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Impacts of COVID-19 on Societies and Economies

ABSTRACTS & PROCEEDINGS

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ABSTRACTS

The Impact of Covid-19 on Migrant Women

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Migration is one of the most important and global problem in the modern world. In addition to social, economic, political and demographic problems, it creates a number of challenges in many countries. According to the global data existing by the mid-year 2020, the number of migrants was 281 million, from which 51.9% were women. Covid-19 pandemic has made it clear to the world that the work of female migrants is very important to the economics of their home countries, apart from the economic aspects. The condition of the migrant women was worsened significantly, during the pandemic many of them lost their jobs, source of income and remained in a foreign country, when the economic condition of their families left in home countries depends on them largely. Many women had to agree to any kind of hard work, what finally contributes even more vulnerability of them. The paper will review the conditions of the migrant women during the Covid-19 pandemic, as well as existing problems and represent certain recommendations, implementation of which will improve and alleviate their conditions.

Key words: Migrants, Women, COVID-19, Conditions, Negative Impact.

Living in an Age of Crisis: The Economy, Democracy, and the Pandemic

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This talk offers a political economy interpretation of the COVID-19 pandemic, framed around its relationship to the dynamics, contradictions and limitations of global neoliberalism. It argues that the pandemic emerged in a context of growing inequalities and deepening crises in neoliberal economies and their political systems, and that the pandemic is likely to reinforce the exclusionary tendencies in the current phase of capitalism, with detrimental implications for democracy. In turn, the pandemic has revealed the limitations of neoliberalism like never before, with adverse consequences for the legitimacy of capitalism itself, and opening unprecedented spaces for left political activity.

German Covid Relief and "The Social Market Economy"

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Although ordoliberalism is commonly known to advocate for a "social market economy", its thinkers have clearly shown that a social market economy should at best have modest social provisions (Oliver, 1960, p. 130). Ludwig Erhard (1950, p. 187) believed that the "push towards a welfare state… will surely kill all human virtues.". Wilhelm Röpke (1963, pp. 184-86) divided the formation income into two, the extra-economic formation of income (obtained through fraud or violence and governmental charities) and the economic formation of income, any attempts to alter redistribution of incomes are considered to cause disequilibrium. Policies such as progressive taxation (amongst other policies) are considered to curtail incentive (Röpke, 1960, pp. 168-70), turn the people into sheep and the government into a shepherd and prevent the "social market economy" from functioning properly (Ibid., p. 186). A Bruegel (2020) report on Covid Recovery Funds of Germany show a vast majority of the funds (the fund totaling 284 billion euros, making it 8.3% of 2019 German GDP) have gone towards supporting German companies. Thomas Sablowski notes the class character of the relief package, noting that wage-earning classes suffer larger losses (or lesser benefits) than companies and enterprises (Sablowski, 2020). Sablowski also finds that the marginally employed (those working in the "mini-jobs") have lesser access to Covid relief, although making significant part of German workforce (The Local, 2021). In this context, this paper will discuss the following question: does this imply a German insistence to fully follow ordoliberal theories or is it a continuation of Germany's squeeze on its workers?

Keywords: Ordoliberalism, welfare state, Germany

New Keynesian Phillips Curve Estimation with Different Output Gap Filters

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The realization of the ineffectiveness of standard rule-based monetary policies (such as monetary targeting-exchange rate targeting) in the globalizing economies (with the increasing phenomenon of financial liberalization) has led to the implementation of the inflation targeting regime. In the inflation targeting regimes based on expectations targeting, the output gap variable, which provides a priori information about the real economy, is closely monitored and taken into account in the monetary policy making processes. In the new Keynesian approach, the relationship between real economy-inflation and monetary policy has gained more importance. This relationship has been discussed in the developed new Keynesian Phillips curve (NKPC) and hybrid new Keynesian Phillips curve (HNKPC) models. In this context, this study aims to examine the output gap-inflation relationship in the Turkish economy, which has implemented an inflation targeting regime since 2002, for the period 2002:M01-2019:M12. First, output gaps were obtained with different trend decomposition methods and their explanation power for the dynamics of the Turkish economy was discussed for that purpose. Afterwards, the effects of output gaps on inflation were estimated using the Generalized Method of Moments (GMM) with different sets of instrument variables. The results show that all the output gap indicators have significant explanatory power on inflation and indicate that the output gap variable should be considered in monetary policy-making processes.

Key Words: Output Gap, New Keynessian Phillips Curve, Monetary Policy, GMM.

Fiscal System and Fiscal Policy in Romania: Theoretical and Practical Considerations

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Fiscal systems play an important role in modern societies since they are responsible for the levying of tax duties (various types of taxes associated with wealth, consumption, income, mandatory contributions, etc.), financing the quality of public goods systems and incentivizing (or not) business initiatives. Besides the types of taxes and tax rates, one important element of the tax system is the nature of the relationship between tax authorities and tax payers, which varies along a continuum between synergistic approaches and antagonistic ones. The present study draws on theoretical and practical insights concerning the Romanian fiscal system and fiscal policy, which have changed substantially during the last three decades.

Keywords: fiscal system; fiscal policy; strategies

Insights on Tax Evasion from the Romanian Market

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Among the different types of tax behavior (i.e., voluntary or enforced compliance, avoidance, evasion), tax evasion has always elicited a particular interest in the literature. Consequently, the phenomenon has been investigated through various lenses from economic and psychological to social, political or neuroscientific ones. The present research takes on an analytical approach by examining the phenomenon of tax evasion on the Romanian market and by presenting some of the strategies used by national tax authorities to mitigate tax evasion. Comparisons with other tax systems across the European Union are also considered.

Keywords: tax evasion; tax authorities; deterrence; cooperation

Tax Behavior and COVID-19:
Strategies to Meliorate the Effects of the Current Pandemic

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Considering the global economic impact of this unprecedented health crisis, the present research aims at delving into some of the strategies implemented by government authorities with respect to national public budgets. Keywords: tax behavior; strategies; COVID-19 pandemic; government authorities

Working Routine and Productivity of the Female Workforce During the Pandemic: The Female Academics in Mexico and Turkey

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On March 11th, 2020, the World Health Organization (WHO) declared the Covid-19 virus outbreak a pandemic. This statement made it possible to understand the global health emergency and the imminent global economic recession caused by its effects. The drop in employment related to social distancing measures and health protocols has had a strong impact on different sectors with a high rate of female employment. This health phenomenon not only caused radical changes in the working conditions of the workforce but also made it necessary to re-discuss the current gender dynamics. With the rise of distance learning during the Covid-19 pandemic, homes replaced offices and universities, and the boundaries between work and domestic life overlapped. The fact that the same place is used for working and daily activities has made the working hours uncertain and the work-life balance of the employees is disturbed. However, due to traditional gender roles, women's household workload has increased; hence this workload has affected their academic productivity. This study explores "How Covid-19 affects women's academic productivity in Mexico and Turkey". To answer the research question, female academics in both countries will be reached by snowball sampling and online interviews will be conducted using semi-structured questionnaires. The study aims to focus on the factors affecting women's academic productivity in the pandemic, to reveal the strategies developed by women for establishing work-life balance, and to conduct a discussion on the rearrangement of the sharing of household chores.

Impacts of Globalisation on Architecture: A Theoretical Approach

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Globalisation as a concept, repeatedly appears in the literature of many scientific studies and has an enormous influence on the society and living practices/styles, and it has relationship with all area of daily life. On the one hand, it is considered as adopting a joint global civilisation and regulating individualities and living qualities, on the other hand, it can be inferred as underlining differentiations and encouraging the local forms and locality. Globalisation have befitted key theme of social scientists, architects, and economic geographers etc. Architectural theory and especially practices have noticeably been influenced by the globalisation process since 1990s through new form of the international multinational architectural companies have started to use "trans-spatial digital design methods" and the wide-range distribution of visual images. In this context other data on myriad projects around the world also have become an excess in the global trade of constructing supplies and, boosted levels of mobility of architects as a labour work. The link between globalisation and architecture based on capitalism and this relationship remains sore. As usual run and with everything capitalism come up against, there is a destructive probability of abuse, in despite of hardly architects compete with capital due to lose their job. Regrettably the commitment of architecture with capitalism heretofore has generally cause to the exploitation of architecture and the root of surplus value from created values like buildings or design and real property. Modern architecture's public duty looks like an issue of the near past. Architecture became kind of a useful and talented instrument of capitalism. While global capitalism partly has optimistically affected architectural practices and styles, capitalism has mass produced architecture that once upon a time it has been a occupation of independence and incomparable talents. Loyalty to the paradigm of a globalized economy where buildings is turn into commodities came in possession of the essential code of modern architectural creation in the globalisation process. In this paper, the impacts of globalisation on the architecture will be examined in the context of the relation between capitalism and architecture.

Keywords: Globalization, Architecture, Design, Changes in Architecture, Capitalism and Architecture

Facing the Pandemic, After An Economic Epidemic: «Greek National Health System Versus COVID-19»

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Undoubtedly the pandemic of COVID-19, caused by the SARS-COV-2 virus, has put Healthcare Systems, and the study of health policies and economics, at the center of interest. The “health crisis”, at the same time, highlighted the vital need to protect Public Health, the adequacy of medicines and, of course, material infrastructure such as hospitals, ICU beds, etc. Therefore, the coronavirus pandemic, demonstrated the bad situation in which the Greek National Healthcare System has found itself. Greece in 2010, entered one of the most serious and more lasting socioeconomic crisis in its modern history. The latest situation, which was intensified by the "Rescue Programs" issued by the EU-IMF-ECB, caused, among other things, loss of almost 1/4 of the country's GDP, persistent unemployment, disintegration of the productive structure and partial collapse of the welfare state. In our presentation, we will make a brief analysis of the “effects” of the economic crisis on the Greek National Healthcare System and in its interaction with citizens. Then we seek to show, how the Greek Health System, as well as all stakeholders, responded to the pandemic especially to the first two pandemic waves.

Keywords: Greek Economic and Health Crisis, Health Policies, Greek Health Care System, Political Economy of Pandemic

The Volatility Spreads of Stock Markets During the Covid-19 Process: Fragile Five Example

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In times of financial crisis, volatilities and volatility spreads generally increase. As a matter of fact, the fear and concern created by the COVID-19 epidemic and the epidemic in the economy and financial market, which emerged as a global health problem but affected the economies of the country in a short period, caused the volatility in financial asset prices and the global financial market to increase. However, it remains uncertain how this instability occurs in countries with weak financial structures and serious problems in macroeconomic indicators. In this regard, the study aimed to examine the volatility and return spreads of the stock daily index data for the period January 5, 2015 - April 30, 2021 in the stock markets of Turkey, Brazil, India, Indonesia and South Africa, which are publicly known as the "Fragile Five". In the study using the diffusion index method by Diebold and Yılmaz (2012), it was understood to be that the volatility spreads increased during the COVID-19 process and the country with the highest volatility spread was South Africa and the country with the lowest volatility spread was in Turkey. In the study, it was also understood that South Africa is a net volatility spreader and Indonesia is a net volatility buyer. The results are remarkable in terms of portfolio investments, portfolio management, risk management and hedging.

Keywords: Volatility Spread, Stock Markets, COVID-19

The Influence of COVID-19 On Stock Market Returns: Evidence from OECD Countries

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The aim of this study is to examine the influence of COVID-19 on stock market returns for OECD countries over the period January 4 – May 28, 2021. Panel data analysis techniques are preferred in estimating the coefficients of the regression models determined for empirical analysis. Our dependent variable is stock market returns as measured by the by the daily change in major stock market index of the countries. Also, the COVID-19, our independent variable, is measured using four alternative variables: (1) the daily growth in the number of COVID-19 patients died, (2) the daily growth in COVID-19 confirmed cases, (3) the daily growth in the number of confirmed cases per million, and (4) the daily growth in the number of deaths per million. In addition to dependent and independent variables, we also use a number of control variables. The econometric analysis of the regression model consists of the following steps: Firstly, Spearman correlation analysis and variance inflation factor analysis are performed. Secondly, the stationarity of our series is checked, and lastly, panel regression analysis employing the Driscoll-Kray procedure is carried out to estimate the linkage between stock market returns and thee Covıd-19.As a result, a general evaluation is made by comparing the results obtained from our study with those of previous studies in the literature.

Covid-19, Inequities and the Politics of Blame

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While Covid-19 has led to a global pandemic, the responses to it have been driven by nation-states, jealously guarding their sovereignty. Both at international and domestic level, Covid-19 has led to a politics of scapegoating - blaming another state, opposition, religious or ethnic minorities, and so on for being responsible for infections. Rather than take responsibility, governments have shifted blame and sought to use state power to reinforce authoritarianism. By using examples from different parts of the world. I will argue how Covid-19 is reinforcing inequities and prejudices.

Perceptions Of Parents About Online Learning And Physical Activity Of Their Children During The Covid Pandemic

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The global lockdown of educational institutions due to Covid-19 has disrupted the academic and physical activity of children. Due to sudden closure of educational institutions online teaching and learning had to be implemented to continue the academic sessions. Students began to miss social interaction which is an essential component for effective learning and preparing students to meet the challenges of real life. The present research aimed at exploring the perceptions of parents about online learning and physical activity of their children. A qualitative study was undertaken to determine the perceptions of parents about online learning during COVID-19 to get a deep insight into real-life experiences. Open-ended questionnaires were administered online to forty-five parents who could be accessed easily and had children studying in Grades 1-3. The major themes that emerged from the data analysis included the following: increased monitoring role of parents, need of IT skills, provision of additional support from schools, challenging nature of online learning and sedentary behavior of their children. With a purpose of understanding perception of parents and their viewpoints about online learning, it was deduced that parents initially had to face many challenges but soon adjusted well with the new method of teaching as it was the need of hour during Covid Pandemic.

Covid 19 and China-US Relations

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China on the 100th anniversary of foundation of the People's Republic of China, has s strategic goal: by the year 2049, to make China the most powerful state in the world. It seems that the United States is worrying about it and is doing its best to prevent China's ambitions. While the US and Europe are battling a second wave of pandemic and economic hardships caused by the widespread of the virus, China, from which Covid-19 began to spread, has not only eradicated the virus, but also achieved significant economic growth rates. According to the data of the third quarter of 2020, China's economic growth was 4.9%. China has returned to a normal rhythm of life across the country: restaurants, shops and other retail outlets are already working at full capacity, which is reflected in their incomes and the country's economic growth in general. It is obvious that Chinese consumers have started spending money. While in the US presidential debate, Donald Trump and Joe Biden competed with each other to convince voters who would be more successful in dealing with China's growing ambitions and deal with threats posed by the Chinese Communist Party and the Communist Party elite. Under the pandemic, China's 257 billionaires became rich by $ 1.5 trillion and the total capital of Chinese billionaires increased to $ 4 trillion. Covid-19 spread from Wuhan Province, China; China, at the expense of tighter control and at the cost of severe economic damage in the first quarter, defeated the pandemic, virtually fully recovered its economy, and left the rest of the world facing a serious challenge. While battling with the virus China did not hinter the economic process, which leads to very serious and large-scale economic crisis in the world. The authorities have did their best not only to maintain the economic situation but also to achieve economic growth prosperity. Thus, it is obvious that China will use the situation very effectively to achieve its stated goal of becoming the number one country in the world by 2050.
"

Nanomedicine and Covid 19: Fundamental Solution or the Deepening of Inequality?

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Coronavirus (COVID-19) appeared more than a year ago, and it has caused more than 2,000,000 deaths and more than 100,000,000 infected people in the world. Scientists from various regions in the world have worked intensively to provide a path towards a systemic solution. Nanomedicine has been portrayed as one of them. Several vaccines from different companies are using nanotech-based platforms. Yet, research and development, production, and commercialization are in the hand of transnational corporations exacerbating inequality in access to vaccines. In this context, we argue that high or emerging technologies, be they called nanomedicine or bionanotechnologies, expand under the logic of three mechanisms: i) integration of markets worldwide (globalization), which accelerate the presence of commodities in diverse geographies; ii) patents, which generally guarantee the ownership of the new technology or technological process under monopoly conditions, supported by an array of international institutions (such as the WIPO) and financial capital and iii) the subordination of social interests to the generation of extraordinary profit. We discuss the developmental implications of these issues from the point of view of underdeveloped countries.

Problems of Protection of Civil Liberties in the Conditions of COVID-19

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The issue of the balance between civil liberties and national security, which includes the spread of disease, is one of the most pressing problems in modern democratic discourses. The article analyzes the discrepancies that exist between human security requirements arising during COVID-19 and civil liberties. In this context, the paper deals with the Western and Asian approaches to effective epidemic management based on differing views on the exercise of the right to legitimate violence by central powers: the West prefers less rigid systems, while the East follows centralized management systems for the use of consumer databases and artificial intelligence technologies.

Impact of Pandemic (Covid19) on Wine Tourism in Georgia

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"Georgia is well-known for its wine culture. It's generally considered as the "cradle of wine". Traditional Georgian wine making method, Qvevri wines, was recognized and listed in Intangible Cultural Heritage Monuments by United Nations Educational, Scientific and Cultural Organization (UNESCO). Tourism, domestic or international is one of the main sectors of Georgian economy. Gastronomy and especially wine tourism popularity was rapidly increasing in the country. But, due to the pandemic, wine tourism as tourism in general, in Georgia as well as globally worldwide, faced a serious challenges. In order to continue activities somehow, virtual tours were offered as an online alternative. What are the tendencies and social cultural aspects of virtual tourism, during the pandemic period? Does their popularity increase? British sociologist, John Urry writes, ""There is no evidence that virtual and imaginative travel is replacing corporeal travel, but there are complex intersections between these different modes of travel that are increasingly de-differentiated from one another"". (The Tourist Gaze)

Keywords: Pandemic, Virtual Tours, Wine Tourism, Covid-19."

Analysis of Intra-Industry Trade in Developing (D8) Countries

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Intra-industry trade is a theory that was put forward after the 1970s and is based on the fact that countries both export and import the same product. The high level of intra-industry trade also affects the competitiveness of countries. Countries with intense intra-industry trade have high competitiveness. Because, with product differentiation, both exporting and importing of a product directly affects the welfare of a country. In the study, intra-industry trade of Developing-8 (D8) countries was analyzed. Analyzes were made for 2019 and SITC Rev.3 single-digit product classification (food & live animals, beverages and tobacco, crude mater.ex food/fuel, mineral fuel/lubricants, animal/veg oil/fat/wax, chemicals/products n.e.s, manufactured goods, machinery/transp equipmt, miscellaneous manuf arts, commodities nes) was used. Analysis results showed that Malaysia has the highest intra-industry trade among D8 countries. Malaysia has high intra-industry trade in 8 out of 10 product groups. Indonesia and Turkey follow Malaysia. Indonesia has a high level of intra-industry trade in 7 product groups out of 10 product groups, and Turkey in 6 product groups.

Epidemic of COVID -19 and its Negative Outcomes for the Refugees and Asylum Seekers

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Being a vulnerable group representative such as migrant, refugee, asylum seeker of internally displaced person bears a great health risk. Its impact definitely depends on the type of migration, the conditions and stresses encountered a long way, and the provision of health care in transit countries and destination. Moreover, a number of social determinants, such as poverty and related conditions, can affect their health. Due to the complexity of the topic, health problems associated with migration sometimes extend beyond the health sector and therefore fall within the mandate and responsibilities of other ministries. Although the health problems of migrants and refugees are similar the host population, the available evidence indicate an increased risk of lower health outcomes and an increased prevalence of certain diseases associated with migrant and refugee status. Thus, the paper is focused on the challenges of vulnerable groups, violation of their human rights and luck of preventive mechanisms to combat a new, unknown for humanity virus COVID -19, putting their lives in a great risk. The work aims to provide the necessary information about migrants' health care policy, luck of necessary conditions and goods, certain legal or illegal obstacles that hinter all kind of integration processes.

Key words: Migrants, Vulnerable Groups, Development, Integration Policy, COVID -19.

Will Citizens Pay Their Taxes After the Pandemic? Strategies to Strengthen Co-operation

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The SARS-CoV-2 pandemic has caught citizens, businesses, and governments unprepared. Ignorance about the threat, quickly turned into fear and panic among citizens and businesses. Governments had neither prepared plans nor strategies to apply, but had to take decisions under uncertainty and nescience. Most governments responded to the exponential spread of infection by imposing lockdown and disrupting businesses. National governments and the EU took actions to minimize the socio-economic fallout from the pandemic outbreak and provided support in trillions of euros to support businesses and employment. Tax administrations have taken actions to ease the burdens of taxpayers and to support businesses facing hardship. Public debts have grown enormously. At some point, tax rates might increase to cope with the unprecedented public deficit. Recently - together with James Alm, Kay Blaufus, Martin Fochmann, Peter Mohr, Nina Olson and Benno Torgler – we speculated about the impact of the lockdown and provision of financial support on future tax compliance.

Accountability and Transparency in Mexico during the Health Emergency due to COVID-19

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The recent pandemic has caused a change in the actions of the institutions in general to be able to face a public health issue. Both the government authority and autonomous organizations, in this case I will refer to Transparency in Mexico, had to redirect the policy to ensure its operation. Although, in the case of Mexico, the Transparency Institute is autonomous, its work on the rendering of accounts of the different levels of government reflects the emergency situation, which favoured the temporary modification of the means through which the rendering exercise was carried out. of counts. This article explores three aspects about the adjustment in transparency due to COVID 19 in Mexico. Firstly, how the National Institute of Transparency, Access to Information and Personal Data had to adequate the actions to maintain the degree of access to information and adjust the regulation to ensure the free exercise of this degree, which is aimed at accountability. Secondly, how the differentiation between essential and non-essential activities were determined by their economic significance, and how these activities show the decline in economic activity. Thirdly, whether these institutional adjustments managed to make the right of access to information effective.

Covid-19 Pandemic Impact On Sustainable Tourism Development In Georgia:Travel Agencies' Perspective

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World has been mired in the global economic crisis since the outbreak of Covid-19 pandemic. Restrictions imposed on the international travel caused financial instability of tourism industry. Demand for tourism services decreased to the critical minimum and various businesses lost the vital income. Most of companies did not resist financial pressure and stopped functioning. However, some of them started working remotely and focused on the organizational development. Georgian travel agencies have experience of operating of maximum 30 years. Therefore, their understanding of sustainable tourism development is not profound and comprehensive. According to the current tendencies, medium-sized enterprises decided to use ongoing gap year and set sustainability goals. Accomplishment of the mentioned goals requires not only time and effort but also significant amount of financial recourses. Therefore, the paper aims to investigate what kind of priorities do Georgian travel agencies have in terms of sustainable tourism development and how do they try to achieve tangible results. Findings given in this research can constitute recommendation package for travel agencies. They can consider it and proceed post-crisis actions in compliance with the principles of sustainability.

Deep Poverty Caused by the Pandemic: Domestic Workers' Experiences of Poverty

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Poverty has been a constantly debated issue in human history. However, poverty is experienced much more heavily in the crisis periods of the capitalist system. Since the capitalist system is a system of inequalities, the gap between the extreme rich and the extreme poor is increasing day by day. With the combination of the economic crisis process and the COVID-19 pandemic, the number of people experiencing deep poverty has increased considerably. In this process, the pandemic poverty experience of disadvantaged groups are more heavy. According to UN, the epidemic will deepen the poverty difference between women and men, 47 million women and their daughter are expected to drag the poverty to the poverty limit. This is the need to read deep poverty through women poverty. In this study, poverty definitions and measurements in the literature are evaluated with a critical perspective and the home worker who can be defined as poverty according to Turkish Statictical Institute data was made in depth interviews with 11 women. In the study, comparative questions were asked about the efforts to get rid of poverty and poverty in the period before and after the pandem. In this process, the domestic worker is further deepens of women's poverty. In addition, it is observed that the increasing livelihood of living, domestic workload, childcare, children's education burden, psychological violence is observed.

Key Words: Deep Poverty, Pandemic Poverty, Poverty of Women , Domestic Workers, Pandemic.

Temporary Basic Income Alternative to Unconditional Basic Income in Covid-19 Pandemic: Could It Be the Solution?

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Before the Covid-19 pandemic, the fourth industrial revolution and its effects were being discussed. It was claimed that many people would lose their jobs and their welfare would decrease, especially due to automation and artificial intelligence technologies. In this process, the application of unconditional basic income has been brought up to increase the welfare of unemployed individuals. However, the Covid-19 pandemic before the expected technological change has changed all the balances in the world. Individuals have begun to experience job losses due to the epidemic rather than unemployment due to technological developments and therefore their income has started to decrease. The Covid-19 pandemic has also created a socioeconomic crisis due to the increasing number of cases and deaths. For this reason, basic income discussions have gained importance again in both developed and developing countries. During the epidemic, unconditional emergency cash transfers to individuals under the name of temporary basic income help reduce poverty in economies and increase the well-being of individuals. This study focuses on the application of temporary basic income to reduce the effects of the socio-economic crisis caused by the Covid-19 pandemic. In this framework, the study examines the countries applying temporary basic income during the epidemic process and offers solutions for Turkey.

How innovative can government be through the use of ICT? The Case study of Azerbaijan

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This essay addresses innovation in government trough use of Information Communication Technology (ICT). The first section discusses the context of innovation and differentiate various type of innovations. Basically focusing on understanding of innovation on governance. The second section discusses ICT in Azerbaijan public service, its different definitions and understanding, and how it has developed over time. The second section will be focusing to explain how innovation occurring in terms of service implementation and innovation as nature of service. In addition, this essay will reflect discussion on role of ICT in public service delivery in Azerbaijan, using public service delivery and how local and central governments brings innovation in public service delivery experience by using advantageous of ICT. This essay explains where innovation being attempted, where it is failing and where it might be deemed. The essay also places Azerbaijan in a regional and global context looking at the Transparency International indices. This case study allows us to understand the ICT in terms of improving public sector as well as focusing on public service delivery and identify what are factors influence to the general process Azerbaijan. The essay concludes that in order to achieve transparency, public trust and efficiency, role of ICT as a substantive service of innovation in public services in Azerbaijan played a significant role.

Effects of The COVID-19 Pandemic on Environmental Policies: Change or Transformation?

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The purpose of this study is to discuss whether the COVID-19 pandemic has transformed environmental policies while dramatically changing the world in many aspects. The pandemic and the measures taken to combat the pandemic have brought dramatic changes and effects not only on our life style, but also in many areas from economy, business life, social relations and environment. In this context, there have been positive effects on the environment, especially air pollution, due to changes in consumption and production behavior especially during lock-down periods. On the other hand, the increase in the use of personal protection equipment, hygiene and disinfectant substances used in combating the pandemic raises new issues about waste management. Masks, which inevitably become a part of our daily life while dealing with such a pandemic that threatens public health to a high degree, cause a negative impact on the environment by increasing the amount of plastic waste. At this point, it is critical for countries to take this aspect of the pandemic into consideration while designing and implementing their environmental policies. However, it is frequently emphasized that the COVID-19 pandemic offers an opportunity for climate change and environmental policies. In combating the negative effects of the pandemic on the economy, "green recovery" policies supported by international institutions such as the EU, UN, OECD, IEA, and IMF have come to the fore. In this context, it is seen that various supports for environmentally friendly sectors and projects are included in the economic incentive packages.

Keywords: the COVID-19 pandemic, environmental policy, green recovery

Working Harder or Happier?
Home Office Adoption After Covid-19

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The emergence of the COVID-19 pandemic during the early months of 2020 produced several unexpected socio-economic worldwide effects, with governments across the globe forced to take drastic measures. Some of the most common restrictions were strong social distancing together with stay-at-home policies. As a result, a large number of economic activities, especially those requiring physical interactions, suffered deep transformations, prompting the appearance of the so-called home office (or telework). From that time on, many enterprises, corporations, and organizations have embraced home office as a means for keeping their workers on duty. However, there is a critical question for labor markets that arise from the pandemic: can workers plausibly work from home? In answering this question, one can devise two positions. One is related to the long-term effects of telework, which can be reflexed by inquiring if working from home has been more effective than working at the office. The other has to do with the psychological effects of telework, such as the lack of face-to-face meetings and personal collaborations. This paper analyzes telework's social and productive consequences by reviewing the main themes arising from the rapid adoption of working from home as reported and commented on by the world media.

Of Covıd-19 Epidemic On Detached House Plot Prices: Sample Of İstanbul Province

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With the epidemic COVID-19, extraordinary measures have been taken, and some quarantine and curfews have been imposed in our country. Within this scope, it has been necessary to reduce the physical contact and interactions as much as possible in common areas by social distancing. As it is almost nearly impossible to provide a complete isolation despite the whole efforts, the best way of minimizing the contact and interaction faces us as the option of staying home. Based on this, the demand for living quarters large enough to work at home and having features such as a garden and a spacious balcony and for the detached house where social isolation can be provided easily has increased. With the aim of overcoming the economic recession due to Covid-19, a package mortgage with the lowest interest rate in Turkish history was announced on June 1, 2020. While the package announced helped increase the sales in 07,2020 in İstanbul, it brought about the increase in the prices of housing in following months. For this reason, the most noteworthy alternative of people who prefer the detached house has been to make construction purchasing a land. In the study conducted, it is aimed to determine if any housing bubble existed or not in detached house plot prices in İstanbul during the period of Covid-19 .In the study, plot values between the years 07,2016-01,2021 were realized through PPI (Producer Price Index) and Right-Tailed ADF test method was applied to the data. When the obtained results were evaluated, based on the time following the date March11, 2020 when the first case was observed in Turkey,it was concluded that a negative-sided bubble occured between the dates 04,2020-05,2020 depending on restrictions, whereas a positive activation was experienced depending on the decrease in mortgage interest rates between the years 08,2020-01,2021 and values obtained took place over the critical values.

Key Words : Covid-19, Price Bubble of Plot, Real Estate Economics, Development Economics

COVID-19 Pandemic and Marital Conflicts

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Marital conflicts are an important research area for scholars. It is believed that in modern monogamous marriages, among the many causes of conflict in the marital relationship, the needs for the spiritual, sexual and intimate-personal necessity of the partner lead to a significant increase in the rate of destabilization. Marital and family conflicts are mainly related to people's desire to satisfy their own needs, or to create an opportunity to satisfy them by ignoring the interests of the other party. Given that almost all conflicts occur at the level of relationship breakdowns between individuals and involve problems of a psychological nature, there may be many potential sources for conflicts between partners. In this regard, it is important to focus on the pandemic that has created the greatest problems for all layers of society. A state of emergency has been declared in many countries, including Georgia, in order to fight against the spread of the new coronavirus (COVID-19. The pandemic has become a major impediment to economic, social, and political activity around the world. The vast majority of the population found themselves in self-isolation or quarantine to prevent being infected with the virus. This is related, on the one hand, to preventing the spread of the virus and, on the other hand, to unresolved conflicts in the family and isolating a person with a potential abuser in a single space. The impact of the coronavirus pandemic is multifaceted. It has become difficult for all societies to avoid the negative consequences of the new reality. In addition to putting pressure on healthcare systems and the global economy around the world, the pandemic has had an unprecedented impact on people's psycho-social status, which in turn has severely affected family relationships. The growing rate of mental illnesses, often associated with marital conflicts, can be seen as a fact reinforcing the importance of researching the issue. Therefore, the aim of the paper was to identify the determinants of marital conflicts during the COVID pandemic. Qualitative and quantitative research methods were used according to the purpose of the research. The analysis of the research data revealed remarkable results, according to which conflicts are mainly related to financial problems, high levels of anxiety, and limitations in satisfying social and self-actualization needs.

Keywords: COVID -19, marital conflicts, pandemic impact.

The Past, the Conjuncture of COVID-19 Pandemic and the Future of Sectoral / Occupational Collective Bargaining in Greece

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Until the beginning of the economic crisis in Greece, collective bargaining at the sector/occupation level was the predominant form of collective bargaining. The sectoral/occupational collective agreements determined the terms of employment and wages for the majority of the private sector employees. During the period 2010-2018, the sectoral/occupational collective agreements were drastically reduced, because of the reshaping of the institutional framework for the collective bargaining. This collapse of the centralized nature of the collective bargaining system was driven by the economic adjustment programmes (memoranda) imposed by the European Commission, the European Central Bank and the International Monetary Fund. However, in some sectors/occupations collective bargaining and collective agreements survived during the crisis, as well as after the formal expiration of the memoranda (2018). The COVID-19 virus pandemic further affects the decentralization of the Greek collective bargaining system in favour of the collective bargaining and agreements at the enterprise level and/or in favour of individual contracts. By constructing and using a database of over 2.000 collective agreements, in this paper we examine their evolution by sector during the period 2000-2020, taking under consideration the reshaping of the institutional framework for collective bargaining and the changing correlation of power in favour of the capital. In addition, we investigate the potential impact of the unemployment and of the gross value added per economic sector on the development of collective bargaining and their basic outputs, which are the collective agreements.

Keywords: collective bargaining, decentralization, Greek economic crisis, COVID-19

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Tax Evasion, Technology, and Inequality in a Post-COVID-19 World

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Ensuring compliance with the tax laws is an enduring challenge for all governments. However, the methods by which governments enforce the tax laws, and by which individuals and firms evade their taxes, change over time, due at least in part to changing technology. In this paper I examine how changing technology, especially changes driven by the transformation of information into digital formats for use by computers, seems likely to affect tax evasion in the years ahead, after the world emerges from the COVID-19 pandemic. I argue that many of these changes in technology will improve the ability of governments to decrease tax evasion, mainly by increasing the flow of information to governments. However, I also argue that these changes in technology will open up new avenues by which some individuals and some firms can evade (and avoid) taxes. At this point it is unclear which trend will dominate, so that the effects of technology on the overall level of tax evasion in a post-COVID-19 world are uncertain. Even so, I believe that the distributional effects of these technological changes are more predictable, given the differential effects of technology on the abilities of individuals of different levels and types of income to evade their taxes. Indeed, I argue that changing technology will make evasion increasingly difficult for most taxpayers, especially those subject to employer withholding and third party information reporting, but that evasion will be increasingly viable for a small number of taxpayers, especially very high income taxpayers. Regardless of the overall impact of technology on the level of tax evasion, I conclude that the effects of technology will likely increase economic inequality.

Mishandling COVID-19: From Contagion To Catastrophe

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The COVID-19 pandemic has been greatly worsened by avoidable policy responses and the political economy of global health, including public health systems and personal entitlements, differential diagnostic testing, contact tracing, physical isolation practices, personal protective and other needed equipment, medical treatments, palliative care and prophylaxis, including the various determinants of vaccine access and efficacy. Three aspects will be elaborated. First, the determinants of the effectiveness or otherwise of various public policy efforts to contain contagion, especially during 2020. Second, the significance of the South African-Indian waiver proposal to suspend relevant World Trade Organization's Trade-Related Intellectual Property Rights (TRIPS) provisions for the duration of the pandemic and the special problems of access to vaccines including COVAX, ACT-A and C-TAP in 2021. Third, the major international and national determinants of pandemic public policy responses will be considered. The scope and implications of different national fiscal and monetary policy responses deserve mention. The potential and actual roles of market finance and the multilateral financial institutions, especially the Bretton Woods institutions, will also be reviewed in this connection.

COVID 19 Impacts on Economic Development in Europe

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The COVID-19 epidemic which started a year ago has affected the global economy and has caused serious problems for development and growth in both developed and developing regions. This paper explores the impacts of the COVID-19 crisis in Europe in terms of production and consumption levels, GDP growth and unemployment levels. The paper treats the primary economic measures taken by governments during the onset of the epidemic and discusses their major impact on the economic systems in Europe. Also, the impact of the pandemic on the financial system and financial institutions is analyzed in terms of bank credit policies and mechanisms. Furthermore, the paper discusses the effects on energy and commodity prices on a global level and the UN alarming reports on price increase. Thus the paper also comments on the poverty dynamics during the COVID-19 process and how this is evident in certain developed regions, particularly that of Europe and the USA.

The Tragedy of the Masks

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The phenomenon of household products disappearing from supermarket shelves has been covered extensively in the press in the last year. After a black-swan event such as the recent COVID-19 pandemic, household products can be viewed as a common-pool resource subject to a rule of capture by the first appropriator. Using a sample of US participants, we show that when the participants are informed that a fixed supply of facial masks exists, they often coordinate on an egalitarian allocation of masks. In another study in which it is brought to the participants' attention that COVID-19 disproportionately affects the 65+ population, younger participants spontaneously demand fewer masks than 65+ participants. A replication study in the UK finds that younger participants in the UK do not display the restraint of their US counterparts. Participants in the UK demand masks based on the masks' perceived usefulness and mask use frequency in their community.

Tajikistan's Apparel Industry in the Global Value Chains: Industrial Upgrading and Challenges to Covid-19

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By using the survey of 25 apparel firms, this study examines how apparel firms in Tajikistan conduct industrial upgrading in GVCs. The apparel industry in Tajikistan can be classified into four types of firms: large export-oriented firms, large domestic-oriented firms, export-oriented SMEs and domestic-oriented SMEs. Some large firms successfully conducted inter-sectional upgrading by diversifying from the textile to apparel production and became a international exporter. Under this process, international buyers have played an important role in process and product upgrading of the firms, while these firms have challenges in functional upgrading due to lack of transfer of high valued activities from the international buyers. The other large firms failed to meet international buyer's requirement and downgraded into a local OBM producer for the domestic market. Two SMEs have grown a successful exporter of niche products under the OBM or CMT arrangement by establishing extensive networks with Russian and CIS markets. However, most of SMEs are engaged in the lowest segment of the domestic market. Although the domestic apparel market has been growing due to the government's policies, particularly state tenders. However, such tenders are based on less sophisticated products such as uniforms, they do not contribute to product (and also functional) upgrading for domestic-oriented firms. Furthermore, this study explores the impact of Covid-19 on the Tajikistan's apparel industry. Surperisingly covid-19 does not influence export-oriented firms in Tajikistan significantly, while domestic-oriented firms have diversified their production into PEE segment.

The Influence of COVID-19 upon the HEIs in Ukraine

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The present paper investigates the social impact carried out by the Ukrainian HEIs during the pandemic and lockdown in Ukraine based on a survey. The results of the survey show that the information received by the students at the university during COVID-19 under conditions of social isolation is of important character because online learning partly gives the respondents a feeling of being engaged in social activities and communication process. Moreover, for students who have got used to being online 24/7 the process of communication with their groupmates was congenial enough. To the traditional list of social functions performed by the modern HEIs, the respondents have added new ones: sharing trustful information, especially about COVID, providing deeper communication between the teachers and students and promoting personal responsibility of time management and organization of education and social life. Thus the social responsibility of the modern HEIs goes beyond traditional educational services and under the new conditions the universities in Ukraine are closer to the traditional European model of universities - “civic universities”.

Alternative Investments in the CoVid-19 Era: Stocks or Commodities?

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The Covid-19 pandemic has shifted investors' preferences towards safer and less volatile investments. In this paper, we examine whether the crisis induced by the pandemic of Covid-19 in the global financial markets has created new investment opportunities. In this context, we examine the effect of Covid-19 on the returns of the stock market index of Dow Jones as well as the returns of gold and oil that attracted large amount of investments in the previous global financial crisis of 2008. Using relevant time series specifications, we establish a hypothesis regarding the hedge investment and test whether one of the three financial products could act as a hedge investment towards the others. Based on our findings, gold acts as a hedge investment in the Covid-19 era. Our findings are robust, since the out-of-sample forecasting accuracy of the alternative models employed, that explicitly incorporate the pandemic induced by the SARS-COV-2 virus, are superior to the baseline models.

Early Evidence on the Impact of COVID-19 on the Italian Stock Market

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The scientific community still struggles to understand the magnitude of the worldwide infections and deaths induced by COVID-19, partly ignoring the upcoming financial consequences. In this paper, by using the autoregressive fractionally integrated moving average (ARFIMA) – general autoregressive conditional heteroskedasticity (GARCH) approach, we quantify and show the importance of the COVID-19 spread in Italy, utilizing data for the stock market. Using information criteria and forecasting accuracy measures, we show that the COVID-19 confirmed cases not only contribute with statistically significant information in the modeling of the volatility, but also increase the forecasting ability of the volatility of the Italian stock market index and lead to a decrease in the mean stock index.

A Glance into Economic Behavior Through The Lens of Cognitive Neuroscience

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Although behavioral approaches regarding economic decision-making (e.g., surveys, focus groups, interviews) may elicit important information on why people decide in a specific manner, these research endeavors still leave many unanswered questions about the "how" of economic decision-making. The newly emerged field of cognitive neuroscience, through its state-of-the-art techniques such as functional magnetic resonance imaging (fMRI), magnetoencephalography (MEG), electroencephalography (EEG) or eye tracking, yields promising results on this "how". The study tackles the most recent studies on economic behavior that make use of cognitive neuroscience setups and techniques in order to unravel the neural mechanisms of economic decision-making. Besides numerous empirical results, innovative avenues for future research are also presented.

