during and after the pandemic. While the vast majority of the participants indicate that there was intense communication with people before the pandemic, they stated that this communication decreased considerably during the pandemic process and that it would be less, that is, moderate intensity after the pandemic compared to before the pandemic. On the other hand, it is useful to write this down, that migration from a crowded, continuously migrating country to a calmer place plays a great role in reducing this communication intensity.

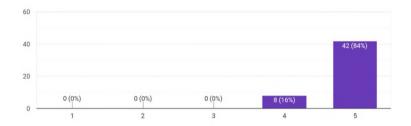


Table 19. Assess the likelihood of infection where you lived before the pandemic

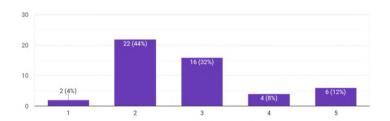


Table 20. Assess the likelihood of infection where you live during the pandemic

Table 19 and Table 20 are closely related to the issue of reverse migration from Baku, which we discussed earlier. We asked students how the likelihood of infection in the city of Baku, where they lived before the pandemic, varied according to their preferred regions after the pandemic. While the likelihood of transmission of the virus is most likely in Baku city, the likelihood of transmission of the virus seems to be quite low in the regions preferred during the pandemic. In addition, all of the people who preferred to spend the pandemic time residing in Baku have chosen to be more likely to be infected with the virus, as we can see in Table 20.

What kind of life will be preferred after the pandemic is one of the questions we ask the participants. Despite the decrease in the unemployment rate and the satisfaction rate from where they live, the vast majority of the participants desire either their life before the pandemic or the formation of a new order. Namely, while 26% of the participants

want to continue their life during the Pandemic, 32% of the participants want their life before the pandemic and 42% of the students want a new order.

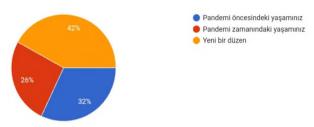


Table 21. If you had to choose a life/ order after the pandemic, which would you prefer?

On the other hand, our participants who wish there to be a new order were told to share their opinions with us about this. Only 10 out of 50 respondents answered this optional question. Three of them stated that they wanted online job opportunities to be part of the new order. Two participants stated that they wished that the online education system would continue and that there would be no need to go away from the family and to another city to receive education. Other responses were, "A peaceful and quiet Baku", "A world with more technological innovations", "A world without diseases", "In a time of pandemic, I saw that shopping malls would be able to live without them by restricting their activities and reducing the mobility of cars. I would like it to continue like this from now on. "As it is understood, people do not seem eager to get rid of the silence that existed at the time of the pandemic after the crowd that existed before the pandemic.

V. Conclusion

The coronavirus pandemic has not been ineffective in the issue of migration as it has shown its effects in all areas of life. In this context, when we consider the migration from Baku due to the pandemic, we can see many permanent effects. Namely, although people are satisfied with their lives in Baku, they are no longer interested in life in such places after the pandemic due to the rapid progress of the epidemic in big cities and the increase in the number of cases. In addition, as we can see from the questions, students tend to prefer a different life after the pandemic compared to their lives before the pandemic. In other words, they tend to lead a different life, such as online education, avoiding communication with people, more technological innovation, and working from home. If we even look at the comments made, there are even participants who want the political order to change.

In summary, we observe that the students are fed up with the crowds and confusion of the big city, and that they desire a quieter, peaceful life in their own way. So, while it is crucial and harmful, we can also comment that a silence from the pandemic has enabled people to establish their own patterns.

BIBLIOGRAPHY

Azərbaycanda cari vəziyyət. 04 Oktyabr 2020. https://koronavirusinfo.az/az/page/statistika/azerbaycanda-cari-veziyyet (erisildi: Ekim 04, 2020).

Bartram, David, Pierre Monforte, və V. Poros. Göç Meselesinde Temel Kavramlar. 2017.

Castles, S., Hein De Haas, and M. Miller. *The Age of Migration: International Population Movements in the Modern World.* New York: Palgrave Macmillan, 2008.

Corona Virüs nedir, nasıl bulaşır? Koronavirüs belirtileri nelerdir, nasıl olur? Wuhan virüsü bilinmeyenleri. 26 Ocak 2020. https://www.milliyet.com.tr/gundem/corona-virus-nedir-nasil-bulasir-koronavirus-belirtileri-nelerdir-nasil-olur-wuhan-virusu-bilinmeyenleri-6130357 (erişildi: Ekim 03, 2020).

Dufoix, Stephane. Diasporas. University of California Press, 2008.

Harari, Yuval Noah. Homo Deus. İstanbul: Kolektif Kitap, 2016.

Kasapoğlu, Çağıl. Koronavirüs: Salgın hastalıklar tarihi uzmanı Prof. Snowden'a göre 'daha insani ve dirençli' bir toplum yaratabiliriz. 26 Mart 2020. https://www.bbc.com/turkce/haberler-dunya-52046490 (Accessed: Ekim 2, 2020).

Kaşoğlu, Ayla. «Göçmen Bir Yazar Olan Murat Tuncel'in Kaleminden "Maviydi Adalet Sarayı ve Gölge Kız".» Turkish Miqration Conference 2015. Prague: Transnational Press London, 2015. 498-504.

Marsella, Anthony J., and Erin Ring. "Human Migration and Immigration: An Overview." In *Migration: Immigration and Emigration in International Perspective*, by Leonore Loeb Adler and Uwe Peter Gielen, 3-22. London: Greenwood Publishing Group, 2003.

Özcan, Ela. Çağdaş Göç Teorileri Üzerine Bir Değerlendirme. Ankara, b.t.

Taylan, Ahmet. "Nitel ve Nicel Araştırmalarda Evren ve Örneklem Seçimi ve Sorunlar." Mənbə: İletişim Araştırmalarında Yöntemler: Okuma Metinleri, Besim Yıldırım tərəfindən, 47-83. Konya: LİTERATÜRK, 2015.

WHO Coronavirus Disease (COVID-19) Dashboard. 04 October 2020. https://covid19.who.int (erişildi: October 04, 2020).

Wimalaratana, Wijitapure. "International Migration and Migration Theories." Social Affairs, Fall 2017.

Wuhan Institute Of Virology. 10 May 2020. http://english.whiov.cas.cn/ne/ (erişildi: 10 2020, 03).

Psychological and Socioeconomic Effects of COVID-19 on Mental Health of Different Sections of the Society

$Vahideh\ LAMEEI^*$

Abstract

In December 2019, a new infectious disease caused by a new coronavirus strain officially called COVID-19 was identified by the World Health Organization (WHO) in Wuhan Province, China. The spread of COVID-19 to the world in as little as three months created an emergency health situation globally and was unique due to the rate of transmission of the virus. In addition to causing public health concerns in society, this disease has also caused psychological diseases such as irritability, fear, labeling, depression, anxiety, sleep disorder, avoidance behaviors, nervousness, post-traumatic stress disorder and depression. In these cases, it is essential to protect the mental health of individuals. People in different parts of a community may experience the psychological symptoms of

Özet

2019 Aralık ayında Cin'in Wuhan Evaletin'de Dünya Sağlık Örgütü (DSÖ) tarafından resmi olarak Kovid-19 adlı yeni bir koronavirüsün neden olduğu bir bulasıcı hastalık tanımlanmıstır. Kovid-19'un tüm dünyaya üç ay gibi kısa bir süre içinde yayılması küresel ölçüde acil sağlık durumu yaratmasıyla ve virüsün bulasma hızı nedenivle benzersizdi. Bu hastalık, toplumda halk sağlığı kaygılarına yol açmanın yanı sıra; sinirlilik, korku, etiketleme, depresyon, anksiyete, uyku bozukluğu, kaçınma davranışları, sinirlilik, travma sonrası stres bozukluğu ve depresyon gibi psikolojik hastalıklara da neden olmuştur. Bu durumlarda bireylerin ruh sağlığını korumak esastır. Bir topluluğun farklı bölümlerindeki insanlar olan; Kovid-19 hastaları, karantinaya alınmış kişiler,

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COVID-19 during the growth phase of the disease, which includes COVID-19 patients, quarantined people, pregnant women, university students, children, healthcare workers and family members of medical staff, and families. In this context, there is strong evidence that their mental health status is prone to symptoms of psychological disorder. In addition to the psychological effects, many countries have been adversely affected by the social and economic consequences of COVID-19. Therefore, this study aims to reveal the prevalence of psychological symptoms in populations where COVID-19 is predisposed during its spread, to determine the risk factors that play an active role in disrupting the mental health of individuals in the COVID-19 pandemic and their effects on socio-economic

Keywords: Mental Health, Psychological Disease, Socio-Economic Consequences, Infectious, Epidemic.

hamile kadınlar, üniversite öğrencileri, çocuklar, sağlık çalışanları, sağlık personelinin aileleri gibi kesinmlerde Kovid-19'un psikolojik semptomları görülebilir. Bu bağlamda, bu kişilerin ruh sağlığı durumunun psikolojik bozukluk belirtilerine yatkın olduğuna dair güçlü kanıtlar vardır. Psikolojik etkilerin yanısıra bir çok ülke Kovid-19'un sosyal ve ekonomik sonuclarından olumsuz sekilde etkilenmiştir. Bu nedenle çalışmamız, Kovid-19'un yayılması sırasında yatkın olduğu popülasyonlarda psikolojik belirtilerin yaygınlığını ortaya koymayı, Kovid-19 pandemisindeki bireylerin ruh sağlığını bozmada etkin rol oynayan risk faktörlerini ve sosyo-ekonomik etkileri belirlemeyi amaçlamaktadır.

Anahtar Kelimeler: Ruh Sağlığı, Psikolojik Hastalık, Sosyo-Ekonomik Sonuçlar, Bulaşıcı, Salqın.

I. Introduction

An infectious disease was reported in Wuhan Province, China, in December 2019. The cause of this disease is a new and genetically modified virus from the coronavirus family -SARS-CoV-2 - called Covid-19 disease (Zhu et al., 2020). Unfortunately, due to its high infectious effects, it has spread rapidly around the world and infected almost every country in a short time (less than four months) (Remuzzi and Remuzzi, 2020; Zangrillo et al., 2020). More than 30.6 million Covid-19 cases and 950,000 deaths have been reported so far, according to official reports from the World Health Organization (WHO). Unfortunately, this virus first affected Turkey like other countries in the world on March 11, 2020 and the fight against this virus is being carried out nationwide and comprehensively. Control and treatment methods of the disease caused by the virus are limited due to the fact that this virus is new and the amount of information available about the pathogenicity of the SARS-CoV-2 virus is insufficient. For now, the most important way to cope with the virus is to prevent the spread of the virus (Budak and Korkmaz, 2020). It has affected the economic, political, social and even military areas of almost all countries of the world. It can be said that those who receive Covid-19 due to the global (Pandemic) status are paralyzed (Li et al., 2020). Therefore, the psychological effects of this disease on the mental health of people at different levels of society

are of particular importance. Given the pathogenicity of the virus, its spread rate and the resulting mortality rate, this disease exposes people at different levels of society to mental health in a variety of ways, including from patients, healthcare professionals, families, children, students, psychiatric patients, and even the perspectives of different professions (Chen et al., 2020; Bao et al., 2020). Therefore, in the current high-risk situation, it is necessary to identify people who are prone to psychological disorders at different levels of society by using psychological strategies and techniques appropriate to their mental health.

II. Mental Health of Covid-19 Patients

Covid-19 disease has a unique feature due to its significantly high spread in a short time, transmission to all countries of the world and creating a pandemic situation (Liu et al., 2020; Zhao and Chen, 2020). Currently, the number of people with this disease and the deaths resulting from it are rapidly increasing worldwide (Remuzzi and Remuzzi, 2020; Zhu et al., 2020). Considering the current emergency situation of this disease and the number of cases, it is estimated that some psychological disorders will occur in patients with Covid-19. In this context, various psychological disorders are found in the results of studies conducted on patients with Covid-19 in China during the spread of the disease. For example, anxiety, fear, depression, emotional changes, insomnia, and post-traumatic stress disorder have been reported (Yang et al., 2020; Liu et al., 2020).

Due to the excessive spread of Covid-19, acute respiratory problems, the negative status of isolated patients in the intensive care unit and the lack of effective drug treatment, deaths due to this disease are among the most important factors that can affect the mental health of Covid-19 patients (Xiang et al., 2020; Bo et al., 2020). According to researches, Covid-19 patients have low psychological tolerance capacity and given the current state of the disease in the world, people with this disease are very prone to psychological disorders (anxiety, far, depression...) and negative thoughts (Yao et al., 2020).

One of the most important psychological disorders that can harm the mental health of Covid-19 patients is post-traumatic stress (PTSD) disorder (Bo et al., 2020). Failure to control this psychological disorder can lead to permanent damage to the patient, such as the onset of disturbing memories, avoidance behaviors, irritability, and emotional numbness (Bo et al., 2020; Sun et al., 2020). Post-traumatic stress disorder is a stress-related psychological problem that occurs in people who experience life-threatening conditions (Kessler, 2020). According to available sources, the experience of life-threatening physical diseases such as Covid-19 may be a cause of post-traumatic stress disorder symptoms (Sun et al., 2020). Sleep disorder is another problem that may arise in isolated or quarantined services for Covid-19 patients. Research conducted in China during the spread of Covid-19 disease in Wuhan shows that the sleep quality index in these patients has fallen sharply. On the other hand, as a result of this study, it has been revealed that there is a relationship between sleep quality disorders and the emergence of psychological disorders such as post-traumatic stress disorder (Zhang et al., 2020). Anxiety and depression are other important psychological disorders that

can harm the mental health of patients with Covid-19. According to the results of a study conducted on hospitalized patients in China, 21 out of 146 participants were infected with Covid-19, 86 people had pneumonia and 91 people were healthy. According to the results of this study, anxiety and depression assessment index of patients with respiratory problems among pneumonia and Covid-19 infected patients is higher than healthy individuals. These people needed psychological interventions as well as medical care to treat their physical illnesses. According to the results of this study, the use of psychological interventions significantly reduced both anxiety and depression indices in Covid-19patients (Yang et al., 2020).