Online Education in Higher Education Institutions

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Due to the pandemic, higher education institutions (HEIs) also faced a serious challenge, they had either to stop the educational process or continue in safe conditions. In order not to interrupt the educational process, higher education institutions switched to distance learning, which was provided through the Internet. In relation to the new situation a variety of terms have been used, the definitions of which have caused a wide discussion not only in Georgia but also in the world. Due to the emergency created by COVID19 in Georgia, the Law on Higher Education was amended to create a legal basis for a new form of teaching and the term “distance learning” was added to it. "Distance Learning - an educational process based on information-communication technologies organized in the higher education institution of Georgia, for obtaining any level of higher education, which is not provided in a specific place. In order to implement distance learning, it is necessary to properly plan the curriculum, to use appropriate approaches and methods for organizing and conducting the learning process “(Law of Georgia on Higher Education).

Covid-19 and Waste Pickers: Living at the Edge

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The COVID-19 pandemic is an unprecedented global health crisis that is having a profound impact on our societies and economies. Workers in the informal economy are particularly at risk because the majority lack social protection, lack access to quality health care and have lost access to productive assets. Poverty and hardship caused by unemployment or social discrimination force a significant proportion of the urban poor to collect and recycle waste to survive. Apparently, the current pandemic is another push factor for waste collection. Waste pickers (scavengers) work like the gears of a huge waste separation system. They usually live and work in extremely precarious conditions. Although waste collectors create a positive externality for society (lengthening of empty landfill space and availability of natural resources), they tend to be socially excluded and exposed to various vulnerabilities (e.g. work-related health risks and accidents). Especially after the pandemic, it became common for scavengers to find themselves confronted with disposable masks, gloves, clothing and disinfectants in some garbage boxes. In other words, we are talking about a sector that is in direct contact with the disease and the virus. This study examines waste collectors and highlights their positive impact on society and their socio-economic vulnerability.

Key Words: Waste Pickers (Scavengers), Covid-19, Vulnerability

Examining the Health, Economic, and Social Burdens of Pandemic-Related Familial Care Work on Low-Income Women in Kolkata, India

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Introduction - In India, the fragmented and heavily under-sourced diversion of resources towards the COVID-19 Pandemic has heavily limited the workings of non COVID-related health services. Several factors, including the suspension of transport-facilities, shutdown of private-facilities, conversion of public-health-facilities into COVID-19 treatment centers, and diversion of medical professionals towards COVID-19 emergency-response have lengthened these-restrictions. This has gendered-implications for low-income women and girls. A lack of structured social-security and healthcare-provision-systems obligates these persons to assume the primary caretaker role in their households. Aims - This session aims to outline evidence for the lived-experiences of low-income Indian women as they strive to balance their paid-work and unpaid-caretaker-obligations during the COVID-19 Pandemic. On a macro-level, our work aims to assess the extent to which women's-health, economic, and social-empowerment can be achieved through existing-programs and policies. Methods - Our findings were drawn from qualitative research conducted in urban and peri-urban regions of Jaipur and Lucknow. A mixed-methods approach was used, combining online-surveys with semi-structured interviews and participatory-exercises to generate high-quality data. All girls and young women selected for participation were in-between the ages of 15-24. Results - Interviewees described their caretaking experience as "physically and emotionally depleting" (Goh). As substitute providers of care, they felt unprepared and unfit to administer health procedures. Although many felt that they "needed" to earn some sort of income, their paid work options were few and poorly paid. As a result, most participants could only fulfill their caretaking responsibilities in the most basic-capacity. Analysis of participants' survey-reports revealed that women had little knowledge of the COVID-19 pandemic and its consequences on their lives in relation to regional politics, economy, and health. Conclusions - The strengthening of social security measures is of the utmost importance. In future, policy should take into consideration the costs of womens' caregiving responsibilities on themselves, their children, and their families. A gendered approach to political economy must be adopted.

Democracy, Elections and Society in the Conditions of the Covid-19 Pandemic – The Case of Georgia

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The COVID-19 pandemic has exacerbated the crisis of democracy around the world, allowing governments to disrupt elections, silence critics and the press, and undermine the accountability principle necessary to protect human rights as well as public health (Freedom House2020). Elections are the cornerstone of democracy and the "main precondition" (Ginsburg and Huq, 2018), the key mechanism by which political leaders are elected and held accountable, and through which people participate in governing the country (Dahl 1971; Lijphart 1999; Lindberg 2006, Landman 2013; Webler and Tuler 2018; Pzreworski 2019). The parliamentary elections held in Georgia on October 31, 2020 in the conditions of the Covid 19 Global Pandemic were assessed by the international community as an example of stability, when Georgian voters went to the polls during the global pandemic and the ongoing war in the Caucasus. The results achieved with wide representation and relevant election rules were seen as determining the country's western future, as Georgia had one of the lowest mortality rates in Europe and was among the world leaders in virus control. It seems that the result of successful crisis management is reflected in the ballot box. However, the results show that Georgia's fate is linked to a larger issue - whether the West can limit Russia's regional influence. " In the presented paper we analyzed the impact of the Covid Pandemic on Georgia - the most free country in the Caucasus region, which is at a critical stage of democratic development, as well as how the election results have affected democracy and society. keywords: Georgia, Covid 19, Global Pandemic, Elections, Democracy, Society.

Elections During the Covid-19 Pandemic in Post-Soviet countries (on the example of Poland, Estonia and Georgia)

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The article presents research on elections during the covid-19 pandemic. The pandemic is the number one challenge on the world agenda. Covid-19 has put countries in the state of universal crisis.The pandemic affected almost every area, including elections. According to the International Foundation for Electoral Systems, more than 60 countries have postponed elections due to a pandemic. However, there are, of course, countries where elections have not been postponed or canceled despite the pandemic. The planning elections, which usually require extensive person-to-person contact, during a historic health crisis is challenging. Officials worldwide have struggled with securing enough funding to implement safety precautions, expanding mail-in voting, and communicating changes with the public, among other obstacles. The article discusses, from post-soviet countries, the Polish Presidential elections and the Georgian Parliamentary elections, both in a pandemic. In addition, the example of Estonia as an innovator state is given. Polish Presidential and Georgian Parliamentary elections, both of which took place in a pandemic. In addition, the example of Estonia as an innovator state is given. The article is based on research methods established in political science. In particular, from research analysis of qualitative is used - content analysis. It includes research on literary material on elections during the covid-19 pandemic, reflecting on the transformation of events and processes on the issue and drawing relevant conclusions.

Keywords: Elections, Covid-19, Pandemic.

Analyzing of the College Admissions Problem and School Choice Problem by Using Matching Mechanisms

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Matching Theory, which brings a solution to the problem of sharing and matching in the markets, has put forward and still puts forward the theories on how to make the most effective matches in two-sided and one-sided markets. The most important argument of these theories is the study of Gale and Shapley (1962), and the deferred acceptance algorithm explained by Gale and Shapley in this study guided the creation of effective mechanisms in the markets. One of the most important examples of the matching problem in the markets are the College Admissions Problem and the School Choice Problem, which we have examined in detail in our study. These problems, which appear to be the same, actually diverge from each other. The differences between these two problems are the main point in the differentiation of the mechanisms written in order to solve the problems. Most of the mechanisms created are different from each other in terms of features. In the second and third chapters of our study, each mechanism is examined separately through examples, and their features are explained in detail. In order to show the important points where these mechanisms, which are used in college admission and school choice, differ from each other in terms of applications and features, in the third chapter the applications of the mechanisms are made on the same examples and the solutions of the examples are shown in detail.

Coronomic Crisis And Risk of Zombification of Global Economy

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To study the impact of the Covid situation on the economy and the current crisis, Sri Lankan Professor A. De Alwis coined the new term "Coronomics", which combines the terms "Corona" and "Economics" to study the coronavirus economy. Results. Many countries have moved to a strict isolation regime, which has led to restrictions on the activities of economic agents, both domestically and internationally. The global health crisis has also had a major impact on the global economic situation. The cancellation of flights, travel restrictions, falling oil prices, imbalances in the supply of healthcare equipment, restrictions and ultimately losses in the travel and shipping industry, consumer isolation and other causes have triggered a global economic crisis.

Economic Strategies Based on Covid-19 in the Program Documents of Georgian Political Parties (on the Example of 2020 Elections)

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COVID -19 has harmed the entire contemporary global economy. The result of it has been reflected in most of the courtiers. Several targeted measures have been proposed by international organizations to reduce the existing negative economic impact. Countries at the legislative level seek to promote sectors that are affected by the coronavirus. On March 14, 2020, the Government of Georgia with tight collaboration with the economic team presented a certain plan of measures to stimulate the country's economy. The government started fighting on two main fronts- the health and life of citizens, the economy, and social security, all these were exactly during the preparations for the 2020 parliamentary elections, the entire pre-election process. Thus, the deals with the current situation and presents the election documents of the main political parties that gain a place in the Georgian parliament. In this case, we have to highlight that the parties offered their versions of saving the country's economy. The issue is considered relevant because it presents the views of the parties on how to ensure the economic growth of the country and the priority of their economic strategy.

Flexibilization of Administrative Work in the Automotive Industry (AI) in the Bajío Region, Querétaro and Guanajuato: Structural Factors and Organizational Reconfiguration

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The research presented seeks to analyze the structural factors and the organizational reconfiguration for the management of administrative personnel in companies of the Automotive Industry (IA) of the States of Querétaro and Guanajuato, under the social approach of improving the quality of life of Mexican workers, in a business context of strong investments, structural growth and great labor mobility. The cardinal question is: How do structural factors and the organizational reconfiguration of IA impact on the flexibilization of administrative work? The objective is to analyze structural changes in work organization, as well as business strategies in IA in the Bajío Region in terms of its employment and capital attraction policies; that as a whole affect the work and professional life of administrative personnel. A mixed methodology is proposed with a focus located in the automotive Bajío region, which has more than 3,000 companies and 470,000 direct and indirect jobs.

Global Political Economy and Power Politics

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The outbreak of the worldly spreading COVID-19 was not merely a health issue, as to the misfortune of millions around the globe; the virus was a shattering event for economies, public policies, international politics, and world trade. In addition, the pandemic's complex consequences targeted individuals and vulnerable communities in unexpected ways, which require a better understanding through rigorous research and analysis. China, a major super power in politics and world trade, where the virus first emerged and spread, faced and is poised to face diverse challenges to its economy and international affairs as a result of the losses and tensions born from Corona. The European Union, having just survived a protracted Brexit, witnessed embarrassing inter-state divisions with regard to COVID-19 combat, besides the reported disagreements and mutual appropriation of medical aid among member states. The USA has also been facing an embarrassing situation on the national and international fronts. The handling of the pandemic has created a lot of mistrust and skepticism in the capabilities of the current administration in handling the crisis. Governments, in both the Global North and the South, encountered hard decisions as to whether it is obliged to support the individuals and social groups negatively influenced by the pandemic. Some countries took action early, supporting those who lost their jobs in the pandemic and offering help to the vulnerable sections in society and economy. Other governments shared responsibilities with the private sector and NGOs, while a third type of governments transferred the entire burden of loss and vulnerability to the threatened groups through a public policy of silence and negligence. Out of this variety of approaches, COVID-19 posed serious questions for public policy and social justice. On the economic level, the pandemic has created lots of venues for research including how to get out of this crisis and what type of policies are better situated to handle the crisis and its aftermath, the status of the health system and its fragility, the resilience of the current world order and the rising de-globalization move, etc. Covid-19 Policy Pandemic China USA

Pandemic: A New Factor of Media Challenge

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In the process of a pandemic, which contributes to the establishment of an unfavorable psycho-social environment, the role of the media is important: either it will take care to maintain calm in the society or contribute to the tendency panic and alarm establishment; prefer calm, balanced, expert views scandalous shock therapy. In this regard Georgia is no exception, since Georgian media tries to provide operative and educational information to a wide audience about how to behave in a certain, what methods to use to manage their spiritual and physical potential, and how to adapt to the existing reality. It is obvious that the media have accumulated certain experience, but still fails to cope with the challenges: there is a tendency to violate professional standards. Inconsistent, unbalanced presentation of facts, biased assessments negatively affect public behavior and attitudes, which was cause by the vaccination. Here we have to say that it is not surprising at all, as the media is facing a similar large-scale challenge for the first time.

Reliability of COVID-19 Data in the Shadow of Anti-Pandemic Measures

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COVID-19 pandemic has presented policymakers in different parts of the world with an unpleasant dilemma. On the one hand, the pandemic necessitates tough measures such as lockdowns and movement restrictions to be taken by elected representatives and authorities. On the other hand, many of those measures are very costly from an economic standpoint and thus likely to make business owners and their employees discontent. However, if an anti-pandemic regiment does not accomplish its goals, then corresponding economic costs are even harder to justify. We argue that under such circumstances cancellation of an anti-pandemic regiment leads to lower reliability of the pandemic data. Firstly, rank-in-file policymakers and bureaucrats have incentives to present more optimistic statistics that signal their competence in policymaking and implementation. If a sufficient number of administrators is involved in data manipulations, truthful reporting becomes a suboptimal strategy for their post-pandemic careers. Secondly, politicians may pressure them to report statistics that appear to agree with the cancellation of restrictions and, therefore, give legitimacy to such practices. Our empirical analyses reveal that closeness to the restrictions' cancellation date is associated with lower reliability of COVID-19 daily cumulative cases and deaths data in several countries. Being robust to a number of sensitivity checks, different operationalizations, and model specifications reported in online appendices, this finding is alarming not only from the perspective of the relationship between the representatives and the represented, but also for citizens who have to take necessary measures to survive in such turbulent times.

Keywords: Covid-19; pandemic data reliability; representation; comparative politics

A Simple Model of Equitable Endogenous Economic Growth

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An evidence-based model is developed wherein economic growth is induced by variables both inside and outside of the firm that contribute to more equity and facilitate more equality of opportunity. This would be the case even if economic agents are modeled as selfish rational decision-makers. Our results are only accentuated if agents are imbued with moral sentiments (empathy and sympathy). This model builds upon x-efficiency theory, efficiency wage theory, and institutional economics, and the recognition of power relationships, relative positioning, and differential preferences to the determination of growth outcomes. In this model, variables that positively impact on cost and equity can also positively impact on the extent and rate of economic growth. This is the opposite to what is predicted in the conventional and even amongst the 'heterodox' economic models. Given the assumed causal relationship between core independent variables and growth, the model presented here is an endogenous theory of economic growth and development. Factors that endogenously incentivize growth are improving wages and working conditions, improving environment standards, decision-maker preferences for a fairer workplace (wage and working conditions), mental models that inform decision-makers of the viability and profitability of a fairer workplace and society, disincentivizing rent seeking and moral hazard behaviour. Exogenous variables that incentivize growth include investment in infrastructure, secure property rights, secure labour rights, tight labour markets, and institutionalizing co-operative organization forms. In this modeling narrative, equitable growth, wherein a fairer workplace is institutionalized, is not a zero-sum game. Indeed, 'fairness' variables contribute to the growth process and increasing the size of the economic pie.

The Chief Sustainability Officer: How to Institutionalize Sustainability in Organizations

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SDGs have gained prominence globally. The 17 SDGs call for “promotion of prosperity while protecting the planet. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection.” The SDG process requires strong institutional structures in the public and private sector agents that are to undertake the necessary actions. However, so far no necessary changes in the institutional structures in neither of the actors have been adequately undertaken. As such, without necessary organizational and administrative measures in place, the successful implementation of the SDGs and the atteinment of goals do not seem possible. In this study, we review whether or to what degree the institutional structure necessary to reach SDGs have been made in selected countries. Subsequently we propose a new administrative post in public and private sector actors who would be the prime institutional responsible for the design and implementation of measures relevant to the SDGs.

Does Covid-19 Affect Price Convergence Across Regions in Turkey?

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This paper aims to analyze the impact of Covid-19 on price convergence across regions in Turkey. We use the log t-test developed by Phillips and Sul (2007, 2009) and their clustering algorithm to empirically determine the number of convergence clubs and divergent units of general and 12 disaggregated consumer prices across 26 regions in Turkey monthly data ranging from January 2005 to December 2020. We find that there are generally two converging clubs that do not seem to converge over time for general consumer prices. In particular, these two clubs start to diverge more after 2013 and continues during the pandemic. While there are two major clubs at the aggregate level, there are two to four clubs at the disaggregated levels across regions. This indicates that the regional cost of living in Turkey does not converge across areas and over time. We found that education and transportation display the highest divergence behavior, while alcoholic beverages and tobacco display the most converged category. In other words, as expected, the prices of relatively non-tradable items show great diversity across regions.

Infectious Diseases in Time and Space

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In December 2019, the coronavirus which spread all over the world from China, not only changed the agenda of international politics and made the fight against the pandemic a concern for every state, but also directed the pen of historians and writers to an in-depth study of the issue and turned the focus to infectious diseases into a historical retrospective. In ancient times, infectious diseases were considered a punishment for sins. The wrong doing that angered the deities was linked to the political actions such as violation of the treaty related to the military campaign, usurpation of the throne, etc. The plague epidemic was also linked to politics in ancient Greece, where the ongoing events (domestic and foreign policy, covert diplomacy) completely changed geopolitical factors. Infectious diseases, as part of the united world, spread to different parts of Georgia at different times. Legends have it that the disease does not appear locally, it comes, comes from somewhere and is violent to enter the village, makes every effort and comes to annihilate people. Via studying pandemics and fatal situations in time and space, we aim to show a link to how the pandemic affects people heavily, enhances the sense of the end of the world, brings the theme of the second coming to the fore, evokes a heavy moral mood and, with all this, plunges the society into severe material poverty.

Perception of Economic Risk Brought by Covid -19 and Government Aids to Manage Perception

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2021 COVID-19 virüsünün yarattığı pandemi salgını dünya genelinde olduğu üzere Türkiye'de de en önemli sağlık trajedisi haline gelmiştir. Yaşanan bu trajedinin sonuna gelinme umudu yüksek olsa da Ülkelerin mali ve ekonomik alanlarında önemli hasarlar bıraktığı bir başka değişle ekonomilerin sağlığını bozduğu da bir gerçektir. Pandeminin, ekonomiler üzerinde yaratığı belki de en önemli hasar; Ülkelerde yaşanan ekonomik bozulma ve finansal güvene karşı artan endişelere bağlı olarak ortaya çıkan ekonomik güvensizliktir". Pandemi sırasında sosyal korumaya yönelik yapılan hükümet yatırımlarına rağmen, Ülkelerinin pek çoğunda insanlar, ekonomik krizden kurtulabilmek veya etkisini daha az hissedebilmek için daha fazla kamu desteğine ihtiyaç duymakta, birçoğunun da daha iyi sağlık koşulları, istihdam olanakları ve uzun vadeli finansman sağlanması yönünde yüksek beklentileri bulunmaktadır. Dünya Sağlık Örgütünün (Word Healty Organization-WHO) verilerine göre 3 Mayıs 2021 günü itibariyle dünya genelinde 3.198.528 kişi hayatını kaybetmiş, ölümler dahil 152.534.452 doğrulanmış COVID-19 vakası bildirilmiştir . Bununla birlikte milyonlarca insan da bu hastalıktan fiziksel ve zihinsel olarak acı çekmiştir. Pandemi, önemli ölçüde iş kayıplarına neden olduğu gibi bu duruma bağlı olarak da hane halkının gelirlerinde meydana gelen ciddi düşüşler ekonomik büyümeyi de etkileyerek ekonomiyi sekteye uğratmıştır. Bununla birlikte eğitim hayatı da bu durumdan nasibini almış, ülkelerin özellikle kırsal alanlarında eğitim durma noktasına gelmiştir. Pandemi dönemi sona erse bile, bu durumun ekonomik ve sosyal yansımaları on yıllarca devam edebilir. Bu çalışmada, pandemi döneminde OECD ülkeleri ve Türkiye'de, insanların karşılaştıkları en temel risklere ilişkin algıları ve hükümetlerin bu riskleri gidermek için hangi tedbirleri aldıkları ele alınarak, risk algısı ile alınan ekonomik tedbirlerinin uyumu değerlendirilmeye çalışılacaktır.

Covid 19 and a New Phase of US-China Relations

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The purpose of this paper is to address the main issues of strained relations between the US and China before and after the spread of the pandemic, such as: information warfare - Coronavirus - the introduction of artificially created biological weapons by the United States to win the trade war with China and the US military to spread the epidemic in Wuhan. On the other hand, the US accuses China of hiding the extent of the virus and China deliberately hiding the exact death rate. Due to the mentioned and other important issues, the information war between the two countries is still ongoing. The article will also discuss the US support for financing companies to move their production from China to the US or other countries during the period of pandemic.

Taxational Measures Within The Scope of Covid-19 Pandemic at Turkey and Some Countries

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The coronavirus is one of the most dangerous pandemics of the last century. Covid-19 in Turkey was seen for the first time in March 2020. Some business has stopped/reduced their activities, some companies have gone bankruptcy. People's production and consumption decisions, employment and distribution policies have changed because of pandemic. The pandemic has affected tax revenues on income, expenditure, wealth, and tax collection potential of the state decreased. Thus, each country has taken many measures and countries have postponed taxes and brought some convenience to the taxpayers. The measures have been formed and shaped depending on the socio-economic structure of countries, financial power of the public economy, the power of the infrastructure such as health, education, and science. In this study, the taxational measures taken because of covid-19 have been explained for Turkey, and selected countries and it is emphasized these measures should continue for a while after the pandemic.

The Challenges Brought out by the Covid-Panic and How to Avoid a Repeat?

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In this presentation I quickly go over the scale of the damage done by covid-related policies, including the damage to democracy, free speech, equality, and the developing world. The last 18 months is depicted as a wave of hysteria that morphed into the opportunity for a coalition of politicians, institutionalised medics, and big corporations to increase their power and wealth at the expense of the rest. I then discuss the options to repair the damage done and to strengthen democratic institutions. I also float the basic idea and workings of an early-warning system on future panics.

Psychosis: The Impact of the Covid-19 Pandemic on the Belarusian Political Landscape

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The first diagnosed case of Covid-19 appeared in Belarus on 27 February 2020 in an Iranian student who had flown in from Baku, Azerbaijan. The case caused an immediate stir in the country. The patient was interviewed by the media and every detail of his case was shared with the public. The impression being given was that the state was firmly in control. However, soon many other cases started appearing in the country. By early August, in the run-up to the presidential election of 2020, there were 68,000, according to official data, and over 560 people had died. Yet President Aliaksandr Lukashenka (spelled alternatively as Alexander Lukashenko) refused to take any measures that, in his view, would damage the Belarusian economy. He declared in a pre-election speech that following suggestions from the World Health Organisation regarding lockdowns or curfews would have caused Belarus "to die as a nation and lose our state". In another speech, he alleged that fear of the virus was a form of "psychosis". No strict rules regarding masking or social distancing were introduced. As the number of people infected with the virus continued to climb, a number of Belarusian physicians cast serious doubts on the accuracy of government statistics on cases and deaths from Covid-19. Using Lukashenka's speeches and media reports from Belarus in Belarusian and Russian as primary sources, I argue that the Belarusian authorities' callous approach towards the pandemic alienated a considerable portion of the electorate and helped deepen the crisis in the country

The Fourth Transformation in Mexico Trapped in the Neoliberalism Cage and the Impacts of Covid.19.

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On December 1 2018 Andres Lopez Obrador begins his term as president of Mexico facing a deep crisis of the national economy with a debt of 11 trillon pesos (50% of the national GDP),50% of workers in te informal economy, 52 million poor people and growing violence throughout the conuntry, and his promise to promote a reorientartion of neoliberalism with a proposal based on national sovereignity, employment and welfare as te basis of Fourth Transformation of the country is facing serious problems. These problems will increase with the continuation of the same neoliberal austerity policy taht has been in force for 36 years. Thus, in February when the Covid-19 burst into the country, the same model will continue to be applied, with teh welfare modality for youn people and elderly as a "new electoral reserve army". With the Covid-19 pandemic, its impacts on the national economy with an -8.5% drop in GDP in 2020, tle loose of 2.3 million jobs and the health system overrun by 2 million infected and 200 000 deaths at the beginning of 2021, the promise of the Fourtg Transformation remains a prisoner of neoliberalism an the health and economic imnpacts of Covid-19.

Tax Rebate and Price Discrimination

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We study the effect of a tax rebate on tax evasion, when a monopolist can also apply a price discrimination strategy. In such a context, the monopolist contracts with the buyers a price discount, in exchange for not issuing the transaction receipt, hiding sales revenues from tax authorities. Buyers in the economy are heterogeneous only in the cost of evading (tax morale), and keeping the purchase receipt, they are eligible for a tax rebate. We show that a price discrimination strategy always leads to a reduction in tax evasion, and for positive values of the rebate rate, the monopolist always chooses to discriminate; regardless of the price strategy adopted and the amount of the rebate rate, the aggregate quantity produced in the economy remains unchanged, so that no effect on consumption is generated. Furthermore, we prove that the tax rebate policy is strongly affected by the distribution of tax morale among population, in fact under certain conditions it becomes even optimal for the government, not to endorse any tax rebate.

The Green Transformatıon in the Covıd-19 Pandemia: A Carbon Border Tax

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The European Green Deal adopted by the European Commission on 11 December 2019 includes the aim of enshrining the long-term objective of climate neutrality by 2050 in legislation and increasing the EU’s climate ambition to reduce greenhouse gas emissions by 50-55% from 1990 levels by 2030. The European Green Deal also indicates carbon leakage risk, which occurs when production is transferred from the EU to other countries with lower ambition for emission reduction, or when EU products are replaced by more carbon-intensive imports (Republic Of Turkey Ministry of Trade, 2020: 1). One of the most important policy tools of the European Green Deal is on carbon border adjustment mechanism. In this context, it is planned to apply a carbon border tax to reduce carbon leakage. Thus, additional obligations are imposed on third countries that do not have climate policies in line with the EU. It can be said that Turkey will be affected significantly by the carbon border tax and the carbon border adjustment mechanism. The mechanism could be an advantage for Turkey to create a green industrial transformation strategy. The aim of this study is to examine the impact of a carbon border tax on Turkey's economy with SWOT analysis in the process of the Covid-19 pandemic.

Keywords: A carbon border tax, The European Green Deal, EU, Turkey

The Political Economy of COVID-19

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The COVID-19 epidemic has triggered a twin (health and economic) crisis. The health crisis is caused by the 'metabolic rift' (capitalism's uncontrollable and insatiable commodification of nature) that leads to the modern 'emerging epidemics' of zoonoses. The economic crisis was already simmering – as the 2008 global capitalist crisis of overaccumulation was not fully resolved). The lockdowns implemented for stopping the pandemic triggered the eruption of the economic crisis and aggravated its evolution. The pandemic poses serious problems to economic policy (which aspect has priority? health or the economy?). Different socio-economic systems cope differently with such problems. Socialist economies and/or economies with a robust public sector can confront better such crises.

Structural Breaks, Manufacturing Revolutions and Economic Catch-up: Empirical Validation of Historical Evidence from South Korea

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High income countries, by definition, are the ones that have escaped the middle income trap. A demonstrative example is South Korea. From a poor country status in 1960s, the country successfully escaped, first low-income and then middle-income traps. The decrease in average GDP generated per hour gap relative to Germany (current prices PPP, US dollars) from 7.0 times in 1970 to 2.1 times in 2015 is evidence enough for South Korea's economic catch-up with high income countries (Yulek, 2018). South Korea has done this by industrial policies and structural change as illustrated by, among others, Amsden, (1994), Tcha (2015), Yulek (2018) and Lane (2019). However, all these studies are predominantly descriptive in nature. They explain what and when South Korea policies targeted and achieved. Industrial policy is supposed to create long-term process of structural change in the industrial production pattern that can be descriptively and statistically monitored through the export and production pattern. Current study intends at detecting policy-led structural change pattern econometrically. For this purpose multiple nonlinear Granger causality tests were applied. The results indicated the existence of structural breaks and nonlinearities in dynamic relationship between the studied variables. Results show evidence of three distinctive structural breaks in real exports and real GDP of South Korea. These findings support the descriptive evidence of structural change in favor of manufacturing revolutions and value added industry development in South Korea.

Forecasting the number of Covid-19 Patient in Turkey Using Nonlinear Autoregressive Neural Networks

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As it is known, the Covid-19 virus, which emerged at the end of 2019, spread rapidly all over the world and was declared a pandemic by the World Health Organization in early 2020. In this context, an intense and effective fight against the pandemic has been continuing for about 1.5 years in our country, as in the whole world. As in the whole world, the fight against the Covid-19 pandemic in our country has deeply affected and continues to affect the whole society negatively in terms of health, economy, social and psychological aspects. As in the world, the expectation of all segments in our country is that the pandemic will no longer be a risk. In this regard, besides the intense struggle, it is pleasing that the vaccine has been found and the intensive vaccination program continues. In this study, the number of Covid-19 positive patients in our country; the prediction model was established with the Non-Linear Autoregressive Neural Network (NAR) model by taking the daily positive case numbers seen in the post-vaccination period. According to the one-month estimation results obtained from the model, a promising forecasting result with a decreasing trend was obtained, albeit fluctuating.

Keywords: Covid-19, Forecasting Covid-19 Cases, Non-Linear Autoregressive Neural Network

Accelerating The Process of Digitalization Through Information Systems in Business, as a Consequence of The Pandemic With Covid-19

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The new reality, the Covid-19 pandemic since early 2020, has opened the doors of the digital economy - a process in which an outdated system collapses to pave the way for something new and more precise. The development of electronic technologies is the only way for businesses at all levels to survive in conditions of forced closure and social isolation. Becoming a powerful catalyst for digital transformation, the Kovid-19 crisis has led to a complete reorganization of processes, rapid change and automation. According to global trends, a dividing line is being set - before and after the pandemic, and for entrepreneurs the biggest challenge remains - speed and adaptation to change, as no one can wait for the realization of a long-term vision.

Contribution of Eco-Innovation and Waste Management to Economic Growth in the Context of Circular Economy: the Case of European Countries

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Mass consumption accelerated with the industrial revolution. The production model of this period is the traditional one-way linear economy, in which the "buy-build-use-dispose" principle is adopted. The mass consumption rate, which accelerated with the increase in population in the following years, has caused the destruction of resources, environmental damage such as climate changes and global warming. This situation has been questioned as it hinders sustainable environmental and economic development and the concept of circular economy has emerged as an alternative. Circular economy is based on the principle that nothing is "waste", everything can become "resource" and is a production model in which the least damage to the environment is done. The EU cares about this area and carries out important regulations and activities. Eco-innovation activities are an example of this. Eco-innovation, considered the driving force of the circular economy, is defined as any new or significantly improved product, process, organizational change or marketing solution that reduces the use of natural resources and the release of harmful substances throughout its life cycle. The study covers the period of 2010-2018 and examined the effects of various indicators of eco-innovation and waste management, which are important components of the circular economy, on the growth of 21 European countries. In the study, panel data analysis method was used and results were obtained with the resistive estimator Prais-Winsten (PCSEs). According to the results; It has been seen that eco-innovation and the recycling rate of municipal waste have a positive effect on the growth of countries, while the recycling rates of packaging waste and e-waste are statistically insignificant.

Keywords: Circular Economy, Eco-inovation, Waste Management, Panel Data Analysis.

JEL Classification Codes : Q5, Q53, Q57

Strategic Management Changes In Georgian Regional Public Administrations During Pandemic

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Traditional approaches of management in public administrations have changed due to the Covid-19 Pandemic. Those modifications affected all level of governance – central, regional and municipal. Georgia was not an exception in this process. Administrative approach in Georgian regions changed its behavior and resulted in different management. Pre-Pandemic strategies of countries and regions/municipalities were formulated by the incentives of sustainable economic growth, advancement human development, adaptation to and prevention of crisis. However, crises are mostly unpredictable and as the Covid-19 Pandemic demonstrated, states were not ready to cope with it. According to National Strategy of Georgia to prevent virus, almost all resources of any level of governance re-administered to Healthcare system. Municipalities of Georgia faced new challenges regarding strategic management of public administrations and therefore, future development of regions. Remote working, lack of resources, partly paused economic activities, unpredictable environment of Covid-19, lead to undetermined development and behavior strategy. The following paper examines the management changes in public administration of Georgian regions. Core part of the paper is about the effectiveness analysis of management and implementation of strategic views in management of local development and public administration. Simultaneously with vaccination process, public administration might switch back to traditional approach of management. The latter has both advantages and disadvantages, which is studied in paper.

PROCEEDINGS

COVID-19 SÜRECİNDE BORSALARARASI OYNAKLIK YAYILIMLARI: KIRILGAN BEŞLİ ÖRNEĞİ

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Abstract

In times of financial crisis, volatilities and volatility spreads generally increase. As a matter of fact, the fear and concern created by the COVID-19 epidemic and the epidemic in the economy and financial market, which emerged as a global health problem but affected the economies of the country in a short period, caused the volatility in financial asset prices and the global financial market to increase. However, it remains uncertain how this instability occurs in countries with weak financial structures and serious problems in macroeconomic indicators. In this regard, the study aimed to examine the volatility and return spreads of the stock daily index data for the period January 5, 2015 - April 30, 2021 in the stock markets of Turkey, Brazil, India, Indonesia and South Africa, which are publicly known as the "Fragile Five". In the study using the diffusion index method by Diebold and Yılmaz (2012), it was understood to be that the volatility spreads increased during the COVID-19 process and the country with the highest volatility spread was South Africa and the country with the lowest volatility spread was in Turkey. In the study, it was also understood that South Africa is a net volatility spreader and Indonesia is a net volatility buyer. The results are remarkable in terms of portfolio investments, portfolio management, risk management and hedging.

***Keywords**: Volatility Spread, Stock Markets, COVID-19*

Giriş

Küreselleşme pek çok alanı etkilediği gibi piyasalar arası ilişkilerin artmasıyla birlikte ekonomi ve finans piyasalarında da kendini göstermiştir. Nitekim sermaye hareketlerinin tüm dünyada serbest hale gelmesi ve bilişim sektöründe yaşanan gelişmeler, küreselleşmeden en çok etkilenen alanın finansal piyasalar olmasına yol açmış ve bu durum finansal piyasalarda bulaşma ve oynaklık yayılımlarının artmasına neden olmuştur.

Oynaklığın, risk ve belirsizlik altında varlık fiyatlarındaki dalgalanmayı ölçmek için kullanılan bir gösterge olduğu düşünüldüğünde fiyat oynaklıklarının yatırımcının korku ve endişelerinin bir sonucu olduğunu söylemek yanlış olmayacaktır (Shu ve Chang, 2019: 2070; Zhang vd., 2020: 2). Bu endişe finansal varlığın içsel faktörlerinden, diğer finansal araçlardan, faaliyette bulunduğu piyasadan ya da küresel piyasalardan kaynaklanabilir.

Bununla birlikte oynaklık yalnızca içsel faktörler tarafından belirlenmez. Büyüme, faiz, kur, enflasyon ve dış ticaret gibi dışsal faktörler de firmalarının finansal performanslarını doğrudan etkilediğinden, bu etki firmanın hisse senedi getirilerine yansıyarak oynaklığın artmasına neden olmaktadır. Nitekim piyasalar arası ekonomik ilişkilerin yoğun olduğu günümüz piyasalarında bir ülkede ortaya çıkan oynaklığın diğer ülkeleri ve finans piyasalarını da etkilemesi uzun sürmez.

Geçmiş yıllarda yaşanan finansal kriz deneyimlerine bakıldığında bu etki daha net görülmekte ve ülkelerdeki oynaklık yayılımlarının yüksek olması krizlerin ortak özelliğini oluşturmaktadır (Santamaria vd., 2017: 207). Bu krizlere örnek olarak 2008 küresel finans krizi, 1997 Asya krizi, 1998 Rusya borç krizi, 1994 Meksika krizi, 1999 Brezilya kur krizi, Türkiye'nin 2000 yılı likidite ve 2001 yılı kur krizleri ve 2010 sonrasında ise Avrupa ve Yunanistan borç krizleri verilebilir.

Bu açıklamalardan yola çıkıldığında oynaklık yayılımlarıyla ilgili analizlerin sistematik risklerin başarıyla yönetilmesine ve finansal istikrarın sağlanmasına katkı sağlayacağı söylenebilir (Zhang vd., 2020: 2). Ayrıca finansal kurumlar arasındaki bilgi yayılma etkilerinin doğru bir şekilde tanımlanması, finansal risklerin bulaşma mekanizmasını anlamamıza yardımcı olacaktır (Li vd., 2021:2).

Bu kapsamda finansal piyasalarda ortaya çıkan finansal risklerin bulaşma etkisine ilişkin araştırmalar genel olarak finansal kurumlar, finansal piyasalar ve endüstriyel sektörler üzerine yoğunlaşmıştır (Li vd., 2021: 2). Finansal piyasalar ve finansal varlıklar arasında oynaklıkların tespit edilmesi, modellenmesi, oynaklık yayılım yönlerinin, oynaklık alan ve ileten piyasaların faktörlerin belirlenmesi finansal piyasalar, yatırımlar, yatırımcılar, portföy yönetimi, portföy optimizasyonu, risk yönetimi, riskten korunma stratejileri, türev ürün fiyatlamaları bakımından önemli sonuçlar ortaya koymaktadır. Oynaklıkların ve oynaklık yayılımlarının artması çeşitlendirme ile risk yönetim imkânlarının azalmasına sebep olurken türev araçlarla riskten korunmanın gerekliliğini artırmakta ve riskten korunma amacıyla oluşan türev ürün talebini artırmaktadır.

Nitekim 2020 yılına gelindiğinde küresel salgının finansal piyasalar üzerinde gösterdiği etkinin geçmişte ekonomik ve siyasi kararların neden olduğu ekonomik etkiler ile benzer olduğu görülmüştür. 2020 yılında ortaya çıkan bu salgının geçmiş salgınlardan en önemli farkı piyasaların küreselleştiği bir ortamda çıkmış olmasıdır. Özellikle salgının Çin'den Avrupa ve ABD başta olmak üzere dünya geneline yayıldığı Mart 2020 ayında; salgın kaynaklı ölüm sayılarının aniden artmaya başlaması, salgınla mücadele konusunda genel kabul görmüş yöntemlerin bilinmemesi, salgının insanlar üzerinde ortaya çıkardığı korku ve endişe piyasalarda ani düşüşlerin meydana gelmesine neden olmuştur.

2020 yılı başından COVID-19'dan kaynaklı tarihi düşüşlerin görüldüğü Mart 2020 ortasına kadar Türkiye BİST100 endeksi %27, Endonezya IDX endeksi %35, Brezilya Bovespa endeksi %42, Hindistan BSE endeksi %32 ve Güney Afrika SA40 endeksi %33 oranında değer kaybetmiştir. Bu kapsamda çalışmada kamuoyunda "Kırılgan Beşli" olarak anılan Türkiye, Brezilya, Hindistan, Endonezya ve Güney Afrika borsalarındaki 5 Ocak 2015 – 30 Nisan 2021 dönemi hisse senedi günlük endeks verilerinin COVID-19 sürecindeki oynaklık ve getiri yayılımlarının incelenmesi amaçlanmıştır. Çalışmada Diebold ve Yılmaz (2012) yayılım endeks yöntemi kullanılmıştır. Çalışma örnekleminde beş ülke verisinin kullanılmasının nedeni finansal yapısı zayıf ve ciddi ekonomik sorunlarla karşı karşıya olan bu beş ülkenin COVID-19 sürecindeki borsa performansını analiz etmektir.

Literatür Taraması

COVID-19 salgınından bağımsız olarak bakıldığında küreselleşmenin neden olduğu serbestleşme, bilişim sektöründeki gelişmeler ve uluslararası ilişkilerdeki artış finansal piyasalarda artan şekilde oynaklık yayılımına neden olmuştur. Artan oynaklıkla birlikte akademik literatürde borsalara ilişkin oynaklık yayılımı çalışmalarının da arttığı görülmektedir.

Bu çalışmalardan biri olan ve G7 ile BRIC ülke borsaları arasındaki risk yayılımını DAG-SVAR yöntemiyle inceleyen Zhang vd. (2021), bu ülkelerin Ocak 2009-Mart 2020 dönemi verilerini incelemiş ve çalışma sonuçları net oynaklık yayılımının COVID-19 salgınından sonra arttığını ve İngiltere ve ABD borsalarının temel risk ileticisi olduğunu göstermiştir. Çalışmada ayrıca risk yayılımı ve oynaklık değerleri de incelenmiş ve Çin başta olmak üzere gelişmekte olan ülkelerin risk alıcısı olduğu, G7 ülkeleri net oynaklığının BRIC ülkeleri net oynaklığından daha fazla olduğu ve Çin'in risk yayılımının merkezi konumunda bulunduğu dikkat çekmiştir. Wang vd. (2021) ise Amerika, Çin, Japonya ve Hong Kong borsalarının Ocak 2010-Mayıs 2020 verilerini kullandığı çalışmasında bu borsaların COVID-19 sürecindeki oynaklık yayılımlarını Diebold ve Yilmaz tekniği ile incelemiş ve benzer sonuçlara ulaşmıştır. Çalışma sonuçları COVID-19'un finansal piyasalarda büyük şoklara neden olduğunu, oynaklık yayılımının son on yılın en yüksek seviyesine çıktığını, ABD ve İngiltere piyasalarının oynaklık yayıcısı, Çin ve Japon piyasalarının ise oynaklık alıcısı olduğunu göstermiştir.

Avrupa Borsalarının oynaklık yayılımını inceleyen Aslam vd. (2021) ise Aralık 2019 - Mayıs 2020 dönemine ait Avrupa'daki yirmi menkul kıymet borsasından elde edilen beşer (5) dakikalık verileri kullanarak Diebold ve Yılmaz tekniğiyle COVID-19 krizinde borsalar arası oynaklık yayılımını araştırmıştır. Çalışma sonuçları COVID-19 sürecinde hem doğrudan hem de toplam oynaklık yayılımının yüksek düzeylere ulaştığını ve Avrupa borsalarındaki ortalama oynaklık yayılımının %78 olduğunu göstermiştir. Çalışmada ayrıca Hollanda ve Almanya'nın en yüksek oynaklık yayıcısı buna karşın Polonya ve İrlanda'nın en düşük oynaklık yayıcısı olduğu, en yüksek oynaklık alıcısının Belçika ve Almanya, en düşük oynaklık alıcısının ise Polonya ve Avusturya olduğu görülmüştür. Net oynaklıklara bakıldığında ise Hollanda ve Almanya'nın net oynaklık yayıcısı, İrlanda ve Polonya'nın ise net oynaklık alıcısı olduğu tahmin edilmiştir. Corbet vd. (2021) tarafından yapılan çalışmada ise Çin'deki borsalara kayıtlı 300 firmadan oluşan CSI 300 borsa endeksi, USA Doları/Çin RMB döviz kuru, bitcoin ve vadeli ticari emtia (altın, petrol ve soya fasulyesi) fiyatları arasındaki oynaklık yayılımına ait veriler Şubat 2020 - Mayıs 2020 döneminde 5'er dakikalık periyotlar halinde incelenmiş ve çalışma sonuçları COVID-19 ve CSI300 endeksinin oynaklık ilettiği, buna karşın altın, petrol, soya fasulyesi ve bitcoinin oynaklık aldığı görülmüştür.

ABD, Japonya ve Almanya hisse senedi piyasasını inceleyen Zhang ve Hamori (2021) ise Ocak 2006 - Ağustos 2020 dönemi günlük verilerini kullandığı çalışmasında COVID-19 sürecinde ham petrol piyasası ile hisse senedi piyasası arasındaki ilişkiyi incelemiş ve çalışma sonuçları COVID-19'un piyasalarda oynaklıkları artırdığını, COVID-19'dan ham petrol fiyatlarına olan oynaklık yayılımının borsaların her birine olan oynaklık yayılımından daha fazla olduğunu ve COVID-19'un ham petrol ve borsa oynaklığına etkisinin 2008 küresel finans krizindeki seviyeyi aştığını göstermiştir.

COVID-19 sürecinde finansal bulaşma etkisini analiz etmek isteyen Akhtaruzzaman vd. (2021) ise Çin ve G7 ülkelerinin Ocak 2013 - Mart 2020 dönemi firma getirisi verilerini incelediği çalışmasında Çin ve G7 ülkeleri finansal ve finansal olmayan firmalar arasındaki dinamik koşullu korelasyonların (DCC) COVID-19 döneminde arttığını, oynaklık yayılım endeksinin (%62) ortalama olarak yüksek olduğunu ve DCC'lerin finansal firmalarda finansal olmayan firmalardan daha yüksek olduğunu tahmin etmiştir. Bahsi geçen çalışmalardan çıkan ortak sonuç COVID-19 sürecinde oynaklıkların genel olarak arttığı, oynaklık yayılımlarının gelişmiş ülkelerde daha fazla olduğu ve yayılma açısından ise gelişmiş ülkelerin daha fazla oynaklık yaydığı şeklindedir.

Yöntem ve Bulgular

Çalışmada, 5 Ocak 2015 – 30 Nisan 2021 dönemine ait günlük veriler kullanılarak kırılgan beşli ülkeleri olan Türkiye, Brezilya, Hindistan, Endonezya ve Güney Afrika borsaları hisse senedi endeks verilerinin COVID-19 sürecindeki oynaklık ve getiri yayılımları araştırılmıştır.

Çalışmada Diebold ve Yılmaz (2012) tarafından geliştirilen oynaklık yayılım endeksi tekniği kullanılmıştır. Zira literatürde yer alan oynaklık çalışmaları tek değişkenli GARCH modellerinden elde edilen varyansta nedensellik testleri ve VECH-GARCH, BEKK-GARCH, DCC-GARCH gibi çok değişkenli modeller ile yapılıyorken, Diebold ve Yılmaz (2012) tarafından geliştirilen yöntem ikiden fazla değişken arasındaki oynaklığa ilişkin toplam oynaklık yayılım endeksi ortaya çıkarabilmektedir. Bu durum ikiden fazla değişkenden meydana gelebilen piyasalar, endeksler, döviz kurları, emtia çeşitleri, çeşitli sayılardaki finansal parametreler arasındaki ilişkileri ve bu ilişkilerin zaman içindeki gelişimini görebilme imkânı sağlamaktadır. Yöntem ayrıca diğer yöntemlerde olduğu gibi iki değişken arasındaki oynaklık yayılım ilişkisine dair sonuçlar ortaya koymaktadır.

Tablo 1: Tanımlayıcı İstatistik

Borsalar	BIST100	BOVESPA	BSE	IDX	SAFR
Ortalama	0.036611	0.066698	0.041605	0.009984	0.024939
En Büyük	5.810361	13.02282	11.57310	9.704184	9.056979
En Küçük	-10.43879	-15.99383	-14.10174	-6.805034	-10.45042
Std. Sapma	1.496006	1.832095	1.252824	1.119126	1.323836
Çarpıklık	-0.818299	-0.862600	-0.969682	-0.220923	-0.329421
Basıklık	7.486978	17.53480	26.39376	11.32315	11.54876
Jarque-Bera	1277.440***	11997.25***	30857.62***	3890.327***	4116.858***
Gözlem Sayısı	1344	1344	1344	1344	1344
*** işareti %1 düzeyinde anlamlılığı göstermektedir. BIST100 Türkiye, BOVESPA Brezilya, BSE Hindistan, IDX Endonezya ve SAFR Güney Afrika ülke borsa ve endekslerini temsil etmektedir.					

Tablo 2'deki tanımlayıcı istatistikler incelendiğinde örneklem döneminde en yüksek getirinin Brezilya borsasında (BOVESPA), ikinci yüksek getirinin ise Türkiye borsasında (BİST100) olduğu görülmektedir. Standart sapmalara bakıldığında ise en yüksek riskin Brezilya (BOVESPA) ve en düşük riskin Türkiye (BİST100) borsasında olduğu anlaşılmaktadır. Türkiye hariç en yüksek günlük endeks düşüşünün COVID-19 salgının başlangıç dönemi olan 2020 Mart ayına ait olduğu tahmin edilmiştir. Türkiye'de ise en yüksek düşüş 23 Mart 2021 tarihinde gerçekleşmiştir.

Tablo 3: Korelasyon ve Birim Kök Testleri

Borsalar	BIST100	BOVESPA	BSE	IDX	SAFR
BIST100	1				
BOVESPA	0.339934*** [13.24143]	1			
BSE	0.335364*** [13.04069]	0.382901*** [15.18411]	1		
IDX	0.274781*** [10.46914]	0.299078*** [11.48175]	0.493256*** [20.77243]	1	
SAFR	0.407202*** [16.33257]	0.434918*** [17.69352]	0.519205*** [22.25498]	0.418049*** [16.85832]	1
ADF	-24.2959***	-10.1336***	-11.0904***	-35.3631***	-13.5389***
PP	-34.9705***	-40.6621***	-38.0910***	-35.3679***	-38.1839***
*** işareti %1 düzeyinde anlamlılığı, [ ] içindeki değerler ise t istatistiğini göstermektedir.					

Tablo 4'deki korelasyon test sonuçları kırılgan beşli ülke borsa endeksleri arasında pozitif korelasyon olduğunu göstermektedir. Bu borsalar arasında Güney Afrika (SAFR) borsasının diğer borsalar ile yüksek korelasyona sahip olduğu, en yüksek korelasyon ilişkisinin ise (0,52) katsayı ile Hindistan (BSE) borsasıyla olduğu görülmektedir. Borsalar arasındaki bu korelasyon ilişkileri kırılgan beşli ülkelerinden oluşturulacak portföylerin riskli olduğunu ve çeşitlendirme ile risk azaltmanın pek mümkün olmadığını göstermektedir. Birim kök test sonuçlarına bakıldığında ise ADF (Augmented Dickey-Fuller) ve PP (Phillips-Perron) birim kök testleri getiri serilerinin düzeyde durağan olduğu görülmektedir.

Tablo 5: Uygun Gecikme Uzunlukları

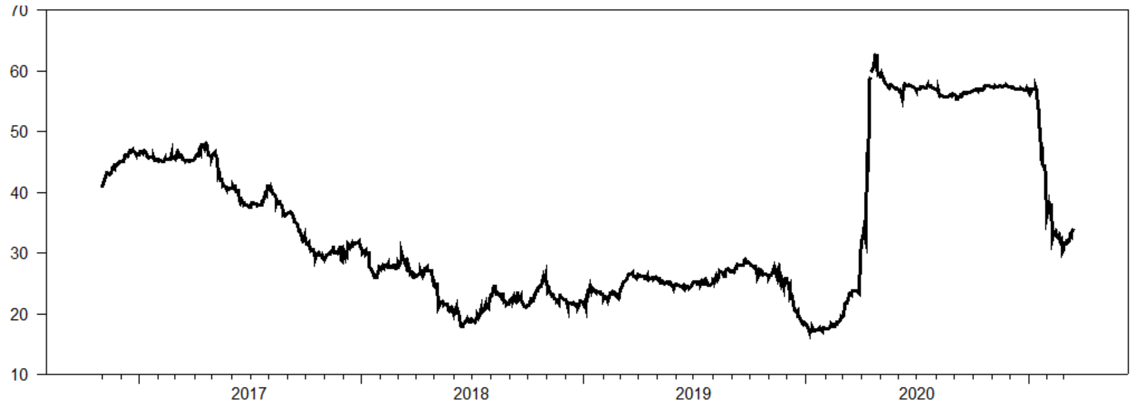
Gecikme	LR	FPE	AIC	SC	HQ
0	NA	8.192475	16.29260	16.31208	16.29990
1	237.9275	7.110235	16.15092	16.26777*	16.19471*
2	77.06983	6.964072	16.13015	16.34437	16.21042
3	57.93985	6.919123*	16.12367*	16.43527	16.24043
4	25.35029	7.046073	16.14184	16.55082	16.29509
5	37.76036	7.107102	16.15046	16.65681	16.34020
6	43.60767	7.135811	16.15447	16.75820	16.38070
7	37.50324	7.197529	16.16306	16.86416	16.42578
8	39.40883	7.248334	16.17006	16.96854	16.46927
9	44.42040	7.270354	16.17305	17.06890	16.50875
10	41.39552*	7.308743	16.17827	17.17150	16.55045
Optimal gecikme uzunlukları * ile gösterilmiştir. LR (sequential modified LR), ardışık geliştirilmiş LR test istatistiği; FPE (Final prediction error), son hata tahmin kriteri; AIC (Akaike information criterion), Akaike bilgi kriteri, SC (Schwarz information criterion) Schwarz bilgi kriteri ve HQ (Hannan-Quinn information criterion) Hannan-Quinn bilgi kriteridir.					

Diebold ve Yılmaz (2012) oynaklık yayılım endeksi VAR (vector autoregressive) modelinden geliştirildiği için model için uygun gecikme uzunluğunun seçilmesi gerekmektedir. Buna göre VAR modeli için uygun gecikme uzunluğu AIC'ne göre üç (3) olarak belirlenmiştir (Bkz. Tablo 5).

Tablo 6 : Oynaklık Yayılımları

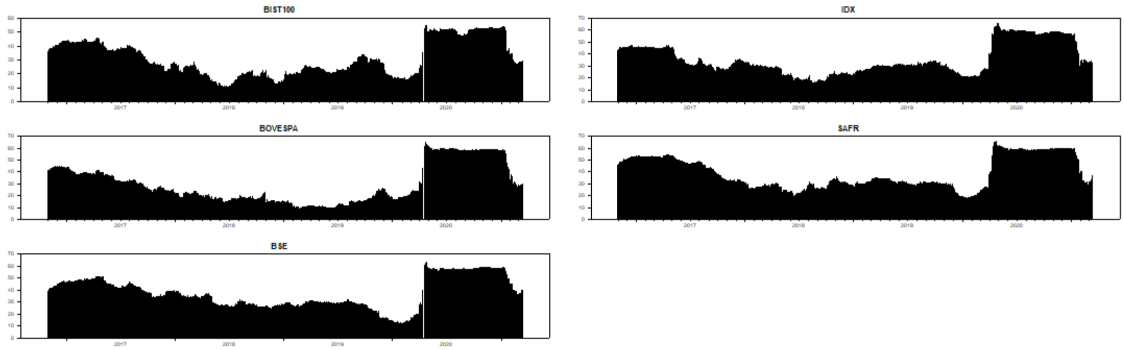
	BIST 100	BOVESPA	BSE	IDX	SAFR	Oynaklık Alımı
BIST100	67,7	8,4	7,9	5,2	10,8	32,3
BOVESPA	7,6	61,8	10	8,1	12,7	38,4
BSE	6,5	9,8	56,1	12,6	15,1	44
IDX	6	9,6	13,8	58,4	12,1	41,5
SAFR	8,9	10,8	15,3	10	55	45
Oynaklık Yayımı	29	38,6	47	35,9	50,7	201,2
Toplam Oynaklık Yayımı	96,7	100,4	103,1	94,3	105,7	%40,2
Net Oynaklıklar	-3,3	0,2	3	-5,6	5,7	

Çalışmanın temel sonuçları Tablo 6'de görülmektedir. Oynaklık yayılımı tablosundan; toplam oynaklık yayılımını, borsaların diğer borsalardan toplam oynaklık alımlarını, borsaların diğer borsalara toplam oynaklık iletimlerini, borsaların net oynaklık alım ya da iletimlerini, borsaların birbirleriyle birebir eşleşmelerde ortaya çıkan oynaklık alım ve iletimlerini görebilmek mümkündür.



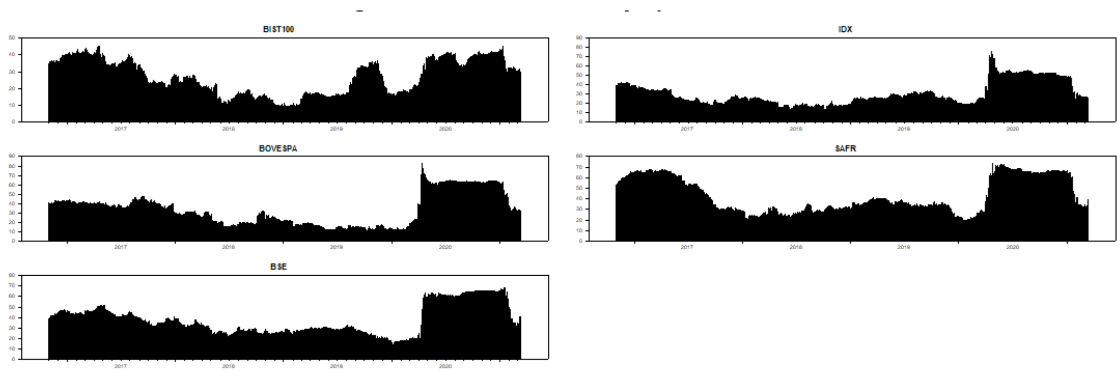
Şekil 1: Toplam Oynaklık Yayılımı

Şekil 2'den görüleceği üzere örneklem dönemine ait toplam oynaklık yayılımı %40,2'dir. Bu değer oynaklık iletimleri toplamının (201,2) oynaklık alım ve iletimler toplamına (500,2) bölünmesinden elde edilmektedir. 12 Aralık 2019 tarihinde %17,19 değerine kadar düşen toplam oynaklık yayılımı 28 Şubat 2020'de %32'ye, salgının ilan edildiği 11 Mart 2020'de %43'e ve 23 Mart 2020'de ise en yüksek değeri olan %62'ye yükselmiştir. COVID-19 salgınının ortaya çıkardığı korku ve panik nedeniyle toplam yayılım endeksi Şubat 2020'den itibaren hızla yükselerek Mart 2020'nin 3. haftasında zirve noktasına ulaşmış ve Mart 2020'den COVID-19 aşı uygulamalarının yaygınlaşmaya başladığı Şubat 2021'e kadar %50 seviyesinin üzerinde seyretmiştir. 7 Nisan 2021 tarihinde oynaklık yayılım endeksinin %30,26 seviyelerine kadar düşmesinde aşıyla ilgili gelişmelerin etkili olduğu söylenebilir. Şekil 3 ve Şekil 4 ise piyasalar arasındaki oynaklık yayılımlarını her bir piyasa için ayrı ayrı göstermektedir.



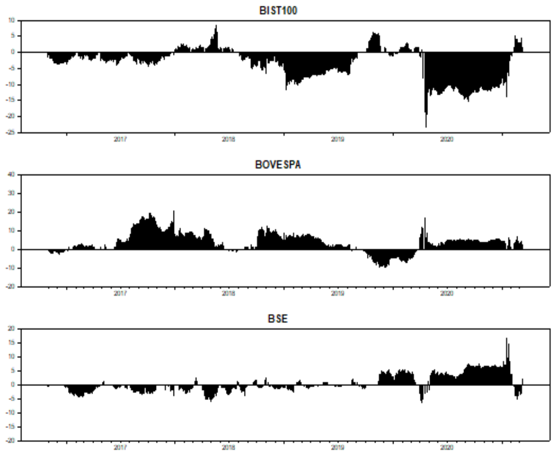
Şekil 5: Diğer Piyasalardan Oynaklık Yayılımı

Her iki şekil birlikte değerlendirildiğinde tüm piyasalarda COVID-19 sürecinde oynaklık yayılım ve alımlarının arttığı anlaşılmaktadır. Piyasalar bazında oynaklık yayılımının en yüksek olduğu tarihler ve oranları Türkiye (BIST100) için 23 Mart 2020'de %54, Brezilya (BOVESPA) için 24 Mart 2020'de %65, Hindistan (BSE) için 13 Mart 2020'de %64, Endonezya (IDX) için 26 Mart 2020'de %69 ve Güney Afrika (SAFR) için 23 Mart 2020'de %66 olarak tahmin edilmiştir. Görüldüğü üzere COVID-19 sürecinde en yüksek oynaklık yayılımı Endonezya'da (IDX), en düşük oynaklık yayılımı ise Türkiye'de (BIST100) gerçekleşmiştir.



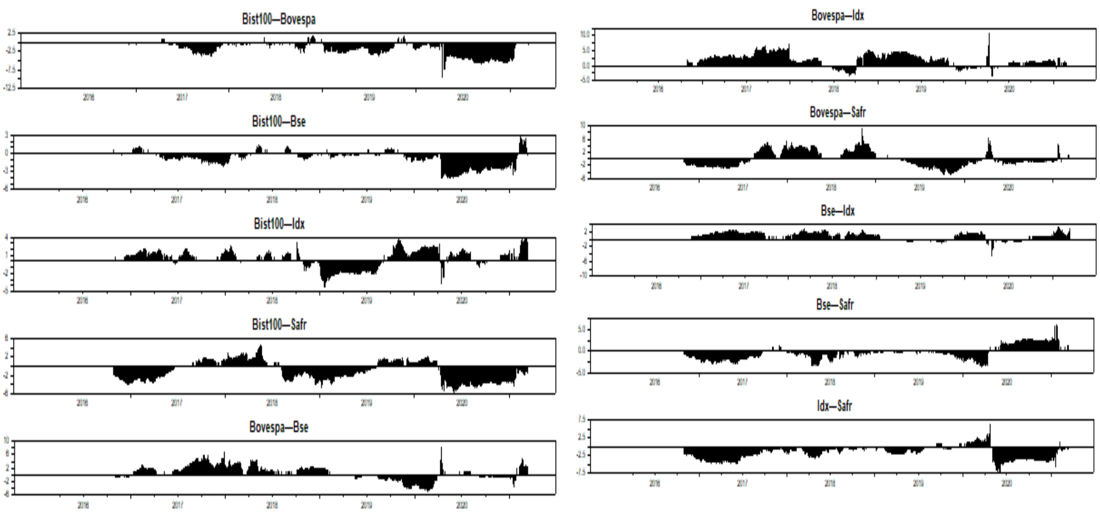
Şekil 6: Diğer Piyasalara Oynaklık Yayılımı

Kırılgan beşli ülke borsaları arasında en yüksek oynaklık alıcı borsanın sırasıyla Güney Afrika (SAFR) ve Hindistan (BSE) olduğu görülürken, en düşük oynaklık alıcı borsanın ise Türkiye (BIST100) ve Brezilya (BOVESPA) olduğu görülmektedir. En yüksek oynaklık iletiminin yine Güney Afrika (SAFR) ve Hindistan (BSE) borsası olduğu, en düşük oynaklık yayanların ise Türkiye (BIST100) ve Endonezya (IDX) borsası olduğu anlaşılmaktadır. Bu bilgilere dayanarak Güney Afrika'nın (SAFR) hem en yüksek oynaklık yayıcısı hem de en yüksek oynaklık alıcısı, buna karşın Türkiye'nin (BIST100) hem en düşük oynaklık yayıcısı hem de en düşük oynaklık alıcısı olduğu söylenebilir. Ayrıca örneklem içinde Güney Afrika'nın (SAFR) en yüksek, Türkiye'nin (BIST100) ise en düşük riske sahip piyasa olduğu anlaşılmaktadır. Şekil 7 ise borsalara ait net oynaklık yayılımlarını göstermektedir.



Şekil 8: Net Oynaklık Yayılımları

Şekil 9'de gösterilen net oynaklıklara bakıldığında Güney Afrika (5,7) ve Hindistan'ın (3) net oynaklık (risk) yayıcısı, buna karşın Endonezya (-5,6) ve Türkiye'nin (-3,3) net oynaklık (risk) alıcısı olduğu görülmektedir. Özellikle COVID-19 sürecinde Türkiye'nin (BIST100) net oynaklık aldığı, Güney Afrika'nın (SAFR) ise net oynaklık yaydığı görülmektedir. Örneklem döneminde Türkiye (BIST100) genellikle oynaklık yayılımı alırken, bazı dönemlerde düşük düzeyde de olsa oynaklık yaymıştır. Şekil 10 ise ikili net oynaklık yayılımlarını göstermektedir.



Şekil 11: İkili Net Oynaklık Yayılımları

Borsalar arasındaki ikili oynaklık yayılım eşleşmelerine bakıldığında, Türkiye'nin (BIST100) oynaklık alımlarının Brezilya'dan (BOVESPA) 8,4, Hindistan'dan (BSE) 7,9, Endonezya'dan (IDX) 5,2 ve Güney Afrika'dan (SAFR) 10,8 olduğu görülmektedir (Bkz. Tablo 5 ve Şekil 5). Türkiye'nin oynaklık yayılımları ise Brezilya'ya (BOVESPA) 7,6, Hindistan'a (BSE) 6,5, Endonezya'ya (IDX) 6 ve Güney Afrika'ya (SAFR) 8,9 şeklindedir. Dikkat edilirse Türkiye'nin en fazla oynaklık aldığı ve aynı zamanda en fazla oynaklık yaydığı piyasa Güney Afrika'dır (SAFR). Net oynaklıklara bakılırsa, Türkiye (BIST100) Brezilya'dan (BOVESPA) 0,8, Hindistan'dan 1,4 ve Güney Afrika'dan 1,9 oranında net oynaklık alırken; Endonezya'ya 0,8 oranında net oynaklık yaymaktadır.

Çalışmanın genel sonuçlarına bakıldığında ortaya çıkan sonuçlar şu şekilde özetlenebilir:

(1) Gelişmekte olan ülkeler (kırılgan beşli) örnekleminde toplam oynaklık yayılımı %40,2 şeklinde gerçekleşmiştir. Son zamanlarda yapılan çalışmalarda oynaklık yayılımı Zhang ve Hamori (2021) %40, Akhtaruzzaman vd. (2021) %60, Wang vd. (2021) %50 şeklinde gerçekleşmiştir. Bu çalışmada elde edilen toplam oynaklık yayılımı (%40,2) ifade edilen çalışmalardaki sonuçlardan genel olarak düşüktür.

(2) COVID-19 sürecinde oynaklık yayılımları önemli düzeyde artış göstermiştir. COVID-19 salgın zamanında yapılan çalışmalardan elde edilen toplam oynaklık yayılımları yaklaşık olarak Zhang ve Hamori (2021) %80, Akhtaruzzaman vd. (2021) %80, Aslam vd. (2021) %77, Wang vd. (2021) %90 şeklinde olmuştur. Bu çalışmada ise COVID-19 döneminde toplam oynaklık yayılımı %60 civarında gerçekleşmiştir. Nitekim ortaya çıkan bu sonuç literatürdeki çalışmalardaki oynaklık yayılımlarından daha düşüktür. Bu iki sonuca dayanarak kırılgan beşli ülke borsaları arasında gerçekleşen toplam oynaklık yayılımının genel olarak diğer borsalar arasında ortaya çıkan yayılımlardan düşük olduğu, yani diğer piyasalara göre risk yayılımının daha düşük düzeyde olduğu söylenebilir.

(3) Kırılgan beşli ülkeleri arasında en fazla oynaklık yayılımına sahip borsanın Güney Afrika (SAFR) olduğu görülmüştür. Güney Afrika (SAFR) borsasının coğrafi açıdan çok uzak olan Brezilya (BOVESPA), Hindistan (BSE), Endonezya (IDX) ve Türkiye'ye (BIST100) oynaklık yayması piyasalar arasındaki entegrasyon derecesinin yüksekliğini ve piyasalar arası ilişkilerin geliştiğini göstermektedir.

(4) Kırılgan beşli ülkeleri arasında en düşük düzeyde oynaklık yayılımına sahip ülke borsasının Türkiye (BIST100) olduğu tahmin edilmiştir. Bu sonuç, Türkiye borsasının (BIST100) diğer örneklem ülkelerindeki borsalara göre daha düşük düzeyde risk yaydığını ve portföy riskini yönetme açısından diğerlerine göre bazı imkanlar sağlayabileceğini göstermektedir.

(5) Son olarak tahmin sonuçları net oynaklık yayıcısının Güney Afrika (SAFR) borsası, net oynaklık alıcısının ise Endonezya (IDX) borsası olduğunu göstermiştir. Buna göre Güney Afrika borsası (SAFR) risk yayıcısı, Endonezya borsası (IDX) ise risk alıcısı olarak değerlendirilmektedir.

Sonuç

Oynaklık finansal piyasalarda ani ve beklenmedik şekilde gerçekleşen yüksek fiyat hareketlilikleridir. Piyasaların birbirleriyle entegrasyonlarının artması, finansal piyasalarda bilgi ve iletişim teknolojisinin gelişmesi ve finansal piyasalarda artan riskler, oynaklık yayılımının artmasına neden olmaktadır. Finansal piyasalarda risklerin yükseldiği kriz dönemlerinde oynaklık yayılımlarında önemli derecede artışlar görülmektedir.

COVID-19 salgını özellikle Mart 2020'de finansal piyasalarda oynaklıkların ve oynaklık yayılımlarının artmasına neden olmuştur. 2020 ilk çeyreğinde başlayan salgın koşulları uzun süre devam ettikten sonra 2021 ilk çeyreğinde uygulanmaya başlanılan aşı ile birlikte piyasalarda kısmen de olsa iyimserlik görülmeye başlanmıştır.

Bu çalışmada Türkiye, Brezilya, Hindistan, Endonezya ve Güney Afrika borsalarındaki oynaklık yayılımları ve bu yayılımların COVID-19 sürecindeki durumu araştırılmıştır. Çalışmada, kırılgan beşli ülke borsaları arasındaki oynaklık yayılımlarının COVID-19 döneminde arttığı, oynaklık endeksinin %40,2 şeklinde olduğu, bu oranın diğer piyasa örneklemleriyle yapılan oynaklık endekslerinden düşük olduğu, yani kırılgan beşli ülke piyasaları arasındaki risk yayılımının diğer piyasalardaki yayılımlardan daha düşük olduğu belirlenmiştir. Bu sonuç beklendiğinin aksine finansal piyasaları zayıf ve ekonomide ciddi sorunlar yaşayan ülkelerdeki finansal piyasaların COVID-19 salgın sürecinde daha az oynaklık yaşadığını göstermektedir. Çalışmada ayrıca, en yüksek oynaklık yayılımına sahip ülke piyasasının Güney Afrika, en düşük oynaklık yayılımına sahip ülke piyasasının Türkiye olduğu, net oynaklıklar açısından ise Güney Afrika'nın net oynaklık yayıcısı, Endonezya'nın net oynaklık alıcısı olduğu görülmüştür. Ortaya çıkan sonuçlar portföy yatırımları, portföy yönetimi, risk yönetimi ve riskten korunma açısından dikkate değer sonuçlardır.

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ANALYSIS OF INTRA-INDUSTRY TRADE IN DEVELOPING (D8) COUNTRIES

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Abstract

Intra-industry trade is a theory that was put forward after the 1970s and is based on the fact that countries both export and import the same product. The high level of intra-industry trade also affects the competitiveness of countries. Countries with intense intra-industry trade have high competitiveness. Because, with product differentiation, both exporting and importing of a product directly affects the welfare of a country. In the study, intra-industry trade of Developing-8 (D8) countries was analyzed. Analyzes were made for 2019 and SITC Rev.3 single-digit product classification (food & live animals, beverages and tobacco, crude mater.ex food/fuel, mineral fuel/lubricants, animal/veg oil/fat/wax, chemicals/products n.e.s, manufactured goods, machinery/transp equipmt, miscellaneous manuf arts, commodities nes) was used. Analysis results showed that Malaysia has the highest intra-industry trade among D8 countries. Malaysia has high intra-industry trade in 8 out of 10 product groups. Indonesia and Turkey follow Malaysia. Indonesia has a high level of intra-industry trade in 7 product groups out of 10 product groups, and Turkey in 6 product groups.

Keywords: *D8 Countries, Intra-industry Trade, Grubel Lloyd Index*

Introduction

Today, the main goal of many countries is to ensure development along with growth. Countries have started to give more importance to free trade in order to increase their welfare levels. For this reason, countries have not only paid attention to the amount of exports and imports, but also tried to achieve development by applying business strategies and policies for development goals. Some countries have made faster development and progress, while some countries have been relatively backward. With the globalization of the economy and the liberalization of trade, regional and economic integrations have begun to emerge (Tahernejad, Fakheri, Shafaee, & Fallahi, 2017).

One of the integrations established in recent years is the Developing-8 (D8) countries. Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan are the other members of the D8 countries where Turkey has assumed the role of founding country. The main purpose of this organization, which was established for development cooperation, is to help member countries improve their position in the global economy. In addition, this integration was created to help diversify and create new trade relations, increase participation in international decision-making processes and improve living standards in member countries (Musah vd., 2021).

Officially established on 15 June 1997, the D8 Economic Cooperation Organization was conceived as a global rather than a regional integration. It is stated that D8 is a forum that does not adversely affect the bilateral and multilateral commitments of member states arising from their membership in other international or regional organizations. The idea of cooperation among leading Muslim developing countries was put forward and the establishment of D8 integration was officially announced in the First Summit Declaration (Istanbul, 1997).

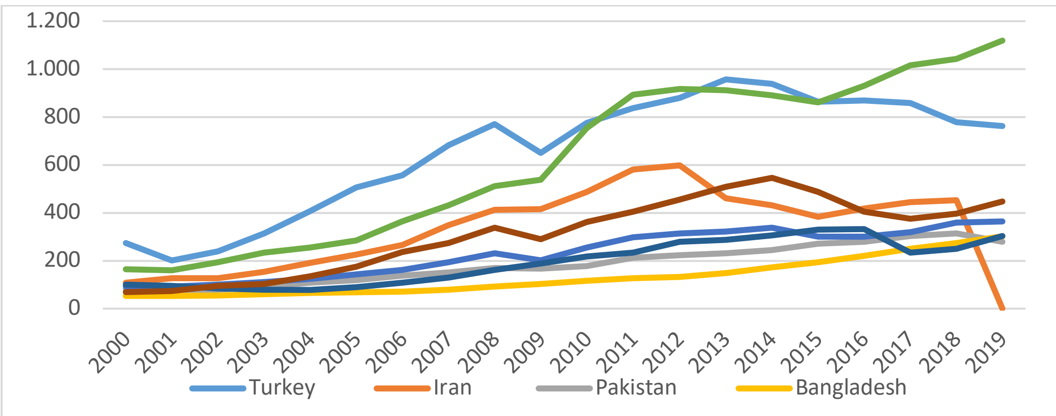
The principles of this integration are briefly stated as peace instead of conflict, dialogue instead of conflict, cooperation instead of exploitation, justice instead of double standards, equality instead of discrimination and democracy instead of oppression (D-8 Organization for Economic Cooperation, 2021).

D-8 countries cooperate not only on a national scale, but also on a sectoral basis. In this context, Turkey coordinates cooperation in industry, health and environment, Bangladesh in rural development, Indonesia in poverty alleviation and human resources, Iran in science and technology, Malaysia in finance, banking and privatization, Egypt in trade, Nigeria in energy, and Pakistan in agriculture and fisheries (Türkan & Alakuştekin, 2017).

1. Macroeconomic Outlook of D8 Countries

D8 countries have grown significantly in recent years and their share in global national income is increasing. While the share of D8 countries in world GDP was 2.8% in 2000, this rate reached 4.5% in 2019. When the GDP of the D8 countries in 2019 is analyzed, it is seen that the country with the highest GDP is Indonesia with a national income of more than 1 trillion dollars. Turkey follows Indonesia with 760 billion dollars. The country with the lowest GDP is Pakistan with 278 billion dollars.

Chart 1: *GDP of D8 Countries (billion $)*

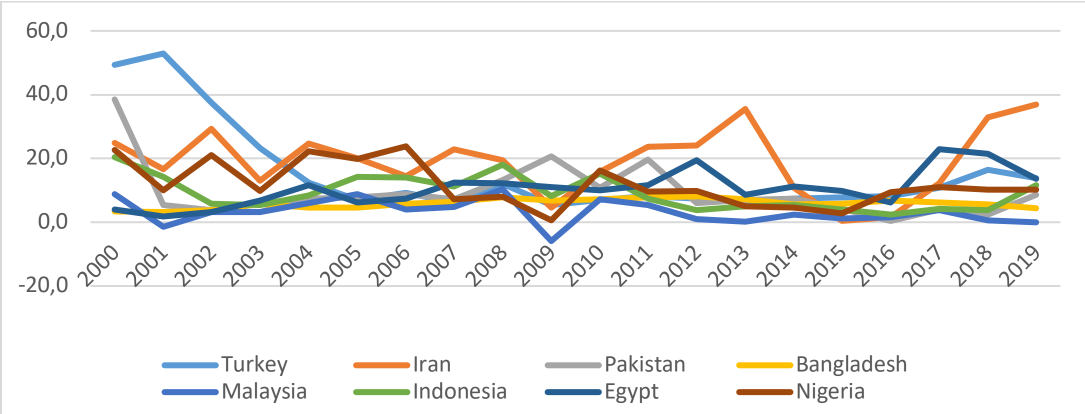


Source: *(World Bank Data, 2021)*

Looking at the GDP sizes of D8 countries between 2000 and 2019 (Chart 1), it is seen that Indonesia and Turkey are positively differentiated from other countries. The increasing trend in the national incomes of Indonesia and Turkey is in a positive direction. Likewise, Indonesia achieved a 5% growth rate in 2019, while Turkey showed a low growth rate of only 0.9%.

For countries, inflation and unemployment rate are other macroeconomic variables that are important like national income. Inflation and unemployment data also show whether growth is healthy in countries.

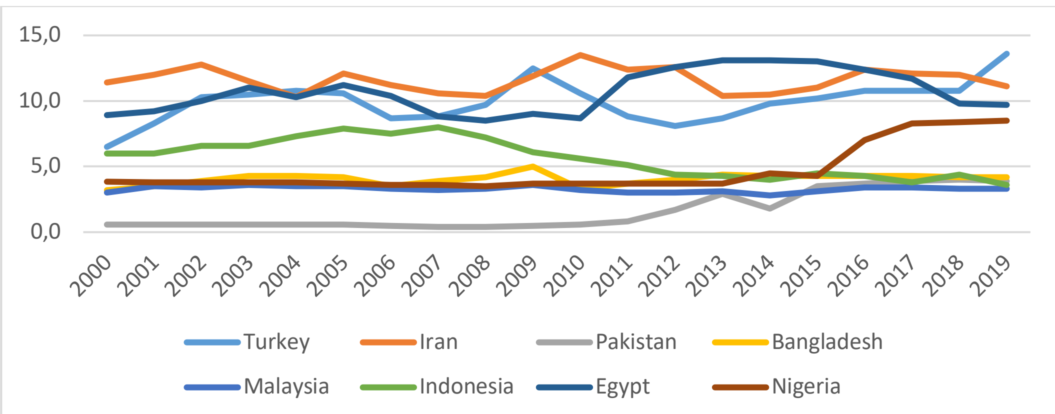
Chart 2: *Inflation Rate (%) in D8 Countries*



Source: *(World Bank Data, 2021)*

The country with the highest inflation rate in D8 countries in 2019 is Iran with 36.9%. Iran is followed by Turkey with 13.9% and Egypt with 13.6%. When the inflation rates in D8 countries between 2000 and 2019 are analyzed (Chart 2), it is seen that price stability has not been achieved in these countries. Especially in 2009, with the effect of the global financial crisis, ruptures occurred in many countries, and the upward trend continued. Among the D8 countries, it is seen that the price volatility in Malaysia is less than in other countries.

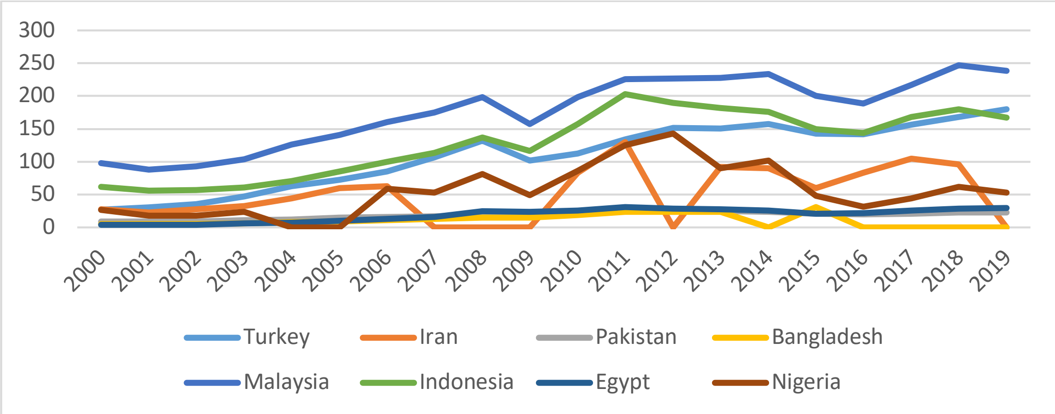
Chart 3: *Unemployment Rates in D8 Countries (%)*



Source: *(World Bank Data, 2021)*

When the unemployment rates in D8 countries are analyzed in 2019, the country with the highest unemployment rate is Turkey with 13.6%. Turkey is followed by Iran with 11.1% and Egypt with 9.7%. When the unemployment rates of D8 countries between 2000 and 2019 are analyzed (Chart 3), it is seen that the two countries with the highest unemployment rates are Turkey and Iran. The country with the lowest unemployment rate among these countries is Pakistan.

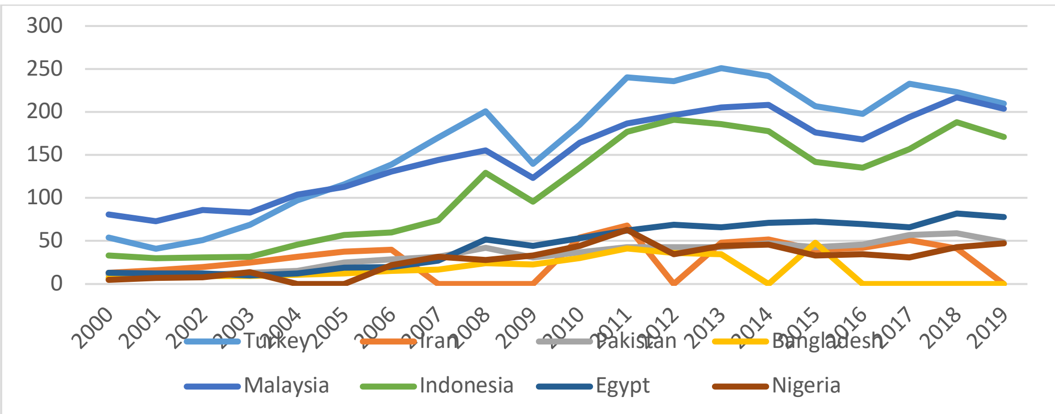
Chart 4: *Exports of D8 Countries (billion $)*



Source: *(World Bank Data, 2021)*

When the export data of D8 countries in 2019 are analyzed, it is seen that the country with the highest export figure is Malaysia with 238 billion dollars. Malaysia is followed by Turkey with 180 billion dollars and Indonesia with 167 billion dollars. When the import data of D8 countries in 2019 are analyzed, the country with the highest import figure is Turkey with 210 billion dollars. Turkey is followed by Malaysia with 204 billion dollars and Indonesia with 171 billion dollars.