III. Mental Health of People in Quarantine due to Covid-19

Quarantine means isolating and restricting movements of people who are exposed to a potentially infectious disease in order to prevent other people from becoming infected if the disease is detected (Brooks et al., 2020). The definition of quarantine is completely different from isolation because isolation means isolating people who are diagnosed with a communicable disease and who need to be separated from non-sick people (Brooks et al., 2020). During the quarantine process, people's mental health may be damaged depending on the environmental conditions and the type of communicable disease spreading, and some psychological disorders may occur in people in quarantine (Wang et al., 2011). In general, all studies examining the psychological disorders of people in quarantine show many signs of mental damage such as emotional distress, depression, stress, mood swings, irritability, insomnia, decreased attention, posttraumatic stress disorder, and anger (Brooks et al., 2020; Rubin and Wessely, 2020). In a study conducted on hospital staff after a guarantine period (9 days) due to contact with people infected with SARS virus, people showed signs of extreme stress disorder (Bai, 2004). The results of this study also show that the quarantine staff's fatigue, separation from others, anxiety, irritability, insomnia, impaired decision-making and concentration skills when working with hot people, and performance quality decrease. The results of a study show that posttraumatic stress disorder is an important psychological symptom observed in various individuals guarantined due to infectious flu in hospital staff (Wang et al., 2011). It is noteworthy that posttraumatic stress symptoms are approximately four times higher among quarantined children than among non-quarantined children. This shows that psychological symptoms occur relatively more in children than in adults (Robertson et al., 2004). Depression is another symptom of hospitalization and post-quarantine mental health disorders. According to a study, approximately 9% of people and hospital staff showed signs of severe depression 3 years after quarantine (Liu et al., 2012). Quarantine during the spread of Covid-19 disease is seen as the most common and best strategy to prevent the spread of the disease (Rubin and Wessely, 2020). According to the results of this study, the most common triggers of stress and psychological disorders in people in quarantine due to Covid-19 disease, fear of infection or transmission to others, prolonged quarantine, inadequate support, lack of access to medical care, inadequate food intake, fatigue and boredom due to quarantine and isolation have been reported. All of the above, in addition to some unpleasant thoughts such as feelings of loneliness, labeling, denial, despair, and more severe aggression and suicidal thoughts may cause the quarantine patients to reduce compliance with treatment due to Covid-19 disease, even people may consider leaving the quarantine area. Ultimately, quarantine conditions cause people to lose their family and friends' psychological support, which increases stress and psychological damage.

IV. Mental Health of Healthcare Workers

Considering that healthcare professionals are at the forefront of the fight against infectious diseases and Covid-19 disease, it can be said that they are among the first exposed to the virus. According to the research, the percentage of infection of medical care workers during the Covid-19 disease epidemic was 3.8%, but the main reason for this high percentage of infection of healthcare personnel was their unprotected contact with infected patients at the beginning of the Covid-19 epidemic (Wu and Googan, 2020). According to Pappa et al. (2020), based on the results of the research obtained during the spread of Covid-19 disease, healthcare professionals were found to be exposed to some harmful psychological disorders such as anxiety and insomnia, which may adversely affect the quality of activity and service. On the other hand, healthcare professionals should wear anN-95 mask and heavy protective clothing that makes it difficult to perform medical procedures under normal conditions and restricts movement. All these factors increase the risk of infection and transmission as well as the risk of psychological disorders among medical personnel (Liu et al., 2020). According to a 2003 study on the mental health of medical staff involved in the spread of the SARS virus, approximately 10 per cent of people were found to have high levels of PTSD (Wu et al., 2009). Another study on the SARS outbreak in Hong Kong found a higher level of anxiety after healthcare professionals came into direct contact with SARS infected patients (Cheong and Lee, 2004). Due to the prevalence of Covid-19 disease worldwide and the mortality rates associated with this disease and the fact that healthcare professionals rank first in the fight against this disease, they are more likely to be exposed to psychological disorders and anxiety than others. According to a cross-sectional study conducted on medical staff in China during the spread of Covid-19 between February 10 and February 20, 2020, 1642 (32.03%) of 512 staff showed direct contact with a previously infected patient. The prevalence of anxiety was approximately 12.5%. Of these, 10.35% had mild anxiety, 1.36% had moderate anxiety and 0.78% had severe anxiety (Liu et al., 2020). In addition, the results of the same study show that healthcare personnel in direct contact with Covid-19 infected patients have a higher anxiety index than those who are not in direct contact with these patients. In addition, the anxiety index rate of healthcare personnel in infected cities (such as Wuhan) is higher than that of healthcare personnel in other cities. In another study conducted on hospital doctors and nurses during the Covid-19 outbreak in Wuhan province of China, it was found that health personnel had highly depressive symptoms of 50.4%, anxiety 44.6%, insomnia 0.34% and painful feeling of 71.5% (Lai et al., 2020). According to the results of this study, it is noteworthy that women and people in direct contact with Covid-19 infected patients reported higher rates of psychological symptoms. Therefore, when the results of the studies presented are examined, it is seen that care and care of the mental health of medical care workers is of great importance when dealing with infectious patients as well as Covid-19 disease.

V. Mental Health of Family Members of Health Workers

According to the available evidence, family members of healthcare professionals are among those at risk of experiencing psychological disorders. Acute conditions of the fight against Covid-19 are some of the leading causes and causes of significant psychological disorders such as stress, anxiety and depressive symptoms among family members of healthcare professionals (Ying et al., 2020). One of the reasons for these psychological disorders is that family members cannot communicate with their loved ones working in health centers. Because healthcare professionals may experience fear of spreading the virus to family members and may experience extreme anxiety about spreading the disease to family members (Guo et al., 2020). On the other hand, family members of healthcare professionals may experience similar psychological disorders related to the fear that their loved ones working in healthcare centers may get Covid-19 virus (Ying et al., 2020). Although studies in this area are very limited, the results of a cross-sectional study on the mental health of family members of a hospital staff in China during the Covid-19 outbreak on 10-20 February 2020 are consistent with this study. In this study involving 822 people, the frequency of anxiety was 33.73% among these people and 29.35% among those with depression symptoms. For this reason, attention should be paid to the mental health status of the family members of healthcare professionals who are prone to psychological disorders during the infectious disease epidemic, especially Covid-19, which has a very high transmission power. It is worth noting that these people can be considered less in the current high risk situation (Ying et al., 2020).

VI. Mental Health of Pregnant Mothers

The spread of the Covid-19 outbreak is one of the factors that increase the stress and anxiety levels of pregnant mothers. According to the findings obtained from the studies, increased levels of stress and anxiety during pregnancy, increased pregnancy poisoning, pregnancy depression, increased nausea during pregnancy cause premature birth and low weight birth of the baby. Quarantine, social distance and a number of traffic restrictions are factors that cause increased anxiety and anxiety levels of prospective mothers (Fakari and Simbar, 2020). According to the results of the research conducted in China, the depression rate of prospective mothers increased significantly during the epidemic period (Wu et al., 2020). On the other hand, women need more emotional support during pregnancy and these needs cannot be met due to restrictions. In addition, the risk of poisoning increases as the use of hygiene and disinfectant materials increases. In some cases, prospective mothers do not consult specialists to find out the general condition of themselves and their infants due to fear of catching the epidemic. Therefore, in some cases, prospective mothers terminate pregnancy due to severe anxiety and tend to cesarean section. Finally, some prospective mothers experience screening and vaccination anxiety of their babies after birth (Wu et al., 2020).

VII. Mental Health of Students

The spread of an infectious disease such as Covid-19, the closure of schools and home quarantine affect the physical and mental health of children and young people (Wang et al., 2020). The findings obtained as a result of the researches show that children's

physical activities decrease during weekends and summer holidays, their sleep patterns are disrupted and their compliance rates with the correct food programs decrease (Mason et al., 2018). This phenomenon intensifies even more when children are confined to the home and their external activities are restricted. On the other hand, factors such as fear of Covid-19, negative thoughts, limitation of the relationship with friends and teachers, lack of suitable space in the house, and proliferation of stressful stimuli such as the financial and economic problems of parents may have permanent effects on the mental health of children and adolescents (Brooks et al., 2020). As a result of the studies, it is seen that the average stress index is 4 times higher in children under quarantine. Therefore, children under quarantine show psychological symptoms such as acute stress disorder, adaptation disorder and depression. According to the reports, 30 percent of these children show that they have traumatic stress disorder (Sprang and Silman, 2013).

College students are also affected by the psychological symptoms of Covid-19. So much so that during the first spread of the epidemic, universities and all educational centers closed down and suspended their activities. According to the studies, in the study conducted in China during the H1N1 flu pandemic in 2009, traumatic stress disorder occurred in 2 percent of university students (Xu et al., 2011). The study conducted on 7,000 university students in China during the Covid-19 pandemic revealed that 24.9 percent of the students had anxiety. Approximately 9 per cent of this rate was found to have intense and severe anxiety and the rest had moderate anxiety. The main reasons for anxiety in students are the decrease in their social relations and their anxiety about their profession and academic careers. In addition, it was seen that the reason for the anxiety factor in some students was that they could not cover the economic distress and school expenses caused by losing their jobs. Accordingly, factors such as having a fixed income of the family and living in the city and with the family significantly reduce the anxiety and anxiety of the students. Finally, getting Covid-19 by relatives and relatives is one of the factors that increase students' anxiety (Cao, 2020).

VIII. Social Distancing and Its Social Dimensions

As the size of the COVID-19 virus emerged and its seriousness was understood, governments gradually implemented methods such as quarantining city centers and social distancing. Governments have decided to implement advisory methods such as "voluntary stay at home" and, where necessary, methods such as implementing laws, banning public meetings, and closing schools and offices. The implementation of these methods slowed down the wheels of social and economic life and stopped them in many societies.

Social distancing means minimizing contact with people and leaving at least two meters of distance between oneself and others, avoiding public transport, working at home, avoiding crowded environments and limiting unnecessary travel. The implementation of methods such as the closure of parks, cafes, tombs, schools, universities, sports clubs and similar social gathering and interaction centers will have different effects on socio-economic groups. For example, many businesses such as markets, gyms, hairdressers and cafes will collapse in the short term and may go bankrupt as the

crisis progresses. In addition, because of staying at home for a long time in patriarchal societies, it will increase the pressure on women to do housework and cause tension between couples and children and the elderly.

Closing schools and universities will also deprive millions of children, adolescents and young people of educational and social activities for a long time, which may not be easily compensated later. On the other hand, the continuation of crises and constraints and their imposed or voluntary self-isolation will have devastating effects on vulnerable groups such as depression and anxiety. Therefore, it is necessary to prepare and implement models of assistance, adjustment, compensation and repair in the areas of social damage already studied and in the social consequences of the Corona crisis.

The method of creating social distancing on a social and individual scale to control the spread of the Corona virus is actually a position where a therapeutic problem encounters a social problem. This method, which is currently applied in all countries of the world, has social consequences. The most important social consequences of this method are as follows:

Social relations area:

Intensifying Isolationism / Intensifying Relationships: Recommending staying at home does not mean the same for all members of society. Because different groups perceive the house differently. For people with limited social relationships, home is a physical place, but from the point of view of some other people in the community, home is not limited to a physical place, and staying at home means meeting all family members in a safe place, causing an understanding that leads to an increase in the number of trips instead of this decrease (Mirzaei and Rahmani, 2020). For this reason, while some of the society has become isolated and reduced their social relations with others due to the application of the social distancing method, another important part has intensified their relations with their relatives, especially with parents.

Domestic area:

Increasing the burden of women's responsibilities in the family: Applying the method of staying at home means increasing women's responsibilities and can lead to dissatisfaction and increased family disagreements. The new situation requires the reform of gender roles and greater cooperation of men in managing household chores. In addition, because of staying at home for a long time in patriarchal societies, it will increase the pressure on women to do housework and cause tension between couples and children and the elderly.

Increased violence and family disputes: Social distancing measures to prevent the spread of Covid-19 have increased the fear of domestic violence, physical, emotional and sexual abuse. Housekeeping problems and social isolation have caused increasing family problems during this period (Nicola et al., 2020). Following the Covid19 crisis, the increase in domestic violence, including child abuse, spousal abuse, elderly abuse and the abuse of disability, is so great that the UN General Manager voiced his con-

cerns and called on governments to make women's safety a priority in responding to this widespread crisis by calling for peace in homes around the world (United Nations Web site, 2020).

Suspension of relief and social protection mechanisms: The implementation of the social distancing method has resulted in the suspension of some social mechanisms that cause sympathy and empathy among community members, such as various social ceremonies. For example, a mourning ceremony, which plays an important role in healing and soothing the grief of mourners, is not possible during the coronavirus pandemic and there is also no alternative mechanism. The issue of "unspoken grief" is so serious among society that some countries have online mourning. In countries like China, a new mourning ceremony has been in place since the beginning of the coronavirus outbreak. In other countries, such as the United Kingdom, tutorials and guidelines for dealing with "unspoken grief" are published on government websites so that people can use these methods to alleviate their and others' pain (Cruise Briente Kier website, 2020).

Education Area

Covid-19 affects all levels of the education system from preschool to higher education. More than 100 countries around the world close educational institutions such as schools and universities. UNESCO estimates that around 900 million students are affected by the closure of educational institutions. The purpose of these closures is to prevent the spread of diseases and viruses in institutions and to prevent transmission to vulnerable people. These holidays have far-reaching socio-economic consequences. Schools cannot provide free meals, social isolation and drop-out rates for children of low-income families. In addition, the inadequate access of the low-income population to facilities such as the internet and tools such as tablets and computers in underdeveloped regions has left them behind the opportunities provided for virtual education. In addition, Covid-19 has led to the cessation of all academic and non-Covid research and the focus of all of them on the short-term and long-term effects of the virus. On the other hand, the postponement of scientific conferences and seminars has reduced opportunities for cooperation and information transfer.

Business Area

Crisis situation in small-scale enterprises: Considering the economic results of the social distancing method, it shows little strength in terms of staying at home and economic resilience of the poor segments of the society. The closure of small businesses crippled the lower classes of society and increased unemployment and reduced the income of the poor groups of society. This has led to more poverty, dissatisfaction and union protests in the absence of effective mechanisms to ensure the welfare of the community group and if closures continue.