Chart 5: Imports of D8 Countries (billion $)



Source: *(World Bank Data, 2021)*

When the foreign trade data of D8 countries between 2000-2019 are analyzed (Charts 4 and 5), Malaysia and Indonesia are positively differentiated from other countries in terms of exports. Turkey follows these two countries. In terms of imports, Turkey and Malaysia are seen as countries with high import figures. The increasing trend in import figures in both countries is clearly evident.

2. Intra-Industry Trade in D8 Countries

Intra-industry trade is when a country both exports and imports a product. First, Grubel (1967) analyzed the European Common Market in his study and found that the same products were both exported and imported at a high level. In his work, he called this situation intra-industry specialization. Grubel and Lloyd (1971) systematized this concept in their study and called it intra-industry trade.

In general terms, intra-industry trade is the export and import of all goods that are close to each other in terms of demand and supply between countries. Instead of the word intra-industry trade, the concepts of intra-industry trade, two-way trade, intra-industry specialization, trade expansion, and two-way trade in similar products are also used in the literature. The concept of intra-industry trade was first used by Balassa. After the establishment of the European Economic Community, with the new period, it has been observed that the trade of industrial goods, in particular, has transformed from an inter-industry structure to intra-industry trade (Şahin, 2016).

Intra-industry trade is of great importance as it brings a different perspective to the factors that directly affect the welfare levels of countries, such as the creation of a competitive industrial structure and the development of international commercial earnings. Taking steps to contribute to the development of intra-industry trade in Turkey will increase the level of development and welfare in the country by increasing economies of scale, specialization and international commercial gains from trade compared to intra-industry trade (Küçüksakarya, 2016).

In intra-industry trade, goods with close substitutes for consumption are imported and exported simultaneously. The crucial point here is that in intra-industry trade, countries both export and import many products that are similar but not the same (differentiated products), which can be close substitutes in consumption or production (Scott, 1975). The concept of intra-industry trade, which is one of the new generation international trade theories and based on the theory of monopolistic competition, allows products that are close substitutes in production to be traded in this way. The Grubel-Lloyd index used to measure intra-industry trade is formulated as follows:

$$1-\frac{|Xij-Mij|}{Xij+Mij} \qquad (1)$$

Xij represents country i's exports in sector j, and Mij represents country i's imports in sector j. Index results take values between 0 and 1. If the index results are close to 1, it indicates that intra-industry trade is high in that country, and close to 0 indicates that the intra-industry trade is low in that country. If the index results are 0, it shows that that country only imports or only exports in that sector. In other words, an index value of 0 indicates that there is no intra-industry trade in that country. If the index value is 1, it means that intra-industry trade is complete in that country. In other words, exports and imports are made at the same rate in the sector in question.

The Grubel-Lloyd Index shows the share of intra-industry trade in total foreign trade. However, the relative weights of the foreign trade volume of the industries in the total foreign trade volume are different. Therefore, for the sub-product groups of each industry, we need to determine their weights in the total foreign trade volume and calculate the index values of these sub-product groups. The sum of the products of these two values will give us the intra-industry trade in terms of weighted average (Başkol, 2009).

In the study, analysis was made using the Standard International Trade Classification data for 2019 (0 group food and live animals, 1 group beverage and tobacco products, 2 groups raw materials, 3 groups mineral fuels and oils, 4 groups animal and vegetable oils, 5 groups chemical products, 6 group manufacturing goods, 7 group machinery and transportation equipment, 8 group various handicraft products and 9 group commodities). Intra-industry trade scores of D8 countries are as in Table 1.

When intra-industry trade of D8 countries is analyzed for 2019 (based on SITC Rev. 3 single-digit product classification) (Table 1), it can be said that intra-industry trade is high for D8 countries in general. Among the D8 countries, the country with the highest intra-industry trade is Malaysia. Indonesia and Turkey follow Malaysia. When the countries are analyzed one by one, the intra-industry trade in Turkey in 6 sectors, Iran in 5 sectors, Pakistan in 3 sectors, Malaysia in 8 sectors, Indonesia in 7 sectors, Egypt in 3 sectors and Nigeria in 3 sectors appears to be high.

Table 1: *Intra-Industry Trade Scores in D8 Countries (2019)*

	Turkey	Iran*	Pakistan	Malaysia	Indonesia	Egypt	Nigeria
Food and livestock	0.75	0.87	0.65	0.79	0.92	0.54	0.23
Beverages and tobacco products	0.90	0.22	0.87	0.98	0.76	0.32	0.60
Raw materials	0.48	0.77	0.21	0.78	0.76	0.27	0.76
Mineral fuel/oils	0.70	0.01	0.05	0.93	0.82	0.86	0.27
Animal and vegetable oils	0.83	0.13	0.04	0.27	0.04	0.27	0.10
Chemical products	0.55	0.74	0.23	0.90	0.61	0.63	0.08
Manufactured goods	0.86	0.71	0.75	0.97	0.94	0.51	0.63
Machinery and transportation equipment	0.97	0.22	0.03	0.89	0.59	0.19	0.26
Various handicrafts	0.55	0.90	0.35	0.70	0.66	0.92	0.02
Commodity	0.20	0.01	0.03	0.58	0.78	0.10	0.00

Note: *D8 countries were excluded from the analysis, since Bangladesh's data could not be accessed.*
(*) Since the data of Iran for 2019 could not be reached, the analysis was made using the data of 2018.

Turkey's intra-industry trade in food and livestock, beverages and tobacco products, mineral oils/fuels, animal and vegetable oils, manufactured goods, machinery and transportation equipment product groups (sectors) is high.

- Iran's intra-industry trade is high in food and livestock, raw materials, chemical products, manufactured goods and various handicrafts.

- Pakistan's intra-industry trade in food and livestock, beverages and tobacco products and manufactured goods is high.

- Malaysia has high intra-industry trade in food and livestock, beverages and tobacco products, raw materials, mineral oils/fuels, chemical products, manufactured goods, machinery and transportation equipment, and various handicrafts.

- Indonesia has high intra-industry trade in food and livestock, beverages and tobacco products, raw materials, mineral oils/fuels, chemical products, manufactured goods, miscellaneous handicrafts, and commodities.

- Egypt has high intra-industry trade in mineral oils/fuels, chemical products, and various handicrafts.

- Nigeria has high intra-industry trade in beverages and tobacco products, raw materials and manufactured goods.

Conclusion

With the acceleration of globalization in the world, free foreign trade has gained more importance and countries have turned to liberal policies. In this direction, countries may resort to establishing integrations or participating in some integrations in order to strengthen their economy and increase their foreign trade. D8 countries were also established in this direction and determined their goals not only economically but also to include cooperation in many fields. In order to achieve these goals, the concept of intra-industry trade is very important for developing countries and helps to increase the competitiveness of countries.

In this direction, the intra-industry trade of developing countries was analyzed in this study. According to the results of the analysis for 2019, it has been concluded that the D8 countries have higher intra-industry trade in mostly raw materials and labor-intensive products. Malaysia has the highest intra-industry trade among the D8 countries on a sectoral basis. This will make a positive contribution to increasing Malaysia's competitiveness. Because the intense intra-industry trade in a country's foreign trade shows that that country implements product differentiation more successfully. Product differentiation is very important for consumers who want to buy different versions of the same product according to tastes and preferences. As a result, this will lead to an increase in the welfare of the citizens of the country.

The existence of intra-industry trade is also very important for the global competitiveness of countries. Because a country's export and import of the same or similar products at the same time increases its competitiveness in the production and consumption of that good. Therefore, countries should attach importance to product differentiation and shape their foreign trade policies accordingly in order to increase their competitiveness.

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INFECTIOUS DESEASES IN TIME AND SPACE

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Abstract

In December 2019, the coronavirus which spread all over the world from China, not only changed the agenda of international politics and made the fight against the pandemic a concern for every state, but also directed the pen of historians and writers to an in-depth study of the issue and turned the focus to infectious diseases into a historical retrospective. In ancient times, infectious diseases were considered a punishment for sins. The wrong doing that angered the deities was linked to the political actions such as violation of the treaty related to the military campaign, usurpation of the throne, etc. The plague epidemic was also linked to politics in ancient Greece, where the ongoing events (domestic and foreign policy, covert diplomacy) completely changed geopolitical factors. Infectious diseases, as part of the united world, spread to different parts of Georgia at different times. Legends have it that the disease does not appear locally, it comes, comes from somewhere and is violent to enter the village, makes every effort and comes to annihilate people. Via studying pandemics and fatal situations in time and space, we aim to show a link to how the pandemic affects people heavily, enhances the sense of the end of the world, brings the theme of the second coming to the fore, evokes a heavy moral mood and, with all this, plunges the society into severe material poverty.

Keywords: *Pandemic, Isolation, Vaccine, Prevention, Crypt, Defense, Politics*

Introduction

Current global pandemic, which has reached the mark of a global catastrophe and set the agenda of international politics, has shown that the pandemic knows no boundaries and extends to all parts of the planet; it is a reaction to a demographic, political, or economic imbalance.

The subject of our research is historical documents, in particular the prayer of Mursilis II, "History" of Thucydides and Georgian historical sources and ethnographic records. In them the spread issue of Plague epidemic is noteworthy in several respects, which we will try to explain below. Infectious diseases confirmed in Georgian ethnographic materials, as part of the united world, have invaded Georgia at different times

Infectious diseases, confirmed in Georgian ethnographic materials, as part of a single world, hit Georgia at different times. Presented are the measures for prevention and treatment of infectious diseases, with Khevsureti and Tusheti selected as classical examples.

Infectious Diseases in the Ancient World

The extant prayer of Mursilis II* to the god of weather over the Plague epidemic is a document containing remarkable and important information (I. Tatishvili, 2006). The text has alternation of human melancholy of Mursilis caused by the prolonged Plague, the prayer to all the deities for the expulsion of Plague, the promise, remorse, the sense of sin passed from father to son, self-justification on the one hand, and the search for the cause of the crime through a dream, through a man of God or an oracle, on the other hand. As we can see,

* The prayer of Mursilis II was translated from the Hittite cuneiform into Georgian by I. Tatishvili.

this intense emotion of the King in prayer clearly reveals a parallel that was felt on the very first stage of the ongoing pandemic among the entire population of the planet.

It is a noteworthy fact, that the epidemic penetrates into the land of the Hittites from the outside as punishment for crimes committed by people. So Mursilis tries to figure out what could have caused the God's wrath. The text reveals the relations between Hatti and Egypt. If the relations between the two countries are regulated initially and the political balance is maintained by the treaty, it is soon broken by Hatti, since the appearance of the Egyptians in the south of northern Syria meant the resumption of its activities, which was confirmed later (Gr. Giorgadze, 1988).

The text tells that the epidemic was spread by the prisoners captured as a result of Sufiluliuma's military expedition and lasted for more than twenty years.

In the above prayer, we test another version of sin. This is the murder of Tudhaliya junior by Mursilis' father Sufiluliuma and not holding sacrifices throughout the country to repent the sins, which had caused the wrath of the deities and therefore they sent an epidemic to the land of Hittites. Mursilis admits the mistakes of his father before the deities, notes his own innocence, he believes that father's sin passes on to the son; and repents before the deities, asking for forgiveness in order to save the country of Hatti from the Plague, which was brought to his country by the captives and civilians from Egypt: "... When the war prisoners were brought to the land of Hatti, they spread the Plague in the land of Hatti… We have sinned, (but) [it] [did not] happen in my time. It [happened ...] in my father's time .... I [pray] about this to the weather deity, my Lord. I kneel before you and ask for forgiveness .... May the Plague be banished from the land of Hatti! " (I. Tatishvili, 2006).

Thus, the Plague, which had been brought from the outside, indicated the spread / introduction of disorder, because confrontation between the internal and external is the oldest and most widespread form of spatial organization, and belongs to the system of binary oppositions. The internal is an orderly cultural world, the residence of an orderly group of people, a community, the exernal – is a disordered, chaotic space (Ir. Surguladze, 2003). In our opinion, the epidemic introduced to the orderly world of Hatti could have been caused by active foreign policy measures as well (battle against the Arzawa coalition, Northern Syria), which violated the principle of political balance in the region and allowed the epidemic to spread widely here.

It should also be noted that ancient Greek writer Thucydides speaks of the plague epidemic in the context of tense political and military action between Athens and Sparta. This was a large-scale war, as it engulfed most of the Greek city-states and was one of the longest and bloodiest in the history of the ancient world. In such a situation, the outbreak of epidemic seems natural, for according to Pericles' plan, the Great Wall of Athens and its main port, Piraeus, would become a shield for the entire population of Attica. And the famous fleet of Athenians – the guarantee for the vitality of the population and strength of the city. It is likely that location of the entire population of Attica within the walls of Athens could cause an outbreak of an epidemic due to violation of sanitary requirements (L. Gordeziani, 2007). In Athens, the cases of epidemic were revealed within a few days after the appearance of the enemy. According to Thucydides, the epidemic spread quickly and claimed large human casualties. As with the Hittites, the plague came here from the outside: The plague broke out in Ethiopia, from there it spread to Egypt and Libya, and then encompassed entire kingdom of the Persian king. Suddenly it exploded in Athens too. As we can see, internal political and military confrontations unequivocally upset the balance, which in this case is a reaction to the created situation.

Thucydides describes in detail the illness before which all and everything was powerless; people were overtaken by despair: "The plague started with high fever and redness of eyes and quickly spread throughout the body. Sick person breathed with difficulty and was choking with thirst. Most died on the seventh or ninth day, those who survived the crisis often died of weakness or became crippled.

The disease indiscriminately claimed the lives of rich and poor, well-groomed and homeless. However, the most severe consequence of this disaster was a spiritual fall: those who felt indisposition would despair and wait for death. The disease was contagious and only the sick and survivors dared to take care of the sick. The disease did not strike people for the second time" (L. Gordeziani, 2007).

The above description almost perfectly fits with today's pandemic and it is unbelievable that this is an epidemic described 25 centuries ago. Indeed, the disease prevalent today causes inevitable fear of death, sadness, insurmountable feeling of hopelessness not only in the elderly but also in the young.

"History" of Thucydides tells another interesting passage which Athens faced due to the cause-and-effect relationship caused by the epidemic. Namely, the feeling of injustice, which as author writes, is caused by the illness. It resulted in a complete transformation of man and entirely changed his moral face; this can be regarded as a mess, chaotic space introduced by the epidemic from the outside: "The plague provoked lawlessness in Athens; what used to be done secretly was now done clearly and impudently. Suddenly everything changed: rich man died, and poor man took possession of his property; because life and wealth had become transient values. Everyone strove for a minute of pleasure. Nobody wanted to sacrifice his life for a sublime goal, because it was unknown whether he would live until the long-awaited future. Pleasure became the first and finest thing. The fear of the Gods and law no longer restrained man from evil, for all were dying in the same way, and no one knew whether he would live until the lawful punishment. The heaviest sentence had already been passed and everyone wanted to enjoy life before its execution" (L. Gordeziani, 2007).

Infectious Diseases in East Georgian Mountains

In ancient times, Georgian people considered diseases, including infectious ones, as wrath sent from Heaven. According to popular belief, infectious diseases were sent to people for their disobedience, wrong living and committed sins.

According to narratives, one of the oldest and most dangerous diseases the Plague, aka Black Death is spread by invisible mythological creatures *zhamni*. The result of their activity is "*zhami*" i.e. the Georgians referred to the Plague as *zhami*. *Zhami* – the murderer of a man, "one day and one night" (S. Orbeliani, 1965), and the time when there was the *zhami* epidemic was called *zhamianoba*.

The narratives inform that *zhamni* walked around with different colored arrows to spread disease. *Zhamni* had arrows of three colors, whoever would be hit by the black-winged arrow would die immediately, by the red-winged – in 2-3 days, some of those hit by the white- winged would survive (Kiknadze, 2009). It is certain in scientific literature that the narratives related to *Zhamianoba* reflect a real story and that the three-colored arrows of the narratives "reflect the symptoms of the disease" (Al. Ochiauri, 1988).

According to narratives, invisible forces provoking disease were perceived as persons in human imagination. They look like humans, but are much shorter. Not everyone could see them. Sixty warriors entered the crypts of Anatori in just one day. ... This disease would come out in the form of a pimple on the body and the person would not live long. Nobody would touch the deceased from *zhamni* to bury. Therefore, when the pimple appeared on the body, the person would go to the crypt on his own and die there (Al. Ochiauri, 2005).

It is not easy to get rid of *Zhami* i.e. the disease, it could come secretly and unexpectedly. Most important was not to let *Zhami* into the living environment. In this, according to the narrative, people were helped by the shrine, which protected the people and the village. The shrine starts fire and shows that it is impossible to get rid of *zhamni* without fire, only fire can burn and annihilate it. While working in the field, I asked the witnesses of the 1918-1919 Spanish Flu what they did with the clothes and items of a person who had died of the infection, they responded that they either burned them or washed well and long. The sick were carefully cared for; the families with influenza patients were avoided.

A person fleeing the flu from another village reportedly flees from a suspicious environment and seeks safe refuge, first he gets rid of, takes off the clothes as a possible source of disease, goes into water – gets washed and then escapes into a safe environment. Here, too, emphasized are isolation and cleanliness – this is main solution against infectious diseases.

It is well known, that the village of Anatori in Khevsureti, completely died out, except for one boy who had gone to Tusheti as a shepherd; he later settled in Shatili.

About Anatori Al. Chincharauli writes: "One village died out in the crypts of Anatori, so that not a single person was left to bury the deceased in the neighboring villages and bring them to the crypts. Since no one could be cured, the sick Anatorians would go to the crypt on their own, throw the previously deceased person down from the stone bed and now ..... they themselves awaited death "(Al. Chincharauli, 2008, p. 30).

According to narratives, ordinary people meet the *zhamni* and talk with them, but like Khevsureti, no one befriends them, no one serves them. To the man from Dartlo who came to the village to make inquiries *zhamni* showed who was hiding where, who was where; they showed him a tool allowing to see what was happening around and said that there was no point in hiding, as they could find everyone.

In Tusheti as well, the Plague and illness were considered punishment from the heaven, for disobedience, wrong living and sins.

According to the material recorded in Tusheti, musical instruments (*panduri* and *chianuri*) were found on the stone beds in the crypts. A sick person would go into the crypt, play the instrument, and thus wait for death. Then another would come in, throw the dead man down from the bed, and take the *chonguri*. (Gabo Tsadzikidze, aged 78, village of Zemo Alvani, 1980, recorded by N. Azikuri). One of the severe epidemic diseases that spread in the mountains was Pox, survived only in a few verses and keenings.

The narratives show various forms of illness - severe, unquestionably fatal, during which people died en masse; and relatively light, with a chance of survival. Consequently, there emerged the idea of different colored arrows spreading the disease. Thus, different colors of arrows seem to indicate different severity of the disease. This would certainly depend a lot on human immunity. High immunity of infants is a well-known fact. I have written down three cases where an infant survived unharmed next to the deceased mother. They are helped by strangers who dare to enter the village, the house, from where they hear a baby crying.

The narratives have it that the most effective way to protect oneself from illness is hiding and isolation. For example, in one of the mountainous districts of Eastern Georgia with 54 villages, the disease occurred in only 3 villages. And their locking saved the others. One of the most striking details is that, all the villages with Plague were closed by the villagers themselves. No one left the village and no stranger was allowed into their village. Not leaving the village and not allowing anyone into the village, i.e. isolation – is the main and reliable shield against the disease.

Also noteworthy is fire, which is also directed against the disease: the village shrine does not allow *zhamni* into the village, but *zhamni* still try to get there somehow, they do not back down, in order to sneak into the village, they change face, disguise themselves, but the shrine annihilates them with fire.

The narratives have it that the disease does not emerge locally, it comes from somewhere, and makes every effort, tries to violently enter the village, comes to annihilate people.

Pandemic and Contemporaneity

Pandemics and fateful situations always have severe impact on people, enhance the sense of the end of the world, bringing to the fore the theme of the Second Coming, evoke difficult moral disposition and at the same time plunge the society into severe material suffering; they actually stop or slow down the development of the society. Current pandemic has also shown this well. The pandemic has not yet subsided, the people are already in need, moreover - impatient and grumbling, they do not realize whole seriousness of the situation. Comparison of modern life with the situations described in the narratives showed drastically different public self-consciousness – great efforts and compromises required from both the state and the medical staff to calm people down: strict instructions to stay at home with maintenance of salary, staying in isolation, imposing a curfew and fines ......Against the background of all this, people's stubbornness, anger, dissatisfaction and grumbling on social networks, attempts of disobedience, escape from quarantine, therefore; the state, failed to convince people with words, was forced to impose fines in order to suppress the resistance of people….. Also completely incomprehensible is escape from the quarantine. Especially since the state provides comfortable living of people in quarantine. So many unprotected elderly and unhealthy people live around us; a conscientious person will at least take care of them. Imagine for a second under the epidemics in the past feelings of the people, who found themselves in the mountains, without a doctor, in a completely vulnerable environment. Imagine the feelings of sick people who saw an unmistakable signs of death on their bodies and each of them quickly leaves the home, his beloved ones, already like a walking death. Enters the crypt, full of dead bodies, and with a *panduri* in his hands meets death with dignity.

Conclusion

Thus, in the ancient World, plague introduced from the outside brings chaos, disorder, it is a kind of reaction to the political or military actions, which upsets balance in this or that country and the order immediately disappears.

Basing on the narrations and ethnographic materials, it can be said that in traditional society, people had fairly sensible attitude to infectious diseases. Noteworthy is the prudence and practical steps taken by people during a particularly dangerous, evil and deadly disease. In this case, the decision was made promptly; and through self-isolation, healthy part of the population was given the opportunity to continue living. As soon as this or that disease broke out, communications were immediately blocked, no one was allowed to leave the village and no one was allowed into the village. Bulk of the population was dying out, and the end was perceived with great dignity and understanding. Since there was no one to bury the deceased, and death was rapidly approaching, they went to the crypt and met the end there.

Fear and obedience, awareness of danger, moral responsibility and ethics towards others were main driving and defining force of people's actions in the past. The people spoiled and arrogant due to advanced technologies in medicine and modern life, it is difficult to understand the dangers; they are daring and disobedient. This has been well demonstrated by modern life. Let's not forget that each era has its luminaries in every field, including medicine. But the microbe of plague that broke out in the 6^{th} century and raged from time to time over the centuries was not discovered until the late 19^{th} century. Every epoch is accompanied by its own problems and new diseases. Flu changed many times; no one knows how long this type of flu Covid-19 will last. But there is one noble concept – caution, which we need so much today.

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THE IMPACT OF COVID-19 ON MIGRANT WOMEN

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Abstract

Migration is one of the most important and global problems in the modern world. In addition to social, economic, political, and demographic problems, it creates several challenges in many countries. According to the global data existing by the mid-year +2020, the number of migrants was 281 million, of which 51.9% were women. The covid-19 pandemic has made it clear to the world that the work of female migrants is very important to the economics of their home countries, apart from the economic aspects. The condition of the migrant women was worsened significantly, during the pandemic many of them lost their jobs, source of income and remained in a foreign country when the economic condition of their families left in home countries depend on them largely. Many women had to agree to any kind of hard work, which finally contributes even more vulnerability to them. The paper will review the conditions of the migrant women during the Covid-19 pandemic, as well as existing problems, and represent certain recommendations, implementation of which will improve and alleviate their conditions. ***The hypothesis of the research is*** *– to find the reason why Covid-19-s impact is more negative on migrant women.* ***The research question*** *– how does the Covid-19 affect migrant women?* ***The study mainly uses*** *an analysis method based on the study of modern, documents and empirical materials. The basis of source – scientific articles, the press materials, and documents published on official websites in the field of gender equality, Covid-19, and migration. Papers, dedicated to the Covid-19, women's rights, and migration.*

Keywords: *Migrants, Women, COVID-19, Conditions, Negative Impact.*

Introduction

The pandemic caused by the new coronavirus (COVID-19) radically changed every human's life and the reality in the world. Problems arose in different spheres, included healthcare and the economy. Countries were forced to reconsider and change their plans as the epidemiological situation led to a reassessment of priorities.

New coronavirus has infected millions of people, hundred thousand died, and countries have had to stop the spread of the virus through certain restrictions and regulations. Due to the so-called "lockdowns", the business sector faced serious problems, workplaces were reduced and accordingly many people lost their jobs, some start-ups could not withstand such difficulties and ceased operations.

Pandemic has affected almost all aspects of human lives, included problems connected to border closures and trade restrictions. These circumstances prevent farmers to sell their products and accessing markets. The impact of COVID-19 on farmers and agricultural workers breaks the food supply chain (WHO, 2020).

The biggest problem nowadays is, that the pandemic is still in the active phase, and judging from the current situation, it will take quite a long time to finally stop the virus, so mentioned losses and problems above are still actual.

It may seem at first glance that gender equality has nothing in common with the new coronavirus pandemic and that COVID-19 affects men and women equally, however, results caused by the mentioned virus are not gender-neutral.

COVID-19 has more impact on women than on men, this is visible in almost every field, be it healthcare, social security, economics, or anything else. This difference is caused because of their sex.

The Impact of Covid-19 on Women

For many years, the gender equality problem has not lost its urgency; it is already a long time since that issue of improving gender equality stands before humanity.

Over the last 30 years, several positive steps have been taken in this direction, but during the mentioned period the world also faced many difficulties. Despite the situation in connection with gender equality has improved significantly, the outlined goal is not achieved yet.

The actuality of gender equality indicates the fact, that on September 25, 2015, UN member countries agreed to create the document on "Transforming our world: the 2030 Agenda for Sustainable Development", which includes 17 goals. Each goal envisages tasks, the total number of which is 169, through these tasks is defined clearly the data to be achieved by 2030. 5th goal of the mentioned document is the achievement of gender equality and empowerment of all women and girls (UN, n.d).

Pandemic differently affects women and men. From sensitivity to infection to the economic and social results, differences vary according to such characteristics as gender and correlation with society (WHO, 2020).

The 2020 year was deliberated to be the year of gender equality improvement, but because of the Covid-19 pandemic, even the previous achievements are in danger of being void. The Covid-19 is intensifying gender inequalities existing in different spheres, which strengthens the impact of the pandemic (UN, 2020).

Women face a lot of barriers during Covid-19, impact of the pandemic on women are different resulting from the place women take in society. Of course, to some extent, Covid-19 affects women and men equally, but the most important is that women are experiencing additional impacts of the new Coronavirus which are caused by differences of gender.

During the Covid-19 unpaid care, work volume has increased significantly. Women spend more time at home with their families, caring for children and doing household work, in addition, women, especially are more employed as domestic workers, than men, at this time of course they are at even greater risk of losing their jobs because many people are afraid, that domestic worker can spread the virus in their family, also migrant women, who are employed in the domestic sphere, have a bigger risk to become infected with the virus, in addition to the mentioned, in most cases such kind of work is low paid and less protected. The economic impacts of Covid-19 touches women and girls, who have a low salary, are leaving near to poverty, and have jobs with low security.

Covid-19 increases the emotional condition of people, which is connected to the economic and social situation, herewith restrictions with distancing and movement. Accordingly, gender-based violence rises. Many women are compelled to be locked at home with oppressors, at this time services of support are unavailable or ruined (UN, 2020).

Besides the problems mentioned above, during the pandemic there is some risk of reducing attention about women and girl health, it is important they be able to exercise their rights in connection of reproductive and sexual health, these issues must be prioritized, supported financially, and admitted as vital (Plan International, n.d)

The Impact of Covid-19 on Migrants

In the modern world, migration is considered to be one of the most actual issues.

A lot of people in the world cross borders to find better future, for them and their family. Some people migrate for work, some of them are studying abroad, some of them are getting relevant treatment outside of their country, etc.

Migration includes not only migrants who are living in a foreign country, refugees, and migrant workers, but also businesspersons, students, tourists, etc. (Alaverdov, 2021).

Migrants and refugees are the social groups most impacted by the Covid-19, they feel the consequences of the crisis on themselves and these results have an important influence on their economic and social condition (UN, 2020).

Of course Covid-19 pandemic changed everyone's life but especially are affected migrants and part of the population who move frequently. Millions of them are left without income and shelter. Because of the restriction on the movement, they were unable to return home. Crises increasingly take away from migrants: jobs, income, house places, and access to medical care. The above mentioned has impacted not only the host counties' economy but the migrants' home countries' economics too (Ahmed, Coulibaly, et.al, 2020).

The impact of the pandemic on migrants may be different according to the reasons for migration, but the main aspects are common for all of them.

Migrants are living and working in poor conditions, often they have not had enough Hygiene, sanitation, and protective equipment. Migrants also face barriers in obtaining information about Covid-19 regulations, due to the language barrier, limited access to the internet, etc.

During the pandemic, migrants have difficulties inaccessibility to the health services and human conditions. In the migrant and refugee camps, they suffer greatly from density, the large crowd of people, and deficiency of hygiene standards (Ahmed, Coulibaly, et.al, 2020).

In many cases migrants provide essential services and are at the forefront of the pandemic, migrants make domestic work, cleaning services, food production, etc.

During the pandemic, for prevention of the new coronavirus, almost every country had to establish different kind of restrictions, such as limitations on movement and borders closing, as a result, migrants have been left locked in the host countries, without income and access to fundamental services, they were unable to return to home. A great number of migrants also have a risk to fall into an unstable situation, because they cannot meet legal requirements and have not had access to visa procedures.

Pandemic has increased discrimination and sometimes migrants were blamed for spreading the virus. In addition to this, during the pandemic number of remittances to migrant's countries for their families were decreased, so it is clear that mentioned factors cause economic and social problems not only for migrants but for their families. The specific group of migrants are at even more risk to have a negative impact from Covid-19 regulations, these are illegal migrants, migrants with low income, women migrants, children, persons with disabilities, etc.

Global financial crises in 2008, showed, that migrants are at a greater risk of firing from their jobs and are more likely to experience reducing salaries or non-payment, as well as deterioration of working conditions. During the Covid-19 crises, it is eminent, that in addition to the above-mentioned problems which migrants, faced they also meet the complicated processes to return to their home country after losing a job (UN, 2020).

Covid-19 and Migrant Women – Impact and Difficulties

Gender segregation is common in the labor market and when women migrate for work, they often work in "feminine" positions. Male migrants work in construction or production, while migrant women are in domestic or service sectors. Distorted, outdated gender norms and stereotypes still dictate that women care for the household, both in domestic work and caregiving (Fleury, 2016).

Migrant women are even more impacted by the Covid-19 pandemic, they are a vulnerable group and need support during global crises.

In many countries migrant women are the majority of health workers, they are caring about patients, are cleaners in hospitals and nurses. These factors assign them to the most at-risk of spreading the virus.

There are about 67 million domestic workers in the world, about 80 percent of whom are women, about 11 million of whom are migrants. In many countries, women constitute the majority of domestic workers, whose work is caring for children and family members, cooking, cleaning, etc. Even before the Covid-19 pandemic, the domestic sector was one of the least protected and least valued job sectors. Many migrant domestic workers job is characterized by insecurity and violence. Often these women are not able to find a new job or to return to their country, because of border closing.

Migrant women labor is keeping many countries health and social care systems, also households during crises. Due to a different kinds of restrictions during the pandemic, including movement restrictions, also job losses, economic crises, increase domestic violence, many support services are closed, in this situation migrant women are particularly vulnerable, because of information and language barriers.

Before the pandemic migrant women especially those, who are employed informally, as well as those who have irregular migration status, were already facing problems in accessing health care and maternity protections. These problems now are even more destructive for migrant women's health, as they may fear as seeking medical support may harm their employment, and if they have no according to documents, they may fear, that while seeking health care, they may be imposed fines, arrested or deported. The lack of social protection, for example, sick leave and unemployment benefits for migrant women, are harmful to their health and welfare. If they will be infected by the virus, they may feel compelled to continue working and not seek medical support (Foley, Piper, 2020).

According to the abovementioned, we can say, that Women migrant workers have a bigger risk of losing the living place, having their labor and human rights violated, and contracting Covid-19. They often work in the informal sector, for example, domestic service and care work, where are not available paid leaves and workers' contracts are insecure, they are not able to work from home.

For live-in migrant domestic workers, losing their jobs, also mean losing their place to live. More difficulties arise in connection to return home and find a new job, because of border closing and travel restrictions.

Women migrant workers employed in the formal sector are also less protected from losing their workplace due to the economic crises, leaving many of them in prisons because of their authorizations and visa status, also uncertainty in perspectives of income and living place.

Lack of the protection and support mechanisms for migrant women, who work in the domestic sphere, social segregation, and the limited accessibility to the information, heighten their vulnerability during the Covid-19 pandemic.

Women migrant domestic workers also face an important risk of abuse, as they are trapped in houses and are not able to return to their homes. Women who work in health care and households have the risk to be directly in contact with persons who are infected with the new coronavirus. Violations of labor and human rights are significant, for example, absence of insurance, social protection, long working hours, sick leave and employment injury, low salary, gender-based violence, etc. (UN Women, 2020).

In addition to the above mentioned, women and girls have a unique health need, but they have less access to quality medicine, stereotypes and distorted social norms, can also limit women's ability to access health care services. (UN, 2020) Especially the migrant women have problems with the accessibility of medical services, because of mentioned reasons. All these have a particular impact on migrant women during the pandemic.

During the pandemic many migrant women workers with children face double pressure, those who are in the domestic or health care work sector, have to work longer hours now, both at home and at work, as schools are closed and children are at home, educational responsibilities also lie on women. (Foley, Piper, 2020)

Conclusion

During the pandemic, gender inequality is even more problematic all over the world. The Covid-19 is one of the most global pandemics in history, it has changed every human's life, creating economic and social problems, has caused human health problems and death. So now migrant women, who feel the negative impact of pandemics especially, need support.

Protecting the rights of migrant women during the Covid-19 pandemic will protect not only them but their families. This will be the step forward to eliminate gender inequality and empower women, who have a great contribution and can have more, in the improvement of economic, social, and human rights protection, healthcare service, etc.

Recommendations

The main recommendation to lighten the negative impact of Covid-19 on migrant women is to empower women, they must enjoy all human rights and have social benefits. Migrant women must have access to essential services, such as healthcare, insurance, security, justice, etc. It is very important to eliminate maximally discrimination on basis of sex.

Women migrant workers should be included and get the same treatment as nationals. For women migrant workers in the informal sector or returning to their countries of origin who are without a job by the crisis, one concrete response measure would be generating employment through Public Works Programmes (UN Women, 2020).

Migrant women must access basic services, for example, education, health, housing, etc. and be part of political processes (Jolly, Reeves, et.al, 2005) also they must be provided with accurate information about Covid-19 restrictions and safety regulations in according language and enjoy protected, insured job, with legitimate contracts.

Raising awareness of women and girls about their rights and about the social protection they can receive, is very important because nowadays lack of information is one of the problems of women on the road of gender inequality and Covid-19, getting accurate information is the way to eliminate existing problems significantly.

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COVID PANDEMIC AND MARITAL CONFLICTS

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Abstract

Marital conflicts are an important research area for scholars. It is believed that in modern monogamous marriages, among the many causes of conflict in the marital relationship, the needs for the spiritual, sexual and intimate-personal necessity of the partner lead to a significant increase in the rate of destabilization. Marital and family conflicts are mainly related to people's desire to satisfy their own needs, or to create an opportunity to satisfy them by ignoring the interests of the other party (Shanava, 2017). Given that almost all conflicts occur at the level of relationship breakdowns between individuals and involve problems of a psychological nature, there may be many potential sources for conflicts between partners (Canary & Cupach, 1995). In this regard, it is important to focus on the pandemic that has created the greatest problems for all layers of society. A state of emergency has been declared in many countries, including Georgia, in order to fight against the spread of the new coronavirus (COVID-19. The pandemic has become a major impediment to economic, social, and political activity around the world. The vast majority of the population found themselves in self-isolation or quarantine to prevent being infected with the virus. This is related, on the one hand, to preventing the spread of the virus and, on the other hand, to unresolved conflicts in the family and isolating a person with a potential abuser in a single space (Gelder et al. 2020). The impact of the coronavirus pandemic is multifaceted. It has become difficult for all societies to avoid the negative consequences of the new reality. In addition to putting pressure on healthcare systems and the global economy around the world, the pandemic has had an unprecedented impact on people's psycho-social status, which in turn has severely affected family relationships (American Psychiatric Association, 2020). The growing rate of mental illnesses, often associated with marital conflicts, can be seen as a fact reinforcing the importance of researching the issue. Therefore, the aim of the paper was to identify the determinants of marital conflicts during the Covid pandemic. Qualitative and quantitative research methods were used according to the purpose of the research. The analysis of the research data revealed remarkable results, according to which conflicts are mainly related to financial problems, high levels of anxiety, and limitations in satisfying social and self-actualization needs.

Keywords: *Covid 19, Marital conflicts, Pandemic impact.*

Introduction

The spread of the coronavirus has posed the greatest challenges to the whole world, including Georgia. Numerous waves of pandemics created the most difficult social problems for all sections of the society and radically changed people's daily lives. The negative impact of the coronavirus has affected not only human health but all sectors of the economy, which in turn has made human life even more difficult.[1] Psychological stress, social constraints, financial problems are a small list of stressors that play a key role in determining marital conflicts.

Marital conflicts are mainly related to the desire of people to satisfy this or that need, or to create an opportunity to satisfy them without taking their partner's interests into account. Many reasons can be singled out, among which are: unfulfilled expectations and needs, rudeness, disrespectful attitude, marital infidelity, financial difficulties, etc. (Bjorksten, 1983) And it can be said that conflict usually arises not because of one,

1 Vanier Institute of the Family. (2020). Families struggle to cope with financial impacts of the COVID-19 pandemic. Retrieved April 18, 2020, from https://vanierinstitute.ca/families-struggle-to-cope-with-financialimpacts-of-the-covid-19-pandemic/

but because of a combination of causes. Conflict participants in the family are often not hostile to each other and often do not even have an adequate understanding of their goals (Сысенко,1989). Marital conflicts are characterized by extremely heterogeneous and, consequently, inadequate situations related to the behavioral characteristics of the people involved in the conflict (Canary & Cupach, 1995). Due to the fact that marital conflicts are related to each other through intense emotional feelings, perceptions and stereotypes, the method of interpreting conflict situations and the attempts of individuals to find ways or actions that lead to escalation of the conflict, it can be said that the Covid pandemic in this regard is one of the important factors in increasing family conflicts. Significant changes in psychological well-being and negative outcomes of mental health can be unequivocally linked to the Covid Pandemic[2], as evidenced by the severe emotional background and divorce rates in society.

Methods applied and sampling

The assessment relied on a combination of qualitative and quantitative methods:

- 200 respondents (100 pairs) participated in the quantitative survey. The target group of the study was married couples whose age limit was defined as 65 years. A questionnaire was developed for the direct survey, which was accompanied by a research tool on marital conflict - a questionnaire was created for the Georgian population, taking into account the culture, traditions and psychosocial characteristics, which expresses special concepts and variables for diagnosing and evaluating marital conflict dimensions. Anxiety scale was also used in the study (PROMIS Emotional Distress— Anxiety— Short Form). Couples in the study described their own families by scoring points for provisions on a five-point scale. Questionnaire and test data were processed using SPSS 23.

- Semi-structured qualitative key informant interviews were conducted with 100 respondents (50 pairs) during the Covid Pandemic. Qualitative data analysis was performed by the method of content analysis.

Method

Participants

Out of 300 respondents in the study, 50% were male and 50% were female. The mean age of the respondents was 37 for males and 31 for females. 63% of the respondents in the study had higher education, 25% were students, 9% had vocational education and 3% had secondary education. 57% of the respondents in the study were employed. The research was conducted in Tbilisi, the capital of Georgia. Respondents were selected using non-random sampling methods - snowball and available sampling.

2 American Psychiatric Association. (2020). New Poll: COVID-19 impacting mental well-being: Americans feeling anxious, especially for loved ones; older adults are less anxious. Retrieved from https://www.psychiatry.org/newsroom/news-releases/new-poll-covid-19-impacting-mental-well-being-americans-feeling-anxious-especially-for-loved-ones-older-adults-are-less-anxious

Data collection procedure

Respondents were given the questionnaire based on their familiarity with the instruction and informed consent.

Research limitation

It is important to note the limitations of the study, according to which the parameters of the selective set do not accurately reflect the general set, making it impossible to generalize the results to the overall set.

Data report

Cluster analysis, cross-tabulation analysis, one-factor dispersion analysis, one-dimensional and two-dimensional analysis, Pearson correlation coefficient, Cronbach's alpha coefficient and non-parametric $\chi 2$ criterium were used to process the quantitative data of the study.

Because quantitative data characteristics play an essential role in the process of empirical data analysis (Бурлачук Л.Ф., Морозов С.М. 1989), one-dimensional analysis was used to calculate the results. The variables introduced through the grouping of statistical sets were calculated by one-dimensional frequency distributions.

In the marital conflict study scale, we used factor analysis to determine the extent to which the dimensions grouped into blocks measured the rate of conflict and represented a single characteristic, i.e. how strongly the correlated variables were combined into a single factor. One factor was identified that measures the degree of conflict, and the provisions in this category are highly correlated with marital disagreements (R=0.57).

To determine its internal consistency, we used the Cronbach's alpha coefficient and calculated its reliability. It should be noted that the research provisions on marital conflicts were considered as one factor and the reliability was high (α = 0.88). Which means that the provisions included in this factor measure marital conflicts.

To determine whether there was a difference in gender between the pairs surveyed, we used a T-test to process the data, which allows the statistical assessment of the difference between the mean values for two independent samplings. It was found that there is a statistically significant difference in the marital conflict survey scale, according to which the T-test found female respondents with a higher rate of conflict $P=0.001<0.005$.

To determine whether there was a difference in the marital conflict scale according to the duration of marriage, comparing the two groups of married respondents under 5 years of marriage (30%) and married couples over 5 years of marriage (70%) a cross-tabulation analysis was performed to determine the rate of conflict, which revealed that the rate of conflict in couples married for five years and more is 78%, and in couples married for less than five years is 49%. It should be noted that the test revealed a statistically significant, reliable correlation $X^2=0.000$.

The impact of the pandemic on marital relations is confirmed by the vast majority of respondents and they only point to the impact in a negative light. 67% of the respondents think that the pandemic significantly changed their lives, affecting their goals, lifestyle and quality of relationships.

"Everything is upside down! I do not remember such a nightmare for 40 years! The environment around me has changed so much that I think I started living in another world! "(Female, 40 years old)

64% of the respondents think that after the onset of the pandemic, a crisis began in their marital relationship, conflicts and differences of opinion became more frequent, it is difficult to make decisions together.

"Covid has caused so many problems that we are tense and we quarrel over almost everything. It is very difficult for us to agree on common decisions" (Male, 29)

The respondents of the study focus on the psycho-social environment, discuss the pandemic globally, discuss the actions taken by the state, point to the deteriorating social background in the country and explain the ongoing conflicts in the family in this regard. During the Covid Pandemic, 32% of the respondents cited social constraints, 24% financial problems, 19% self-actualization constraints, and 17% stress as the main causes of marital conflicts.

The respondents consider the restriction of social relations as one of the biggest challenges of the Covid pandemic and believe that it has had the most severe impact on their psycho-social condition. According to the respondents, the forced changes in the forms of seeing friends, close relatives and all kinds of relationships made social existence unbearable. 32% of the respondents named social constraints as the determinant of conflict during the Covid Pandemic.

"These restrictions are simply unbearable, it has made us sick! Imagine, I could not see my own mother and what kind of mood I would be in. Everything was annoying at home, it is horrible when you cannot go out, when you are in trouble and you want to see a friend and share your pain, you have no right to do that.! " (Female, 26)

"You can't have a glass with your friends, what a good life and fun to talk about. It affected me a lot, I was very irritated and aggressive" (Male, 35 years old).

"During this pandemic, the most severe was the restriction of social relations for me, I was not happy about anything" (Male, 30).

Twenty-four percent of the respondents indicated a significant increase in financial disputes during the Covid Pandemic. Due to financial problems, according to the respondents, daily life was full of stress, aggression and constant tension.

"You know, we have a very difficult period! It was horrible to realize that we might have found ourselves on the brink of starvation. We were arguing over all the money spent and accusing each other of embezzlement! I do not even want to remember! (Female, 29 years old).

"What can I say about the financial problems, we really had and still have them, however, we had more now. Everything was closed, nothing worked and our income was so reduced that it was simply impossible to support our family. "- (Male, 39)

Data analysis revealed that 19% of the respondents cite restrictions on meeting the need for self-actualization during the Covid pandemic as causes of frequent conflicts with a partner.

"When you cannot move forward, despair is at work and you think you may soon become unemployed, it affects a person very much! I was irritated all the time because of this and nothing made me happy!: (Female, 36 years old)

"Professional freezing is very bad! I suddenly lost all hope of moving forward, I had a hard time controlling my emotions. "-(Male, 45)

17% of the respondents named high levels of anxiety and stress as an unconditional cause of conflicts. In this regard, it should be noted that no gender differences were statistically significant in the results.

"I got so stressed, Covid made me sick"! Relationships are very difficult for me and I have a conflict with everyone! (Female, 40 years old)

"I am constantly excited, I am always worried and I am crying. I think death is near! " (Female, 50 years old)

"Everything is already getting on my nerves! It annoys me to hear so many death chronicles. This is reflected in the family as well, everyone is tense and everyone has nerves in a bad condition. (39 years old)

Part of the respondents consider Covid Pandemic to be the cause of family problems. 5% of the respondents believe that in terms of family adaptation - in the distribution of affairs, leadership, decision-making, functions, roles and rules, Covid has led to increased conflicts in their families.

"We are always arguing! Our responsibilities are mixed and there is such a chaos in our family, I do not even know if it will ever be sorted out "(Female, 38 years old)

"Do not remind me of functions and roles! Everything has become mine to do! The kids used to go to school anyway before, now everything is on me and who cares about me in the family! Who will ask you what, you are a woman and you have to be patient with your irritated husband, as if this Covid does not get on my nerves (female, 35 years old)

To determine whether there was a difference in gender on the anxiety scale, cross-tabulation analysis was used and the X^2 criterion was calculated. Based on the data analysis, it was found that the anxiety rate in female respondents is higher (56%) compared to male respondents (44%). Also, according to the duration of marriage, it was found that the anxiety rate in married couples under five years of age is lower (47%) than in married couples over five years of age (53%) $X^2 = 0.000$ $P < 0.005$.

The Correlation analysis was used to determine whether there was a relationship between the Anxiety Scale and the Marital Conflict Scale. Based on the processing of the obtained data, it was found that anxiety is positively and highly correlated with the conflict. The correlation between conflict and anxiety is 0.73. $P < 0.005$

To determine whether the number of children influenced the distribution of respondents in the tools we used, based on the correlational analysis of the data obtained, it was found that the number of children was related to the change in the results on the anxiety and conflict scales. In particular, it was found that with the increase in the number of children, there was a growing trend of anxiety and conflict on a high scale. Statistically reliable, significant correlation was confirmed based on correlation analysis $P < 0.005$.

To determine how couples were distributed on the marital conflict and anxiety scale, three groups were singled out and according to the sum of the mean scores for the provisions, the following trends were identified - respondents were divided into three groups, the first group had high levels of anxiety and conflict (72%); The second group had high levels of anxiety and low levels of conflict (15%). The third group had a low rate of anxiety and a high rate of conflict (13%).

To compare the means of different groups, we used dispersive analysis (ANOVA) to determine whether demographic data influenced the scales we used. While processing the respondents' data, it was found that although the data are not statistically significant, there is a tendency that the level of anxiety is slightly higher among employed respondents (18.9) and relatively low among the unemployed (13.4). There is also a slight difference in the conflict index according to employment, by which the rate of conflicts is slightly higher among the employed respondents than among the unemployed. It should be noted that no statistically significant difference was observed in the scale of marital conflicts and anxiety by education or age.

Discussion and interpretation of results

According to the main purpose of the study, the factors influencing marital conflicts during the Covid pandemic were identified. Data processing revealed that there are differences in conflict indicators between respondents in terms of gender and duration of marriage, in particular, the rate of conflict among the females is higher compared to the male respondents. Also, the rate of conflicts in those who are married for over five years is higher than in those who are married for less than five years. The vast majority of respondents point to the negative impact of the pandemic on their personal relationships, and names the Covid Pandemic as the major challenge in escalating conflicts. During the Covid Pandemic, the majority of respondents of the survey named social constraints, financial problems, limitations related to self-actualization needs and stress as major causes of marital conflicts. It should be noted that no statistically significant differences were found in the duration and age of marriage in the process of formulating the reasons.

Processing of the data obtained during the study revealed that the rate of anxiety in female respondents is higher compared to male respondents. Also, according to the duration of the marriage, couples married over 5 years were found to have a high rate of anxiety. It should be noted that a positive, high correlation was found between the Anxiety Scale and the Marital Conflict Scale based on a correlation analysis. The analysis of the results revealed interesting correlations with the number of children, in particular, it was found that with the increase in the number of children there was a growing trend of a high rate on the scale of anxiety and conflict. It should be noted that the study did not reveal any statistically reliable and significant differences interms of education and employment.

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COVİD-19 SALGININDA YEŞİL DÖNÜŞÜM: SINIRDA KARBON VERGİSİ

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Abstract

The European Green Deal adopted by the European Commission on 11 December 2019 includes the aim of enshrining the long-term objective of climate neutrality by 2050 in legislation and increasing the EU's climate ambition to reduce greenhouse gas emissions by 50-55% from 1990 levels by 2030. The European Green Deal also indicates carbon leakage risk, which occurs when production is transferred from the EU to other countries with lower ambition for emission reduction, or when EU products are replaced by more carbon-intensive imports (Republic Of Turkey Ministry of Trade, 2020: 1). One of the most important policy tools of the European Green Deal is on carbon border adjustment mechanism. In this context, it is planned to apply a carbon border tax to reduce carbon leakage. Thus, additional obligations are imposed on third countries that do not have climate policies in line with the EU. It can be said that Turkey will be affected significantly by the carbon border tax and the carbon border adjustment mechanism. The mechanism could be an advantage for Turkey to create a green industrial transformation strategy. The aim of this study is to examine the impact of a carbon border tax on Turkey's economy with SWOT analysis in the process of the Covid-19 pandemic.

Keywords: *A carbon border tax, The European Green Deal, EU, Turkey*

Giriş

Hızla gelişen sanayileşme bir taraftan ekonomik büyümeye imkan sağlarken, diğer taraftan sorumsuz, aynı zamanda sürdürülemez küresel üretim ve tüketim yapılarının oluşumuna yol açmıştır. Endüstriyel üretim miktarındaki artış zamanla derinleşen iklim krizine, küresel ısınmaya, biyolojik çeşitliliğin azalmasına, yoksulluk oranlarındaki artışa ve finansal konularda istikrarsızlığa zemin hazırlamıştır. Özellikle doğal kaynakların kendi kendini yenileyeceğine (self-regulting) dolayısıyla tükenmeyeceğine yönelik genel kanı, çevre kirliliğinin uzun yıllar ihmal edilmesine sebep olmuş, ekolojik bir krizin dünya geneline yayılmasında etkili olmuştur. Tüm bunlar gelişirken, ülkelerin sürdürülebilir kalkınma stratejilerinde sadece ekolojik krizi ele almaları doğru bir yaklaşım değildir. Dünya genelindeki nüfus artışı, yoksulluk oranlarındaki artış, uluslararası düzeyde fırsat eşitsizliği ve sınırsız kaynak tüketimi gibi pek çok faktör bu krizin çok boyutlu olarak büyümesine sebep olmaktadır. Bu kapsamda çeşitli uluslararası birliklerin organizasyonlarında "yeşil düzen" ve "yeşil ekonomi" kavramlarını gündeme gelmeye başlamıştır. Planlanan yeni yeşil düzende gelir ve istihdam artışını sağlamak, karbon emisyonu ve çevre kirliliğini azaltmak, enerji ve kaynak verimliliği artırmak, biyolojik çeşitlilik ve ekosistemdeki işleyiş kaybını önlemek hedeflenmektedir (Abdıraımov, 2016).

Avrupa Komisyonu, Avrupa Birliği ekonomisinin daha sürdürülebilir ve daha yeşil bir seviyeye ulaşma amacı taşıyan, "Avrupa Yeşil Anlaşması" yeşil düzen konusundaki önemli çalışmalardan biridir. Öte yandan Aralık 2019 tarihinde kamuoyuna sunulmasının hemen ardından ortaya çıkan, tüm dünyayı etkisi altına alan Covid19 salgını, dikkatleri yeşil düzen anlayışından uzaklaştırmıştır. Gerek sosyal ve gerekse ekonomik hayatı adeta durma noktasına getiren bu durum karşısında pek çok ülke, salgınla başa çıkma ve ekonomik toparlanma konularını öncelikli gündemine almış, yeşil düzen ve yeşil ekonomi konularını ise ihmal etmiştir. Diğer taraftan

Avrupa Birliği Komisyonu salgınla mücadele esnasında da Yeşil Anlaşma konusunu ekonomik iyileşmenin merkezinde konumlandırmış; "yeşil iyileşme" hedefinden ve bu noktada oluşturduğu yol haritasından taviz vermemeye çalışmıştır (Keleş, 2021). Bu yol haritasında yer alan "sınırda karbon vergisi uygulaması" ile ticari partnerlerini emisyon azaltımı konusunda teşvik etmeye yönelik stratejiler geliştirmiştir. Tüm bu bilgiler ışığında çalışmada Yeşil Düzen, Yeşil Ekonomi, Avrupa Birliği Yeşil Anlaşması konularına kavramsal bir çerçeve sunmak ve sınırda karbon uygulamasının Türk ekonomisi üzerindeki olası etkilerini GFZT analizi ile belirlemek amaçlanmaktadır.

Yeşil Düzen Ekonomisi (The Green New Deal)

Yeşil Yeni Düzen; ekonomide, toplumda ve ekolojide yaşanan krizlere aynı anda çözüm üretmek amacıyla tasarlanmış bir politika setidir. Bu politikada bir yandan yeni yeşil yatırımlarla ekonominin yavaş işleyen çarklarının yeniden harekete geçirilmesi, bu vesile ile yeni bir istihdam alanının yaratılması, aynı zamanda birtakım düzenlemeler ile ekonomiyi daha düşük karbon seviyesine çekme amaçlanmaktadır. Yeşil Yeni Düzende kamu kaynaklarının doğa ve insan refahı için kullanılmasını savunulmaktadır. Bu noktada ortaya çıkan ve Yeşil Ekonomi olarak ifade edilen yeni ekonomik düzende; çevresel riskler en aza indirilerek, sürdürülebilir bir kalkınma hedeflenmektedir (Aşçı, 2021). Dolayısıyla yeşil ekonomi; çevresel teknoloji, mal ve hizmet üretim faaliyetlerinde çevresel kirliliği en aza indirmeyi hedef alan ekonomik yapıdır (OECD, 1999). Sürdürülebilir üretime ve çevreye zarar vermeyen teknolojiler üzerinde yapılan yatırımların sosyal adalet, sosyal koruma ve etik temel ilkeleri benimseyerek hayata geçirilmesini sağlayan bir ekonomidir Doğal kaynakların verimli, toplumsal açıdan kapsayıcı ve düşük karbonlu olarak kullanılması üzerinde durmaktadır (Özcan, 2019). Bu noktada hedeflenen kamu harcamaları, politika reformları ve düzenleme değişiklikleri, bu anlayışı destekler şekilde oluşturulmaya çalışılmaktadır.

Avrupa Birliği Emisyon Ticaret Sistemi ve Ücretsiz Tahsisat

İklim değişikliği ve küresel ısınma ile mücadelede küresel işbirliğini ortaya koyan en önemli girişim Kyoto Protokolüdür. Bu protokol, 1997 yılında Birleşmiş Milletler İklim Değişimi Çerçeve Antlaşması ile kabul edilmiştir. Ancak protokolün yürürlüğe girmesi Rusya'nın 2005 yılında bu antlaşmayı kabul etmesiyle gerçekleşmiştir. Kyoto Protokolüne taraf olan ülkeler sera gazı emisyonlarını 1990 yılındaki seviye olan %5'in altına düşürmeyi taahhüt etmişlerdir. Bu taahhüt dönemi 2008-2012 dönemini kapsamaktadır. Kyoto Protokolü'nün en önemli unsuru ülkelere emisyon ticareti yapma hakkı sunmasıdır. Bu çerçevede ülkeler emisyon miktarlarını azaltabilmek için, kendi aralarında emisyon ticareti yapabilmektedir. Protokolün 2013-2020 yıllarını kapsayan ikinci dönemi ise yürürlüğe girmemiştir (Akar, 2020: 18). Bu nedenle 2020 ve sonrası dönem iklim değişikliğini ele alan Paris Anlaşması 2015 yılında kabul edilmiştir. Anlaşma sera gazı emisyonlarının %55'ini oluşturan en az 55 ülkenin anlaşmayı onaylaması ile, 2016 yılında yürürlüğe girmiştir. Paris Anlaşması'nın uzun dönemli amacı, sanayileşme öncesi döneme kıyasla küresel sıcaklık artışının 2°C'nin altında tutmaktır. Bu amaca yönelik olarak ülkelerin fosil yakıt kullanımını azalarak, yenilenebilir enerjiye yönelmesi gerekmektedir (Dışİşleri Bakanlığı, 2021: 1).

Kyoto Protokolü çerçevesinde Avrupa Birliği, Emisyon Ticaret Sistemi (AB ETS)'ni 2005 yılında kurmuştur. Stöllinger (2020: 11)'e göre AB ETS, karbondioksit (CO_2) dışsallığını içselleştiren bir üst sınır ve ticaret sistemidir. Sistem kapsamında, önceden tanımlanmış miktarda emisyon sertifikası verilmektedir. Böylece, firmalara bir ton CO_2 salma hakkı tanımaktadır. AB ETS gibi üst sınır ve ticaret sistemlerinin avantajı, CO_2 emisyonları için bir fiyat belirlemeye gerek olmamasıdır. Bunun yerine fiyat, "yetersiz" fiyatlar nedeniyle bozulma riskini azaltan bir piyasa mekanizması içinde arz ve talep tarafından belirlenmektedir. Prensip olarak bu durum, piyasaya dayalı mekanizmada verimli sonuçlara yol açmaktadır. Çünkü nispeten düşük bir maliyetle emisyonları azaltabilen firmalar emisyon izinlerini satmakta, emisyon azaltıcı önlemlerin kurulumunun yüksek maliyetli olacağı firmalar ise bu tür tahsisatları satın alabilmektedir.

Emisyon ticareti sisteminin mantığı bu şekilde basit olmasına rağmen, uygulanması nispeten karmaşıktır. Özellikle küreselleşme ile birlikte sermayenin mobilitesinin artması bu duruma örnek verilebilir. Faggiano (2021: 3)'e göre, bir sektöre aşırı yük bindirmek bu sektördeki firmaları emisyonların fiyatlandırılmadığı ve çevresel düzenlemelerin gevşetildiği veya hiç olmadığı ülkelere taşınmaya zorlamaktadır. Bu durum ters etki yaratarak, küresel emisyonlarda bir artışa neden olmaktadır. Bu olgu, iklim politikası çerçevesinde karbon kaçağı olarak tanımlanmaktadır. Bugüne kadar herhangi bir karbon kaçağı kanıtının bulunmadığının altını çizmek önemlidir. Ancak her zaman göz önünde bulundurulması gereken bir gerçektir. Firmaların, çevre için olumsuz sonuçlar doğuracak şekilde yurtdışına taşınma olasılığı, talihsiz bir durum olmakla birlikte tüm ülkeler için bir tehdittir.

AB'de mevcut karbon kaçağı riskini çeşitli önlemlerle düzenlemektedir. En dikkate değer uygulama ise ücretsiz emisyon kotası tahsis (free allocation) mekanizmasıdır. Demir, çelik ve alüminyum gibi karbon kaçağı riski altında bulunan sektörler, CO_2 tahsisatlarının tamamı olmasa da bir kısmını ücretsiz almaktadır. Bu mekanizma, endüstrinin emisyonları için karşı karşıya olduğu maliyeti düşürerek, üretimi yurt dışına taşıma riskini azaltmaktadır. Bununla birlikte, ücretsiz emisyon kotası tahsisi uygulaması iki açıdan eleştirilmektedir. Birincisi, bir sektöre ücretsiz emisyon kotası tahsisatı sağlamak, emisyonları kurumsal olarak sübvanse etmektir. İkincisi, birçok sektör ücretsiz emisyon kotası tahsisi ile aşırı tahsisat elde etmiştir. Örneğin 2018 yılında Avrupa'da demir sektörü, tahsislerinin %116'sını ücretsiz almıştır. Bu, yalnızca karbondan arındırma için herhangi bir teşviki ortadan kaldırmamakta, aynı zamanda yüksek emisyonlu sektörler için fazladan kaynak tahsisi sağlamaktadır (Faggiano, 2021: 4).

Avrupa Birliği Yeşil Anlaşması ve Sınırda Karbon Düzenleme Mekanizması

AB ETS, Avrupa endüstrisinin rekabet gücünü tehdit ettiği ve karbon kaçağı oluşturduğu, yani yabancı sera gazı emisyonlarını artırdığı için yoğun bir şekilde eleştirilmektedir. Rekabet gücü kayıpları ve karbon kaçağı korkuları, sıkı iklim politikalarına karşı endüstri lobi gruplarının öne sürdüğü temel argüman olduğu iddia edilebilir. Rekabet gücü ve karbon kaçağı aynı zamanda sınır düzenleme önerilerinin en önemli motivasyonudur. AB ETS'yi revize eden Direktif 2009/29/EC, 2013 yılında yürürlüğe girmiştir. Değişiklikler, özellikle elektrik sektöründe çok daha yüksek bir açık artırma payını ve karbon kaçağını sınırlamak için bazı hükümleri içermektedir. Bunlardan en önemlisi, "karbon kaçağı riskine maruz kalan sektörlere veya alt sektörlere" devam eden ücretsiz emisyon kotası tahsisidir (Madde 10-12). Bununla birlikte, Direktif, ihtiyatlı bir şekilde de olsa, sera gazı yoğun ithalat için bir sınır ayarlamasından bahsetmektedir (Monjon ve Quirion, 2011: 1957).

11 Aralık 2019 tarihinde Avrupa Yeşil Anlaşması teklifi Avrupa Parlamentosu'na sunulmuştur. Bu anlaşmanın temel yasal dayanağı olan AB İklim Kanunu'nda 21 Nisan 2021 tarihinde kabul edilmiştir. Avrupa Yeşil Anlaşması, 2050 yılına kadar uzun vadeli iklim dostu (karbon-nötr) hedefini yasalara dahil etme ve AB'nin sera gazı emisyonlarını 2030 yılına kadar 1990 seviyelerine göre %50-55 azaltmaya yönelik iklim hedefini içermektedir (Ticaret Bakanlığı, 2020:1). Zachmann ve McWilliams (2020)'e göre Avrupa Yeşil Anlaşması, önümüzdeki on yıl içinde AB karbon emisyonlarını yaklaşık %40 oranında azaltma hedefini içermektedir. Bu

hedefe ulaşmak, muhtemelen karbon fiyatlarında önemli bir artışı içerecektir. Teorik olarak, daha yüksek karbon fiyatları karbon kaçağına veya endüstriyel faaliyetin ve buna eşlik eden emisyonların yüksek karbon fiyatlarına sahip ekonomilerden düşük karbon fiyatlarına sahip ekonomilere taşınmasına yol açabilir.

Avrupa Yeşil Anlaşması'nın temel konuları; sınırda karbon düzenleme mekanizması, sıfır kirlilik hedefi, geçişi finanse etmek ve AB'nin 2030 ve 2050 için iklim hedefini artırmaktır. Bu mekanizma, her şeyden önce böyle köklü bir değişikliğin finansmanında önemli bir role sahip olabilir. Tarife tahsilatından elde edilen gelir akışı, düzenleme mekanizmasının ne kadar kapsayıcı olduğuna bağlı olarak 0,8 milyar € ile 25,2 milyar € arasında değişebilir (Nevalainen, 2021: 5). Lamy, vd. (2020: 2)'e göre ise AB iklim hedefine ulaşmak için, öncelikli olarak Birlik içinde yüksek karbon fiyatlandırması uygulamalıdır. Bunun, enerji yoğun sektörler için AB ETS aracılığıyla yapılması gerekmektedir. İklim ve Enerji Analizleri Merkezi (Centre for Climate and Energy Analyses)'ne göre, AB ETS kapsamındaki tahsis fiyatı, hedef emisyonlarda 1990 seviyelerine kıyasla 2030 yılında %50 azalma ise 52 €/ton; 2030'da %55 azalma hedefi var ise 76 € 'ya ulaşmalıdır.

AB Yeşil Anlaşması'nda yer alan "Birliğin sınırlarında karbon ayarlama mekanizması" önerisi paketin en önemli noktasını oluşturmaktadır. Sınırda karbon düzenlenmesi mekanizması, AB'ye ithal edilen yabancı ürünlerin maliyetinin karbon içeriğini yansıtmasını sağlamayı amaçlayan bir sınır önlemidir. Böyle bir düzenleme altında, AB'ye ihracat yapmak isteyen firmalar, ilgili yabancı ülkede üretim sürecinde salınan CO_2 miktarına eşit CO_2 ödenekleri satın almak zorunda kalacaklardır. Sonuç olarak bu, hem Avrupalı hem de yabancı üreticilerin ton CO_2 başına aynı çevresel maliyetlere maruz kalmasını sağlayacaktır. Böylece adil rekabete izin veren koşulların yeniden oluşturulması, karbondan arındırmanın teşvik edilmesi ve karbon kaçağının caydırılması gerçekleşecektir (Faggiano, 2021: 4). Lamy, vd. (2020: 2)'e göre ithal ürünlerden kaynaklanan karbon emisyonlarının yerel CO_2 üretiminin yaklaşık %30'unu oluşturduğu net bir CO_2 ithalat bölgesi olarak, özellikle en az gelişmiş ülkeler ve karbon yoğun ürünlerin ihracatçısı olan ticaret ortakları için potansiyel olarak olumsuz olsa da, bir sınır ayarlaması Avrupa Birliği'nin iklim hedefleri için uygun olacağı düşünülmektedir. Krenek, vd., (2020: 2)'e sınırda karbon ayarlama mekanizmasının getirilmesi, AB'nin ETS'nin mevcut karbon kaçağı hükümlerini aşamalı olarak kaldırmasına ve tüm emisyon tahsisatlarını açık artırmaya çıkarmasına neden olacaktır. Bu durum ETS'yi karbon emisyonlarını fiyatlandırmak ve azaltmak için daha etkili tek taraflı bir araç haline getirecektir. Teoride, sınırda karbon ayarlama mekanizması, yerli ve yabancı üreticiler için eşit şartlar sağlamak ve böylece potansiyel karbon kaçağını önlemek için mükemmel bir araç olacaktır.

Chiappinelli, vd., (2021: 1)'e göre çelik, çimento, alüminyum ve plastik sektörlerindeki alternatif süreçlerin teknolojik olarak hazır olma durumuna ve uygulanabilir kabul oranlarına bakılarak, 2025 yılına kadar AB'nin mevcut temel malzeme üretiminin %20'sinin bu tür düşük emisyonlu seçeneklerle değiştirilebileceği iddia edilmektedir. Bunun için yaklaşık 28,9 milyar € yatırım yapılması gerektiği tahmin edilmektedir. Bu yatırımları desteklemek, sadece sektörün karbondan arındırılmasını başlatmakla kalmayıp, aynı zamanda ekonomik bir çarpan etkisini de tetikleyerek ekonomik toparlanma hedeflerine katkıda bulacağı düşünülmektedir.

Sınırda karbon mekanizması için gerekli olan böyle bir yatırım maliyeti sınırda karbon vergisi ile finanse edilebilir. Stöllinger (2020: 5)'e göre sınırda karbon vergisi, AB'nin dahili karbon fiyatlandırma sisteminden kaynaklanan AB endüstrilerindeki karbon kaçağının önlenmesine yardımcı olabilir. Bu şekilde, asimetrik yerli karbon fiyatlandırma politikaları nedeniyle enerji yoğun sektörlerde rekabetin bozulması kısmen giderilebilir. Bir karbon sınır vergisinin bir başka olumlu yan etkisi de AB bütçesine üye devletlerin doğrudan katkılarından bağımsız yeni bir gelir kaynağı olmasıdır. Krenek, vd., (2020: 2) sınırda vergi düzenlemesini, AB bütçesini finanse etmek için sürdürülebilirlik odaklı yenilikçi öz kaynak olarak kullanılabilecek önemli ve istikrarlı bir gelir türü olarak görmektedir. Böyle bir verginin tahmini gelirleri, 2021-2027 Çok Yıllı Mali Plan döneminde AB harcamalarının %5 ila %7'sini; 2050 yılında ise %16'sını finanse edeceği görülmektedir. Bu yeni gelir kaynağı, üye devletlerin AB bütçesine mevcut katkılarını azaltmalarına izin verecek, ulusal düzeyde çarpık vergileri kesmek için alan yaratacak ve AB düzeyinde sürdürülebilirliği artıran ulus üstü bir vergi geçişini sağlayacaktır. Bu nedenle, sınırda karbon vergi düzenlemesi, AB'nin halihazırda karşı karşıya olduğu hem çevresel hem de mali zorlukların üstesinden gelinmesine katkıda bulunacağı düşünülmektedir.

Bununla birlikte sınırda karbon düzenleme mekanizmasının getirdiği avantajlara ve vergi gelirlerinin olumlu etkilerine karşılık bu mekanizmanın işlerliğini etkin bulmayan çalışmalarda mevutur. Zachmann ve McWilliams (2020)'e göres sınırda karbon sınır mekanizmasının faydasını en üst düzeye çıkarmak amacıyla, yalnızca karbon yoğun ve ticarete maruz kalan sektörlere odaklanılmıştır. Bu nedenle karbon mekanizmasını kapsayan ve kapsamayan sektörler arasında net bir ayrım yapmak çok zor olacaktır. İklim politikasında sınır ayarlama mekanizmasının uygulanması AB iklim politikasına yardımcı olmaktan çok engel olacağı düşünülmektedir. Evans, vd., (2021: 307)'e göre AB uygulamayı düşündüğü sınırda karbon düzenleme mekanizması ihracat ve ithalat açısından farklı etkiler meydana getirebilir. İhracat için sınırda karbon düzenleme mekanizması, Dünya Ticaret Örgütü kurallarıyla tutarlı olmadığı düşünülmektedir. Bu nedenle düzenlemenin, yalnızca ithalata yönelik bir düzenleme daha az olasıdır. İthalata yönelik sınırda karbon düzenlemesi ile ihracata yönelik ücretsiz tahsisin birleştirilmesi daha etkin bir politika seçimi olduğu düşünülmektedir. Ancak her iki uygulamanın yasal zorluk riski yaratacağı da beklenmektedir. Daha genel olarak, politika yapıcılarının rekabet gücü desteği ile daha güçlü bir karbon fiyatı ve ek mali gelir arasında bir ödünleşimde bulunması gerekmektedir. Zhou, vd., (2010;31) karbon fiyatlandırması ve sınırda karbon düzenleme mekanizması büyük ticaret ortaklara uygulanmazsa, karbon yoğun ticarete maruz kalan kilit endüstrilerin uluslararası rekabet gücünü ve dolayısıyla üretim ve istihdamı azaltabilir. Rekabetçilik endişesinin yanı sıra, karbon fiyatlandırma politikasının uygulanması nedeniyle iklim politikası olmayan diğer ülkelerde karbon emisyonlarının artması, yani karbon kaçağı sorunu, tek taraflı iklim politikasının etkinliği konusunda başka bir endişeye neden olmaktadır. Karbon kaçağı kanalları incelendiğinde karbon kaçağının enerji dışı piyasalarda ticaret işlemleri ile değil, dünya enerji piyasaları aracılığıyla oluşmaktadır. Bununla birlikte sınır düzenlemelerinin ekonomik olarak verimli olabilmesi için DTÖ kurallarıyla uyumlu olacak şekilde tasarlanması gerekmektedir.

Sınırda Karbon Vergisinin Türkiye Ekonomisine Etkisi: GZFT Analizi

Sınırda karbon düzenleme mekanizmasının Türkiye ekonomisini etkileyeceği kuşkusuz bir gerçektir. Aşıcı (2021: 13)'e göre Türkiye'de sınırda karbon düzenleme mekanizmasının sektörlere etkisini belirleyebilmek amacıyla tesis-bazlı sera gazı emisyon miktarı verilerinin olması gerekmektedir. Bu veriler ise, kamuoyu ile paylaşılmamaktadır. Ancak, sektörel bazda sera gazı emisyon miktarı verileri ele alındığında, sınırda karbon düzenleme mekanizmasının AB pazarında Türkiye ihracatçısına yılda yaklaşık 1.1 ile 1.8 milyar € yük getireceği tespit edilmiştir.

Ticaret Bakanlığı (2020: 2)'e göre Türkiye ve AB, bir Gümrük Birliği ortaklığıyla birbirine bağlıdır ve kömür ve çelik ürünleri ticareti, Türkiye-Avrupa Kömür Çelik Topluluğu Serbest Ticaret Anlaşması ve tarım ürünleri ticareti 1/98 sayılı Karar ile düzenlenmektedir. Türkiye'nin AB'ye ihracat hacmi 2019 yılında yaklaşık 88 milyar $ iken, AB'nin Türkiye'nin toplam ihracatındaki payı yaklaşık %49'dur. Türkiye'de faaliyet gösteren çok sayıda AB şirketi ve Avrupa değer zincirlerinin parçası olan şirketler bulunmaktadır. Bu nedenle Türkiye sınırda karbon ayarlama mekanizmasında üçüncü ülkelerden ayrışan farklı konumuna vurgu yapmaktadır.

Şahin, vd., (2021: 56)'ın belirttiği üzere, Türkiye'de henüz karbon ticareti düzenlemesi veya üreticilerin katlandığı herhangi bir karbon maliyeti bulunmamaktadır. Bu nedenle AB ile Türkiye arasındaki bu ticaret Avrupa Yeşil Anlaşma gereğince sona erebilir. Bu doğrultuda AB'nin, haksız rekabeti ve karbon emisyonlarının bölgeye sızmasını önlemek amacıyla Türkiye ile ayrı bir anlaşmaya varması gerektiği düşünülmektedir. Türkiye'de, Avrupa Yeşil Anlaşma çerçevesinde hızlı bir şekilde karbon ticareti yol haritası belirlemelidir.

Tablo 1: Sınırda Karbon Düzenleme Mekanizmasının Türkiye Ekonomisine Olası Etkisi: GZFT Analizi

Güçlü Yanları	AB-Türkiye arasındaki yoğun ticari ilişkiler Gümrük Birliği Anlaşması mevzuatı İklim değişikliği ve enerji ile ilgili yasal altyapının oluşturulması
Zayıf Yanları	İklim konusunda nitelikli personelin olmaması İklim değişikliği, atık yönetimi ve sera gazı emisyonu konusunda farkındalığın olmaması İklim değişikliği ile ilgili vergi politikasının olmaması
Fırsatlar	Sanayi sektöründe yeşil dönüşüm stratejisinin oluşması Karbon ticaret düzenlemesi planı oluşturma Karbon düzenlemesi yapılarak, ihracat oranlarını arttırma
Tehditler	Paris Antlaşması ile ilgili düzenlemeleri yapmaması Kurumsal kapasitenin yetersizliği İhracat hacminde azalma

Tablo 1'de sınırda karbon düzenleme mekanizmasının Türkiye ekonomisine olası etkileri güçlü yanlar, zayıf yanlar, fırsatlar ve tehditler (GZFT) analizi ile açıklanmaya çalışılmıştır. Türkiye'nin bu düzenlemede güçlü yanları arasında Gümrük Birliği mevzuatı çerçevesinde AB ile yoğun ticari ilişkilerin olması sayesinde diğer ülkelerden farklı bir konumda yer almaktadır. Bununla birlikte Türkiye'nin sera gazı emisyon miktarını azaltmak amacıyla atmış olduğu yasal adımlar da mevcuttur. Bunlara; İklim Değişikliği Eylem Planı (2011-2023) ve Enerji Verimliliği Strateji Belgesi (2012-2023) örnek verilebilir. Ayrıca Türkiye 2009 yılında Kyoto

Prokolüne ve 2016 yılında Paris Anlaşmasına taraf olmuştur. Türkiye'nin sınırda karbon düzenlemesi mekanizmasında zayıf yanlarına; iklim değişikliği konusunda uzman personelin olmaması, iklim değişikliği, atık yönetimi ve sera gazı emisyonu konusunda sosyo-ekonomik farkındalığının olmaması ve karbon düzenlemesi ile ilgili bir vergi politikasının bulunmaması örnek verilebilir.

Türkiye'nin sınırda karbon düzenleme mekanizmasını fırsata dönüştürebilir. Özellikle sanayi sektöründe yeşil dönüşüm stratejisi oluşturabilir. Bu sayede başta enerji sektörü olmak üzere otomotiv ve ulaşım gibi sektörlerde sera gazı emisyonu ve karbon maliyeti düzenlemesi hayata geçirilebilir. Böylece karbon ticaret düzenlemesi planı oluşturulabilir. AB'nin bu düzenlemesine uyum sağlanabilirse, Türkiye'nin ihracat oranları artabilir. Tehditler arasında ise; Paris Anlaşması'nın taraf olmasına rağmen meclis onayından henüz geçmemesi ve kurumsal kapasitenin yetersizliği yer almaktadır. Bununla birlikte eğer Türkiye emisyon yoğunluğunu azaltmadığı ve karbon düzenlemesi yapmadığı takdirde, AB ülkelerine ihracat hacminde azalma yaşanması kaçınılmazdır.

Sonuç ve Değerlendirme

AB'de Yeşil Anlaşma ile birlikte tartışılmaya başlanan sınırda karbon mekanizması, uygulanan ücretsiz emisyon kotası tahsisi mekanizmasının verimsiz olmasından ortaya atılmıştır. Bu mekanizma ücretsiz emisyon kotası tahsisine alternatif bir önlem olarak sunulmaktadır.

Uluslararası rekabet gücünü korurken endüstriyel karbonsuzlaştırmayı yönlendiren bir karbon fiyatlandırma mekanizması tasarlamak, politika yapıcılar için de büyük bir ikilem teşkil etmektedir. Ancak sınırda karbon düzenleme mekanizması ile birlikte sınırda karbon vergisi CO_2 emisyonlarının vergilendirilmesi karbon kaçağının azaltması konusundaki en etkili seçeneklerden biridir. Bununla birlikte AB karbon sınır vergisi mekanizmasının, GATT kapsamındaki DTÖ yükümlülükleriyle uyumlu olması gerekmektedir. Bu şartlar çerçevesinde uygulanacak bir karbon vergisi AB bütçesine önemli gelir kaynağı oluşturacağı ileri sürülebilir.

Türkiye AB ile yoğun ticari ilişkileri ve Gümrük Birliği mevzuatı gereğinde sınırda karbon mekanizması düzenlemesinde üçüncü ülkelerden ayrı olarak, farklı bir konumu bulunmaktadır. Bu nedenle Türkiye ile AB arasında Yeşil Anlaşma uyarıca farklı bir protokol yapılması gerekmektedir. Ayrıca bu süreçte Türkiye, iklim değişikliği ve karbon kaçağı riskine yönelik karbon ticareti mekanizması eylem planı oluşturmalıdır.

Kaynakça

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COVID-19 SALGININDA KOŞULSUZ TEMEL GELİRE ALTERNATİF GEÇİCİ TEMEL GELİR: ÇÖZÜM OLABİLİR Mİ?

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Abstract

Temporary Basic Income Alternative to Unconditional Basic Income in Covid-19 Pandemic: Could It Be the Solution? Before the Covid-19 pandemic, the fourth industrial revolution and its effects were being discussed. It was claimed that many people would lose their jobs and their welfare would decrease, especially due to automation and artificial intelligence technologies. In this process, the application of unconditional basic income has been brought up to increase the welfare of unemployed individuals. However, the Covid-19 pandemic before the expected technological change has changed all the balances in the world. Individuals have begun to experience job losses due to the epidemic rather than unemployment due to technological developments and therefore their income has started to decrease. The Covid-19 pandemic has also created a socioeconomic crisis due to the increasing number of cases and deaths. For this reason, basic income discussions have gained importance again in both developed and developing countries. During the epidemic, unconditional emergency cash transfers to individuals under the name of temporary basic income help reduce poverty in economies and increase the well-being of individuals. This study focuses on the application of temporary basic income to reduce the effects of the socio-economic crisis caused by the Covid-19 pandemic. In this framework, the study examines the countries applying temporary basic income during the epidemic process and offers solutions for Turkey.

Giriş

2019 yılı sonunda ortaya çıkan Covid-19 salgınının yayılma hızının çok yüksek olması nedeniyle sıkı kısıtlama ve karantina tedbirleri uygulanmıştır. Bu durum insan hareketliliğinin yoğun olduğu sektörler üzerinde son derece olumsuz etkiler yaratmış, tüm dünyada işsizlik oranları önemli ölçüde artmıştır. Birçok ülke bu süreçte Covid-19 salgının olumsuz etkilerini azaltabilmek amacıyla gelir yardımları, kredi kolaylıkları ve vergi indirimleri gibi destekler sağlamıştır. Birçok ülke, bu desteklerin yanı sıra bireylerin refahını arttıran geçici temel gelir uygulaması da başlatmıştır. Türkiye'de ise bireylere ve işletmelere birtakım destekler sağlanmakla birlikte geçici temel gelir kapsamında değerlendirilebilecek bir uygulama bulunmamaktadır.