IX. Global Economical Effects of the Coronavirus (Covid-19) Outbreak

The spread of the coronavirus (Covid-19) has faced many challenges in different sizes to countries around the world. So much so that even developed countries claiming to

have advanced health and welfare systems have recently encountered problems. One of the main questions is to what extent can coronavirus have a negative impact on any country's economy? Covid-19, which puts almost 25% of the world society at risk, has caused a rapid decline in production, domestic trade and foreign trade in the global economy, especially tourism, industry and services sectors (Taherinia and Hassanvand, 2020). The prevalence of Covid-19 virus in different sectors of the economy shows different effects. These effects were mentioned in the follow-up of the article.

Agriculture: The global decline in demand for hotels and restaurants has reduced the price of agricultural products by up to 20%. Countries around the world have endured the implementation of health protocols (prohibition of compliance with social distancing, avoidance of unnecessary travel and collective gathering) to control the spread of the disease;. Excessive shopping has increased scarcity beyond supermarket shelves. The American Veterinary Society has raised concerns about small quantities of animal medicines.

Oil and petroleum products: Due to the prevalence of the Covid-19 virus, demand for oil has decreased and it is estimated that there will be a war against oil price (Troter, 2020).

Manufacturing Industry: The impact of the Covid-19 virus on manufacturing jobs in Britain has led to a sharp decline in turnover in more than 80% of respondents within two months of the pandemic virus, according to a survey by the British Palestinian Federation. He examined that 98% of respondents experienced a sharp decline. Some of them expressed concerns about the negative impact of this disease on commercial activities. Import-related problems and shortages of personnel equipment have been recognised as major concerns for some businesses. In fact, "working at home" is considered a good option for many roles in a production company (Chakraborty & maşty, 2020).

Financial crisis: Finance sector: Covid-19 has impacted communities, businesses and organizations globally, as well as financial markets and the global economy. The reactions of various governments to this financial turmoil have led to disruptions in the financial cycle of all countries. In China, restrictions have significantly reduced the production of goods, while quarantine policies have reduced the consumption, demand and use of products and services. As Covid-19 progressed in the rest of the world, the country began to rapidly improve its economy by strengthening the power of trade negotiations with the United States. The stock market sector has also been affected, with the Dow Jones Industrial Average dropping significantly, with around 500 large US capitalized companies in the United States. The decline in global stock exchanges created a volatile liquidity environment and central banks tried to counteract these effects by reducing and maintaining liquidity.

Health and treatment: Covid-19 epidemic is an unprecedented challenge for health and treatment systems. High costs of health services, lack of protective equipment such as

face masks, low number of ICU beds, low number of ventilation devices are weaknesses in the provision of health services.

Tourism: Putting almost 25% of the world's society at risk, Covid-19 has caused a rapid decline in the global economy, especially tourism. The World Tourism Council has warned that 50 million jobs in the global tourism sector are at risk and urgent action is needed. Measures can be taken from national governments to overcome the lack of cash through temporary subsidies for travel and tourism and quick and easy access to short-term loans. Most countries around the world have tried to prevent the spread of coronavirus to their countries by restricting unnecessary travel and suspending visa services.

Airway Industry: Comprehensive travel restrictions caused by the COVID-19 pandemic have created a challenging environment for the airline industry. Globally, the closure of borders and the suspension of flights have caused many financial problems for airlines.

Sports Industry: Covid-19 has a huge impact on sports programs and even the biggest sports events in 2020. The International Olympic Committee has announced that the Tokyo 2020 ceremony will be postponed until 2021. This decision was supported by athletes and different nations. All this has been done to prevent the spread of the disease, although the weight and importance of which have not yet been studied have a significant financial burden.

Medicine Industry: The radical changes in the dynamics of health services have led to investment in disease prevention infrastructure and accelerated the digital transformation of service delivery. In addition, pharmaceutical companies have launched joint programs to develop coronavirus vaccine in collaboration with various universities around the world.

X. Conclusion and Solutions

In December 2019, the Covid-19 outbreak in China began to spread rapidly and managed to influence the whole world in less than a few months (Farnoosh et al., 2020). Due to the rapid spread of Covid-19 and the increase in the number of deaths, the world's leading developed countries have faced a major challenge. How long this crisis will continue has become an unanswered question that requires patience. Therefore, in this very risky period; the mental health of people at various levels of the society is at risk in a different way. Factors such as the risk of contracting the disease, future professional career, closing down various occupational groups in the society and consequently decreasing family income in the society, increasing unemployment and prolongation of the quarantine process are factors affecting the psychology of people. Therefore, the cause of psychological disorders affecting people's mental health should be revealed so that a number of psychotherapy strategies can be invented to protect people's mental health. In addition, governments need to review business strategies in both the manufacturing and service sectors to overcome economic and social problems, especially among low-income groups, such as poverty and unemployment. Like scientific rev-

olutions leading to the Industrial Revolution, industries must now be equipped with knowledge, and especially industries must consider being knowledge-based, otherwise they will face a crisis. For example, in China, in-depth research is being conducted that information science will overcome technology and show its knowledge of income generation up to 2040.

In this period when people's health is in danger due to the Covid-19 outbreak, appropriate therapy methods should be delivered to people through video conferencing, online programs, correct applications and smartphones. According to research, these methods are important factors affecting anxiety (Rees and Maclaine, 2015), depression (García-Lizana and Muñoz-Mayorga, 2010) and post-traumatic stress disorder (Turgoose et al., 2018). In Turkey, where it is easy to access such opportunities, we can determine the psychological disorders in people and reduce the rate of anxiety, depression and traumatic stress disorder and protect the mental health of people. Accordingly, China has identified and screened people who are available for psychological disorders through the internet in its country and has provided films and articles that are useful for children, pregnant women, the elderly, people who have lost relatives to Covid-19 and healthcare professionals. Approximately 29 guidelines were made available to people from 26 January to 20 February. Most of these guidelines are designed in accordance with the current conditions. For example, one of these guidelines was to reduce employees' anxiety about returning to work after the outbreak (Li et al., 2020). China has also designed several artificial intelligence programs to respond to the psychological crises caused by the Covid-19 pandemic. For example, he identified and monitored people at risk of suicide through artificial intelligence programs (Liu et al., 2020). 72 online mental health surveys were conducted on different groups of society from 8 to 18 February. Research on healthcare professionals in this direction has helped politicians take the necessary measures and anticipate interventions for problems. This intervention system in the Chinese mental health crisis consisted of three basic principles: 1. Identifying the mental health status of people affected by Covid-19 2. Identifying those who are at risk of suicide and attempted violence 3. Providing appropriate treatment interventions (Li et al., 2020). Therefore, the mental health of people at various levels of society can be preserved by identifying the part of the society at risk and providing the necessary psychotherapy protocols during this period when people's mental health is at risk due to the epidemic.

BIBLIOGRAPHY

- Bai, YaMei, Chao-Cheng Lin, Chih-Yuan Lin, Jen-Yeu Chen, Ching-Mo Chue, and Pesus Chou. "Survey of stress reactions among health care workers involved with the SARS outbreak." Psychiatric Services 55, no. 9 (2004): 1055-1057.
- Bo, Hai-Xin, Wen Li, Yuan Yang, Yu Wang, Qinge Zhang, Teris Cheung, Xinjuan Wu, and Yu-Tao Xiang. "Post-traumatic stress symptoms and attitude toward crisis mental health services among clinically stable patients with COVID-19 in China." Psychological medicine (2020): 1-2.
- Bao, Yanping, Yankun Sun, Shiqiu Meng, Jie Shi, and Lin Lu. "2019-nCoV epidemic: address mental health care to empower society." The Lancet 395, no. 10224 (2020): e37-e38.

- Brooks, Samantha K., Rebecca K. Webster, Louise E. Smith, Lisa Woodland, Simon Wessely, Neil Greenberg, and Gideon James Rubin. "The psychological impact of quarantine and how to reduce it: rapid review of the evidence." The Lancet (2020).
- BUDAK, Fatih, and Şerif KORKMAZ. "COVID-19 pandemi sürecine yönelik genel bir değerlendirme: Türkiye örneği." Sosyal Araştırmalar ve Yönetim Dergisi 1 (2020): 62-79.
- Cao, Wenjun, Ziwei Fang, Guoqiang Hou, Mei Han, Xinrong Xu, Jiaxin Dong, and Jianzhong Zheng. "The psychological impact of the COVID-19 epidemic on college students in China." Psychiatry research (2020): 112934.
- Chakraborty, I. & Maity, P. (2020). COVID-19 outbreak: Migration, effects on society, global environment and prevention. Science of the Total Environment 728, 138882.
- Chen, Qiongni, Mining Liang, Yamin Li, Jincai Guo, Dongxue Fei, Ling Wang, Li He et al. "Mental health care for medical staff in China during the COVID-19 outbreak." The Lancet Psychiatry 7, no. 4 (2020): e15-e16
- Fakari, Farzaneh Rashidi, and Masoumeh Simbar. "Coronavirus Pandemic and Worries during Pregnancy; a Letter to Editor." Archives of Academic Emergency Medicine 8, no. 1 (2020).
- Farnoosh, Gholamreza, Gholamhossein Alishiri, Seyed Reza Hosseini Zijoud, Ruhollah Dorostkar, and Alireza Jalali Farahani. "Understanding the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and Coronavirus Disease (COVID-19) Based on Available Evidence-A Narrative Review." J Mil Med 22. no. 1 (2020): 1-11.
- García-Lizana, Francisca, and Ingrid Muñoz-Mayorga. "Telemedicine for depression: a systematic review." Perspectives in psychiatric care 46, no. 2 (2010): 119-126.
- Guo, Jianming, Lianming Liao, Baoguo Wang, Xiaoqiang Li, Lianrui Guo, Zhu Tong, Qinghua Guan et al. "Psychological Effects of COVID-19 on Hospital Staff: A National Cross-Sectional Survey of China Mainland." Available at SSRN 3550050 (2020).
- Hale, T., Angrist, N., Kira, B., Petherick, A., Phillips, T., and S. Webster (2020) "Variation in government responses to COVID-19," Blavatnik School of Government, BSG Working Paper, BSG-WP-2020/032
- Kessler, Ronald C. "Posttraumatic stress disorder: the burden to the individual and to society." The Journal of clinical psychiatry (2000).
- Lai, Jianbo, Simeng Ma, Ying Wang, Zhongxiang Cai, Jianbo Hu, Ning Wei, Jiang Wu et al. "Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019." JAMA network open 3, no. 3 (2020): e203976-e203976.
- Lai, Chih-Cheng, Tzu-Ping Shih, Wen-Chien Ko, Hung-Jen Tang, and Po-Ren Hsueh. "Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and corona virus disease-2019 (COVID-19): the epidemic and the challenges." International journal of antimicrobial agents (2020): 105924.
- Li, Li, Changli Wan, Ru Ding, Yi Liu, Jue Chen, Zonggui Wu, Chun Liang, Zhiqing He, and Chengzhong Li. "Mental distress among Liberian medical staff working at the China Ebola Treatment Unit: a cross sectional study." Health and quality of life outcomes 13, no. 1 (2015): 1-6.
- Li, Sijia, Yilin Wang, Jia Xue, Nan Zhao, and Tingshao Zhu. "The impact of COVID-19 epidemic declaration on psychological consequences: a study on active Weibo users." International journal of environmental research and public health 17, no. 6 (2020): 2032.
- Li, Wen, Yuan Yang, Zi-Han Liu, Yan-Jie Zhao, Qinge Zhang, Ling Zhang, Teris Cheung, and Yu-Tao Xiang. "Progression of mental health services during the COVID-19 outbreak in China." International journal of biological sciences 16, no. 10 (2020): 1732.
- Liu, Chen-Yun, Yun-zhi Yang, Xiao-Ming Zhang, Xinying Xu, Qing-Li Dou, Wen-Wu Zhang, and Andy SK Cheng. "The prevalence and influencing factors in anxiety in medical workers fighting COVID-19 in China: a cross-sectional survey." Epidemiology & Infection (2020): 1-17.
- Liu, X., R. S. Na, and Z. Q. Bi. "Challenges to prevent and control the outbreak of Novel Coronavirus Pneumonia (COVID-19)." Zhonghua liu xing bing xue za zhi= Zhonghua liuxingbingxue zazhi 41 (2020): E029-E029.
- Liu, Xinhua, Meghana Kakade, Cordelia J. Fuller, Bin Fan, Yunyun Fang, Junhui Kong, Zhiqiang Guan, and Ping Wu. "Depression after exposure to stressful events: lessons learned from the severe acute respiratory syndrome epidemic." Comprehensive psychiatry 53, no. 1 (2012): 15-23.
- Liu, Shuai, Lulu Yang, Chenxi Zhang, Yu-Tao Xiang, Zhongchun Liu, Shaohua Hu, and Bin Zhang. "Online mental health services in China during the COVID-19 outbreak." The Lancet Psychiatry 7, no. 4 (2020): e17-e18
- Mason, Frances, Amanda Farley, Miranda Pallan, Alice Sitch, Christina Easter, and Amanda J. Daley. "Effectiveness of a brief behavioural intervention to prevent weight gain over the Christmas holiday period: randomised controlled trial." bmj 363 (2018).
- Masoud Taherinia, M., Hassanvand., A. (2020) Economic Consequences of Covid-19 Disease on the Iranian Economy; With an Emphasis on Employment. Quarterly Journal of Nursing Management (IJNV), 9(3), 42-58.

- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, Ch., Agha, M. and Agha, R. (2020), «The socio-economic implications of the coronavirus pandemic (COVID-19: A review». International Journal of Surgery 78, 185–193.
- Pappa, Sofia, Vasiliki Ntella, Timoleon Giannakas, Vassilis G. Giannakoulis, Eleni Papoutsi, and Paraskevi Katsaounou. "Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis." Brain, behavior, and immunity (2020).
- Remuzzi, Andrea, and Giuseppe Remuzzi. "COVID-19 and Italy: what next?." The Lancet (2020).
- Rees, Clare S., and Ellen Maclaine. "A systematic review of videoconference-delivered psychological treatment for anxiety disorders." Australian Psychologist 50, no. 4 (2015): 259-264.
- Rubin, G. James, and Simon Wessely. "The psychological effects of quarantining a city." Bmj 368 (2020).
- Robertson, Emma, Karen Hershenfield, Sherry Lynn Grace, and Donna Eileen Stewart. "The psychosocial effects of being quarantined following exposure to SARS: a qualitative study of Toronto health care workers." The Canadian Journal of Psychiatry 49, no. 6 (2004): 403-407.
- Sun, Luna, Zhuoer Sun, Lili Wu, Zhenwen Zhu, Fan Zhang, Zhilei Shang, Yanpu Jia et al. "Prevalence and risk factors of acute posttraumatic stress symptoms during the COVID-19 outbreak in Wuhan, China." MedRxiv (2020).
- Sprang, Ginny, and Miriam Silman. "Posttraumatic stress disorder in parents and youth after health-related disasters." Disaster medicine and public health preparedness 7, no. 1 (2013): 105-110.
- Turgoose, David, Rachel Ashwick, and Dominic Murphy. "Systematic review of lessons learned from delivering tele-therapy to veterans with post-traumatic stress disorder." Journal of telemedicine and telecare 24, no. 9 (2018): 575-585.
- Wang, Yongguang, Baihua Xu, Guoqiu Zhao, Rifang Cao, Xiaoyan He, and Sufen Fu. "Is quarantine related to immediate negative psychological consequences during the 2009 H1N1 epidemic?." General hospital psychiatry 33, no. 1 (2011): 75-77.
- Wang, Guanghai, Yunting Zhang, Jin Zhao, Jun Zhang, and Fan Jiang. "Mitigate the effects of home confinement on children during the COVID-19 outbreak." The Lancet 395, no. 10228 (2020): 945-947.
- Wu, Yan-Ting, Chen Zhang, Han Liu, Chen-Chi Duan, Cheng Li, Jian-Xia Fan, Hong Li et al. "Perinatal Depression of Women Along with 2019 Novel Coronavirus Breakout in China." (2020).
- Wu, Zunyou, and Jennifer M. McGoogan. "Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) outbreak in China: summary of a report of 72 314 cases from the Chinese Center for Disease Control and Prevention." Jama 323, no. 13 (2020): 1239-1242.
- Wu, Ping, Yunyun Fang, Zhiqiang Guan, Bin Fan, Junhui Kong, Zhongling Yao, Xinhua Liu et al. "The psychological impact of the SARS epidemic on hospital employees in China: exposure, risk perception, and altruistic acceptance of risk." The Canadian Journal of Psychiatry 54, no. 5 (2009): 302-311.
- Xiang, Yu-Tao, Yuan Yang, Wen Li, Ling Zhang, Qinge Zhang, Teris Cheung, and Chee H. Ng. "Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed." The Lancet Psychiatry 7, no. 3 (2020): 228-229.
- Xu, Jiahong, Yayuan Zheng, Mingmin Wang, Jiangmin Zhao, Qing Zhan, Mingxu Fu, Qianyi Wang, Junjie Xiao, and Yan Cheng. "Predictors of symptoms of posttraumatic stress in Chinese university students during the 2009 H1N1 influenza pandemic." Medical science monitor: international medical journal of experimental and clinical research 17, no. 7 (2011): PH60.
- Zangrillo, Alberto, Luigi Beretta, Paolo Silvani, Sergio Colombo, Anna Mara Scandroglio, Antonio Dell'Acqua, Evgeny Fominskiy et al. "Fast reshaping of intensive care unit facilities in a large metropolitan hospital in Milan, Italy: facing the COVID-19 pandemic emergency." Critical Care and Resuscitation 22, no. 2 (2020): 91.
- Zhu, Hengbo, Li Wei, and Ping Niu. "The novel coronavirus outbreak in Wuhan, China." Global health research and policy 5, no. 1 (2020): 1-3.
- Zhang, Fan, Zhilei Shang, Haiying Ma, Yanpu Jia, Luna Sun, Xin Guo, Lili Wu et al. "High risk of infection caused posttraumatic stress symptoms in individuals with poor sleep quality: A study on influence of coronavirus disease (COVID-19) in China." medRxiv (2020).
- Zhao, Shilei, and Hua Chen. "Modeling the epidemic dynamics and control of COVID-19 outbreak in China." Quantitative Biology (2020): 1-9.
- Yang, Lu, Danjuan Wu, Yanbin Hou, Xunqiang Wang, Ni Dai, Guanjun Wang, Qing Yang et al. "Analysis of psychological state and clinical psychological intervention model of patients with COVID-19." medRxiv (2020).
- Ying, Yuchen, Liemin Ruan, Fanqian Kong, Binbin Zhu, Yunxin Ji, and Zhongze Lou. "Mental health status among family members of health care workers in Ningbo, China, during the coronavirus disease 2019 (COVID-19) outbreak: a cross-sectional study." BMC psychiatry 20, no. 1 (2020): 1-10.

Social Distancing as a Response to Control COVID-19 and Its Practical Scenario

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Abstract

The main objective of this research is to analyze social distancing as a strategy in fighting COVID-19 in line with current practical scenario as well as sharing the exemplary activities that have been undertaking in Turkey as a response to prevent the pandemic. Content analysis, which is part of qualitative research method, has been used. As social distancing is a social response to the novel COVID-19, scholars recommend that qualitative method is crucial in order to capture involvements of society in fighting the pandemic. The researcher has used secondary data such as published articles, reports and online sources. Additionally, primary sources were gathered using semi-structured interview and researcher's observation. In this case, fifteen informants were inter-

Özet

Bu araştırmanın temel amacı, COVID-19 ile mücadelede mevcut pratik senaryo doğrultusunda bir strateji olarak sosyal mesafevi analiz etmek ve aynı zamanda pandemiyi önlemek için Türkiye'de yapılan örnek faaliyetleri paylaşmaktır. Çalısmamızda, nitel araştırma yönteminin bir parçası olan içerik analizi kullanılmıştır. Sosyal mesafe, COVID-19'a karşı sosval bir tepki olduğu icin bilim adamları, toplumun pandemiyle mücadeleye aktif katılımları için nitel yöntemin çok önemli olduğunu vurgulamaktadır. Çalışmamızda yayınlanmış makaleler, raporlar ve çevrimiçi kaynaklar gibi ikincil veriler kullanılmıştır. Ek olarak, birincil kaynaklar olan yarı yapılandırılmış görüşmeler ve araştırmacının kendi gözlemleri kullanılmıştır. Buna göre, çalışmanın temel bulguları şöyle sıralabilir: sosyal

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viewed on various occasions and their responses were saturated which quides the researcher to analyze the data based on the relevant data. Accordingly, key findings of the study are: expanding the best examples in practicing social distancing, relevance of frequent awareness creations, and the power of symbols in shaping social life and facilitating social distancing, repeated advertisement about social distancing using various media outlets and influential community members as well as following reliable sources. Finally, the researcher has forwarded the practical implications of social distancing as strategy in fighting COVID-19 and shaping social interaction in a new form.

Keywords: Social Distancing, Scenario, Symbol, COVID-19, Content Analysis

mesafeyi uygulamada en iyi örnekleri genişletme ihtiyacı, farkındalık yaratımlarının önemi, sosyal yaşamı şekillendirme ve sosyal mesafeyi kolaylaştırmada sembollerin gücü, güvenilir kaynakların yanında, çeşitli medya organlarını ve etkileyici kitle üyelerini kullanarak tekrar eden sosyal mesafe reklamları yapmak. Son olarak araştırmamızda, COVID-19 ile mücadelede ve sosyal etkileşimi yeni bir biçimde şekillendirmede bir strateji olarak ortaya çıkan sosyal mesafenin pratik sonuçlarını aktarmaya çalıştık.

Anahtar Kelimeler: Sosyal Mesafe, Senaryo, Sembol, COVID-19, İçerik Analizi

*

I. Introduction

The novel coronavirus COVID-19 has been classified by the World Health Organization as a pandemic due to its worldwide spread. Due to the absence of vaccine, the ability of countries to prevent and control the transmission of the pandemic is so crucial. The term 'social distancing' refers to efforts that aim, through a variety of means, to decrease or interrupt transmission of COVID-19 by minimizing physical contact and various means. Here the point is to maintain social contact from a distant place with friends, family and colleagues through online communications and other alternatives². In line with this situation, amid coronavirus pandemic the trending pieces of advice for 'social distancing' and 'stay-at-home' have become two of the most pushed recommendations from the WHO and governments across countries³. People's restricted mobility to workplaces and other commonly travelled places flatten out the coronavirus rise. Furthermore, social distancing, also called "physical distancing," means keeping space between oneself and other people at least 6 feet which means about 2 meters length.

However, scholars forward that spatial distancing should be the term used when distance between individuals or objects addressed⁴. Grounded in biological and epidemiological data, spatial distance means physical extent of 2 meter but shared responsi-

¹ Xie, George J Milne and Simon. 2020. "The Effectiveness of Social Distancing in Mitigating COVID-19 Spread: a modelling analysis." (University of Western Australia).

² Considerations relating to social distancing measures in response to COVID-19 second update. Stockholm: European Centre for Disease Prevention and Control, 2020.

³ Hussain, Belayeth. "Do governments' decisions on social distancing flatten out people's mobility during covid-19 pandemic?" 2020.

⁴ McQueen, T. A. 2020. "The COVID-19 pandemic calls for spatial distancing and social closeness: not for social distancing!" International Journal of Public Health.

bilities existing in people's social and cultural contexts afford social closeness. Public health should approach the threat of COVID-19 by promoting spatial distance together with social closeness. Regardless of whether to use physical distancing or social distancing, the researcher approaches social distancing measures as public and individual distancing⁵. Following this, the government of Turkey has taken promising public and individual measurements in order to prevent and control the pandemic. Some examples of public measurements include, closing education institutions, canceling mass gatherings, travel restrictions, and border control⁶. Furthermore, a recent study conducted in USA also shows that opening schools depends on effective prevention measures such as the use of masks, social distancing and other actions that could be taken by schools and concerned bodies⁷. Individual measures consist of isolation, non-contact greetings, and encouragement to keep physical distances between people⁸. However, the practice of social distancing is influenced by levels of awareness in the society. The practical application of social distancing is also subjective to the culture, traditions and social life of a given society. In societies of less individualized the term "social distancing" may be perceived as problematic and disturbing in social and cultural contexts in which people are used to turn to each other when times get rough.

In Turkey, in addition to social distancing, a wide range of medical and non-medical measurements have been undertaking that lead the country to successfully control the transmission of COVID-19 pandemic. Sources implied that training about the COVID-19 was provided both to healthcare personnel and to the public. These were undertaken to disseminate information through different communication channels such as radio, television and social media in order to reach the whole public. As it is difficult to assess and analyze all the measurements taken in Turkey to control COVID-19, the researcher only attempted to describe the best examples of practicing of social distancing in Turkey as well as the overall scenario.

II. Social Distance and Its Multi-disciplinary Perspective

In the context of current pandemic COVID-19, social distancing is classified as non-pharmaceutical countermeasures (NPCs) with the objective to minimize and manage physical contacts between individuals and thereby to control the expansions of the disease (European Centre for Disease Prevention and Control, 2020). The meaning

^{5 2020.} Guidance on Community Social Distancing During COVID-19 Outbreak. Addis Ababa, Ethiopia. Africa Center for Disease Control. Accessed June 14, 2020. https://africacdc.org/download/africa-cd-cpolicy-recommendation-for-african-union-meetings-and-travel-during-covid-19-outbreak/.

⁶ Rahmet GÜNER, İ. H. 2020. «COVID-19: Prevention and control measures in community.» Turkish Journal of Medical Sciences, pp. 571-57.

⁷ Thomas M. Selden, Terceira A. Berdahl, and Zhengyi Fang. "The Risk Of Severe COVID-19 Within Households Of School Employees And School-Age Children." Health Affairs (The People-to-People Health Foundation, Inc.) 39, no. 11 (2020): 2002-2009.

^{8 2020. &}quot;Centers for Disease Control and Prevention (CDC)." Accessed August 17, 2020. https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html.

⁹ Yasemin Demirbilek, G. P. 2020. "COVID-19 outbreak control, example of ministry of health of Turkey." Turkish Journal of Medical Sciences, pp. 489-494.

and interpretations of social distancing is in accordance with the aim of evaluating closeness and farness of social categories and its implications to analyze wide ranges of sociological, behavioral, political, and economic sort of knowledge across disciplines. Researchers claim that social distance is a vital tool for assessing the degree of intimacy between individuals that has been applied in various disciplines¹⁰.

From sociological points of view, scholar highlighted social distance as a uniquely sociological concept, which can irreducible to spatial or biologic (genetic) distance and categorized into four distinct ways¹¹. 1). Social distance as affective distance which is based on the idea that those who are socially close to us are those we feel close to and vice versa; 2). Social distance as normative distance seen as a set of collectively recognized norms about membership status in a group; 3). Social distance as interactive distance as concerns of how frequently two groups interact with each other which determines the weakness or strength of a social tie, and 4). Social distance as cultural and habitual distance based on cultural similarities between groups that determine the space of social distancing in a given society.

Social distance is a subjective perception or experience of distance from another person or other persons¹². Furthermore, the concept of social distance has been used extensively over the years to study racial, religious, and ethnic groups. Research showed that social distance between younger and older people in Russia is increasing, and will create more problems as the proportion of older Russians in the population increases¹³. Social distance has its roots in the norms of interaction between people in different age categories. In the fields of politeness, when there is a high degree of social distance, the speaker tends to use a more polite and off-record strategy. In contrast, a speaker will tend to use the bald and on-record strategy while there is low social distance between the speaker and hearer¹⁴.

Another aspect of analyzing social distance is in relation with power. Social distance theory of power is that asymmetric dependence between two individuals gives rise to asymmetric experiences of social distance, where high-power individuals' greater sense of social distance leads them to engage in a more abstract mental representation¹⁵. Studies indicate that social distance is greatly influenced by differences in social status, cultural differences, spatial segregation, and informal institutions¹⁶. In line with

Min Chen, Jinhe Zhang, Jinkun Sun, Chang Wang & Jinhua Yang. 2020. "Developing a scale to measure the social distance between tourism community residents, Tourism Geographies." doi:10.1080/14616688. 2020.1765012.

¹¹ Karakayali. N. 2009. "Social Distance and Affective Orientations." Sociological Forum, 24. doi:10.1111/j.1573-7861.2009.01119.x.

¹² Smith, Joe. 2013. "The Social Distance Theory of Power." Personality and Social Psychology Review pp. 158–186.

¹³ Smirnova. V. 2010. "Older People." Sociological Research pp. 64-74.

¹⁴ Alsulami. S. 2015. "The Effectiveness of Social Distance on Requests." Arab World English Journal pp. 382-395.

¹⁵ Smith Joe, "The Social Distance Theory of Power.", pp. 12.

¹⁶ Lu, Guoxian. 2008. "The social distance between urban residents and migrant workers: an institutional analysis, Social Sciences in China." 172-186. doi: 10.1080/02529200802288575.

this fact, the emergence of pandemic like novel coronavirus has altered the way we live, interact and socialized¹⁷. Considering this source, extraordinary measures of social distancing, mobility control and resource mobilization have been introduced in many parts of the world to short-circuit the chain of transmission of a disease. At the same time, evidence from China implied that social networking and organizing together around hometown association and chambers of commerce in the city as well as groups on applications provides mutual supports from group buying of masks to sharing appropriate news about the pandemic. However, social distancing practices need to be path-dependent and context-specific¹⁸. For instance, there were also negative side effects evidenced in Algeria where the daily domestic-violence of individuals who practice social distancing is three times more than those who do not practice it¹⁹

Finally, research on social distance needs to focus on better evaluation of interventions supportive behaviors' in real life rather than in hypothetical situations²⁰. Furthermore, social distancing and community consciousness have a close relationships that can significantly influence on personal hygiene practices too²¹. Therefore, in this study the researcher focuses on the positive sides of social distancing in fighting and preventing the current COVID-19 outbreak.

III. Methods

The researcher followed content analysis method. The aim of using content analysis is to organize and elicit meaning from data and to draw realistic conclusions from it²². In order to get multiple views about the current pandemic, practices of social distancing and get lessons for future epidemics or other social problems, it is necessary to apply qualitative method of data collection and analysis²³. With the intention to achieve objectives of the research, secondary sources such as published articles, news, reports and online materials were utilized. Additionally, primary data were collected using semi-structured interview.

Sampling and Data Collection Procedures: The researcher used non-probability sampling method. Following this, the sample size for this study was selected based on the judgment of the researcher and willingness of the informants. Accordingly, fifteen

¹⁷ Ishmael Festus, Jaja M. 2020. "Social distancing: how religion, culture and burial ceremony undermine the effort to curb COVID-19 in South Africa." *Emerging Microbes & Infections*.

¹⁸ Calvin King Lam Chung, Jiang Xu & Mengmeng Zhang. 2020. "Geographies of Covid-19: how space and virus shape each other." *Asian Geographer*. doi:10.1080/10225706.2020.1767423.

¹⁹ Messaoudene, A. 2020. "Social Distancing and Its Effect on Social Connectedness in the Algerian Society." The International Journal of Social Sciences and Humanities Invention.

²⁰ Oh, Anthony Jorm & Elizabeth. 2009. "Desire for social distance from people with mental disorders." Australian and New Zealand Journal of Psychiatry, pp. 183-200. doi:10.1080/00048670802653349.

²¹ Suresh, Lakshmi Priyadarsini &. 2020. "Factors influencing the epidemiological characteristics of pandemic COVID 19: A TISM approach." *International Journal of Healthcare Management*, pp. 89-98. doi: 10.1080/20479700.2020.1755804.

²² Bengtsson, M. 2016. "How to plan and perform a qualitative study using content analysis." Nursing Plus Open (Elsevier)

²³ Leach Parker, MacGregor & Wilkinson. 2020. "COVID-19—A social phenomenon requiring diverse expertise." https://www.ids.ac.uk/opinions/covid-19-a-socialphenomenonrequiring- diverse-expertise/.

informants as a sample were interviewed on various occasions. Based on their willingness, some participants gave their sound recording but for the remaining participants the researcher manually collected the data. Participants were asked to share their opinion regarding practices of social distancing and the way forward. Furthermore, informants were selected based on convenience sampling and considering time limitations. The researcher did not mention name of the participants because of ethical considerations and non-willingness of the participants.

IV. Results and Discussions Practicing Social Distancing in Fighting COVID-19: The Best Examples from Turkey

In this section, the researcher attempted to highlight the best examples and lessons of implementing social distancing in Turkey. While analyzing this section, it should be considered that access to hard copies of secondary materials were difficult and for this reason the researcher highly collected data from online sources, reports and news. Evidence from TRT News²⁴ confirmed that Turkey has managed to flatten the curve from an average of 4,000 to 900 cases per day in the past few weeks. The death toll has come down significantly, while the numbers of those who have recovered have risen. These achievements could be attributed to the high commitments of government bodies and cooperation of the public in using various precautions and strategies in fighting the pandemic disease. Recent study also confirmed that social distancing could flatten the distributions of corona virus²⁵. Report from Anadolu Agency²⁶ demonstrated that Turkey has taken strong measures to prevent the spread of the novel coronavirus outbreak as well as its solid public health system and generous social assistance schemes have made the country a model for many others. The practices of social distancing need to be supported by other protections like using masks in environments such as marketplaces and transportations²⁷.

According to Al-Monitor New²⁸, Turkey has been implementing the practices of social distancing by canceling large gatherings and sports competitions, and closing cafes and pubs. The goal is to prevent the spread of the virus.

Social distancing in business areas like cafeteria - The major question of researchers and the public during the corona virus is about the effectiveness of social distancing in bending the curve. Accordingly, evidence from USA indicated that cafeterias, bars, entertainment places and associated businesses considerably reduced the spread of COVID-19 by applying social distancing²⁹. Following the declining of COVID-19, social

²⁴ TRT News. Accessed May 29, 2020. https://www.trtworld.com/magazine/explained-key-highlights-ofturkey-s-1st-june-reopening-plan-36751.

²⁵ Jiang, Meirui Qian & Jianli. "COVID-19 and social distancing." *Journal of Public Health: From Theory to Practice* (Springer), 2020.

²⁶ Anadolu Agency. Accessed April 11, 2020. https://www.aa.com.tr/en/health/covid-19-turkey-modelcountry-with-strong health-system-social-assistance/1801007

²⁷ Demirbilek, "COVID-19 outbreak..." pp. 9.

²⁸ Al-Monitor News. Accessed March 20, 2020. https://www.al monitor.com/pulse/originals/2020/03/tur-key-coronavirus-socialdistancing infrastructure.html

²⁹ Charles Courtemanche, Joseph Garuccio, Anh Le, Joshua Pinkston, and Aaron Yelowitz. "Strong Social

distancing is also given attention in business areas as a way to prevent the pandemic. According to TRT News (March 12, 2020), in order to flatten the curve, people regardless of whether they show symptoms or not were asked to minimize contact with others when shopping for food and supplies. The goal is to lower the rate of the virus's spread. This is called "social distancing". Recently, there are also business units that are demonstrating symbols to apply social distancing. For Example, a cafe in the province of Artvin is put into effect social distancing guidelines with mannequins, placing a couple at every other table. As the mannequins occupy half the tables, customers are advised to stay at a safe distance from others³⁰. The following picture shows mannequins as placing a couple at every other table to indicate social distancing in café.



A cafe uses mannequins to enforce social distancing in province of Artvin, Turkey (Source: Duvar English News, 05 June 2020)

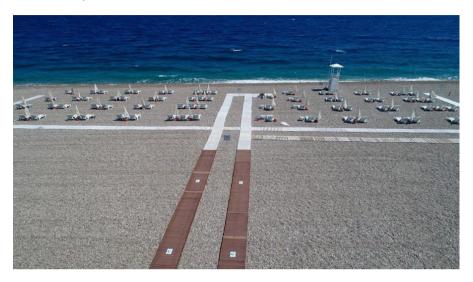
Social distancing applying at the beach places - another source from Hürriyet Daily News³¹, social distancing areas set up in Antalya beach against the pandemic. A beach on the Turkish Mediterranean has set up social distancing areas and rules to guard against any new coronavirus outbreak. Under a pilot program on Konyaaltı Beach in the resort city of Antalya, 9 square meter private areas have been set up with a distance of 1.5-2 meter between them. Sunbeds and umbrellas were also placed according to the social distancing rules, and special areas were prepared for people with disabilities. On the beach, which features separate entry and exit points are prepared. Smoking is also restricted to prevent the spread of the virus. Additionally, recent evidence in the

Distancing Measures In The United States Reduced The COVID-19 Growth Rate." *Health Affairs* (The People-to-People Health Foundation, Inc.) 39, no. 7 (2020): 1237–1246.

³⁰ Duvar English. Accessed June 5, 2020. https://www.duvarenglish.com/health2/coronavirus/2020/06/05/cafe-uses-mannequins-to-enforce-social-distancing-measures-inturkeys-northeast/

³¹ Hürriyet Daily News. Accessed May 30, 2020. https://www.hurriyetdailynews.com/antalya-each-set-sup-social-distancing-areas-against-virus-155184

USA showed that keeping social distancing and proper use of face masks can reduce the spread of corona virus³². The following picture shows social distancing areas and rules in Antalya:



A beach on the Turkey's Mediterranean has set up social distancing areas and rules to guard against any new coronavirus outbreak (Source: Hürriyet Daily News, 30 May 2020)

Furthermore, Bianet English Report³³ underlined the indispensable of social distancing because keeping one's own distance in all situations and everywhere by maintaining 1-2 meters distance with other people. In line with this source, practicing social distancing is an important measure to protect the possibility of second wave of the pandemic. Report from Anadolu Agency³⁴ indicated that Turkish Airlines restarted its flight to the selected countries and follows social distance rules for both of the passengers and airport personnel.

Similarly, Health Minister emphasized that by applying social distancing and all the necessary prevention methods, there is no expectations for second wave of coronavirus outbreak in Turkey and the normalization process should not be viewed as an end to the pandemic³⁵. Additionally, a direction has been forwarded in that all people should not forget how serious the disease is and should not relax measures for people in high-risk

³² Wehby, Wei Lyu and George L. "Community Use Of Face Masks And COVID-19: Evidence From A Natural Experiment Of State Mandates In The US." *Health Affairs* (The People-to-People Health Foundation, Inc.) 39, no. 8 (2020): 1419-1425.

³³ Bianet English. Accessed June 12, 2020. https://bianet.org/english/health/224469-first-wave-ofcovid-19-not-yet-over-in-turkey-social-distance-is-indispensable

³⁴ Anadolu Agency. Accessed June 11, 2020. https://www.aa.com.tr/en/turkey/turkey-intl-flights-restartin-istanbul-airport/1873349

³⁵ Daily Sabah News. Accessed June 03, 2020. https://www.dailysabah.com/turkey/we-dont-expect-a-secondwave-of-coronavirus-outbreak-in-turkey-health-minister-says/news

groups. Wearing masks should be continuous and no one should violate social distancing rules just because of wearing masks. This is not a time to return to old habits of daily life. Moreover, Duvar English Report³⁶ posted an official statement from Turkey's Interior Ministry that the relaxing of certain COVID-19 prevention measures should not lead to laxness in taking necessary precautions. It is essential that business owners, staff and customers adhere to social distancing, wear masks and closely follow hygiene measures in these businesses.

Social distancing in the public spaces - In the light of social distancing orders, the Istanbul Metropolitan Municipality also placed "social distancing circles," measuring roughly 240 cm in diameter and spaced 180 cm apart, throughout Caddebostan Park. The municipality will extend the implementation to other parks in the city in the following days³⁷. Moreover, research reveals that the US COVID-19 epidemic growth rate began to decline within approximately 1 incubation period following the initiation of statewide social distancing measures³⁸. The following picture shows the experience in Istanbul public space:



The Istanbul Metropolitan Municipality on May 26, 2020 shared photos showing its staff drawing 'social distancing circles' on the grass on the Caddebostan coastline.

In the same ways, Biannet English News³⁹ reported that the municipality of İzmir has introduced "social distance circles" in Kordon, a popular recreation area on the city's coast. The circles on the grass have a radius of four meters and are two-and-a-half

³⁶ Duvar English. Accessed May 11, 2020. https://www.duvarenglish.com/health2/coronavirus/2020/05/11/turkish-govt-agencies-warn-against-laxness-toward-covid-19measures-as-businesses-malls-reopen/

³⁷ Duvar English. Accessed May 26, 2020. https://www.duvarenglish.com/health2/coronavirus/2020/05/26/istanbul-municipality-paints-social-distancing-circles-in-parks/

³⁸ Mark J. Siedner, Guy Harling, Zahra Reynolds, Rebecca F. Gilbert, Sebastien Haneuse, Atheendar S. Venkataramani, Alexander C. Tsai. "Social distancing to slow the US COVID-19 epidemic: Longitudinal pretest-posttest comparison group study." *PLOS MEDICINE* 17, no. 8 (2020).

³⁹ Biannet English. Accessed May 22, 2020. https://bianet.org/english/health/224658-social-distancecircles-in-izmir-s-recreation-areas

meters apart from one another to make people maintain social distance. The municipality is apparently planning to apply social distance circles in other recreation areas in the city as well, including Karşıyaka, Bayraklı Coastline, Buca Hasanağa Garden and Bornova Aşık Veysel Recreation Area.



Photos show that people who came to Kordon adopted the idea and sat in the circles: (Source: Biannet English News, 22 May 2020)

Social distance measure in metro and trams - information stickers are applied in metro and trams to maintain the social distance within the scope of the measures taken due to the coronavirus outbreak. The symbols and signs available at metro stations are helpful for notifying passengers to keep their social distancing. Instructing to sit by leaving one seat unoccupied and related symbols are helping to make distances among passengers. There are warnings on the labels where the passengers are directed to sit by leaving one seat unoccupied such as "Maintain your social distance! Leave this seat unoccupied! ". The number of passengers decreased by 90 percent in the metro and trams that are carrying more than 2 million passengers a day due to the fact that residents of Istanbul do not go out on the streets unless they have to. The decrease in the number of passengers allows maintaining social distance within the vehicles⁴⁰. According to this source, the application of social distancing in the metro areas is encouraging and can support the efforts of controlling the expansions of corona virus. In addition, study conducted regarding the cost-benefit analysis of social distancing showed that social distancing measure has net social benefit in saving lives and managing the expansions of corona virus⁴¹. The following picture shows the warning for keeping social distancing in Istanbul metro.

⁴⁰ Istanbul Metropolitan Municipality. Accessed March 27, 2020. https://www.metro.istanbul/en/news/detail/social-distance-measure-in-metro

⁴¹ Linda Thunström, Stephen C. Newbold, David Finnoff, Madison Ashworth and Jason F. Shogren. "The Benefits and Costs of Using Social Distancing to Flatten the Curve for COVID-19." *Journal of Benefit-Cost Analysis* (Cambridge University Press) 11, no. 2 (2020): 179-195.