Çalışmanın temel amacı, Covid-19 salgını sürecinde ortaya çıkan sosyoekonomik sorunların etkilerini azaltmaya yönelik geçici temel gelir uygulanmasını değerlendirmektedir. Bu kapsamda ilk olarak koşulsuz temel gelir kavramı ve gelişimine yer verilmiştir. Ardından Covid-19 salgının etkisiyle işlerini ve dolayısıyla gelirlerini kaybeden kişilere yönelik geliştirilen geçici temel gelirin özellikleri ve uygulama önerileri ele alınmıştır. Son bölümde ise Covid-19 salgınında özellikle yoksul vatandaşlarını desteklemeye yönelik geçici temel gelir uygulayan ülke örnekleri incelenmiştir. Daha sonra, Türkiye'de geçici temel gelir uygulamasına yönelik öneriler sunulmuştur. Çalışma sonuç bölümü ile tamamlanmıştır.

Koşulsuz Temel Gelir

Temel gelir kavramının temeli, nakit olarak ödenmesidir; bu nedenle yiyecek, barınak, giysi ve diğer tüketim malları şeklinde yapılan ödemeler temel gelir kavramına girmemektedir. Bu, 16.yy itibaren Avrupa'da oluşturulan garantili asgari gelirin en erken biçimleriyle ve daha az gelişmiş ülkelerde daha yakın zamanda uygulamaya konulan gıda dağıtım programlarıyla karıştırılmamalıdır. Temel geliri savunanların ana argümanı, hükümetlerin kamu kaynaklarını lükse ya da daha kötüsüne israf edilmekten ziyade hane halkının tüm üyeleri için temel ihtiyaçlarını karşılamaları amacıyla verilmesidir. Bununla birlikte, yiyecek kuponları ve diğer tahsis edilmiş kuponlar gibi, genellikle asgari gelir sağlamak için kullanılan destek biçimlerinin arkasındaki motivasyondur. Kısacası temel gelir, değişen aralıklarla ödenen düzenli bir gelirdir (Parijs ve Vanderborght, 2017: 29). Koşulsuz temel gelir ise, tüm bireylere sürekli ve koşulsuz olarak sağlanan bir geliri ifade etmektedir. Koşulsuz temel gelir, evrensel temel gelir vatandaşın geliri, asgari garantili gelir, temel gelir garantisi veya daha basit bir ifadeyle temel gelir olarak da adlandırılmaktadır (Erdoğdu ve Akar, 2020: 905).

Temel gelir fikrinin gelişiminin dört dalgadan oluştuğu görülmektedir. İlk dalga sanayi kapitalizminin ortaya çıkışı ile yaşanan gelişmelere bir yanıt olarak ortaya çıkmıştır. Bu süreçte temel gelir önerisi ilk olarak Thomas Paine (1796) tarafından geliştirilmiştir. Paine (1796), toprağın mülkiyetinin tüm topluma ait olduğunu, bu nedenle toprak sahiplerinin zengin-fakir ayırt etmeksizin yirmi bir yaşına gelmiş her bireye sistemin tanıtılması için bir kez 15 pound, elli yaşını geçmiş bireylere ise ömür boyu yılda 10 pound ödeme yapması gerektiğini ifade etmektedir. İkinci dalga Birinci Dünya Savaşı döneminde toplumsal adaletin sağlanmasına yönelik tartışmalarla ortaya çıkmıştır. Buna göre savaş sonrasında yaşanan yoksulluk sorunun çözülmesi için vatandaşlara haftalık-aylık olarak kayıtsız şartsız bir gelirin sağlanması önerilmiştir. Üçüncü dalga 1960'larda ABD'de teknolojik ve yapısal işsizlik endişeleri üzerine gündeme gelmiştir (BIEN, 2021: 1; Beken, 2020: 181). Son dalgada ise Endüstri 4.0'ın gelişimi ile bireylerin işsiz kalacağı fikri nedeniyle yeniden tartışılmaya başlamıştır. Ancak mevcut Covid-19 salgını, tartışmaların Covid-19 krizi çerçevesinde geliştirilmesine neden olmuştur.

Covid-19 ve Geçici Temel Gelir

Sars-Cov-2 virüsünün neden olduğu koronavirüs hastalığı, 2019 yılı sonunda ilk olarak Çin'in Wuhan kentinde ortaya çıkmış ve küresel olarak hızla yayılması ile birlikte Dünya Sağlık Örgütü tarafından 11 Mart 2020 tarihinde salgın olarak nitelendirilmiştir. 30 Mayıs 2021 itibariyle 169.597.415 kişi enfekte olmuş ve 3.530.582 kişi virüs nedeniyle hayatını kaybetmiştir (Dünya Sağlık Örgütü, 2021: 1). Salgının yayılma hızının çok yüksek olması vaka ve ölüm sayılarının hızla artmasına neden olmuştur. Bu nedenle tüm dünyada geniş kısıtlama ve karantina tedbirleri uygulanmış ve bu durum iş kayıplarının yaşanmasına ve dolayısıyla gelir kaybına neden olmuştur. Bununla birlikte ülkelerde son dönemde geçici temel gelir uygulaması da tartışılmaya başlamış ve birçok ülke vatandaşlarına salgından dolayı nakit desteği sağlamaya başlamıştır.

Tablo 1'de koşulsuz temel gelir ile geçici temel gelirin benzer ve farklı özellikleri gösterilmektedir. Wispelaere ve Morales (2021: 249)'a göre her bir bireye salgın krizi süresince herhangi bir koşul olmaksızın aylık nakit ödeme yapan bir acil durum temel gelir uygulaması, salgının politika müdahalesinde kritik ve zamanında önemli bir rol oynayabilir. Temel gelir ile koşulsuz temel gelir arasındaki temel fark, geçici temel gelir doğası gereği, özellikle salgınla müdahalenin maliyetlerini hafifletmeye yönelik geçici bir önlem olmasıdır. Bu programlar süre bakımından ülkelere göre farklılık gösterebilir. Daha katı planlar muhtemelen yalnızca acil kapanma dönemini (3 ay) kapsayacak ve söz konusu önlemler adım adım gevşetme aşamasına girdiği anda sona erecektir. Daha geniş planlar ise, ekonominin yeniden açılmasının önemli ölçüde daha fazla zaman alacağı ve desteğin hayati kalacağı gerçeğine izin vererek 6 aylık bir geçici temel gelir önerilebilir.

Tablo 1: Koşulsuz Temel Gelir ve Geçici Temel Gelirin Benzer ve Farklı Özellikleri

	Koşulsuz Temel Gelir	**Geçici Temel Gelir**
Periyodik	Belirli aralıklarla (haftalık, aylık vb.) devamlı olarak ödenir.	Acil durum süresince 9-12 aya kadar ödenir.
Nakit	Nakit ödenir.	Nakit ödenir.
Evrensel	Evrenseldir, tüm vatandaşlara sağlanır.	Evrensel değildir, yoksulluğu azaltmak amacıyla toplumun en yoksul kesimi hedef alınır.
Bireysel	Bireyseldir, kişisel olarak ödenir.	Bireyseldir, kişisel olarak ödenir.
Koşulsuz	Koşulsuzdur, iş arama şartı vb. koşullar aranmaz.	Toplumun yoksul kesimini hedeflemekle birlikte iş arama veya nakit yardımların kullanımı gibi davranışsal koşulların empoze edilmemesi açısından koşulsuzdur.

Kaynak: BIEN (2021a), "About Basic Income", Erişim Linki: https://basicincome.org/about-basic-income/, Erişim Tarihi: 17.05.2021. ve Molina, G.G., Ortiz-Juarez, E., (2020), "Temporary Basic Income: Protecting Poor And Vulnerable People in Developing Countries", UNDP Global Policy Network, Transitions Series Working Papers, 5. kaynaklarından yararlanılarak yazarlar tarafından oluşturulmuştur.

Özellikle gelişmekte olan ülkelerde, sosyal koruma sistemleri zayıftır ve çoğunlukla kayıtlı işçilere fayda sağlama eğilimindedir. Bu durum yoksul ve savunmasız insanları ve ailelerini kısmen veya tamamen korumasız bırakmaktadır. Dünya salgına yanıt olarak sosyal koruma ve yardım önlemlerinin genişlemesine tanık olmakta iken, en fazla harcamayı yüksek gelirli ekonomiler gerçekleştirmiştir. Bu önlemlerin tam olarak üçte biri, dünya nüfusunun yüzde 15'ine yarar sağlayan, primsiz nakit transferleridir. Kişi başına olarak, bu ülkeler sosyal yardım için ortalama 7 ABD $ veya sosyal sigorta ve işgücü piyasası programları eklenirse 9.5 ABD $ harcamaktadır. Bu, yüksek gelirli ekonomiler tarafından kaydedilen 121-123 ABD $ 'ına karşılık gelen ortalamaya göre çok düşük bir yardım kalmaktadır (Molina ve Ortiz-Juarez, 2020: 2).

Ülkeler tam (top-up), yarı-medyan (half-median) ve tekdüze (uniform) olmak üzere üç farklı geçici temel gelir uygulaması yaklaşımı planlayarak, Covid-19'un neden olduğu yoksulluğu azaltabilir. Bu yaklaşımlarda potansiyel yararlanıcılara uygulanacak destek miktarları Dünya Bankası'nın satın alma gücü paritesine (PPP) göre hesaplamış olduğu yoksulluk sınırını gösteren günlük miktarlar kullanılmıştır. Bu kapsamda günlük kişi başına uluslararası yoksulluk sınırı 1,9 ABD $, düşük orta gelir sınıfı yoksulluk sınırı 3,2 ABD $ ve üst orta gelir sınıfı yoksulluk sınırı ise 5,5 ABD $'dır (Erdoğdu ve Akar, 2020: 915-916; Molina ve Ortiz-Juartez, 2020: 7-8). Geçici temel gelirin tam, yarı-medyan ve tekdüze politika seçimine bağlı olarak aylık maliyeti, 132 gelişmekte olan ülkenin GSYH'larının sırasıyla %0,27, %0,35 ve %0,63'üne denk gelmektedir (Molina ve Ortiz-Juartez, 2020: 9-14). Bahsi geçen geçici temel gelir yaklaşımları (UNDP, 2021: 1);

- ***Tam:*** Her ülkenin ortalama gelir yetersizliğine eşdeğer bir nakit transferini ifade etmektedir. Güney Asya ve Sahra Altı Afrika'daki ülkeler için günlük 3,20 ABD $, Doğu Asya ve Pasifik ile Orta Doğu ve Kuzey Afrika'daki ülkeler için günlük 5,50 ABD $; Orta Doğu, Kuzey Afrika ve Karayipler ile Latin Amerika'daki ülkeler için günlük 13 ABD $'dır. Bu yaklaşıma göre, yoksul ve savunmasız kişilerin krizden önceki ortalama gelirleri, kırılganlık eşiğine ulaşma noktasına kadar desteklenmektedir.

- ***Yarı-medyan:*** Her ülkedeki ortalama hane halkı başına düşen gelir veya tüketimin yarısına eşdeğer bir nakit transferidir. Bu seçenek, ülkelerin kişi başına medyan geliri veya tüketimi de değiştiğinden ülkeler arasında medyan değerdeki değişiklikleri takip etmektedir. Bu yaklaşımın bir özelliği, belirli bir ülkedeki yarı medyan ölçünün değeri, uluslararası yoksulluk sınırı olan günlük 1.90 ABD $ düşükse, bu değer ikinci miktara yükseltilmelidir. Bu nedenle, bu seçenek kapsamında yararlanıcı başına asgari geçici temel gelir miktarı günde 1,90 ABD $'ından az olmamalıdır.

- ***Tekdüze:*** Günlük 5,50 ABD $ tek tip bir nakit transferidir. Bu tek tip transferler, günde 5,50 ABD $'ından daha az gelirle yaşayan yaklaşık 3,4 milyar insan için günde 1,90 ABD $ bir yardım önerisine dayanmaktadır. Ancak transferlerin boyutunu günde 1,90 ABD $'ından 5,50 ABD $'a çıkartılarak gelir desteğinin kapsamını genişletilebilir ve ülkeler arasındaki farklı yaşam standartlarını dikkate alarak savunmasız bireyleri kapsayabilir.

Geçici Temel Gelir Ülke Örnekleri

Geçici temel gelir fikri, ülkelere kriz ortamında krize dayanıklı nakit transferleri kullanma fikrine dayanmaktadır. Bazı ülkeler, farklı isimler altında ve farklı nakit sınırları ile benzer programları uygulamaya koyarak bu yönde bir adım atmıştır. Prabhakar (2020: 109)'a göre küresel salgın, evrensel temel gelir konusundaki görüşleri yeniden düşünmeye sevk etmiştir.

Tuvalu: Covid-19 salgını ile ilgili olarak 20 Mart 2020'de Halk Sağlığı Acil Durumu ilan edilmiştir. Tuvalu'da vatandaşlara iki seferlik doğrudan nakit ödeme, öğrenci desteği, charter uçuşları ve yakıt için yaklaşık 4,9 milyon Avusturalya $ destek sağlanmıştır (IMF, 2021: 1). Tuvalu'da Covid-19 krizi geçene kadar sınırlı bir ömre sahip olarak ifade edilen, koşulsuz temel gelir kriterlerini karşılayan tam teşekküllü bir program bulunmaktadır (Molina ve Ortiz-Juarez, 2020: 5).

İspanya: İspanya 25 Şubat 2020'de ilk doğrulanmış Covid-19 vakasını duyurmuştur (IMF, 2021: 1). İspanya'da, asgari gelir garantisi sağlamak amacıyla Mayıs ayında bir aylık 250 milyon €'luk bütçe onaylanmıştır. Bu bütçe, yaklaşık 850.000 ailenin ve 2.3 milyon bireyin gelirlerinin asgari eşiğe yükseltilmesine eşdeğerdir (Molina ve Ortiz-Juarez, 2020: 5). Patel ve Kariel (2021: 1)'e göre İspanya, en çok ihtiyacı olan 850.000 haneye ayda 1.015 € nakit desteği sağlamıştır. Dolayısıyla böyle bir temel gelir niteliğindeki gelir desteği yoksulluğun hafifletilmesine önemli katkılar sağlamıştır.

Kolombiya: İlk Covid-19 vakası 6 Mart 2020 tarihinde doğrulanmıştır (IMF, 2021: 1). Kolombiya'da hükümet, yardım programları aracılığıyla ek 3 milyon savunmasız haneye (toplamda 12 milyon kişiye) kaynak sağlamak ve nakit transferleri artırmak amacıyla Dayanışma Geliri planın başlatmıştır (Molina ve Ortiz-Juarez, 2020: 5).

Slovenya: 4 Mart'ta doğrulanan ilk Covid-19 vakasından sonra çok ciddi vaka ve ölüm artışları yaşanmıştır (IMF, 2021: 1). Slovenya'da serbest meslek sahipleri, koronavirüs salgını krizinden en çok etkilenen savunmasız grup olmuştur. Krizden etkilendiğini beyan eden serbest meslek sahiplerine (gelirleri bir önceki yıla ve/veya önceki aylara göre belirli bir oranda azalmış), kriz sırasında 2020 Mart ayı için 350 €, 2020 Nisan ve Mayıs ayları için 700 € tutarında geçici temel gelir uygulamıştır. Ayrıca sosyal güvenlik primleri devlet tarafından karşılanmıştır (Kresal, 2020: 5). IMF (2021: 1)'e göre 2020 yılının Haziran ayı başlarında, Slovenya'daki her yetişkine, turizmi desteklemek için Slovenya'daki konaklamalarda harcanmak üzere de 200 € 'luk kupon (çocuk başına 50 €) verilmiştir. Bunun için tahsis edilen toplam miktar 345 milyon €'dur.

Brezilya: Doğrulanan ilk vaka 26 Şubat 2020 tarihinde bildirilmiş ve nüfusun %7'si enfekte olmuştur (IMF, 2021: 1). Brezilya'da esasında 2003 yılından beri Bolsa Familia adı verilen program ile Vatandaşlık Temel Gelir uygulaması bulunmaktadır. Program kapsamında aylık geliri 64 ABD $ altında olan tüm haneler yardımdan yararlanabilmekte ve gelirlerini asgari ücretin üzerine çıkarabilmektedir (Bingöl, 2020: 4). Covid-19 salgınının neden olduğu ekonomik kriz sırasında düşük gelirli ailelere yardım etmek amacıyla 30 Mart 2020'de kabul edilen yasa ile Acil Durum Temel Gelir Programı kapsamında üç aylık temel gelir uygulaması benimsenmiştir. Bu program kapsamında 18 yaşından büyük tüm yetişkinlere koşulsuz olarak aylık 600 Brezilya Reali (yaklaşık 110 ABD $) ödeme yapılması kararlaştırılmıştır. Hane reisi kadın olanlar için ise ek ödeme iki katı yapılmaktadır (Castañeda-Navarrete, vd., 2020: 96; Coelho, 2020: 1). Brezilya'da, nüfusun yaklaşık dörtte biri Mart 2020'den bu yana aylık 110 ABD $ nakit ödeme aldığı için, yoksulluk 40 yılın en düşük seviyesine düşmüştür (Patel ve Kariel, 2021: 1).

Şili: İlk doğrulanmış Covid-19 vakasını 3 Mart 2020'de bildirmiştir. Covid-19'la mücadelede 17 Mayıs'ta ihtiyaç sahiplerine 2,5 milyon gıda sepeti dağıtılmış ve bu sepetin mali maliyetinin 100 milyon ABD $ olduğu ifade edilmiştir. Bununla birlikte 14 Temmuz'da ciddi gelir kayıpları olan orta sınıf işçilere yaklaşık 635 ABD $ tutarında doğrudan nakit transferi yardımı yapılmıştır. Böylece Şili'de orta sınıfın korunması ve güçlendirilmesi amaçlanmıştır (IMF, 2021: 1).

Kamboçya: İlk doğrulanmış Covid-19 vakası 27 Ocak 2020'de bildirilmiştir (IMF, 2021: 1). 7 Nisan 2020'de, hükümet operasyonları veya işçi istihdam sözleşmeleri geçici olarak askıya alınan hazır giyim fabrikalarının, 40 ABD $ hükümetten ve 30 ABD $ da işverenden olmak üzere işçilere her ay 70 ABD $ verilmiştir. İşlerin geçici olarak durdurulması nedeniyle turizm çalışanlarına da, her ayda 40 ABD $ sağlanmıştır (ILO, 2021: 25)

Singapur: Nisan 2020'de vakalar arttığında başlatılan kapanmanın ardından 2020 sonuna kadar Covid-19 vakalarının yayılmasını kontrol etmeyi başarmıştır. (IMF, 2021: 1). Bakım ve Destek Paketi, tüm yetişkin Singapurlular için nakit ödeme 300 Singapur $ çıkarılmıştır. Düşük ücretli çalışanlar için Workfare Özel Ödemesi (Workfare Special Payment), hane halkı ihtiyaçları için 3.000 Singapur $ nakit desteği sağlanmıştır. Uygun niteliklere sahip serbest meslek sahipleri de, dokuz ay boyunca (Aralık 2020) ayda 1.000 Singapur $ nakit desteği almıştır. Taksi ve özel kiralık araç sürücüleri, üç ay boyunca (Ekim 2020) araç başına günlük 20 Singapur $ nakit destek alabilmiştir (ILO, 2021: 110).

Solomon Adaları: İlk doğrulanmış Covid-19 vakası 3 Ekim 2020'de bildirilmiştir (IMF, 2021: 1). Covid-19'un etkileri nedeniyle geçici olarak işten çıkarılmış veya işten çıkarılmış 50 yaşın altındaki tüm bireyler için 5.000 Solomon Adaları $ nakit desteği sağlanmıştır. Bu destek, 1 Nisan 2020 - 30 Haziran 2020 tarihleri arasında geçerli olmak üzere 3 aylık bir süre için uygulanmıştır (ILO, 2021: 116).

Tayland: 13 Ocak 2020'de ilk doğrulanmış Covid-19 vakası bildirilmiştir (IMF, 2021: 1). Salgın kapsamında, 3 milyon geçici ve kendi hesabına çalışan işçilere üç ay boyunca ayda 5.000 Baht mali yardım verilmiştir. Bu destek Nisan-Haziran 2020 döneminde verilmiş ve toplam 9 milyon çalışanı kapsamıştır (ILO, 2021: 121).

Almanya: ilk doğrulanmış Covid-19 vakası 27 Ocak 2020'de kaydedilmiştir (IMF, 2021: 1). Moreno (2020: 173)'e göre Almanya'da temel gelir pilot uygulaması söz konusudur. Merkezi Berlin'de bulunan Ekonomik Araştırma Enstitüsü, 2020 Ağustos ayından başlayarak Aralık 2024 yılına kadar, rastgele seçilen 1500 kişiye ayda 1.200 € dağıtmak üzere "Temel Gelir" projesini başlatmıştır.

ABD: Ocak ayında ilk Covid-19 vakasını doğrulamıştır (IMF, 2021: 1). ABD'de hane halkına ve işverenlere 2 trilyon ABD $'lık federal hükümet yardımı vaat eden bir yasa imzalanmıştır. Uygulanan tedbirler arasında, ABD'de Nisan 2020'de başlatılan bir yıl için kişi başı 1.200 ABD $ ve 16 yaşın altındaki her çocuk için 500 ABD $ 'a kadar destek ödemesi bulunmaktadır (Prabhakar, 2020: 109).

Kore: Ocak 2020'de ilk doğrulanmış Covid-19 vakasını bildirmiştir (IMF, 2021: 1). Bulaşıcı Hastalık Kontrol ve Önleme Yasasına sayesinde, Covid-19 salgınına karşı mücadelede uluslararası bir örnek teşkil etmektedir. Salgının sadece ekonominin dezavantajlı kesimini değil, aynı zamanda ekonomik olarak aktif çekirdek nüfusu da etkilemesi muhtemeldir. Kore'de yerel yönetimlerin bazıları geçici temel gelir uygulamıştır. Bu geçici temel gelir Kore'de "afet temel geliri" adıyla da bilinmektedir. 7 yaşından küçük çocukları olan hane halkı için "özel bakım kuponu" verilmiş ve toplam 2,63 milyon kişi yararlanmıştır. 4 ayda bir toplam 400,000 KRW nakit desteği sağlanmıştır. Yaşlı hane halkı için "kıdemli işler kuponu" verilmiş ve toplam 543.000 kişi yararlanmıştır. Bireylere 4 ayda bir 236.000 KRW nakit desteği sağlanmıştır (Yeo ve Kim, 2020: 5).

Kanada: İlk Covid-19 vakası Ocak 2020 tahinde bildirilmiştir (IMF, 2021: 1). Covid-19 nedeniyle çalışmayı bırakan Kanada vatandaşlarına 24 haftaya kadar haftada 500 Kanada $ nakit desteği sağlayan Kanada Acil Müdahale Yardımı programını uygulamaya başlamıştır. Bu gelir evrensel olmasa da yardım, serbest meslek sahipleri, geçici çalışanlar ve yarı zamanlı çalışanlar dahil olmak üzere daha önce işsizlik yardımlarının olası alıcıları olarak tanınmayan gruplara kadar genişletilmesi, evrensel gelire yakınsamasına yol açmıştır (Ståhl ve MacEachen, 2021: 3).

Moreno (2020: 173)'e göre yalnızca İspanya, koşulsuz temel gelir yaklaşımı ile uyumlu hale getirilebilecek bir program uygulamaktadır. Espinoza (2020: 160) ise Şili'deki Acil Aile Geliri, Brezilya'da Acil Durum Temel Gelir Programı, Kolombiya'daki Dayanışma Geliri ve İspanya'daki Asgari Hayati Ücret, ülkelerde koşulsuz temel gelirin uygulanabilirliği argümanını zorlayan yeni nakit transferidir. Prabhakar (2020: 109)'a göre de Covid-19 salgını, koşulsuz temel gelir uygulanması olasılığını sağlamada düşük olmakla birlikte, en iyi ihtimalle salgın geçici acil temel gelir ödemeleri için bir zemin hazırlamıştır. Moreno (2020: 173)'de Prabhakar (2020: 109) gibi geçici temel gelir şeklinde uygulanan Covid-19'a yönelik gelir desteği, aslında kademeli olarak bir koşulsuz temel gelire doğru ilerlemenin bir yolu olarak görmektedir.

Türkiye: ilk doğrulanmış Covid-19 vakası 11 Mart 2020'de bildirilmiştir (IMF, 2021: 1). Türkiye'de Covid-19 salgınıyla mücadelede hibe desteği açıklamıştır. Ticari kazançları basit usulde tespit edilenlere, vergiden muaf esnafa ve bunların dışında kalan esnaf ve sanatkârlar ile gerçek kişi tacirlere aylık 1.000 Türk Lirası olmak üzere toplamda 3.000 Türk Lirası hibe desteği sağlanmıştır (Resmi Gazete, 2020:1). 20 Mayıs 2021 tarihinde tek seferde ödenmek üzere ekonomik faaliyet konuları Ticaret Bakanlığı tarafından belirlenecek iki ayrı grup için 3.000 ve 5.000 Türk Lirası hibe desteği sağlanmasına karar verilmiştir (Resmi Gazete, 2021: 1). Covid-19 salgınıyla mücadelede Türkiye'de geçici temel gelir uygulaması mümkündür. UNDP (2021)'e göre Türkiye'de politika tercihine göre geçici temel gelirin maliyeti Tablo 2'de gösterilmektedir.

Tablo 2: Türkiye'de Politika Tercihine Göre Geçici Temel Gelirin Maliyeti

	Yararlanan Kişi Başına (Aylık)	Ülke Toplam (Aylık)	GSYH'nın % (Aylık)	GSYH'nın % (12 Aylık)
Tam	143$	5.37B$	0.23	2.76
Yarı-Medyan	213$	8.03B$	0.35	4.2
Tekdüze		6.30B$	0.27	3.24

Kaynak: UNDP (2021), "Temporary Basic Income (TBI) Simulator", Erişim Linki: https://data.undp.org/content/tbi/, Erişim Tarihi: 23.05.2021.

IMF (2021: 1) Covid-19 için Politika Tepkileri verilerine göre, Türkiye'de Mart 2021 itibariyle mali desteklerin toplam miktarının 638 milyar TL olduğu tahmin edilmektedir. Bu miktar GSYH'nin %12,7'sine denk gelmektedir. Tablo 2'de de görüldüğü üzere Türkiye'de vakaların görüldüğü mart ayından itibaren yoksul kesime uygulanacak on iki aylık bir geçici temel gelir desteği, bu miktarın yaklaşık üçte biri ila beşte biri arasında bir orana denk gelecektir. Dolayısıyla Covid-19 krizi sürecinde mevcut destekler kapsamında yoksul kesime kişi başına on iki ay geçici temel gelir desteği sağlaması mümkündür. Bu sayede toplumun refahı da önemli ölçüde yükselecektir.

Sonuç

Tüm dünyayı çok kısa bir sürede etkisi altına alan Covid-19, salgının yayılmasına yönelik alınan karantina tedbirleri tüm dünyada birçok insanın işsiz veya gelirsiz kalmasına neden olmuştur. Bu süreçte birçok ülke vatandaşlarını desteklemek üzere mali politika önlemleri almış ve salgın sebebiyle gelirlerini kaybeden bireylere, geçimlerini sağlayacak kadar uygulanacak bir koşulsuz temel gelir desteğinin sağlanması gündeme gelmiştir. Ancak koşulsuz temel gelirin süreklilik arz eden bir yapısının olması nedeniyle, birçok ülkede Covid-19 salgın krizi süresince geçici temel gelir desteği tartışılmaya ve uygulanmaya başlanmıştır.

Covid-19 krizi sürecinde birçok ülke farklı isimler, yöntemler ve miktarları ile geçici temel gelir benzeri uygulamalar yürütmektedir. Türkiye'de Covid-19 sürecinde sanatçılara, esnaf ve sanatkârlara tek seferde olmak üzere nakit desteği sağlamıştır. Türkiye'de Covid-19 salgın krizinde koşulsuz temel gelir veya geçici temel gelir uygulaması bulunmamaktadır. Bu nedenle, Türkiye'de standart olarak geçici temel gelir uygulamasının aylık maliyeti GSYH'ın %0.27'sine, yıllık maliyeti ise %3.24'üne tekabül etmektedir. Diğer bir deyişle Türkiye'de doğrulanmış ilk Covid-19 vakasından günümüze kadar geçen sürede, geçici temel gelir programı uygulanmasının mümkün olduğu ileri sürülebilir.

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DEMOCRACY, ELECTIONS AND SOCIETY IN THE CONDITIONS OF THE COVID-19 PANDEMIC - THE CASE OF GEORGIA

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Introduction

2020 will go down in history as the largest crisis year in the world linked to the COVID-19 global pandemic. The pandemic is also threatens the future of liberal democracy. If we briefly evaluate pandemic democracy, it becomes more and more shadowy and we can say that autocratization acts like a virus on it. The "Year of the Lock" in 2020 replaced the "Year of Protest" in 2019. That was the focus of last year's analysis of democracy. (V-Dem. 2021)

The global pandemic of Covid 19 virus has become a crisis challenge for democracy and an inspiration for profound change for the world. At the same time, modern societies are experiencing many other crises: the economic crisis, climate change, the apparent rise of inequality, the rise of populism, the rise of geopolitical tensions, the ongoing religious and ethnic conflicts, the protests of blacks. All this characterizes our era against the background of the pandemic as an era of profound change and uncertainty, which can rightly be called the era of profound transformation (Schott.2020).

Modern democracies have to overcome many short-term and long-term crises that have been exacerbated by the COVID-19 pandemic. It has allowed governments to disrupt elections, silence critics and the press, and undermine the principle of accountability, which is essential to the protection of human rights as well as public health. The pandemic situation for democracy and human rights has deteriorated in 80 countries (Freedom House.2020), with particular deterioration in weak democracies and repressive states.

Holding elections in 2020 has become a significant challenge and a test of democracy for a number of countries. Our goal is to use the example of Georgia to analyze the risks involved in holding democratic elections during a state of emergency, both in terms of public health and constitutional order, as well as the stability and security of the country.

The Georgian case shows how the pandemic affected critical elements of the election, the fairness of the election process and the credibility of the results. By analyzing the various measures and election results taken to reduce the risks associated with the pandemic, we will try to determine the degree of sensitivity of the country to the democratic order of the pandemic as a challenge.

Elections and Democracy

Elections and electoral procedures are of special importance to humanity. The institution of democratic elections has been around for centuries. It is based on the development of philosophical, political and legal thought on the one hand, and the democratic practice of modern developed liberal countries on the other. One of the defining characteristics of a democracy is regular, periodic elections. This requirement is set out in Article 21 (3) of the Universal Declaration of Human Rights.

Holding elections during a natural disaster, famine or epidemic is a serious risk to human life. This problem also exists with the coronavirus pandemic. Crowds can increase the spread of infection during an election campaign or voting.

Why do some countries pause in elections during a pandemic, while others do not? Decisions about holding or canceling are ambiguous and the conclusions are not always related to the number of infected. The key to democracy are those countries that remain committed to values if they experience a change in democracy (Asplund and James. 2020).

As IDEA, an international study of the relationship between elections and COVID-19, shows, democracy can be undermined even by holding elections at this time. for example:

- Activity may decline, especially among vulnerable groups, undermining the principles of inclusiveness and equality in the electoral process

- Proper political campaigning becomes impossible because direct communication in large groups is restricted or prohibited;

- Public debates may focus only on the health crisis, which hinders the broad discussion of other important topics;

- Unscrupulous government can use restrictions on the rights of opposition candidates or critical media and individuals to make elections less free and less fair.

The right of citizens to participate in the formation of government structures is a universally recognized norm , as elections are the a necessary defining condition of democracy (Ginsburg and Huq, 2018). Elections are the main mechanism through which people participate in governing their own country, in which way political leaders are elected and held accountable (Dahl 1971; Lijphart 1999; Lindberg 2006, Landman 2013; Webler and Tuler 2018; Pzreworski 2019). The ability of democracies to conduct elections is further reinforced by credible human rights legislation, to protect rights such as freedom of movement, the right of assembly, the right to form associations and the right to freedom of speech and expression (Dahl 1971; Landman 2013). Elections unite the interests of citizens and determine their relationship with the government in several different dimensions.

According to the final data, in 2020, national elections were held in 28 countries, where a total of 88 million people voted, and in the midst of the pandemic, elections were scheduled in March-April 2020 in 22 more countries and in 30 more countries from April to October (IDEA.2020). The measures taken to address the risks, I think, will still have a broad impact on all other elections around the world.

There are several ways in which a pandemic and government response can affect any of these processes:

- The virus can prevent voters from voting and affect overall activity.

Voter turnout as a critical factor and a health barometer of democracy determines the legitimacy of elections. Developed democracies in recent decades have seen a decline in voter turnout, which could be the result of a pandemic and impact on new democracies.

- Deferment depends on the type of mode.

For example, delays in full or "imperfect" democracies can lead to disagreements (in the US 2020; France, Italy and Poland). In hybrid systems (Levitsky and Way 2012) delays can lead to growing political uncertainty and undermining the rule of law. Postponement in authoritarian regimes (Schedler 2006; Levitsky and Way 2012) can create a power vacuum, abuse of power, as well as emergency measures, which further strengthens authoritarian rule.

Postponement of elections is associated with three main threats (IDFI. 2020):

- Mandate: Elected officials have to exceed their term of office, which calls into question the legitimacy of their decisions.

- Democratic rights: A state of emergency declared in many countries may become a weapon of power for politicians with authoritarian tendencies.

- Precedent: Postponing elections sets a dangerous precedent for states that may be abused in the future to illegitimately retain power.

A pandemic can affect many elements of the election cycle. Campaigning and subsequent voting may be delayed in order to protect the health of citizens. These procedures naturally cannot be performed in the usual format for understandable reasons. However, the 2020 elections have shifted to remote and digital formats and holding them was important for democracy.

Pandemic democracy

What is democracy experiencing in this era of transformation and what awaits new weak democracies? Prior to the pandemic, the irrelevant nature of existing social institutions in terms of solving global problems and increasing social polarization was evident. Today, a wide range of democratic institutions are showing signs of severe stress or failure.

The initial assessment of many of the risks associated with the COVID-19 pandemic is related to the conduct of democratic, fair and transparent elections. Risks associated with the pandemic, the nature of the election, the order in which the election cycle can be disrupted, and decisions raise important questions about the future of democracy (Landman.2020).

Countries have reacted differently to managing the Covid-19 pandemic crisis. At stake were two major values _ life and health and democratic rights. For countries planning to hold elections despite the current pandemic, the lessons of other countries are critically important. According to the International Institute for Democracy and Electoral Assistance (IDEA.2021), 65 states and territories around the world have postponed national or local elections due to the Coronavirus pandemic.

It is difficult to decide whether to hold elections under a state of emergency. Governments must take into account the many legal, technical and sanitary parameters and expected outcomes, as well as the constitutional mechanisms for planning and organizing elections and the conditions necessary to ensure proper election campaigns, so that democratic institutions function normally and fundamental human rights and freedoms are protected.

Georgia is among the 111 countries where the state of democracy and human rights has not changed since the pandemic (Freedom House.2020). The government deserved great approval from the population for taking tough but transparent measures against the pandemic. Parliamentary elections in Georgia were held amid a global pandemic, significant changes in the country's electoral system, political polarization, and reduced confidence in the current parliament. The formation of the electoral environment was also influenced by the ongoing constant aggression by the Kremlin and the aggravation of the situation in the region.

With election day approaching, the sharp rise in coronavirus cases has had an impact had on campaign strategies and precinct procedures. Significant restrictions on voting for infected voters did not create but the health risks may has affected voter turnout negatively affected. The pandemic, especially with rising levels of infection, has created problems Georgian economy and healthcare system. Given that Georgia in 2020 Internationally exemplary in terms of virus management in spring and summer Considered a country, crisis management by the government in the fall became a prominent theme of the election campaign.

Opposition parties have agreed to take joint action and have signed a declaration in the new parliament declaring inadmissibility a coalition with the ruling party. If the Covid Pandemic during the election period was a challenge for the government, it became an opportunity for revenge for the radical opposition.

Elections were held, voter turnout was high despite the pandemic. Georgia has passed the Democracy Test and the results have been recognized by the EU Monitoring Mission and other observers. 9 parties crossed the threshold and should have had the most multi-party parliament in the history of Georgia (OSCE./ODIHR.2021).

But the radical opposition party National Movement, led by former president and leader Saakashvili, a Ukrainian citizen, began preparations for a new revolution that would pave the way for the cancellation or annulment of elections and new elections. The opposition was in fact preparing for the second day of the elections. The planned provocations in the polling stations and in the media controlled by him created a background as if the government was using a pandemic and rigging the elections to prolong its rule. Before the CEC counted the votes, the opposition rigged the election and attempted to invade the CEC. Formally, many complaints were filed, most of which were not considered by the court due to unfoundedness. The United Opposition, which won the election, did not recognize the results and boycotted parliament.

The Covid 19 pandemic turned out to be a litmus test to understand how much Georgian democracy, society and the political spectrum have grown. The interesting thing about this process is that the public realized the importance of the process, the risks. According to the CEC, 56.11% of registered voters cast ballots. This

(60.7% in 2012 and 51.63% in 2016) indicates that COVID-19 was likely to have a small impact on voter turnout (NDI. 2020).

The electorate was active despite the pandemic, but voted against autocracy. Because it did not want ex-President Saakashvili's party, the UNM, which remains the most influential opposition force, to come to power and continue its autocratic rule. After a six-month boycott mediated by the United States and the European Union, an agreement was reached between the political forces and the opposition entered parliament.The citizens of Georgia have always been committed to a democratic and European future. Due to the difficult political situation and pandemic in the Caucasus, the public became increasingly dissatisfied with the boycott of the opposition. This was vital for Georgia in the face of geopolitical tensions.

The case of Georgia shows that the state of emergency can be used not only by the ruling elites to prolong the regime, but also by the revanchist and radical forces to seize power. Unfortunately, the political reality in Georgia is turbulent and does not fit into the usual democratic format.

The West has done everything to save democracy in Georgia. However, despite its shortcomings, Georgia has not even considered moving away from democracy.

There are various ways to maintain democracy to keep it in the required condition, many countries in the period of the global pandemic have shown important innovative approaches and quick thinking to adapt to the new reality.

Different approaches to managing elections during a pandemic raise many questions about what threatens democracy. The spread of COVID-19 around the world encompasses a wide range of risk issues. Including on democracy and public participation (Webler and Tuler 2018).

The case of Georgia clearly shows that elections may be held at a high level in pandemic trials, but there is a problem with the credibility of the results, which can be abused by both the ruling elite and the revanchist and radical opposition. Which also poses a risk of establishing autocracy.

Society and Pandemic Democracy - Citizen-centered democracy

The spread of the Covid-19 virus has also had a significant impact on public life. It has actually changed people's daily lives, lifestyles, attitudes. The public was overwhelmed by fear and uncertainty due to misinformation and the vague prospect of tackling the unknown virus, severe lockdowns and closed borders, economic stagnation and political tensions in many parts of the world. This was accompanied by a number of restrictions on democratic rights, including restrictions on freedom of movement, association and assembly, education and labor rights, as well as religious rites and, to a lesser extent, participation in elections and voting.

What matters is what expectations the public had towards the elections in the wake of the global pandemic. Democracy is not just a cherished ideal for society. This is the public administration system that should be the best at overcoming the COVID-19 scale and complexity crisis.

COVID-19 negatively changed the election process. Against the background of Lockdown, optimism in society fell sharply. Issues such as access to health care, inequality and security have become topical, and politicians' favorite topics have been replaced by a pandemic. Voters seem to have not changed, but the context of the 2020 election has changed (Ball.2020).

Despite strict lockdowns, free exchange of information and discussions were actively taking place on media and social networks. The voluntary self-organization of society and the open relationship between government and society significantly determine respect for the values of democracy and success in fighting the pandemic. In the elections, Georgian society showed more political maturity and civic responsibility than political parties. This was clearly seen even during the political crisis, when the people did not support the boycott of Parliament and the protests.

Democracy does not guarantee competent leadership and good governance. However, democracies predominate among the countries that deal more effectively and contain this virus. Other countries, by contrast, are unable to deal effectively with the pandemic and pay very high prices for human life and economic security. This further weakens society and lays the groundwork for authoritarianism. I think the impact of the pandemic on political and civil rights will be mostly negative for the next three to five years.

During the coronavirus pandemic, four major problems were identified by the public:

- Lack of transparency and information from the government regarding the virus,
- Growing corruption,
- Insufficient protection of the weak part of the population
- Abuse of power by governments

Measures taken for public health in Georgia were generally developed within the framework of inclusive processes and were positively assessed by all parties involved.

The coronavirus has hit an already fragile system. It would be a mistake to think of a pandemic as something very different from other problems in our society and electoral system (Hassen. 2020). It interacts with existing problems and exacerbates the situation.

The pandemic exposed the merits and demerits of Georgian society, as well as one thing: there is a great deal of polarization in society, which is very important for linking politics. The vast majority of citizens supported the pandemic restrictions, believing that it was far more important to eradicate the virus than elections or to improve the economy. However, they did not give up on democratic rights and their protection

Conclusion

The global distribution of Covid-19 has already had an impact on the health and well-being of the world's population. And electoral decisions will have a significant impact on the health of a democracy in the future.

For almost half a century, the minimalist vision of democracy has prevailed, where democracy is narrowly defined in terms of elections, the rule of law, and the protection of civil and political freedoms. In this view the idea of a democratic society is weakened. (Brown. 2019). At the same time, the rise of right-wing nationalist populism and the erosion of democracy have led to the violation of these principles in stable democracies. The possibilities of democracy need new spaces in which citizens can redefine the importance of democracy in the era of modern transformation.