Koltuğu boş bırak, sosyal mesafeni koru (Maintain your social distance! Leave this seat unoccupied!) (Source: İstanbul Büyük Şehir Belediyesi)

Interviewees Insights and Suggestions

Based on the data collected from participants, important points about social distancing are forwarded as below:

Familiarity to social distancing takes time but frequency of advertisement matters

Participants highlighted that social media and government bodies are delivering a wide ranges of information about social distancing on social media, television and other means, but the level of awareness from people's side is not enough and this is may be due to not understanding about the consequences of not keeping social distancing. Additionally, participants indicated that symbols are crucial in working as alarms, which facilitates social interactions and adapting actions towards practicing social distancing. For example, signs and notice boards that show social distancing in banks, market places, transportations and other social gatherings need to be followed properly. According to participants, sometimes it has been observed that there are symbols but peoples did not get familiarity with the existing symbols because social distancing by itself is a new phenomenon. Following this fact, practicing and socializing to social distancing takes time. Moreover, participants emphasized that awareness creations should be advertised by famous peoples, leaders, community leaders, religious fathers, and even parents because practicing social distancing should start from home. There should not be forgetting while getting tired or in the conditions of deep thinking about practicing social distancing. Furthermore, frequency of awareness is quite important. It should be internalized to the people's daily life as we are always washing our hands and faces every morning, added by participants.

Culture and traditions

According to participants, culture of the society influences the practices of social distancing; for example it is easy to practice social distancing in the society where individualism life exist and challenging where communal social life is apparent (in such society if a person do not shake hand he/she can be labelled negatively). Observers also underlined that there are two type of people: those who follow all the precautions

including using masks. On the other hand, those who did not give attentions in fighting the pandemic even it seems that they may forgot about existence of coronavirus and such peoples drink tea together without keeping their social distancing that shows giving low attentions towards precautions. The point is that the culture and traditions of a society influence the implementations towards fighting coronavirus and peoples should properly follow government directions in fighting the pandemic. For example, shaking hand is part of our culture so that peoples should understand the current situations and do not be disappointed if not get shaking hand in the current circumstances. Rather it is suggested to practice non-contact greetings. However, in addition to the awareness creation, those who do not follow the rules in fighting the pandemic should be subject to appropriate measurements, according to participants.

Follow reliable information and mutual understanding

It was suggested that in understanding and fighting coronavirus, social media is very important but peoples should follow correct information particularly the validity and reliability of social media posts need to be verified. Accordingly, before accepting the information that is posted on social media, individuals have to crosscheck the reality of the information from the government websites and sources. Additionally, false information from social media are catastrophe, create fear and anxiety in the peoples mind. It was also recommended that television and government media are better in terms of providing reliable information in the current circumstances. Another important observation of participants were that knowing about social distancing by one's own self or some individuals is not enough and peoples should tell about social distancing to each other whenever it is important in a polite ways because politeness make things better and avoid conflict. During queue or line to get services in banks, supermarket, transportation and other places, peoples have to keep their distance and consider their back and front side as well as give recognition for person standing in the place based on mutual understanding.

V. Conclusion

This study focuses on the positive side of social distancing as essential means in fighting corona virus but it should be used with other precautions methods too. The best practices of social distancing in Turkey need to be continuous and all of the society should cooperatively follow the rules and directives of the state without forgetting it. Additionally, implementation of social distancing requires the involvements of all stakeholders and the public given that consistent follow-up of it will stop the expansion of the pandemic. In public areas such as market and transportations all peoples have to respect the symbols and notice board rues that enforces social distancing. Another point is that parents should advise their family members about the practices of social distancing. Given the significance of awareness creations, the culture of greetings should be managed by avoiding handshaking and kissing. Finally, other researchers should investigate the impacts of social distancing on family, social structure and culture of the society from interdisciplinary points of view.

BIBLIOGRAPHY

- 2020. "Centers for Disease Control and Prevention (CDC)." Accessed August 17, 2020. https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html.
- 2020. Guidance on Community Social Distancing During COVID-19 Outbreak. Addis Ababa, Ethiopia. Africa Center for Disease Control. Accessed June 14, 2020. https://africacdc.org/download/africa-cdcpolicy-recommendation-for-african-union-meetings-and-travel-during-covid-19-outbreak/.
- Al-Monitor News. Accessed March 20, 2020. https://www.al monitor.com/pulse/originals/2020/03/tur-key-coronavirus-socialdistancing infrastructure.html
- Alsulami. S. 2015. "The Effectiveness of Social Distance on Requests." Arab World English Journal 382-395.
- Anadolu Agency. Accessed April 11, 2020. https://www.aa.com.tr/en/health/covid-19-turkey-modelcountry-with-strong health-system-social-assistance/1801007
- Anadolu Agency. Accessed June 11, 2020. https://www.aa.com.tr/en/turkey/turkey-intl-flights-restartin-is-tanbul-airport/1873349
- Bengtsson, M. 2016. "How to plan and perform a qualitative study using content analysis." Nursing Plus Open (Elsevier)
- Bianet English. Accessed June 12, 2020. https://bianet.org/english/health/224469-first-wave-ofcovid-19-not-yet-over-in-turkey-social-distance-is-indispensable
- Biannet English. Accessed May 22, 2020. https://bianet.org/english/health/224658-social-distancecircles-in-izmir-s-recreation-areas
- Calvin King Lam Chung, Jiang Xu & Mengmeng Zhang. 2020. "Geographies of Covid-19: how space and virus shape each other." Asian Geographer. doi:10.1080/10225706.2020.1767423.
- Charles Courtemanche, Joseph Garuccio, Anh Le, Joshua Pinkston, and Aaron Yelowitz. "Strong Social Distancing Measures In The United States Reduced The COVID-19 Growth Rate." *Health Affairs* (The People-to-People Health Foundation, Inc.) 39, no. 7 (2020): 1237–1246.
- Considerations relating to social distancing measures in response to COVID-19 second update. Stockholm: European Centre for Disease Prevention and Control, 2020.
- Daily Sabah News. Accessed June 03, 2020. https://www.dailysabah.com/turkey/we-dont-expect-a-second-wave-of-coronavirus-outbreak-in-turkey-health-minister-says/news
- Duvar English. Accessed June 5, 2020. https://www.duvarenglish.com/health2/coronavirus/2020/06/05/cafe-uses-mannequins-to-enforce-social-distancing-measures-inturkeys-northeast/
- Duvar English. Accessed May 11, 2020. https://www.duvarenglish.com/health2/coronavirus/2020/05/11/turkish-govt-agencies-warn-against-laxness-toward-covid-19measures-as-businesses-malls-rennen/
- Duvar English. Accessed May 26, 2020. https://www.duvarenglish.com/health2/coronavirus/2020/05/26/istanbul-municipality-paints-social-distancing-circles-in-parks/
- Xie, George J Milne and Simon. "The Effectiveness of Social Distancing in Mitigating COVID-19 Spread: a modelling analysis." 2020.
- Hürriyet Daily News. Accessed May 30, 2020. https://www.hurriyetdailynews.com/antalya-each-setsup-so-cial-distancing-areas-against-virus-155184
- Hussain, Belayeth. "Do governments' decisions on social distancing flatten out people's mobility during covid-19 pandemic?" 2020.
- Ishmael Festus, Jaja M. 2020. "Social distancing: how religion, culture and burial ceremony undermine the effort to curb COVID-19 in South Africa." *Emerging Microbes & Infections*.
- Istanbul Metropolitan Municipality. Accessed March 27, 2020. https://www.metro.istanbul/en/news/detail/social-distance-measure-in-metro
- Jiang, Meirui Qian & Jianli. "COVID-19 and social distancing." Journal of Public Health: From Theory to Practice (Springer), 2020.
- Karakayali. N. 2009. "Social Distance and Affective Orientations." Sociological Forum, 24. doi:10.1111/j.1573-7861.2009.01119.x.
- Leach Parker, MacGregor & Wilkinson. 2020. "COVID-19—A social phenomenon requiring diverse expertise." https://www.ids.ac.uk/opinions/covid-19-a-socialphenomenonrequiring- diverse-expertise/.
- Linda Thunström, Stephen C. Newbold, David Finnoff, Madison Ashworth and Jason F. Shogren. "The Benefits and Costs of Using Social Distancing to Flatten the Curve for COVID-19." *Journal of Benefit-Cost Analysis* (Cambridge University Press) 11, no. 2 (2020): 179-195.
- Lu, Guoxian. 2008. "The social distance between urban residents and migrant workers: an institutional analysis, Social Sciences in China." 172-186. doi: 10.1080/02529200802288575.
- Mark J. Siedner, Guy Harling, Zahra Reynolds, Rebecca F. Gilbert, Sebastien Haneuse, Atheendar S. Venkataramani, Alexander C. Tsai. "Social distancing to slow the US COVID-19 epidemic: Longitudinal pretest-posttest comparison group study." PLOS MEDICINE 17, no. 8 (2020).

- McQueen, T. A. 2020. "The COVID-19 pandemic calls for spatial distancing and social closeness: not for social distancing!" *International Journal of Public Health*.
- Messaoudene, A. 2020. "Social Distancing and Its Effect on Social Connectedness in the Algerian Society." The International Journal of Social Sciences and Humanities Invention.
- Min Chen, Jinhe Zhang, Jinkun Sun, Chang Wang & Jinhua Yang. 2020. "Developing a scale to measure the social distance between tourism community residents, Tourism Geographies." doi:10.1080/1461668 8.2020.1765012.
- Oh, Anthony Jorm & Elizabeth. 2009. "Desire for social distance from people with mental disorders." *Australian and New Zealand Journal of Psychiatry* 183-200. doi:10.1080/00048670802653349.
- Rahmet GÜNER, İ. H. 2020. "COVID-19: Prevention and control measures in community." Turkish Journal of Medical Sciences 571-57.
- Smirnova. V. 2010. "Older People." Sociological Research 64-74. Doi: 10.2753/SOR1061-0154490104.
- Smith, Joe. C. 2013. "The Social Distance Theory of Power." Personality and Social Psychology Review 158-186.
- Suresh, Lakshmi Priyadarsini &. 2020. "Factors influencing the epidemiological characteristics of pandemic COVID 19: A TISM approach." International Journal of Healthcare Management, 89-98. doi: 10.1080/20479700.2020.1755804.
- Thomas M. Selden, Terceira A. Berdahl, and Zhengyi Fang. "The Risk of Severe COVID-19 within Households of School Employees and School-Age Children." *Health Affairs* (The People-to-People Health Foundation, Inc.) 39, no. 11 (2020): 2002-2009.
- TRT News. Accessed May 29, 2020. https://www.trtworld.com/magazine/explained-key-highlights-ofturkey-s-1st-june-reopening-plan-36751.
- Wehby, Wei Lyu and George L. "Community Use of Face Masks and COVID-19: Evidence from a Natural Experiment of State Mandates in the US." *Health Affairs* (The People-to-People Health Foundation, Inc.) 39, no. 8 (2020): 1419-1425.
- Yasemin DEMİRBİLEK, G. P. 2020. "COVID-19 outbreak control, example of ministry of health of Turkey." Turkish Journal of Medical Sciences 489-494.

Impacts of COVID-19 in Social Perspectives during the Pandemic: Analysis of Social Solidarity Applied by Turkey

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Abstract

The outbreak of COVID-19 necessitates a thinking of the basic assumptions in social perspectives to depict solidarity between humans on lockdowns. Turkey has been working as a key factor in regards of supplying social assistance to other countries due to COVID-19. In that context, Turkey is an exemplary country to provide a social assistance not only to host Syrian refugees but also to demonstrate international solidarity in the response of emergency needs during the pandemic of COVID-19. Thus, Turkey is considered as one of the world countries that is helping so much during the pandemic outbreak. It is evident that the Turkish government puts international solidarity into consideration. Also, it confirms that the pandemic outbreak strengthens social solidarity to be applied in contributing philanthropic assis-

Özet

COVID-19 salgını, evlerine kapanmış insanların davanısmasını tasvir etmek için sosyal perspektiflerdeki temel varsayımların tekrar düşülmesini zorunlu kılmıştır. Türkiye, COVID-19 nedeniyle diğer ülkelere sosyal yardım sağlama konusunda kilit bir rol üstlenmiştir.. Bu bağlamda Türkiye, yalnızca ev sahipliği yaptığı Suriyeli mültecilere sosyal yardım yapma konusunda değil ayrıca pandemi sırasında ortaya çıkan acil durumlara karşı gösterdiği uluslararası yardımlarla örnek bir ülke olmuştur. Bu yüzden, Türkiye pandemi sırasında diğer ülkelere en çok yardım eden dünya ülkelerinden biri olarak kabul edilmektedir. Türk hükümetinin uluslararası dayanışmayı önemsediği açıktır. Ayrıca, bu yardımlar pandemi nedeniyle sosyal dayanışmanın güçlendiğini göstermektedir. Nitel yön-

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tance. Based on the qualitative method approach, this article aims at analyzing and describing social solidarity applied by Turkey during COVID-19. Further, it argues that Turkey has donated medical supplies and personal protective equipment to many countries for fighting against the threat of COVID-19. Equally, the Coordinated UN agencies have jointly collaborated to manage the pandemic spread by approving emergent humanitarian assistance requirements to vulnerable populations. Nevertheless. the Turkey's social assistance through international solidarity has played a constructive role to support countries including community groups during the COVID-19 crisis. This study pays a close attention to social solidarity applied by Turkey, to describe how actual social system is quite centered on social assistance that will socially change future lives in the post-pandemic world.

Keywords: Turkey, COVID-19, Social Solidarity, Pandemic, Assistance

tem yaklaşımına dayanan bu makale, Türkiye'nin COVID-19 sırasında uyguladığı sosval davanısmavı analiz etmevi ve açıklamayı amaçlamaktadır. Ayrıca, Türkiye'nin COVID-19 tehdidiyle mücadele için birçok ülkeye tıbbi malzeme ve kişisel koruyucu ekipman bağışladığını vurgulamaktadır. Benzer bir şekilde BM kurumları, savunmasız toplumların acil insani yardım gereksinimlerini karşılamaya çalışarak, salgının yönetebilmek için ortaklaşa işbirliği yapmışlardır. Bununla birlikte, Türkiye'nin uluslararası dayanışma yoluyla sağladığı sosyal yardım, COVID-19 krizi sırasında topluluk grupları da dahil olmak üzere ülkeleri desteklemek için yapıcı bir rol oynamıstır. Bu çalışma, Türkiye tarafından uygulanan sosyal yardımlasmayı dikkatle inceleyerek, pandemi sonrası dünyamızı değiştirecek olan sosyal sistemin oluşmasında sosyal yardımların nasıl merkezi olduğunu ortaya koyacaktır.

Anahtar Kelimeler: Türkiye, COVID-19, Sosyal Dayanışma, Pandemi, Yardım

*

I. Introduction

When the COVID-19 was officially declared as the world pandemic¹, the situation is not only assumed as a health problem but also a social perspective in the dimension of the global level. This critical moment collectively creates a social system which is based on human solidarity. Due to death toll reported, global populations felt concerned about impacts of COVID-19. Thus, lockdowns are generally established in many world countries to prevent the pandemic propagation. From that context, community groups started building alternative models to open opportunity windows for social supports as it is expressed: "when a joy is shared, it is multiplied; when a sorrow is shared,

¹ https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen [Accessed 06/05/2020]

VASILIKA, Kantzara, Solidarity in Times of crisis: Emergent practices and potential for paradigmatic change notes from Greece. Pubblicazioni de l'Universita Cattolica Del Sacro Cuore. Vatae Pensiero, 2014. p.5.

it is lessened²". It is obvious that the pandemic of COVID-19 links community groups through social assistance-driven system based on global supply chains.

In fact, on 24/03/2020 when the Turkish President Recep Tayyip Erdoğan announced the initiation of donation campaign called "Biz Bize Yeteriz Türkiyem³" (We are Enough for Each Other), this campaign has played a constructive role in social contexts. From that reason, Turkey is considered as one of the world countries that help humankind in the light of social assistance as it is reported by the World Bank: "Turkey has quickly adopted measures to help contain the spread of COVID-19 and save lives, whilst providing economic support to affected firms and households⁴". Moreover, it is emphasized that "The Turkish nation has an enduring tradition of humanitarian aid emanating from its history and culture⁵". Thus, Turkey is used to helping other countries in difficult times. In regards of Turkish tradition, humanitarian duty is taken as an important element to achieve a stable international community. During the pandemic, the social assistance makes Turkey a model country for fighting against the deadly virus of COVID-19⁶.

Indeed, the social assistance reveals how people, from different cultural backgrounds, can assist each other for establishing ultimate goals of sustainable fraternity. The recent evidences illustrate that humankind provides social assistance in the intention of struggling COVID-19 for both rich and poor people. Eventually, this situation depicts the human spirit of solidarity during critical periods of Covid1-9. Therefore, humans are social beings that can unite in difficult moments. The pandemic of COVID-19 aggregated relevant appeals to humanitarian responses whose results are effectively positive. As a consequence, the globalizing world has created a complex system which is based on socialization. This plays a considerable role in shaping mutual assistance by endorsing certain social models that enable humankind to help one another. Therefore, community solidarity strengthens the spirit of cooperation whose aim is to transform the world towards common goals to fight COVID-19.

By focusing on importance of this research, many studies are centering on economic, political and health issues of COVID-19, but they have largely ignored impacts of COVID-19 in social aspects. From that context, this article aims to analyze impacts of COVID-19 in social perspectives based on social solidarity applied by Turkey, including other world humanitarian organizations, during the pandemic of COVID-19. Furthermore, the contribution of this study is based upon a constructive role played by Turkey while demonstrating its social solidarity by donating medical supplies to other countries during the pandemic of COVID-19. Thus, the study attempts to address two aspects:

³ https://tr.sputniknews.com/turkiye/202003301041721380-cumhurbaskani-erdogan-aciklama-yapiyor/[07/05/2020]

⁴ https://www.worldbank.org/en/country/turkey/overview [Accessed 02/05/2020]

⁵ http://www.mfa.gov.tr/humanitarian-assistance-by-turkey.en.mfa [Accessed 02/05/2020]

⁶ www.aa.com.tr/en/health/covid-19-turkey-model-country-with-strong-health-system-social-assistance/1801007 [Accessed 11/05/2020]

- 1. To illustrate social solidarity applied by Turkey, including other world humanitarian organizations during the pandemic of COVID-19;
- 2. To describe future lives in social level after the pandemic of COVID-19.

In this article, the qualitative method approach is utilized to analyze data collected from reports and documents published online. Indeed, the current study is conducted by these crucial questions:

- Why does Turkey give initiatives during the pandemic of COVID-19?
- How will be future lives in social context, after the pandemic of COVID-19?

In order to answer the above questions, it is necessary to explain social impacts of COVID-19 in social contexts while examining social assistance applied by Turkey, including other world humanitarian organizations. This confirms how human behaviors have recently changed in social level for both developed and developing countries in the inclusion of social assistance. Also this paper analyzes social solidarity applied by Turkey, other organizations and describes future lives in social perspectives based upon impacts of COVID-19.

II. Turkish Government in Social Solidarity During The Pandemic Of COVID-19

Impacts of COVID-19 in social perspectives is generally explained in the light of social solidarity. During the pandemic, Turkey began donating aid material supplies to demonstrate solidarity with friends whose countries were having a hard time: "Turkey has increased social assistances by sending aid to at least 57 countries and others to fight virus⁷". As many people were kept in lockdowns, quarantines and isolation, Turkey got privilege to supply medical aids to many world countries. This is done to support efforts for fighting against the pandemic of COVID-19. The aid packages strengthen social solidarity during critical moments. Based on the Turkish saying "If you can feel pain, you are alive if you can feel pain of others, you are human", Turkish government provides donations to sustain international solidarity by helping other nations. From that context, the Turkish President Recep Tayyip Erdoğan said that Turkey shares what it has with all friends. Therefore, this generous social assistance made Turkey a model for many others in the fight against the deadly virus.

In addition, while death toll was increasing in some European countries, the pandemic was so critical that Turkey came to play a significant role in a joint assistance with some European countries. Indeed, Italy and Spain were typical examples of European countries which were seriously affected by the pandemic of COVID-19. Eventually, The "health supplies prepared to fight COVID-19 together, and with the hopes of seeing brighter days were sent to Spain and Italy [...]8. Thus, the medical supplies donated by

⁷ https://www.aa.com.tr/en/latest-on-coronavirus-outbreak/turkey-sent-aid-to-at-least-57-countries-to-fight-virus/1820195 [Accessed 02/05/2020]

⁸ https://www.hurriyetdailynews.com/turkey-sends-coronavirus-aid-to-italy-spain-153471 [Accessed 02/05/2020]

Turkey to Spain and Italy consist of personal protection equipment and disinfectants, including 450,000 masks. It is clear that the Turkish assistance to Italy and Spain was the strong and sincere cooperation between them. As a result, "Italy and Spain's foreign ministers thanked Turkey on Wednesday for helping their countries combat the novel coronavirus." Hence, this assistance is supposed to imply shared participation, commonality and solidarity, new awareness and synergies are rising during the pandemic of COVID-19. The COVID-19 has set the world of how to partner up in the face of the ongoing pandemic of COVID-19.

Focusing on international solidarity, Turkey also sent medical supplies and protective equipment to United States. The assistance was delivered as aid upon NATO ally's request to support America's fight against the pandemic of COVID-19. This aid illustrates the strong relations between US-Turkey during the hard times of COVID-19. As it is noticed by the Reuters, "Ankara has already sent 500,000 coronavirus testing kits to the United States¹⁰". The United States welcomed the generous donation from Turkish government. It is also indicated that the US-Turkey relationship is strong and one of the most important allies. Finally, the aids potentially illustrate the social solidarity at a pivotal time in US-Turkish relations during the pandemic of COVID-19.

On the same perspective, Turkey's solidarity is also applied to United Kingdom during the critical times of COVID-19 that is why the Turkish government showed hopes to UK by providing the medical supplies. Furthermore, it is worth arguing that "Turkey, as an ally and a close friend of the U. K., stepped in and donated 250,000 PPE, including 50,000 N-95 facemasks, 100,000 surgical masks and 100,000 protective suits. Following this generous action, the U.K. has requested that Turkey supply another 84 tons of PPE, including 400,000 gowns¹¹". In the crisis of COVID-19, the Turkey-UK solidarity is considered as a sign of ever closer rapprochement. Indeed, Turkey's humanitarian motivation about medical assistance to United Kingdom has great implications for bilateral relations. Due to COVID-19, the Turkish assistance exemplifies what genuine international solidarity could look like.

Concerning relations between Turkey and Africa, Turkey has truly asserted one of the leading allies of African Continent. It is noticed that turkey's unique policy of mutual cooperation, seeking friendship with Africa on a win-win basis. As Turkey has already shown its aids to other many countries, this gesture will always continue to be applied also to some African countries. As it is mentioned, "it is important that the Turkish government adopts a similar policy of friendship and support toward the African continent

⁹ https://www.aa.com.tr/en/europe/italy-spain-thank-turkey-for-medical-aid/1788595 [Accessed 02/05/2020]

¹⁰ https://www.reuters.com/article/us-health-coronavirus-turkey-usa/turkey-flies-medical-aid-to-coronavirus-stricken-u-s-idUSKCN22A1C5 [Accessed 02/05/2020]

¹¹ https://www.dailysabah.com/opinion/op-ed/turkey-uk-solidarity-during-covid-19-a-sign-of-ever-closer-rapprochement[Accessed 02/05/2020]

¹² https://www.dailysabah.com/opinion/op-ed/deepening-relations-in-time-of-crisis-turkey-and-the-african-continent

in these crucial times¹²". It is clear that Africa is equally on the heart of the Turkish assistance. Therefore, it is heartwarming to agree that the relationship between Turkey and Africa has been significant growth over the years.

III. Global Initiatives for Social Solidarity during the Pandemic of COVID-19

The COVID-19 is threatening the entire world as far as it actually causes a global health, economic, political and social crisis. In that context, the "Global Humanitarian Response Plan" (GHRP)¹³ was set up to fight impacts of COVID-19 specifically in the poorest world countries. Thus, the GHRP's social assistance project was approved with funding requirements of \$ 2.01billion¹⁴ for global humanitarian response for COVID-19, although it was not estimated a number of countries where the funding would be given. The purpose and scope of GHRP are based upon analyzing and responding to the direct public health and indirect immediate humanitarian consequences of the pandemic of COVID-19. On international solidarity level, the needs are built on a joint analysis of the immediate health and non-health needs for vulnerable people. Further, the GHRP appeals from WFP, WHO, IOM, UNDP, UNFPA, UN-Habitat, UNHCR, UNICEF and NGOs for better responding to unprecedented challenges posed by this pandemic of COVID-19. As the result, the global action and social solidarity related to COVID-19 fights are strongly supported to maintain the core programs of humanitarian assistance. Thus, social solidarity is effectively taken into consideration during the pandemic of COVID-19.

Indeed, the World Economic Forum¹⁶ whose mission is to engage the foremost political, business, cultural and leaders of society to shape global, regional and industry agendas in the world, has however created another institution called "World Economic Forum COVID-19 Action Platform¹⁶". It operates with over 1,000 organizations to work together for the pandemic response of COVID-19. The Action Platform was established to keep spirits up during social distancing and self-isolations. Hence, it facilitates to show how community groups support each other with their neighbors in their beloved cities. Italy was depicted while people were singing patriotic and lifting songs in their balconies to demonstrate their moral supports when being stuck in their homes. Also, it is showed that many communities displayed social solidarity to their health workers by applauding them to praise their efforts. It is also a question to some community groups who provide practical assistance by mobilizing delivery supplies to elderly people. In England, for instance, action platform reports some volunteers who have set up the HelpHub¹⁷ which is a considerable opportunity to offer supports and reassurance to vulnerable people online during self-isolating. Also, in Australia, the humanitarian agency services were

¹³ https://www.humanitarianresponse.info/fr/programme-cycle/space/document/covid-19-global-humanitarian-response-plan [Accessed 02/05/2020]

¹⁴ Based on the report of Global-Humanitarian-Response-Plan-COVID-19.pdf [Accessed 02/05/2020]

¹⁵ https://www.weforum.org/about/world-economic-forum [Accessed 02/05/2020]

¹⁶ https://www.weforum.org/agenda/2020/03/covid-19-coronavirus-solidarity-help-pandemic/[Accessed 02/05/2020]

¹⁷ It is to support individuals who find themselves with limited contact due to the Covid-19: www.helphub. co.uk

created to allow elderly and vulnerable people to shop to the open stores for an hour, in seclusion to avoid the risk of COVID-19 infection.

Based on international solidarity basis, the UNHCR declared COVID-19 as a Level 2 Emergency¹⁸, the particular concern was given to socio-humanitarian assistance agencies which are designed to manage the outbreak of COVID-19. Due to the unprecedented impacts of COVID-19, the assistance operations were provided across worldwide because the spread of COVID-19 is gradually researching a larger number of population. From that situation, "UNHCR started revising its initial requirements of \$ 33 million which was appealing for an additional \$222 million, bringing revised requirements to \$255 to urgently support preparedness and response in situations [...]¹⁹". Therefore, today's life attention is obviously addressed to the emergences of new health practices that depend upon saving human lives. Owing to that crisis, UNHCR proposes that cashbased assistance could be used as a quick and efficient means of getting assistance to people, empowering families to make the best decisions on how to care for themselves. The COVID-19 outbreak can essentially be addressed through international solidarity and cooperation to simplify partner selection processes whose purpose is to give country teams maximum flexibility in providing social assistance.

On the same perspective, the World Food Program (WFP) responded to emergencies about the COVID-19 pandemic with heavy toll on human lives. The rapid global of COVID-19 spread affect millions of world population for vulnerabilities related to food insecurity. From that perspective, WFP²⁰ expertise emergence responses by putting in the area of data collection and analysis, policy and advocacy support, and service provision for governments' strategies to address the medium-term consequences of the pandemic of COVID-19. In that context, WFP aims at preventing risk of hunger pandemic of COVID-19 by approving the L3 Emergency External Situation Report #0621 which estimates that, up to 260 millions of people in low income and middle-income countries, especially in Africa and Middle East, may be affected by acute hunger. The funding status to WFP's requirements of USD 350 million was approved under the current of GHRP to support a rapid scale-up of logistics common service provision. Also, the Global Food Crisis Report established for assessments and operational adaptation to render WFP's work engagement with partners of COVID-19. From that context, the note status of WFP's specific donor appeal allowed pre-positioning of a 3-month stock in priority countries with \$ 1.9 billion for safeguarding critical food assistance programs. Therefore, the COVID-19 outbreak, through WFP, builds various social and humanitarian assistance response to increase international solidarity during the COVID-19.