The example of Georgia shows that in view of the dangerous erosion of democracy, a more holistic, hybrid model of democracy is needed, which includes deliberative, participatory, direct and representative forms of democracy, where each can act to overcome the shortcomings of the other. Within this "dynamic democratic ecology," there is an urgent need for democratic innovation that enhances community involvement (Brown. 2019). Progressive change is important to overcome the polarization of society.

The COVID-19 pandemic forces us to rethink three aspects: society as a form of integration; Politics as a force; Savings as material benefits (Sankar Manana. 2021). The epidemic has affected not only public governance and economic thinking, but also society, deepening social divisions.

I think democratic institutions need to be reformed to become more inclusive, pluralistic and consensus-based. Only then will democracies be able to effectively counter the threat of the emergence of autocratic leaders and deal with other global threats.

The COVID-19 crisis is an alarm signal that the freedoms we are so wary of are in jeopardy and that we should not take it for granted. Thanks to democracy, citizens and their elected leaders can learn and grow. It has never been so important.

Authoritarian rulers see the COVID-19 crisis as a new field of political struggle, an opportunity to take advantage of it, and to try to undermine democracy as a "weak" political system and deny its enormous achievements over the past few decades. Democracy is in jeopardy and the people who care about it must show the will, discipline and solidarity to protect it.

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Contribution Of Eco-Innovation And Waste Management To Economic Growth In The Context Of Circular Economy: The Case Of European Countries

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Abstract

Mass consumption accelerated with the industrial revolution. The production model of this period is the traditional one-way linear economy, in which the "buy-build-use-dispose" principle is adopted. The mass consumption rate, which accelerated with the increase in population in the following years, has caused the destruction of resources, environmental damage such as climate changes and global warming. This situation has been questioned as it hinders sustainable environmental and economic development and the concept of circular economy has emerged as an alternative. Circular economy is based on the principle that nothing is "waste", everything can become "resource" and is a production model in which the least damage to the environment is done. The EU cares about this area and carries out important regulations and activities. Eco-innovation activities are an example of this. Eco-innovation, considered the driving force of the circular economy, is defined as any new or significantly improved product, process, organizational change or marketing solution that reduces the use of natural resources and the release of harmful substances throughout its life cycle. The study covers the period of 2010-2018 and examined the effects of various indicators of eco-innovation and waste management, which are important components of the circular economy, on the growth of 21 European countries. In the study, panel data analysis method was used and results were obtained with the resistive estimator Prais-Winsten (PCSEs). According to the results; It has been seen that eco-innovation and the recycling rate of municipal waste have a positive effect on the growth of countries, while the recycling rates of packaging waste and e-waste are statistically insignificant.

Keywords: *Circular Economy, Eco-inovation, Waste Management, Panel Data Analysis.*

JEL Classification Codes : *Q5, Q53, Q57*

Giriş

Sınırlı mevcudiyetiyle kaynaklar, hızla artan nüfus ve yetersiz bilinç nedeniyle hızlı tüketim baskısı altındadır. Bu durum, kaynakların yok olmasına ve sürdürülebilir kalkınmaya engel olmasının yanında, iklim değişimleri ve küresel ısınma gibi çevresel tahribatlara da neden olmaktadır. "al-yap-kullan-at" prensibinin benimsendiği geleneksel tek yönlü doğrusal ekonomi modelinin devam etmesi halinde sorunların daha da artması kaçınılmazdır. Hem mevcut çevresel ve ekonomik sorunları gidermek hem de bunu sürdürülebilir kılıp gelecek nesillere daha refah ve kaliteli bir hayat sunabilmek için doğrusal ekonomi sistemine bir alternatif gerekmektedir. Bu alternatif, kaynak yönetimini dikkate alan doğada hiçbir şeyin "atık" olmadığı ve her şeyin "kaynak" haline gelebileceği ilkesine dayanan döngüsel ekonomi sistemidir.

Döngüsel ekonomide atık yönetimi çok önemli bir kavramdır. Burada, atıkların sıfır düzeyine indirilmesi ve mümkün olmadığı durumlarda minimize edilmesi gerekliliği temel düşüncedir. Eğer bu başarı elde edilemiyorsa, sırasıyla yeniden kullanım, geri dönüştürme, geri kazanma veya enerji kaynağı olarak değerlendirme alternatiflerdir. Fakat bu seçeneklerde de başarılı elde edilemezse atığın güvenli bir şekilde bertaraf edilmesi gerekmektedir. Atık yönetiminde amaç ürünün çıkarımından nihai tüketim ve bertaraf edilmesine kadar ürünün tüm yaşam döngüsü boyunca çevresel etkileri minimize etmektir (Utkulu ve Bilik, 2020).

Bu arada, eko-inovasyon (EI) kavramı, sürdürülebilirliğe geçişte değişim için temel bir itici güç olarak vurgulanmaktadır. Bu kavram, tüm biçimleriyle (ürün, süreç, pazarlama, organizasyon) hem ekolojik hem de ekonomik kazanımlar sağlayan yenilik olarak tanımlanmaktadır (OECD, 2005). Başka bir deyişle, kavram, tüketim ve kaynakların kullanımında daha fazla verimlilik dahil olmak üzere "çevresel faydalara" önem veren rekabetçi teknolojilerin ve kurumsal uygulamaların (yeni iş modelleri dahil) geliştirilmesinde kilit bir unsur olarak kabul edilmektedir. EI, döngüsel ekonominin "katalizörü" ve doğrusal ekonomik sistemden döngüsel ekonomik sistemine geçişte kilit bir bileşen olarak görülmektedir (Carrillo-Hermosilla vd., 2010; European Commission, 2012; Potočnik, 2014).

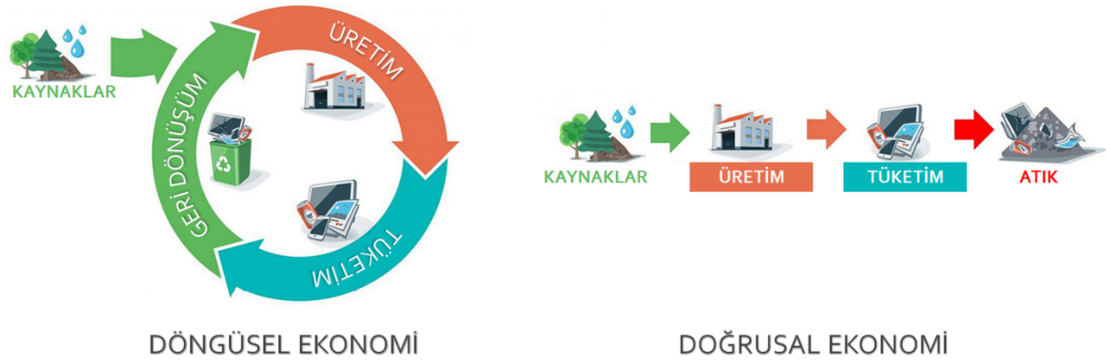
Döngüsel ekonomi kavramı, Avrupa Birliği'nde (AB) oldukça benimsenmekte ve bu alanda önemli düzenlemeler yapılmaktadır. Üye ülke ekonomilerinin döngüsel ekonomiye uyum sağlaması açısından dünyada öncülük yapmaktadır. Almanya, 2014 yılı verilerine göre; üretilen atıkların %65'i geri döndürülebilmiştir. Fransa'da bu oran %39 düzeyindedir (Karaçor, Küçüksucu ve Konya, 2020). Fakat tüm dünyada olduğu gibi AB ülkelerinin çoğu döngüsel ekonominin henüz başlarındadır. Öyle ki, günümüzde küresel ekonominin sadece %8,6 düzeyinde döngüsel olduğu belirtilmektedir (Circle Economy, 2020).

Bu çalışmada, döngüsel ekonomi kapsamında eko-inovasyon ve atık yönetiminin gayri safi yurtiçi hasıla (GSYİH) arasındaki ilişki incelenmiştir. Bu amaçla iki model kurulmuştur. Çalışmada ilk olarak, döngüsel ekonomi kavramı, ardından eko-inovasyon ve atık yönetimi arasındaki ilişki açıklanmıştır. Daha sonra AB'de döngüsel ekonomi politikalarına, çeşitli göstergelerle bu alandaki gelişmeler ve gelecek hedeflere değerlendirilmiş. Son olarak, model ve veri seti tanıtılmış ve bulgular açıklanmış, en son olarak ta sonuçlar değerlendirilmiştir.

Döngüsel Ekonomi

Sanayi devriminden itibaren ortaya çıkan ve günümüze kadar gelen süreçte geleneksel olarak uygulanan ekonomik sistem, doğrusal ekonomi olarak tanımlanmaktadır (Önder, 2018). Bu ekonomik sistem, firmaların ürettiği ürünlerin tüketiciler tarafından ihtiyaçları karşılanmak amacıyla tüketildiği tek yönlü bir modele dayanmaktadır (Koçan, Gültekin ve Baştuğ, 2019). Bu modeldeki kaynak akışı, değer zincirinin başlangıcına sadece hammadde girişinin yapıldığı, üretim olarak ta "al-yap-kullan-at" prensibinin benimsendiği bir mantığa dayanmaktadır (MacArtur, 2013). Geleneksel olan bu üretim modelinde hammadde, girişimci, emek ve sermaye bileşenleri ile üretim yapılmakta, ardından nihai ürün karlılık gözetilerek piyasaya sunulmakta, tüketilmekte ve nihayetinde tüketilmeyen kısmı atık halini almakta ve bu süreçlerin sonucu olarak ta üretim denklemine çevresel bir sorun olarak emisyon dahil olmaktadır (Karaçor, Küçüksucu ve Konya, 2020). Dolayısıyla nüfusun ve kentleşmenin hızla arttığı ve kaynakların sınırlı olduğu günümüz gerçeğinde, kaynak yönetimini dikkate alan doğada hiçbir şeyin "atık" olmadığı ve her şeyin "kaynak" haline helebileceği ilkesine dayanan döngüsel ekonomi modeline olan ilgi artmıştır (Burnson, 2018; Circle Economy, 2019; Netherlands Enterprise Agency, 2019).

***Şekil 12:** Döngüsel ve Doğrusa Ekonominin İşleyiş Mekanizması*



Kaynak: OrganiTrust, https://organitrust.org/circular-economy/

Döngüsel ekonomi (DE), doğal ekosistemlerden esinlenen bir kavramdır ve bir ürünün tüm yaşam döngüsünü yeniden tasarlama çabasıyla, doğrusal bir ekonomi kavramından (tek yönlü çıkarma, üretim, dağıtım, tüketim ve bertaraf faaliyetlerine dayanan) kalıcı olarak yenilenen bir ekonomiye doğru hareket eden mekanizmadır (de Jesus vd., 2018). Modelde, endüstrinin atıksız olarak çevre üzerinde hiçbir etkisi olmadan "beşikten beşiğe (cradle to cradle)" konsepti benimsenerek ürünün yaşam döngüsünde kaynaklardan maksimum şekilde yararlanılır. Bunun aksine doğrusal ekonomi modelide ise, "beşikten mezara (cradle to grave) kopsepti ile çalışmaktadır (McDonough and Braungart 2002; Stahel ve Giarini, 1989). DE, olumsuz çevresel ve toplumsal etkileri en aza indirmeyi, yenilenemeyen kaynakların kullanımını azaltmayı, toksik ve tehlikeli maddeleri ortadan kaldırmayı ve ürün ömrünü uzatmayı, ayrıca ürünleri yeniden kullanma ve malzemeleri iyileştirme potansiyelini en üst düzeye çıkarmayı amaçlayan süreçlerin ve ürünlerin tasarımına odaklanmaktadır (Gueymard ve Lopez, 2013). Bu nedenle DE, geleneksel doğrusal ekonomiden daha verimli ve daha üretkendir (Esposito, Tse ve Soufani, 2015; Girard ve Nocca, 2017; Murray, Skene ve Haynes, 2017). Fakat doğrusal ekonomi modelinin geleneksel yaklaşımları günümüzde de ekonomik faaliyetler üzerindeki egemenliğini sürdürdüğünden, döngüsel ekonomi çözümleri hala yetersiz kalmaktadır. Günümüzde küresel ekonominin sadece %8,6 düzeyinde döngüsel olduğu belirtilmektedir (Circle Economy, 2020). Bunun önemli sebeplerinden birisi, malları, bileşenleri ve malzemeleri yaşam döngüsü içerisinde en yüksek düzeyde faydalanmaktansa, bakir kaynakları kullanarak üretim yapıp ve sonra bunları kullanıp atmanın genellikle daha uygun maliyetli olmasıdır (Steinfatt, 2020).

Döngüsel ekonominin iyi işleyebilmesi için uzun ömürlü tasarım, bakım, onarım, yeniden kullanım, yeniden üretim, yenileme ve geri dönüşüm gibi faaliyetler önem kazanmaktadır (Geissdoerfer vd., 2017). Literatürde bu faaliyetler, döngüsel ekonominin temel ilkeleri olarak belirtilmekte ve modelin işleyişine dahil etmek için R çerçeveleri kullanılmaktadır (Utkulu ve Türköz, 2020). Dolayısıyla DE modelinin en temel ve basit hali, azaltma-yeniden kullanma-geri dönüşümü (reduction-reuse-recycle) içeren 3R (Gaustad vd, 2018; Lieder ve Rashid, 2016) olsada çerçeve zamanla genişlemiş önce 4R (Brennan, Tennant ve Blomsma, 2015), daha sonra 6R (Jawahir ve Bradley, 2016; Sady, 2016) ve son olarak ta en geniş kamsamı ile 9R (Potting vd., 2017; Kirchher, Reike ve Hekkert, 2017) olarak tanımlanmaktadır. 9R çerçevesi kapsamında; malzemelerin etkin kullanım stratejileri arasında Geri Dönüşüm (Recycle) ve Geri Kazanım (Recover); ürün ve parçalarının ömrünü uzatma stratejileri içerisinde Yeniden Kullanım (Reuse), Onarım (Repair), Yenileme (Refurbish), Yeniden Üretim (Remanufacture) ve başka bir amaca uygun hale getirerek Yeniden Amaçlandırma (Repurpose); daha akıllı ürün üretim ve kullanım stratejileri olarak Reddetme (Refuse), Yeniden Düşünme (Rethink) ve Azaltma (Reduce) yer almaktadır (Sayın, 2020).

Döngüsel Ekonomi ve Eko-İnovasyon

Küresel tüketim son iki yüzyılda dramatik bir şekilde arttığı ve 2050 yılına kadar üç katına çıkması beklendiği için palyatif çözümler yeterli olmayabilir (Vanner vd., 2014). Daha sıkı çevre standartları ve tüketicinin iklim değişikliğine duyarlılığı gibi yeni küresel eğilimler ortaya çıkmaktadır. Bu bağlamda, tüm değer zinciri boyunca inovasyonla özendirici ve teşvik edici kapalı döngülerde çalışan yeni bir ekonomik model kavramı, rekabetçi ve sonlu ama dinamik kalan bir dünyada malzeme ve enerji israfını en aza indirmek için alternatif bir çözüm olarak savunulmaktadır. (UNEP, 2006, 2011). Bu süreçte, DE ön plana çıkmaktadır. DE'ye geçiş, üretim ve tüketim sistemlerinde önemli değişiklikler gerektirmektedir. Bu nedenle teknolojik, organizasyonel ve sistem yenilikleri dahil olmak üzere çeşitli inovasyon çabaları gereklidir. Dolayısıyla, eko-inovasyonun rolü bu süreçte önem kazanmaktadır (de Jesus vd., 2018).

Eko-İnovasyon Gözlemevi (EIO) eko-inovasyonu, döngüsel ekonominin tüm alanları için hayati bir unsur olarak görmekte ve "doğal kaynakların kullanımını ve bütün hayat döngüsü boyunca zararlı maddelerin salınımını azaltan herhangi bir yeni veya önemli ölçüde geliştirilmiş bir ürün, süreç, organizasyonel değişiklik veya pazarlama çözümünün tanıtımı" olarak tanımlamaktadır (EIO, 2012). İlk olarak Fussler ve James tarafından 1996 yılında bahsedilen eko-inovasyon, genel olarak tüketicilere ve işletmelere katma değer sağlayan ve çevre üzerindeki etkilerini önemli ölçüde azaltarak yeni çözümler oluşturmaya katkıda bulunan özel bir tür yeniliktir (Fussler ve James, 1996; Makara vd., 2016; OECD 2009). Eko-inovasyon, çevreye olan hassasiyetiyle diğer inovasyon türlerinden ayrılmaktadır. Doğal çevreye saygı gösterirken ekonomik olarak rekabetçi olmak hedeftir.

Eko-inovasyon, diğer kurumların yanısıra Ekonomik İşbirliği ve Kalkınma Örgütü (OECD) ve Avrupa Birliği (AB) tarafından geliştirilmekte olan uluslararası istatistikte yeni bir araştırma alanıdır. AB'de, eko-inovasyon üzerine araştırmalar Eko-İnovasyon Gözlemevi (EIO) tarafından yürütülmektedir. EIO'nun ana görevlerinden birisi, AB ülkelerindeki eko-inovasyonla ilgili verileri toplamaktır. Bu göstergelere dayanarak, Eko-İnovasyon sıralaması için bir puan tablosu oluşturulmaktadır. Endeks, beş gösterge grubunu dikkate alır. Bunlardan üçü doğrudan eko-inovasyonla ilgilidir: eko-inovasyon girdileri, eko-inovasyon faaliyetleri ve eko-inovasyon çıktıları; ikisi ise eko-inovasyonu başlatmanın etkileridir: çevresel kaynak verimliliği ve sosyoekonomik sonuçlar (Kowalska, 2014).

Şekil 13: Eko-İnovasyon Gözlemevi'nde Kullanılan Eko-inovasyon Göstergeleri

Eko-inovasyon girdileri

- Hükümetin çevre ve enerji Ar-Ge ödenekleri ve harcamaları (GSYİH'nin %'si)
- Toplam Ar-Ge personeli ve araştırmacılar (toplam istihdamın %'si)
- Erken aşama yeşil yatırımların toplam değeri (Dolar/kişi)

Eko-inovasyon faaliyetleri

- İşletme bünyesinde elde edilen çevresel faydalarla bir yenilik getiren işletmeler (toplam işletmelerin %'si)
- Son kullanıcı tarafından elde edilen çevresel faydalara sahip bir yenilik getiren işletmeler (toplam işletmelerin %'si)
- ISO 14001 tescilli kuruluşlar (milyon nüfus başına)

Eko-inovasyon çıktıları

- Eko-inovasyonla ilgili patentler (milyon nüfus başına)
- Eko-inovasyonla ilgili akademik yayınlar (milyon nüfus başına)
- Eko-invasyonla ilgili medya kayıtları (elektronik medya sayısı başına)

Kaynak verimliliği sonuçları

- Malzeme üretkenliği (GSYİH/Yurtiçi Malzeme Tüketimi)
- Su verimliliği (GSYİH/Su Ayak İzi)
- Enerji verimliliği (GSYİH/Brüt Yurt İçi Enerji Tüketimi)
- Sera gazı emisyon yoğunluğu (CO2e/GSYİH)

Sosyo-ekonomik sonuçlar

- Eko-endüstrilerden ürün ihracatı (toplam ihracatın %'si)
- Eko-endüstrilerde istihdam (tüm şirketlerdeki toplam istihdamın %'si)
- Eko-endüstrilerde gelir (tüm şirketlerdeki toplam gelirin %'si)

Kaynak: EIO, 2021

Beş alanın her birindeki endeks değeri, temeldeki göstergelerin ağırlıksız ortalaması ile hesaplanmaktadır. Sonuç olarak, her gösterge beş alanda aynı ağırlığa sahiptir. Bir AB Üye Devletinin genel skoru, yalnızca birkaç göstergeden oluşan skor alanlarına göre sapmayı önlemek için 16 alt göstergenin ağırlıksız ortalaması ile hesaplanmaktadır. Dolayısıyla sunulan göstergelere dayanarak, belirli bir ülkenin/bölgenin/şirketin eko-inovatif olup olmadığını değerlendirmek mümkün olmaktadır.

Sürdürülebilir bir kaynak ve atık yönetiminin amacı, tam teşekküllü bir döngüsel ekonomiye geçişi sağlamak, yani kaynakların ve malzemelerin değerinin mümkün olduğu kadar uzun süre korunmak, bunları olabildiğince sık yeniden kullanıp ve ideal olarak hiç veya mümkün olduğunca az atık ortaya çıkarmaktır (WBGU, 2016). Döngüsel ekonomi konsepti, kaynak çıkarımı, ürünün tasarımı, üretimi, depolanması ve tüketiminin yanı sıra berteraf veya geri dönüşümüne kadar ekonominin tüm sektörleri içermektedir. Bu konsepte, döngülerin kapatılmasıyla atık tekrar bir kaynak haline gelmektedir. Fakat bu fikirlerin olabildince kapsamlı bir şekilde uygulanabilmesi için her aşamada daha güçlü bir eko-inovasyon faaliyetlerine ihtiyaç vardır.

Tablo 7: Döngüsel Ekonomi için Eko-inovasyon Türleri

Tip	Kısa açıklamalar, örnekler ve anahtar kelimeler
Ürün tasarımı eko-inovasyon	Çevre üzerindeki genel etki ve malzeme girdisi, tüm ürünün yaşam döngüsü boyunca en aza indirilir Bileşenlerin ve malzemelerin onarımı, bakımı, yeniden üretimi, geri dönüşümü ve kademeli kullanımı gibi kurtarma seçeneklerine izin verilmesi
Eko-inovasyon süreci	Üretim süreçlerinde malzeme kullanımı, emisyonlar ve tehlikeli maddeler azaltılır, riskler azaltılır ve maliyetlerden tasarruf edilir Yeniden imalat yönteminin geliştirilmesi Ürünlerin güncellenmesi de dahil olmak üzere, kusurlu bileşenleri değiştirerek veya onararak yenileme Bileşen, malzeme ve madde düzeyinde demontaj ve geri kazanım İleri dönüşüm, işlevsel geri dönüşüm, aşağı dönüşüm → Sıfır atık üretimi, sıfır emisyon, daha temiz üretim
Örgütsel eko-inovasyon	Döngüleri kapatmak ve kaynak verimliliğini artırmak için zorlayan yöntemler ve yönetim sistemleri yeniden düzenlenmesi Yeni iş modelleri, örn. endüstriyel simbiyoz, değerli kaynaklar için yeni toplama ve kurtarma planları →Ürünlerden işlevsel hizmetlere (ürün-hizmet sistemleri)
Pazarlama eko-inovasyon	Ürün ve hizmet tasarımı, yerleştirme, promosyon, fiyatlandırma Aynı amaçla yeniden kullanımın teşviki (örn. şişeler, aletler), farklı amaçlar için yeniden kullanımın teşviki (örn. oyun alanları için tekne çamurlukları olarak lastikler) → Eko-etiketleme, yeşil marka
Sosyal eko-inovasyon	Davranış ve yaşam tarzı değişiklikleri, kullanıcı odaklı yenilik Paylaşım (örn. ev aletleri, kitaplar, tekstil ürünleri), ortak tüketim (örn. apartman daireleri, bahçe aletleri) yeterlilik (örn. plastik torba yasakları) → Akıllı tüketim, sorumlu alışveriş
Sistem eko-inovasyonu	Genel çevresel etkiyi azaltan yeni işlevlerle tamamen yeni sistemler oluşturulur. Sanayi toplumunun önemli ölçüde kaydileştirilmesine öncülük etmek → Yeni kentsel yönetişim, akıllı şehirler, permakültür

Kaynak: *EIO, 2016*

Tablo 1 döngüsel ekonomiyle ilgili farklı eko-inovasyon türlerinin kapsamını göstermektedir. Tabloda, dönüşümün farklı yönlerinde rol oynayabilecek davranışları değiştirmekten teknolojilere uyum sağlamaya kadar çok çeşitli eko-inovasyon çeşitleri tasvir edilmektedir.

Tüm biçimleriyle hem ekolojik hem de ekonomik kazanımlar sağlayan eko-inovasyon, rekabetçi teknolojilerin ve kurumsal formların (yeni iş modelleri dahil) geliştirilmesinde kilit bir unsur olarak kabul edilmiştir (Carrillo-Hermosilla vd., 2010; European Commission, 2012). Politika arenasında eko-inovasyon, DE'nin "katalizörü" (Potočnik, 2014) ve lineer sistemden döngüsel üretim ve tüketim sistemine geçişte kilit bir bileşen olarak adlandırılmıştır. Dolayısıyla Eko-İnovasyon Gözlemevi (EIO), Avrupa'da kaynakları verimli kullanan döngüsel ekonomiye ulaşmanın bir yolu olarak eko-inovasyonu kullanmayı vizyon olarak belirlemiştir (EIO, 2016).

Döngüsel Ekonomi ve Atık Yönetimi

Küresel ölçekte, her geçen gün daha fazla kirlilik, atık üretilmekte ve ekosistem üzerindeki baskı artmaktadır. Bu miktarın, eş zamanlı olarak nüfus artışı, artan gelir ve kentleşmeye paralel olarak artacağı öngörülmektedir (Veral ve Yiğitbaşoğlu, 2018). Dünya Bankası'nın 2018 yılı "What a Waste 2.0" raporuna göre mevcut koşullar devam ederse yıllık küresel atık üretimi %70 artması beklenmektedir. Şu anda, dünya çapında yılda yaklaşık 2.01 milyar metrik ton kentsel katı atık üretilmektedir. Dünya Bankası, genel atık üretiminin 2050 yılına kadar 3.40 milyar metrik tona yükseleceğini tahmin etmektedir. Günümüz atıklarının tahmini %13,5'i geri dönüştürülmekte ve %5,5'i kompostlanmaktadır. Rapor, dünya çapında üretilen atığın üçte biri ile %40'ının uygun şekilde yönetilmediğini ve bunun yerine atıldığını veya açıkça yakıldığını tahmin etmektedir (World Bank, 2018).

Döngüsel süreçte atık üretim, tüketim ve bunlar dışında kalan faaliyet alanlarında ortaya çıkan, artık bir ihtiyaç duyulmayan, istenmeyen, atılmış ve faydasız, gereksiz ve fazla bulunarak uzaklaştırılmak istenen her türlü malzemedir (Utkulu ve Bilik, 2020). Atıklar genel olarak şu şekilde sınıflandırılmaktadır (Agarwal vd., 2015):

- Katı atıklar; evsel atıklar, bahçe ve tarım ve tıbbi atıklar
- Sıvı atıklar; termik santrallerde kullanılan sular, çeşitli yağlar
- E-atıklar; bilgisayar, televizyon, cep telefonu
- Plastik atıklar; plastik poşetler, şişeler, kovalar
- Metal atıklar; kullanılmış metal saç, hurda vb.
- Nükleer atıklar; nükleer kullanılmayan atık malzemeleri

Üretim ve tüketim faaliyetleri sonucunda ortaya çıkan atıklar, insan sağlığını tehdit etmekle birlikte, ekolojik çevreyi de kirleterek tüm canlılık için tehdit oluşturmaktadır. Atıkların insana ve ekolojik çevreye olan etkisini en aza indirmek için atık yönetimi politikaları uygulanmaktadır (Önder, 2018).

Atığın dönüştürülerek tekrar tekrar kaynak haline geldiği döngüsel ekonomi sürecinde sıfır atık için atık yönetimi kavramı ön plana çıkmaktadır (Utkulu ve Bilik, 2020). Atık yönetimi, atık maddelerin ortaya çıkmasından berteraf işlemine kadar geçen süreçteki tüm faaliyetler ve uygulamalardır. Bu süreç, atıkların toplanması, taşınması, işlenmesi ve berteraf edilmesi faaliyetlerinin yanında, atık yönetim sürecinin takibi ve düzenlenmesini de içermektedir (Ioana, 2010).

Atık yönetim ilkelerini dört başlık altında sınıflandırılabilir (Ioana, 2010): Atık Hiyerarşisi, Ürün Yaşam Evreleri, Kaynak Etkinliği ve Kirleten Öder İlkesi. Atık Hiyerarşisi, döngüsel ekonominin 3R (veya 9R) (azaltma, yeniden kullanma ve geri dönüşüm) olarak ifade edilen süreçlerini ifade etmektedir. Atık Hiyerarşisinde amaç, ürünlerden maksimum kazanç elde edip, minimum miktarda son atık ortaya çıkarmaktadır. Atık Hiyerarşisi süreci, atıkların ortaya çıkmasını engelleyecek politika önerilerini temel prensip aldığı için bir pramit şeklinde ifade edilmektedir.

Şekil 14: Atık Yönetim Hiyerarşisi

Kaynak: Ioana, 2010

Atık yönetiminde temel düşünce, atıkları önlemek, azaltmak ve mümkünse sıfır atık hedefine ulaşmaktır. Eğer atıklar, önleme ve azaltma aşamasında hedeflenen düzeyde başarı elde edilemiyorsa, bu durumda atık malzeme alternatif seçeneklerle kullanılmalıdır. Alternatif bu seçenekler sırasıyla, yeniden kullanma, geri dönüştürme, geri kazanma veya bir enerji kaynağı olarak değerlendirmedir. Fakat eğer bu seçenekler de gerçekleştirilemiyorsa, bu durumda atıkları güvenli bir şekilde berteraf etmek gerekmektedir (Utkulu ve Bilik, 2020).

Atık yönetiminin ikinci ilkesi, ürünün yaşam evreleridir. Ürünün yaşamı tasarımla başlar, üretim, dağıtım ve birincil tüketim ile devam eder; ardından azaltma, yeniden kullanma ve geri dönüşüm süreçleri eklenir. Ürünün yaşam evrelerindeki her bir aşama, atık potansiyelini minimize edilmesi için yeniden tasarlama, kullanım süresinin uzatılmasına ve ürüne olan ihtiyacın yeniden düşünülmesine yönelik fırsatlar sunmaktadır (Utkulu ve Bilik, 2020). Döngüsel ekonomi perspektifinden, ürünün yaşam evrelerinin her bir aşama yavaşlatılarak ve kapalı döngülerle kaynakların sınırlı olduğu dünyada, hem gereksiz atık yaratılmasından kaçınılmış hem de atıklardan maksimum bir şekilde faydalanılabilir.

Atık yönetimi ilkelerinden üçüncüsü olan kaynak etkinliği, küresel ekonomik büyümenin mevcut üretim ve tüketim kalıpları ile sürdürülebilirliğinin sorgulanması anlayışını yansıtmaktadır. Öyle ki, son elli yılda, küresel malzeme çıkarımı 1970'te 26.7 milyar tondan 2017'de 92.1 milyar tona üç kattan fazla arttı. Günümüzde ekonomilerde 100 milyar tondan fazla material kullanılmakta ve hızla da artmaktadır. Bunun sonucu olarak da sera gazı emisyonları artmaktadır (şuanda 59.1 milyar ton) (Circle Economy, 2021; IRP, 2019; Olivier ve Peters, 2020). Kaynak etkinliğinde amaç, ürünün yaşam döngüsünde hammadde çıkarımından nihai kullanıma ve bertaraf edilmesine kadar geçen süreçte çevresel etkileri minimize etmektir. Son olarak kirleten öder ilkesi ise, kirleten tarafın neden olduğu olumsuz çevre etkilerini tazmin etmesini zorunlu kılmaktadır (Deselnicu vd., 2018; Utkulu ve Bilik, 2020; Song, Li ve Zeng, 2015).

Avrupa Birliği'nde Döngüsel Ekonomi

Döngüsel ekonomi (DE), Avrupa Birliği (AB) tarafından oldukça önemsenen ve bu analanda bir sürü ciddi düzenlemelerin yapıldığı bir kavramdır. AB bu konsepti, sadece çevresel değil, ekonomik avantajları açısından da değerlendirmektedir. AB, döngüsel ekonomi ile ekonomisinin daha temiz ve rekabet edilebilir olmasını hedeflemekte, aynı zamanda kaynakların kullanımını ve atıkların azaltılmasını, geri dönüşüm ve yeniden kullanma gibi yenilikçi yöntemlerin yaygınlaşmasını teşvik etmektedir. Böylece çevreye duyarlı bir ekonomi vizyonu ile gittikçe kıtlaşan, çevresel baskılara veya değişken fiyatlara maruz kalan bazı kaynakların korunması ve Avrupa endüstrileri için maliyetlerden tasarruf sağlama hedeflenmektedir. Bunun yanında AB, bu konsept ile yeni iş fırsatlarının önünü açarak ve küresel düzeyde müşterilerine temiz ürün ve hizmet vermek için yenilikçi, kaynak verimliliğini dikkate alan yeni nesil Avrupa işletmelerinin kurulmasını da hedeflemektedir (Esin, 2019; Önder, 2018).

Avrupa Komisyonu, 17 Aralık 2012 tarihinde Verimli Avrupa Manifestosu adı altında döngüsel ekonomi kavramı hakkındaki görüşünü bildirmiştir. Bu belgede şu vurgulanmaktadır: "Kaynaklar ve çevre üzerinde artan baskıların olduğu bir dünyada, AB'nin döngüsel ekonomiye geçişten başka bir seçeneği yoktur". Bu ifade, olumsuz mevcut durumdan çıkış yolu sağlayabilen bir döngüsel ekonomi, toplum ve AB'nin yeniden sanayileşmesine ve sürdürülebilir verimli bir büyümeye doğru bir yol haritası sunmaktadır (Bonciu, 2014).

AB'nin döngüsel ekonomiye yönelik faaliyetleri Temmuz 2014 yılında önemli bir aşamaya gelmiştir. Avrupa Komisyonu, 2014 yılında Döngüsel Bir Ekonomiye Doğru: "Avrupa için Sıfır Atık Programı" yayınlamıştır. AB'de atığın kaynağa dönüştürülmesi ve geri dönüşüm gibi sürdürülebilir atık yönetim faaliyetlerinin teşviki konusunda önemli gelişmeler elde edilmiştir. Programda, 2030 yılına kadar materyal girdi ihtiyaçlarının %17-24 oranında azaltılabileceği ve kaynak kullanımındaki verimlilik neticesinde toplam 630 milyar Euro tasarruf potansiyelinin bulunduğu belirtilmiştir. Döngüsel ekonomi konsepti ile oluşturulan yeni ürün düzeyinde iş modelleri, yeni pazarlar ve yeni ürünlerle AB GSYİH'sını %3,9'a kadar artırabilme imkanının olduğu ifade edilmektedir. Ekonomik, sosyal ve çevresel faydaları artırabilmek için komisyon çeşitli hedefler koymuştur (European Commission, 2014):

- Belediye atıklarının yeniden kullanımı ve geri dönüşümünü 2030 yılına kadar minimum %70'e çıkarmak;

- Ambalaj atıkları için 2020'ye kadar %60, 2025'e kadar %70 ara hedeflerle 2030 yılına kadar ise %80 geri dönüşüm oranına ulaşmak;

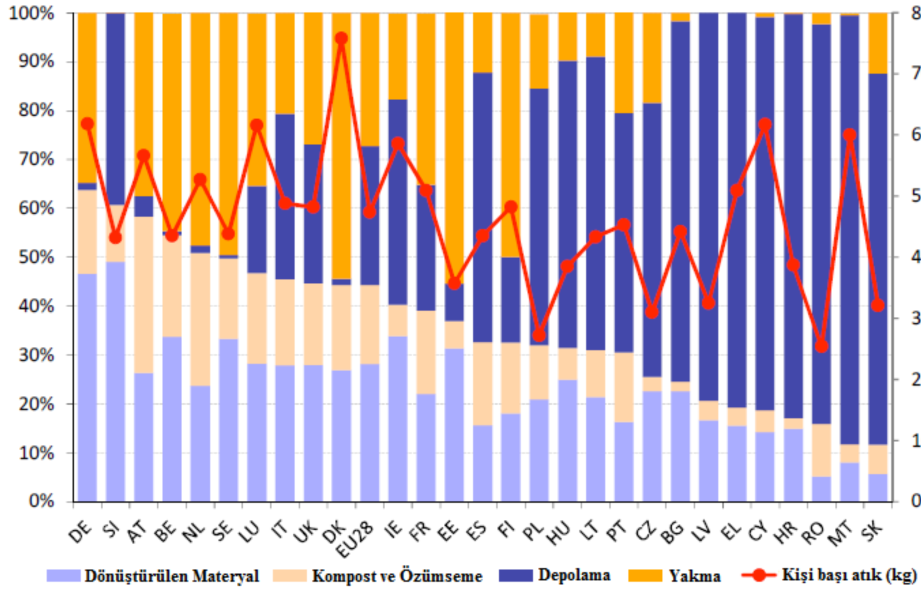
- 2025 yılına kadar geri dönüştürülebilir plastikler, metaller, cam, kağıt ve karton ile biyolojik olarak parçalanabilen atıkların çöpe atılmasını yasaklarken, üye devletler 2030 yılına kadar çöp sahasını fiilen ortadan kaldırmaya çalışmalıdır;

- Belirli malzemeler için atık sonu kriterlerinin katma değerinin değerlendirilmesi de dahil olmak üzere, yüksek kaliteli ikincil hammaddeler için pazarların gelişimini daha da teşvik etmek.

- Yüksek bir geri dönüşüm kalite seviyesi sağlamak ve geri dönüştürülmüş malzemeler için hesaplama yöntemini netleştirmek.

Avrupa Birliği, çeşitli mevzuatlar ve direktiflerle döngüsel ekonomiyi benimsemeye yönelik adımlar atılmaktadır. Bu gelişmelerin ışığında atık yönetimi ve geri dönüşüm üzerinde önemle durulmaktadır. Ağırlık ölçüsü (kg) baz alındığında Avrupa'da üretilen toplam atığın yaklaşık %10'unu temsil eden, çoğunlukla haneler tarafından üretilen belediye atıklarının işlenmesi konusunda üye devletler arasında büyük farklılıklar bulunmaktadır. Grafik 1'de de görüldüğü gibi, atık işleme yöntemleri arasında geri dönüşüm ve kompostlaştırmanın payı Almanya'da %64'ten Malta ve Slovakya'da %12'ye kadar değişmektedir (AB ortalaması: %44); yedi üye devlet, belediye atıklarının %10'dan azını düzenli olarak depolarken, sekiz üye devlet, belediye atıklarının %70'inden fazlasını düzenli olarak depolamaktadır (AB ortalaması: %28); kişi başına ve yılda belediye atık miktarı Romanya'da 254 kg'dan, Danimarka'da 758 kg'a kadar değişmektedir (AB ortalaması: 474 kg) (European Paliament, 2018). Üye ülkeler arasında atık arıtma yöntemleri konusunda ciddi farklılıkların olmasının yanında, hala depolama ve yakma yöntemlerinin payının yüksek olduğu da görülmektedir.

Grafik 1: Avrupa Birliği'nde Belediye Atıkları ve Atık Arıtma Yöntemleri (2014)



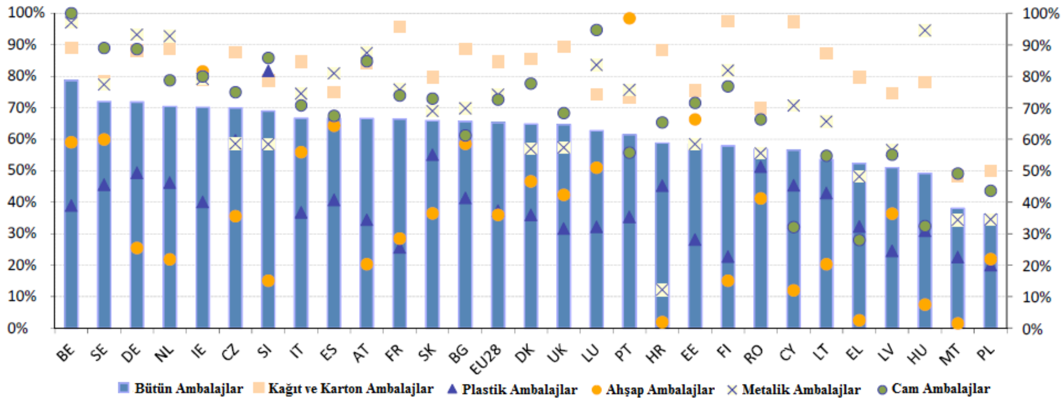
Kaynak: Eurostat, 2016

Not: IE, EL ve RO için veriler 2013 yılına aittir.

Avrupa Komisyonu 2015 yılında, Avrupa'nın döngüsel ekonomiye geçiş sürecini hızlandırmaya yönelik yeni ve daha iddialı bir "Döngüsel Ekonomiye Yönelik Bir Eylem Planı" paketi uygulamaya koymuştur. Bu planda, üye ülkelerin bir ürünün tasarlanmasından üretim ve tüketim süreçleri sonunda atık oluşumuna kadar geçen tüm aşamalarda yapılması gerekenler belirtilmeye çalışılmıştır (Önder, 2018). Böylece ürün, malzeme ve kaynakların değerinin olabildiğince uzun süre korunduğu ve atığın minimum seviyeye indirildiği döngüsel bir ekonomiye geçiş için yapılması gereken faaliyetler özetlenmiştir (Peck vd., 2017).