¹⁸ www.reporting.unhcr.org/sites/default/files/COVID-19%20appeal%20-%20REVISED%20-%20FINAL. pdf [Accessed 02/05/2020]

¹⁹ www.reporting.unhcr.org/sites/default/files/COVID-19%20appeal%20-%20REVISED%20-%20FINAL. pdf [Accessed 05/05/2020]

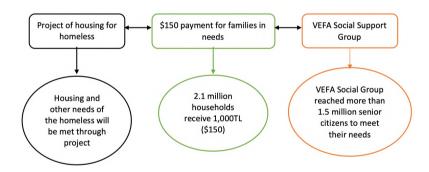
²⁰ https://www.wfp.org/emergencies/covid-19-pandemic [Accessed 09/05/2020]

²¹ https://docs.wfp.org/api/documents/cc9c32f64353429fb2f6b2b0d36a00ef/download/?_ga=2.49579236.31495274.1589029964-338118821.1589029964 [Accessed 08/05/2020]

IV. Discussion

As the COVID-19 is currently bringing some new social impacts in sociological lives. social solidarity is applied through community groups. For instance, actually, many activities are closed because people are kept home. From that perspective, human beings are becoming more inter-independent to satisfy basic needs during the critical times. Thus, main priorities of humanitarian organizations and governments are to operate probably on impacts of COVID-19 because "A pandemic is defined as the highest level of global health emergency and affecting multiple regions of the world²²". The Turkish government tries managing the pandemic of COVID-19 in interior level. Thus, "There is still much to learn about this infectious disease and its negative impact in different contexts, and preparedness and response actions will continue to be driven by rapid accumulating scientific and public health knowledge²³". This study considers the Turkish solidarity and global humanitarian response assistance as effective social solidarity basis during the pandemic of COVID-19. It also seems that if the virus is well controlled, the world will build sustainable social solidarity which is, in the long term, be recognized as fruitful result in mutual assistance. Thus, Turkey provided a new social system which is interiorly operating through social solidarity for citizens and families.

Table 1: illustrating interior social solidarity applied by Turkey



Source: Turkey, a model country with strong health system²⁴

In the perspective of interior assistance, after the declaration of COVID-19 as world pandemic by WHO, Turkey rapidly started reacting by taking a series of country measures with social restrictions. This means that Turkey took effective cooperation with all concerned public and private institutions to prevent the threat of COVID-19. Afterwards,

²² Ömer Açıkgöz and Aslı Günay. The Early Impact of the Covid-19 Pandemic on The Global and Turkish Economy. Tubitak, 2020, p.5.

²³ Zakir Khan and Yusuf Karatas: COVID-19 in Turkey: An Urgent need for the Implementation of Preparedness and Response Strategies, Health Science Reports/Wiley, 2020. p.2

²⁴ www.aa.com.tr/en/health/covid-19-turkey-model-country-with-strong-health-system-social-assistance/1801007 [Accessed 11/05/2020]

many families were kept lockdowns. In that situation, the social interaction was applied by the Turkish government to assist citizens. As it is indicated, the project of house of homeless was established to provide accommodation to the homeless in 81 provinces of the country. They were accommodated in public and private guesthouses, hostels and hotels so that they could benefit basic needs such as food, clothing etc. Moreover, the Turkish government announced the payment assistance of 1,000 TL (\$150) for families in needs. This aid cash was directly delivered to the concerned houses. This implies that 2.1 million households received the social assistance during social distancing. Indeed, it is also informed that VEFA Social Support Group has played a constructive role while giving generous social assistance to senior citizens aged about 65 and particularly to people who live alone or with chronic ailments. Thus, VEFA reached more than 1.5 million senior citizens who met needs under lockdowns. It is finally worth noticing that the social solidarity applied to families in need was launched by the Turkish President Recep Tayyip Erdoğan through the donation campaign called "Biz Bize Yeteriz Türkiyem" which is actually very productive. Furthermore, after the interior solidarity, Turkey started supplying aids to other world countries as it is showed.

Table 2. Illustrating social solidarity applied by Turkey in other countries

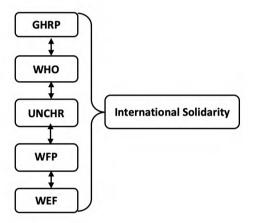
Aid (s)	Type of aid (s)	Purpose (s)	Target country	
-Medical supplies	450,000 masks	-To strengthen solidarity during the pandemic of Covid-19;		
		-To build a joint collaboration through international solidarity;	-Italy and Spain	
-Medical supplies	500,000 testing kits	- To fight against Covid-19 and its spread;	-USA	
		-To sustain diplomatic relations upon NATO's allies;		
-Medical supplies	250,000 PPE	-To implicate bilateral relations;	-UK	
	50,000/N-95 facemasks,	-To show close friendship during Covid-19;		
	100,000 surgical masks;			
	100,000 protective suits.	- To strengthen mutual solidarity.		

Source: It is made by the author based on the information provided above

Due to the COVID-19, Turkey started establishing the necessary measures to help other countries to fight against the threats of COVID-19. In that way, philanthropic actions have been implemented on social mechanisms to collaborate each other. In fact, Turkey has responded to calls of urgent needs from different countries as it is indicated in the above

table. It is obvious that medical supplies and personal protective equipment were donated to some countries to show strong social solidarity during the pandemic of COVID-19. Thus, Turkey-Italy relations have a strong foundation as it is asserted; "Turkey's relations with Italy date back to the times of Ottoman Empire, which had close relationships with such Italian city states as Grenoa and Venice^{25"} that is why Turkish assistance is applied to Italy²⁶ during this critical moment to a close partnership. Thus, according to the discussion presented in this study, it is possible to confirm that social solidarity of COVID-19 is also summarized on the fact that Turkey is a model country with strong health system and social assistance in fight against COVID-19 virus. Turkey has taken a model country to prevent the spread the novel coronavirus as well as virus^{27"}.

Table 3: Global interaction for international solidarity



Source: It is made by the author based on information discussed in the above details

The GHRP, WHO, WFP, GHRP and UNCHR are collaboratively working together to increase social assistance capacities for fighting against global crisis. It is paramount to prioritize humanitarian response systems which strengthen international solidarity. Marcelo et al. emphasize that "Today the world is another place. While human lives continue to be lived in local realities, these realities are increasingly being challenged and integrated into larger global networks of relationships. [...] All these social systems are predicated on the need to impart values, morals, skills, and competencies to the next generation²⁸. Thus, on one hand, humanitarian organizations find other alternative supply chain actions to assist community groups. On the other hand, they optimize production and consumption capacities of world population by estimating realistic value

²⁵ http://www.mfa.gov.tr/relations-between-turkey-and-italy.en.mfa [Accessed 05/05/2020]

²⁶ www.dailysabah.com/opinion/op-ed/a-friend-in-need-is-a-friend-indeed-turkish-italian-solidarity-in-face-of-crisis [Accessed 07/05/2020]

²⁷ www.aa.com.tr/en/health/covid-19-turkey-model-country-with-strong-health-system-social-assistance/1801007 [Accessed 11/05/2020]

²⁸ Marcelo M. et Al. Globalization: Culture and Education in the New Millennium. University of California Press, Los Angeles, USA. 2004. p.7.

chains for their future. Therefore, the COVID-19 is a global threat to social challenges that emerges the world crisis in sanitary, social, political and economic levels. To minimize impacts, people continue receiving needed assistances through international solidarity. It is observed that, from the beginning of 2020 year, the COVID-19 intensifies the spirit of social solidarity not only between persons but also between nations. Furthermore, social solidarity was a tedious process for both beneficiaries and actors due to COVID-19. The world will not be the same in the post-pandemic periods. overall, social lives in the future will show different trends after COVID-19 such as:

- The values of collective assistance of societies will become more collaborative in regards of social solidarity;
- The spirit of individualization which begins with modernism will considerably decrease after the pandemic of COVID-19;
- Nation-States will have sentimental values towards community groups for common social transformation targets.

V. Conclusion

The study's finding is that Turkey's social solidarity has played a constructive role in terms of fighting against COVID-19 when donating medical supplies to other countries. Turkey has an effective health system infrastructure. Also, global humanitarian response assistance is significantly relied on strategic decisions to help vulnerable community groups. In fact, this rationality assumption leads the study to seek the reason behind social solidarity and it is argued that Turkey is an exemplary country to help others through national and international solidarity for fighting against the outbreak of COVID-19. It seems that this pandemic will lead the world to a new post-pandemic world which is based on providing social opportunities about social solidarity between countries and community groups. Governments should develop new strategies to adjust social assistance as exemplified by Turkey during the pandemic of COVID-19.

VI. ACKNOWLEDGEMENTS

The author of this work takes this opportunity to express his gratitude to all people who are giving in one way or another to show their deep solidarity to others during the outbreak the pandemic of COVID-19. Although it is not easy to do so, they are sacrificing their time and energy to help others by showing their moral and social supports in difficult moments. Furthermore, special thanks are addressed to medical staffs throughout the world for their untiring mission to save human lives.

BIBLIOGRAPHY

- Anadolu Agency Website AA. Europe/italy-spain-thank-turkey-for-medical-aid/1788595/ www.aa.com.tr/en// Ankara, Turkey, 07/05/2020.
- Anadolu Agency Website AA. Health/covid-19-turkey-model-country-with-strong-health-system-social-assistance/1801007/www.aa.com.tr/en/ Ankara, Turkey; 10 May, 2020.
- Anadolu Agency Website AA. Latest-on-coronavirus-outbreak/turkey-sent-aid-to-at-least-57-countries-to-fight-virus//www.aa.com.tr/en/Ankara, Turkey, 20 May, 2020.
- Anadolu Agency Website AA. Latest-on-coronavirus-outbreak/turkey-sent-aid-to-at-least-57-countries-to-fight-virus/1820195// www.aa.com.tr/en//Ankara, Turkey, 10 May, 2020.
- Anadolu Agency Website AA.Health/covid-19-turkey-model-country-with-strong-health-system-social-assistance/1801007// www.aa.com.tr/en/ Ankara, Turkey, 08 May, 2020.
- Daily Sabah /opinion/op-ed/deepening-relations-in-time-of-crisis-turkey-and-the-african-continent/ www. dailysabah.com/ Istanbul, Turkey, 12 May, 2020.
- Daily Sabah. /opinion/op-ed/turkey-uk-solidarity-during-covid-19-a-sign-of-ever-closer-rapprochement/ www.dailysabah.com/ Istanbul, Turkey, 10 May, 2020.
- Sabah.Opinion/op-ed/a-friend-in-need-is-a-friend-indeed-turkish-italian-solidarity-in-face-of-crisis/ www. dailysabah.com/ Istanbul, Turkey; 07 May, 2020.
- Hurriyet Daily News. Turkey-sends-coronavirus-aid-to-italy-spain-153471 www.hurriyetdailynews.com/ Istanbul, Turkey, 12 May, /2020.
- Marcelo M. et Al. *Globalization: Culture and Education in the New Millennium*. University of California Press, los Angels, USA. 2004.
- Ömer Açıkgöz and Aslı Günay. *The Early impact of the Covid-19 pandemic on the global and Turkish Economy*. Tübitak, 2020.
- Reuters/article/us-health-coronavirus-turkey-usa/turkey-flies-medical-aid-to-coronavirus-stricken-u-s-idUSKCN22A1C5//www.reuters.com/ New York, USA, 12 May, 2020.
- Sputnik International. Turkiye/ 202003301041721380-cumhurbaskani- erdogan-aciklama-yapiyor //wwwtr. sputniknews.com/ Ankara, Turkey, 05 May, 2020.
- The Amazing Domains/ HelpHub.co.uk.is For sale/www.helphub.co.uk/United Kingdom, London, 07 May, 2020.
- The Covid-19 Global Humanitarian Response Plan-COVID-19. Programme-cycle/space/document/covid-19-global-humanitarian-response-plan.pdf www.humanitarianresponse.info/ru/ Geneva, Switzerland, 09 May, 2020.
- The Ministry of Foreign Affairs. Relations-between-turkey-and-italy.en.mfa www.mfa.gov.tr// Ankara, Turkey; 10 May /2020.
- The Ministry of Foreign Affairs/ The Turkish Emergency Humanitarian-Assistance// www.mfa.gov.tr// Ankara, Turkey, 05 May, 2020.
- The United Nations High Commissioner for Refugees (UNHCR).Sites/ default/files/COVID-19%20appeal%20 -%20REVISED%20-%20FINAL.pdf www.reporting.unhcr.org/. Geneva, Switzerland, 12/05/2020.
- The World Bank-Turkey. BRD-IDA/en/country/turkey/overview//www.worldbank.org// Ankara, Turkey, 09 May, 2020.
- The World Economic Forum (WEF).about/world-economic-forum/ www.weforum.org/ Geneva, Switzerland, 08/05/2020.
- The World Economic Forum COVID-19-Action-Platform/agenda/2020/03/covid-19-coronavirus-solidarity-help-pandemic/ www.weforum.org/ Geneva, Switzerland, 9/5/2020
- United Nations Office for Coordination of Humanitarian Affairs (OCHA-Services). Programme-cycle/space/document/covid-19-global-humanitarian-response-plan/www.humanitarianresponse.info/fr. New York, USA, 06/05/2020.
- VASILIKA, Kantzara, Solidarity in Times of crisis: Emergent practices and potential for paradigmatic change notes from Greece. Pubblicazioni de l'Universita Cattolica Del Sacro Cuore. Vatae Pensiero, 2014.
- World Food Programme (WFP). Emergencies/covid-19-pandemic/ www.wfp.org/, Roma, Italy, 11/05/2020.
- Zakir Khan & Yusuf Karatas: COVID-19 in Turkey: An Urgent need for the Implementation of Preparedness and Response Strategies, Health Science Reports/Wiley. Istanbul, Turkey, 2020.