Döngüsel ekonomiye geçiş sürecinde önemli unsur olan geri dönüşüm konusunda Avruğa Birliği, ambalaj atıklarının geri dönüşümü üzerinde ayrıca durmaktadır. Bu husustaki ilk direktifi 1994 yılında yayınlamış olan AB, 2004 yılında revizyona gitmiş ve 2008 yılı için ise çeşitli hedefler konulmuştur. Cam için %60, kağıt ve karton için %60, metaller için %50, plastikler için %22.5 ve ahşap için %15 geri dönüşüm oranları belirlenmiştir. Grafik 2'de de görüldüğü gibi, konulan bu hedeflere bir kaç ülke dışında ulaşılmıştır. 2013 yılı AB geneli baz alındığında bütün ambalajların %65'i geri dönüşyürülmüştür: kağıt ve karton ambalajlar için %85; metalik ambalajlar için %74; cam ambalajlar için %73; ahşap ambalajlar için %36 ve plastik ambalajlar için %37.

Grafik 2: Avrupa Birliği'nde Ambalaj Atıklarının Geri Dönüşümü (2013)

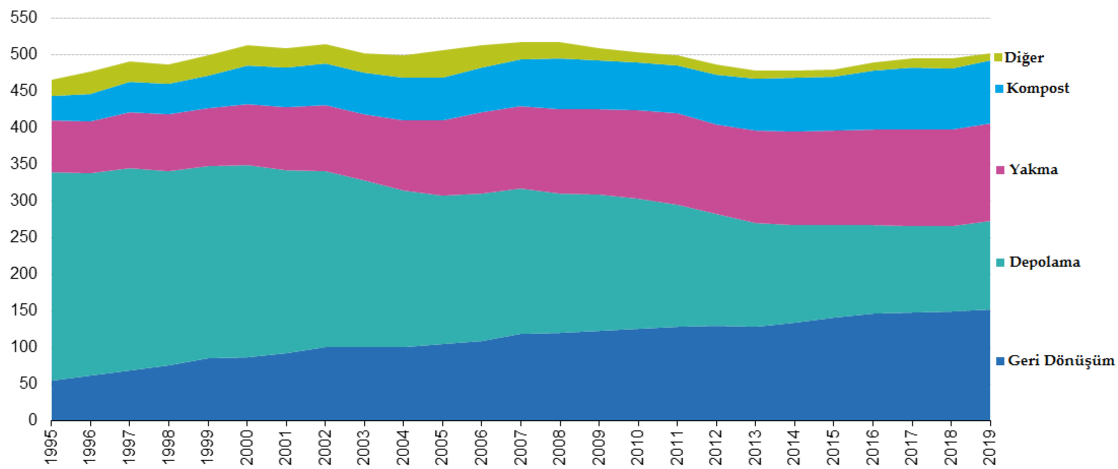


Kaynak: Eurostat, 2016

Not: Romanya (RO) için veri 2012 yılına aittir.

Avrupa Birliği'nin günümüze kadar döngüsel ekonomi ile ilgili uygulamaya koyduğu çeşitli düzenlemelerin olumlu sonuçlar verdiği söylenebilir. Grafik 3'te 1995-2019 yılları arasında AB'de atık bertaraf yöntemlerinin yüzdesel gelişimi verilmiştir. Atık bertaraf yöntemleri içerisinde depolamanın payının yıllar itibariyle azalırken, geri dönüşüm, kompostlama ve yakmanın payının nispeten artığı dikkat çekmektedir.

Grafik 3: Avrupa Birliği'nde Belediye Atık Yöntemlerinin Değişimi (Kişi başına kg)



***Kaynak:** Eurostat, 2021*

Veri Seti, Yöntem ve Bulgular

Çalışmada veri mevcudiyeti dikkate alınarak Avrupa Birliği'ndeki 20 ülke ve İngiltere'nin 2010-2018 dönemindeki verileri kullanılmıştır.[3] Veriler, Eurostat, Avrupa Komisyonu ve Dünya Bankası'nın internet sitesinden elde edilmiştir. Çalışmada kullanılan ekonometrik model şu şekildedir:

$$LGDP_{it} = \beta_0 + \beta_1 LEI_{it} + \beta_2 LMW_{it} + \beta_3 LPW_{it} + \beta_4 LEW_{it} + e_{it} \qquad (1)$$

Modelde, bağımlı değişken olarak ülkelerin gayri safi yurtiçi hasılaları (GDP); bağımsız değişkenler ise; eko-inovasyon indeksi (EI), belediye atıkları geri dönüşüm oranı (MW), ambalaj geri dönüşüm oranı (PW) ve e-atık geri dönüşüm oranı (EW) kullanılmıştır. Bütün değişkenlerin logaritması alınmıştır. Ekonometrik analiz, Stata 16 ekonometri paket programı ile yapılmıştır.

Tablo 3'te çalışmada kullanılan değişkenlere ait tanımlayıcı istatistikler sunulmuştur. Tüm değişkenler için 189 adet gözlem bulunmaktadır. Değişkenlerin medyan ve ortalama değerlerinin birbirine yakın olması nedeniyle normal dağılıma sahip olduklarını söylenebilir.

Tablo 8: Tanımlayıcı İstatistikler

Değişkenler	Örnek Hacmi	Medyan	Ortalama	Standart Sapma	Maksimum	Minimum
lnGDP	189	26.272	26.291	1.503	28.997	23.703
lnEI	189	4.584	4.458	0.405	5.003	2.995
lnMW	189	3.586	3.523	0.480	4.207	1.589
lnPW	189	4.185	4.157	0.139	4.446	3.586
lnEW	189	3.627	3.596	0.340	4.295	2.674

Tablo 4'te değişkenlere ait korelasyon matrisi tablosu verilmiştir. Korelasyon değerinin ±0.30'dan büyük olması durumunda bağımsız değişkenler arasında korelasyonun olduğu, yani çoklu doğrusal bağlantı sorununun olduğu sonucu çıkarılabilmektedir. Korelasyon matrisi tablo sunuçları incelendiğinde çoklu doğrusal bağlantı sorunu olduğu görülmektedir.

Tablo 9: Korelasyon Matrisi Tablosu

	lnGDP	lnEI	lnMW	lnPW	lnEW
lnGDP	1.000				
lnEI	0.495	1.000			
lnMW	0.438	0.677	1.000		
lnPW	0.283	0.498	0.559	1.000	
lnEW	-0.655	0.001	0.350	0.209	1.000

Tablo 5'te çalışmada kurulan modele ilişkin test istatistikleri sunulmuştur. Modelin belirlenmesi için yapılan F, Breush-Pagan LM ve Hausman testlerinin sonuçlarına göre, modelin tesadüfi etkilerle kurulmasına karar

3 Çalışma kapsamındaki ülkeler: Belçika, Bulgaristan, Çekya, Danimarka, Almanya, Estonya, Yunanistan, İspanya, Fransa, Litvanya, Letonya, Lüksemburg, Macaristan, Hollanda, Avusturya, Polonya, Slovenya, Slovakya, Finlandiya, İsveç ve İngiltere.

verilmiştir. Değişen varyans sorununun sınanması için Levene, Brown ve Forsythe testi yapılmış ve sonuç olarak modelde değişen varyansın olduğu tespit edilmiştir. Otokorelasyon sorununun sınanması için Durbin-Watson, Baltagi-Wu LBI ve Lagrange Çarpanı (LM) ve Genişletilmiş Lagrange Çarpanı (ALM) testleri kullanılmıştır. Durbin-Watson ve Baltagi-Wu LBI test sonuçlarının 2'ye yakın çıkmaması, LM ve ALM testinde ise H_0 boş hipotezinin reddedilmesi nedeniyle modelde otokorelasyonun olduğu sonucuna varılmıştır. Birimler arası korelasyonu gösteren yatay kesit bağımlılığını test etmek için ise, Freidman ve Pesaran testleri kullanılmıştır. İki testin sonuçlarına göre modelde yatay kesit bağımlılığının bulunduğu tespit edilmiştir. Yapılan testlerin sonucuna göre modelde, değişen varyans, otokorelasyon ve yatay kesit bağımlılığı olmak üzere üç ekonometrik sorununda bulunduğu görülmektedir. Dolayısıyla model bu sorunlara dirençli olan tahmincilerle tahmin edilmiştir.

Tablo 10: Test İstatistikleri Tablosu

	Test	İstatistik Değeri	Olasılık Değeri
Modelin Belirlenmesi	F Testi	5603.49	0.000
	Breush-Pagan LM Testi	671.50	0.000
	Hausman Testi	0.05	0.999
Değişen Varyans	Levene, Brown ve Forsythe Testi	W0 = 2.645	0.000
		W50 = 1.820	0.021
		W10 = 2.645	0.000
Otokorelasyon	Durbin-Watson	0.61992756	-
	Baltagi-Wu LBI	1.0794631	-
	LM ve ALM Testi	ALM = 3.91	0.047
		LM = 675.42	0.000
Yatay Kesit Bağımlılığı	Friedman	53.168	0.000
	Pesaran	14.653	0.000

Modelde tespit edilen sorunlara dirençli olan tahminci Prais-Winsten'dir. Çalışmada; PCSE-1 adı verilen model Panel Düzeltilmiş Standart Hataların (PCSE) tüm birimler için genel birinci mertebeden korelasyona izin veren yöntemini temsil etmektedir. PCSE-2 ise, birimlere özel birinci mertebeden korelasyona izin veren yöntemi temsil etmektedir. PCSE tahmincisi, küçük olduğu panellerde daha iyi sonuç vermektedir. Fakat yatay kesit boyutu büyüdükçe bu tahmincinin etkinliği azalmaktadır (Tatoğlu, 2018).

Tablo 11: Prais-Winsten Tahmincisi Sonuçları

	PCSEs-1 lnGDP	PCSEs-2 lnGDP
lnEI	0.418* (1.94)	0.763*** (4.33)
lnMW	0.479** (2.35)	0.478** (2.89)
lnPW	-0.108 (-0.52)	-0.124 (0.63)
lnEW	-0.155 (-1.07)	-0.357** (-2.63)
_cons	23.757*** (20.49)	22.899*** (20.44)
N	189	189
Wald testi	8.51*	30.85***
R^2	0.99	0.99

, ** ve * sırasıyla 0.10, 0.05 ve 0.01 düzeyinde istatistiksel olarak anlamlılığı ifade etmektedir.*

Tablo 6'da kurulan iki modelinde sonuçları verilmiştir. Modellerin bir bütün olarak istatistiki anlamlığına Wald testi sonuçlarından bakılmaktadır. Birinci modelin bir bütün olarak %10 düzeyinde anlamlı olduğunu, ikinci modelin ise %1 düzeyinde anlamlı olduğu görülmektedir. Modeldeki bağımsız değişkenlerin bağımlı değişkendeki değişmeleri açıklama gücünü gösteren belirlilik katsayısına (R^2) bakıldığında ise iki modelde de %99 gibi yüksek bir oranda olduğu görülmektedir.

Modelin tahmini sonucu elde edilen değişkenlerin katsayılarının istatistiki olarak anlamlılığına bakıldığında; ambalaj atıklarının geri dönüşümü (lnPW) değişkeni katsayısı, iki modelde de istatistiki olarak anlamsız iken, e-atık geri dönüşümü (lnEW) değişkenin katsayısı ise birinci modelde istatistiki olarak anlamsızdır. Diğer değişkenler ve sabit katsayı iki modelde de istatistiki olarak anlamlı olarak bulunmuştur. Katsayıların iktisadi olarak anlamlılığına bakıldığında; eko-inovasyon (lnEI) ve belediye atıkları geri dönüşüm oranı (lnMW) değişkenlerinin katsayıları iktisadi beklentiye uygun olarak pozitif çıkmıştır. Fakat ambalaj atıklarının geri dönüşüm oranı (lnPW) ve e-atık geri dönüşüm oranı (lnEW) değişkenlerinin katsayıları iktisadi beklentinin tersine negatif olarak elde edilmiştir.

Tablo 6'da tahmin sonucu elde edilen katsayıların değerleri de verilmiştir Eko-inovasyon indeksindeki (lnEI) yüzde 1'lik bir artışın ülkelerin gayri safi yurtiçi hasılalarını (lnGDP) birinci modelde yüzde 0.41, ikinci modelde ise yüzde 0.76 artırdığı; belediye atıklarının geri dönüşüm oranındaki (lnMW) yüzde 1'lik bir artışın, birinci ve ikinci modelde yüzde 0.47 oranında artırdığı sonucu elde edilmiştir. Ambalaj atıklarının geri dönüşüm oranı (lnPW) değişkenini katsayısı istatistiki olarak anlamlı olmadığı için yorumlanmamıştır. E-atık geri dönüşüm oranı (lnEW) değişkenin katsayısı ikinci modelde istatistiki olarak anlamlı çıkmıştır. Fakat iktisadi olarak beklentinin tersine sonuç elde edilmiş ve e-atık geri dönüşüm oranındaki %1'lik bir artışın, ülkelerin gayri safi yurtiçi hasılalarını yüzde -0.15 azalttığı bulgusu elde edilmiştir.

Sonuç ve Değerlendirme

Çalışmada, eko-inovasyon ve atıkların geri dönüşüm oranlarının 21 Avrupa ülkelerinin verileri kullanılarak bu ülkelerin GSYİH'leri üzerindeki etkisi analiz edilmiştir. Genel olarak eko-inovasyon ve atıkların geri dönüşüm oranlarının Avrupa ülkelerinin GSYİH'lerine olumlu katkıda bulunduğu gözlemlenmiştir.

Eko-inovasyon kaynak çıkarımından ürünün yaşam döngüsünün sonuna kadar bir sürü aşamada yeni iş modelleri ve teknolojik yenilikler ortaya çıkarmaktadır. Bu iş modelleri ve yeni teknolojilerin olumlu çevresel etkilerinin yanında ekonomik kazanımları da söz konusudur. Örnek olarak; Danimarkalı şirket Genan, 2003 yılında Almanya'da dünyanın en büyük lastik geri dönüşüm tesisini kurmuştur. Şirket, spor sahalarında yüzey olarak veya futbol sahalarında suni çim olarak kullanılabilen kauçuk tozu ve granüllerden bir ürün geliştirmiştir. Bu ürün ayrıca boyada, zeminlerde, yeni lastiklerin yeniden üretiminde ve hatta yeni asfaltta ses azaltma bileşeni olarak kullanılabilmektedir. Diğer imha yöntemlerine kıyasla Genan yöntemiyle malzeme geri dönüşümü, ton hurda lastik başına 1-2 ton CO_2 tasarruf sağlamıştır. Yeni bir pazarın öncülerinden biri olması sayesinde, şirketin büyümesine ve sadece birkaç yıl içinde dünyanın en büyük kullanılmış araba lastikleri geri dönüştürücülerinden biri olmasına olanak sağlamıştır. Bir diğer örnek olarak; Macaristan'da Samsung SDI Hungary Co. Ltd. şirketi, eko-inovatif faaliyetlerini atık yönetimi alanında uygulayarak, önemli maliyet avantajları sağlayan bir dizi emisyon azaltma ve geri dönüşüm önlemi uygulamaya koymuştur. Kimyasal atıkların geri dönüştürülmesi, hem atık hem de kullanılan hammadde miktarını %35 oranında azaltmış ve 7.600 Euro ekonomik getiri sağlamıştır. Şirket yeniden kullanılabilir ambalaj malzemelerinin kullanılması ile kağıt, ahşap ve kimyasal ambalaj miktarını azaltarak 160.000 Euro; gaz arıtıcı aparatifini bir termal rejeneratif yanma sonrası aparatifi ile değiştirerek yılda ek 316.000 Euro tasarruf edilmiştir. Su geri dönüşüm önlemleri ile de yılda 20.625 m^3 israfını önlemiştir. Eko-inovasyon uygulamalarına bir diğer örnek te atıktan eko-boyaya başarısını sağlayan İngiliz şirketi Newlife Paints'tir. Bu şirket atık boyaları geri alıp tekrar boyaya dönüştürmektedir. Eko-inovasyon uygulamaları ile hem çevresel hem de ekonomik kazanımlar elde eden ülkelerin çok fazla örneği bulunmaktadır.[4] Nitekim Eko-inovasyon Gözlem Evi (EIO), bu uygulamaların tüm ekonomik sektörlerde ticari potansiyele sahip olduğunu gösteren birçok çalışma ve politika raporunun olduğunu belirtmiştir.

Atıkların geri dönüşümünün GSYİH üzerine etkisini gösteren sonuçlar literatürdeki benzer çalışmaların sonuçlarına paralellik göstermektedir. Belediye atıklarının geri dönüşüm oranının GSYİH üzerinde istatistiki ve iktisadi açıdan anlamlı, ambalaj ve e-atık geri dönüşüm oranlarında istatistiki olarak anlamlı sonuç bulunamamıştır. Bu durumun muhtemel sebeplerinden birisi, ambalaj atıkları ve e-atık geri dönüşümü uygulamaları nispeten yenidir ve çoğu Avrupa ülkeleri bu alanlarda henüz ilerleme kaydetmemiş olabilir. AB'deki tüm e-atıkların %40'ından azı geri dönüştürülmekte, geri kalanı ise ayrıştırılmamaktadır. Geri dönüşüm uygulamaları AB ülkeleri arasında farklılık göstermektedir. 2017'de Hırvatistan tüm elektronik ve elektrik atıklarının %81'ini geri dönüştürürken, Malta'da bu oran %21'dir.[5] Keza ambalaj atıklarının geri dönüşüm oranına bakıldığında da AB ülkeleri arasında ciddi farklılıklar vardır. Dolayısıyla bu alanlarda daha fazla çaba sarf edilmesi gerektiği ifade edilebilir.

Atık yönetiminin AB ülkelerinin ekonomilerine ve çevrelerine katkılarının boyutunu görebilmek için Avrupa Komisyonu'nun tahminlerine bakılabilir. Avrupa Komisyonu'na göre, eğer Avrupa atık mevzuatına tam

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4 Ayrıntılı bilgi ve uygulama örnekleri için bknz: EIO ve CfSD (2013).
5 Ayrıntılı bilgi için bknz: https://www.europarl.europa.eu/news/en/headlines/priorities/circular-economy/20201208STO93325/e-waste-in-the-eu-facts-and-figures-infographic

anlamında uyulursa; yılda 72 milyar Euro tasarruf edileceği, AB atık yönetimi ve geri dönüşüm sektörlerinin yıllık cirosunun 42 milyar Euro artacağı, ayrıca 2020'ye kadar 400 binden fazla, 2030 yılına kadar ise ek olarak 180 bin doğrudan iş yaratılabileceği tahmin edilmektedir. Çevresel boyutta ise, yıllık sera gazı emisyonlarının %2-4 oranında azalması öngörülmektedir.[6]

Döngüsel ekonominin bütün olarak ekonomik boyutuna bakıldığında ise, Avrupa Komisyonu Araştırma Servisi'ne göre; AB şirketlerine 250-465 milyar Euro veya malzeme maliyetlerinde %12-23 arasında değişen yıllık net malzeme maliyet tasarrufu sağlayabilir. Ayrıca kaynak verimliliği 2030 yılına kadar %30 artırılırsa, GSYİH'yı %0,8 oranında artıracak ve AB'de iki milyon yeni iş yaratacaktır.[7] Dolayısıyla başta çevresel ve ekonomik boyutundaki kazanımları ortada olan döngüsel ekonominin, daha temiz ve refah bir gelecek ve sürdürülebilir bir kalkınma için teşvik edilmesi son derece önemlidir. Bu konuda paydaşların bilinçlendirilmesi büyük önem taşımaktadır. AB'nin bu konuda aldığı yol ortadadır. Dolayısıyla AB ülkeleri, dünyanın diğer ülkelerine bu konuda örnek teşkil edebilir.

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6 Ayrıntılı bilgi için bknz: https://ec.europa.eu/commission/presscorner/detail/el/MEMO_14_450, https://ec.europa.eu/environment/action-programme/objectives.htm.
7 Ayrıntılı bilgi için bnz: https://www.europarl.europa.eu/thinktank/infographics/circulareconomy/public/index.html.

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INTERNATIONAL SECURITY AND THE IMPACT OF COVID 19 ON CHINA-US RELATIONS

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Abstract

China on the 100th anniversary of the foundation of the People's Republic of China has s strategic goal: by the year 2049, to make China the most powerful state in the world. It seems that the United States is worrying about it and is doing its best to prevent China's ambitions. While the US and Europe are battling a second wave of pandemic and economic hardships caused by the widespread of the virus, China, from which Covid-19 began to spread, has not only eradicated the virus but also achieved significant economic growth rates. According to the data for the third quarter of 2020, China's economic growth was 4.9%. Under the pandemic, China's 257 billionaires became rich by $ 1.5 trillion and the total capital of Chinese billionaires increased to $ 4 trillion.

Introduction

China has returned to a normal rhythm of life across the country: restaurants, shops, and other retail outlets are already working at full capacity, which is reflected in their incomes and the country's economic growth in general. Chinese consumers have started spending money. While in the US presidential debate, Donald Trump and Joe Biden competed with each other to convince voters who would be more successful in dealing with China's growing ambitions and deal with threats posed by the Chinese Communist Party and the Communist Party elite.

Covid-19 spread from Wuhan Province, China; China, at the expense of tighter control and the cost of severe economic damage in the first quarter, defeated the pandemic, virtually fully recovered its economy, and left the rest of the world facing a serious challenge. While battling with the virus China did not hinter the economic process, which leads to a very serious and large-scale economic crisis in the world. The authorities have done their best not only to maintain the economic situation but also to achieve economic growth prosperity.

Discussion

The problem of security is one of the central issues in the theory and practice of international relations and public figures. It is closely related to any issue of international relations. Individuals, polises, empires, and states throughout human history have not ceased to be at enmity with one another. So politicians and public figures and scientists were forced to fixate on how to avoid problems and how to prepare for battle. New weapons systems were created for this, various strategies were developed. One of the main issues in international relations was the surrounding anarchist international system. As long as there is a state - security will not be universally total. It will depend on the political will of the "statesmen".

The traditional approach to international security usually involves the status of entities (states) and their military potential for national security. The content of the term has expanded over the last 50 years. For instance for the key task for security is to deal with the challenges of the 21st century, a globalized society, the rapid development of technology, and the threats that have arisen in the process of this development and globalization. Among the mentioned challenges the last but as we can see the most acute is the black plague of contemporaneity COVID-19, which has claimed the lives of millions of people and, worse yet, has had a devastating impact on the world economy. Coronavirus (COVID-19) is a complex challenge and a significant threat not only to world health but also to the global economy. The rapidly growing number of infected and the widespread of the virus turned the virus that emerged in Wuhan at the end of 2019 into a pandemic in just a few months. The negative impact of COVID-19 on the world economy is now an irreversible fact. However, questions about the scale and quality of COVID-19 impact are still unanswered (European Commission, 2020).

The coronavirus, which was detected in China at the end of 2019 and became a global pandemic in three months, has spread to over 200 countries at this stage. Although the vaccine is in development and its initial trials are promising, the potential impact of the disease is large and a cause for global concern. In addition to affecting human health, coronavirus has a significant impact on the world economy.

According to the International Labor Organization, due to the virus, the number of unemployed people in the world, from 188 million, will increase by an additional 5.3 - 24.7 million. Depending on how large the area of spread of the virus will be. Coronavirus will harm almost all sectors of the economy. However, the following sectors will be particularly affected: tourism, manufacturing, financial sector, retail, entertainment, and leisure.

China's economy is the second-largest in the world in terms of nominal GDP, accounting for 16% of the world economy. For the rest of the world, China is important because it is a source of demand, one of the major suppliers, and a player in the financial markets. In 2019, Chinese imports amounted to $ 2.1 trillion. The closure of China's borders has had a major impact on the world economy.

China's strategic goal, on the 100th anniversary of the founding of the Republic of China, or to make China the most powerful state in the world in 2049, is taken seriously by the United States, so it actively fights on all fronts.

To reduce the expected negative consequences, the US government has adopted an economic stimulus package, under which several retaliatory actions have been taken. The Federal Reserve reduced the federal funds rate to 0% and 0.25% to maintain unemployment and price stability (Shulman, 2020). Also, the Federal Reserve increased its national fund reserves by $ 500 billion and its securities secured by collateral by $ 200 billion.

While in the US presidential debate, Donald Trump and Joe Biden competed with each other to convince voters who would be more successful in dealing with China's growing ambitions and threats posed by the Chinese Communist Party and the Communist Party elite, the Supreme Commander of the People's Liberation Army of China, President Xi Jinping, addressed the military and the elite of the Communist Party gathered at the Grand Palace in Beijing. The event was held for the 70 correctness of China’s military victory in North Korea over unipolarity, the inadmissibility of adapting the rest of the world to the interests of one country and satisfying its ego.

The United States economy shrank at its fastest pace since World War II due to the Covid-19 pandemic in 2020. The pandemic particularly affected businesses in various areas of service: restaurants, airlines, or others.

Millions of Americans have found themselves out of work and in poverty as a result of quarantines imposed to limit the distribution of Covid-19.

President Joe Biden has unveiled an economic recovery plan that includes $ 1.9 trillion in assistance to citizens and businesses. He may also use the GDP data to persuade the members of the Republican party who believe that it is too early to approve a $ 2 trillion package after receiving a $ 900 billion bailout package last month.

The U.S. economy decreased by 3.5% in 2020 - the worst rate since the end of World War II since 1946. The decline in GDP in 2020 was observed for the first time after the economic crisis of 2007-2009. In 2019, the economic growth rate was 2.2%. The gross domestic product grew to 4% per annum in the fourth quarter. In the summer of 2019, the growth of the US economy reached an all-time high of 33.4%. By the end of the year, GDP was already at a much lower level (UN, 2020).

Joseph Biden became President of the United States at the most difficult period not only for America but for the whole world. Among the many challenges, the Covid-19 pandemic is the first and foremost. The United States remains the world leader in terms of infected cases (25 million cases, 25% of global cases) and deaths (425,000 - 20%) due to record cases and increasing hospitalization in several states, particularly California. We can say that this is the political polarization of the society, the significant economic recession, the high level of unemployment, and the geopolitical difficulties (OECD, 2020).

The return of President Biden to the United States on his first day in the World Health Organization has strengthened the chances of the organization retaining its potential for recovery and avoiding the growing threat of authoritarian regimes to address the critical task of finding resources. In general, the global governance of the pandemic on the international stage - be it Africa, South America, or the poorer countries of Asia - is now dominated by China. In this regard, Russia and Turkey are also active. However, without America's serious role on this front, the redistribution of political and economic influence in the world of the near future could lead to a complication of ideals and prospects for democratic development, as well as economic ties with the Third World. In this case, Joseph Biden will urgently need to re-establish multilateral close cooperation with traditional allies - the European Union and other democracies - which has weakened in many areas under Trump. On the defeat front of the Coronavirus pandemic, as well as on protecting the climate and ecology, such unity is especially important in the long run.

Under the pandemic, China's 257 billionaires became rich by $ 1.5 trillion and the total capital of Chinese billionaires increased to $ 4 trillion. Covid-19 spread from Wuhan Province, China; China, at the expense of tighter control and the cost of severe economic damage in the first quarter, defeated the pandemic, virtually fully restored the economy, and left the rest of the world facing a serious challenge. China did almost nothing (did not stop flying to Europe and America long enough, hid information about the scale of the spread, etc.) to contain the virus, which led to another, the very serious and large-scale economic crisis in the world, and itself to economic growth and the world. Talks about the possibility of achieving a year of prosperity (GACC,2020).

Thus, it is likely that China will use the situation very effectively to achieve its stated goal of becoming the number one country in the world in 2050. Whether the traditional allies will be able to overcome the difficulties in US-European relations and join efforts to implement China's ambitious plans will be shown in the coming years.

The Asian Development Bank forecasts that the COVID-19 epidemic will cost the Chinese economy $ 42 billion at worst, and GDP growth will slow to 1.74%.10 More negative results are expected in a report by Rabo Bank, which estimates that China's economy will grow to 2.4%. Decreases are expected instead of 5.7% growth (Asian Development Bank, 2020).

Studies and reports prepared by international organizations assess the impact of the pandemic on the global economy inconsistently. In a report released by the Asian Development Bank, three potential cases of the expected consequences of a pandemic are discussed. The impact of a pandemic on the world economy will be different and will depend on how long it takes to defeat it. According to the Asian Development Bank, a pandemic of $ 77 billion (0.08% of GDP) to $ 347 billion (0.4% of GDP) will hurt the world economy (Institute for World Economy, 2020).

According to the latest analysis proposed by the UN, after the COVID-19, the growth of the global economy will be reduced by at least 2.5%, and the damage will reach about trillion dollars. In the worst case, that number could double. The biggest damage will be done to the countries that export oil and other goods. The economic growth rate of such countries is expected to decrease by at least 1% (United Nations, 2020).

According to the Organization of Security and Cooperation in Europe report, world economic growth will decline to 2.4% from the projected 2.9%, mainly due to declining world trade (OECD, 2020).

The economic loss stems not from the virus itself, but rather from preventing it from spreading. However, it influences the decisions of consumers and states. People try to avoid traveling, shopping, which eventually leads to a decrease in demand. As for the companies, their decisions to stop the production process hinder delivery. Restrictions in demand and supply as the virus spreads could become a significant problem for global economic growth. Due to the threat of spreading the virus, many people or companies refrain from visiting China or other risky countries and engaging in economic activity.

Despite the different expectations, mainly the economic impact on the countries develops by the following: the main economic shocks were received by the countries with the highest COVID-19 prevalence rates, followed by those whose economies were most dependent on tourism and oil, and exports of other goods, which subsequently harmed the economies of their partner countries.

Although the coronavirus originally spread to China and most researchers study the effects of the virus on the Chinese economy, the world situation is changing daily, and if China was the focus of researchers for 2.5 months after the virus emerged, the world situation has changed since the end of March (Erken, Menno, Raphie, Kan, 2020). The United States followed by European countries such as Italy and Spain. Consequently, it is difficult to predict which country's economy will suffer the most.

As for the economic sectors, the analysts predict that the coronavirus pandemic will affect all fields of the economy. However, some of them will have a more negative impact, while others will have less. According to data platform statista.com, the two sectors most affected by the coronavirus are the tourism and transportation, and the processing industry sector. In addition to these sectors, the impact of the virus is noticeable in such fields as the financial sector, retail, and entertainment.

Conclusion

The interconnectedness of the world and the increase in the ability of global processes to penetrate national borders facilitate the global spread of threats that were previously localized within a single country or region. But at the same time, this growing degree of globalization of various threats is forcing states to unite their efforts to combat them and to take to the background the inter-state contradictions that exist between them. This has been confirmed worldwide by the Covid Pandemic.

China will likely use the situation very effectively to achieve its stated goal of becoming the number one country in the world in 2050 (Shulman, 2020). Whether the traditional allies will be able to overcome the difficulties in US-European relations and unite efforts against the implementation of China's ambitious plans will be shown in the coming years.

The coronavirus pandemic will have a major impact on the world economy. However, given that the situation in the world is changing daily, it is difficult to determine the extent of this impact at this stage. The effects of the coronavirus pandemic are often compared to World War III, and once the virus is eradicated, improving the world economy will become the number one challenge. As economists predict, there is a high probability that the coronavirus will lead the world economy to recession.

Not only America, but the entire world should be grateful to Donald Trump for the rapid development of vaccines. $ 11 billion was quickly mobilized and used to fund vaccine research and advance purchases for both US and British-German companies. This was followed by the development of several effective vaccines in record time. Operation Warp Speed's budget to receive 300 million vaccines was further increased to $ 18 billion. When approving the plan, Trump hoped that the vaccines would be available for the presidential election, and this would dramatically increase his chances of winning. However, the vaccines were delayed for several weeks.

President Biden's main task is to defeat the pandemic by the end of the year (or at least achieve the tendency to govern effectively). In this case, he will be able to concentrate as much as possible on other, no less difficult goals - an economy, since without it a large part of Americans can miss Donald Trump, and global political and defense security, in which the post-pandemic world becomes even more difficult, less predictable, and regional. Moreover, the most dangerous is that the world can face a period of sharp dominance and escalation of conflicts.

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FACING THE PANDEMIC, AFTER AN ECONOMIC EPIDEMIC: «GREEK NATIONAL HEALTH SYSTEM VERSUS COVID-19»

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Abstract

Undoubtedly the pandemic of COVID-19, caused by the SARS-COV-2 virus, has put Healthcare Systems, and the study of health policies and economics, at the center of interest. The health crisis, at the same time, highlighted the vital need to protect Public Health, the adequacy of medicines and, of course, material infrastructure such as hospitals, ICUs beds, etc. Therefore, the coronavirus pandemic, demonstrated the bad situation in which the Greek National Healthcare System has found itself. Greece in 2009-10, entered one of the most serious and more lasting socioeconomic crises in contemporary history. The latest situation, which was intensified by the fiscal adjustment programs issued by the EU-ECB-IMF, caused, among other things, loss of almost 1/4 of the country's GDP, persistent unemployment, disintegration of the productive structure and partial collapse of the welfare state. In this paper, we will make a brief analysis of the "effects" of the economic crisis on the National Healthcare System of Greece. In addition, we will examine how the crisis and austerity policies have affected household health spending, key health indicators and citizens' access to health services. Then we seek to show, how the Greek Health System, as well as all stakeholders, responded to the pandemic especially to the first two pandemic waves.

Keywords: *Greek Economic and Health Crisis, Health Policies, Greek Health Care System, Political Economy of Pandemic*

Introduction

During the decade of 2010, on the occasion of the raging economic crisis, Greece implemented a series of fiscal adjustment programs. These programs were basically developed by the EU, the ECB and the IMF. The above institutions, in fact, undertook the supervision of their implementation. Under these programs, one of the main goals that Greece had to achieve was the elimination of budget deficits and then the achievement of primary surpluses. This pattern therefore includes the reductions in government spending on public health.

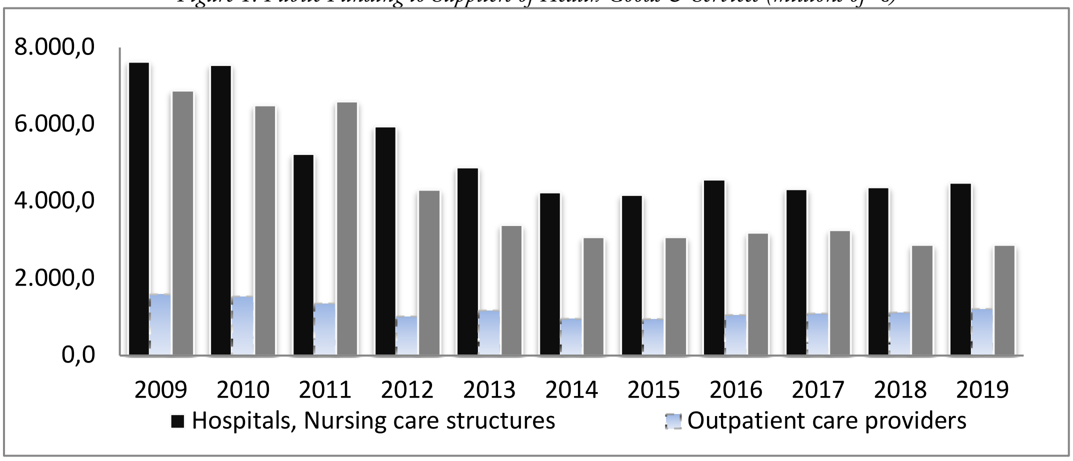
Fiscal Austerity and Public Health

In the period 2000-2008, public expenditure on health in Greece averaged 5.07% of GDP. In 2009-2010 the corresponding percentage amounted to 6.49%. The aforementioned fiscal adjustment programs, however, set the goal of public spending on health not exceeding 6% of GDP. Thus, the Greek governments reduced health spending. From 2011 to 2019, public health spending is firmly below 6% of GDP; from 2014 to 2019, in fact, this percentage is constantly below 5%. Moreover, given the dramatic contraction in real GDP, the decline in public spending on health in Greece has been significant in absolute terms. The real value of public health expenditure, however, is about 1% of GDP higher due to the clawback mechanism (OECD/EOHSP, 2019). Nevertheless, even if we take into account the impact of the clawback, per capita public health expenditure in Greece is much lower than the EU average. As public spending shrank, overall health spending fell sharply as a percentage of GDP over the past decade. This percentage, then, after 2013, is consistently lower than the average of the OECD countries.

A significant portion of the cuts in public health spending were on hospital funding, nursing facilities, and outpatient facilities (Figure 1). With regard to publicly funded care services, there have been consequential cuts in care and rehabilitation services, as well as in the provision of outpatient medicines (Figure 2). Therefore, the public pharmaceutical expenditure, which until then was in the highest position of the EU, has decreased considerably. It should be emphasized that the waste of public spending on pharmaceuticals was due to the inefficient allocation of public resources, the lack of control mechanisms in both distribution and prescriptions. In order to reduce public pharmaceutical expenditure, among other measures, the participation of policyholders in the price of medicines was increased.

Due to cuts in public funding for Health, the number of public hospitals decreased from 142 in 2009 to 125 in 2017 (Siettos et al., 2021). It is a tragic irony that, among the hospitals that closed at the time, there were two that dealt with the treatment of infectious diseases. One of them opened recently in a hurry as a "response" to the pandemic. In addition, the reduction of doctors from 2010 to 2013 amounted to 35% (Siettos et al., 2021). Also, due to budget austerity, the available hospital beds have been significantly reduced. Indicatively, according to ELSTAT[8], hospital beds decreased from 38,115 in 2009, to 29,495 in 2017. Fiscal adjustment programs also had indirect negative effects on the Greek public health system. Persistent high unemployment, for example, which has also been triggered by these programs, is causing problems in the long-term viability of the public health system. This is because the latter is based, to a crucial degree, on insurance contributions.

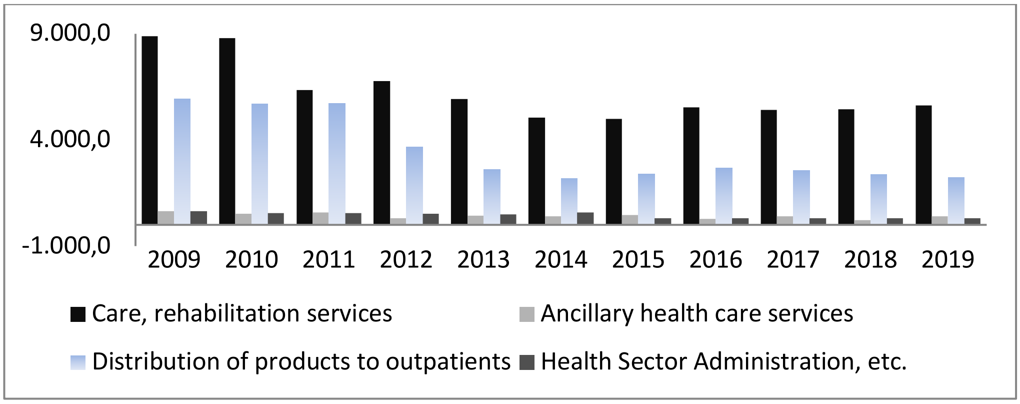
Figure 1: Public Funding to Suppliers of Health Goods & Services (millions of €)



Source: Authors Elaboration with data from ELSTAT

8 ELSTAT is the national statistical service of Greece.

Figure 2: Public Funding of Health Services, (millions of €)



Source: Authors Elaboration with data from ELSTAT

Households Health Expenditures

The health system in Greece has a different structure in terms of the ratio of private and public expenditure in relation to most EU systems. Apart from the comparatively lower public expenditures on health, what distinguishes the health system[9] in Greece is the notably high out-of-pocket[10] expenditures. After 2011, over 30% of domestic health expenditures comes directly from households. This percentage is one of the highest in the EU and is primarily due to high direct private spending on medicines, inpatient and outpatient care. Moreover, during the crisis, the state passed on to households a portion of the health expenditure previously borne by it. In fact, this happened at a time when the average disposable income of households was showing a notable decline. At the same time, the high percentage of out-of-pocket expenditures underlines the inefficiency of public National Health System (NHS).

The average monthly expenditure per household for health in 2019 is lower than in 2009; in 2009 amounted to 134.3 euros while in 2019 to 104.6. However, health expenditures represent 7.1% of total household expenditures for 2019 when in 2009 it was 6.5%. This highlights the reduced consumption power of households, the inelasticity of demand for health goods and services and the increased participation of patients in health expenditure. During the Greek crisis, due to the implementation of fiscal adjustment programs, household health expenditures shifted significantly in terms of medicines and hospital care. In general, 10% of households suffer catastrophic[11] health expenditures, a percentage of the highest in the EU (WHO, 2019).

Access to Health Services in the Recession

Thorough historical research has shown that economic crises directly affect public health and citizens' access to health services (Suhrcke, et al., 2011). In particular, high unemployment rates and reductions in social

9 The Greek health system (GHS) basically consists of the public National Health System (NHS) and the private health care system.
10 Out-of-pocket expenditures are a direct burden on family budgets with health expenses.
11Catastrophic expenditures are defined as direct expenditures of households that exceed 40% of their total. expenditures, after deducting expenditures for living needs such as food and housing.

protection spending are directly linked to the above problems. The sad Greek experience during the recession fully confirms these findings. The middle and lower "income strata" of Greek society were particularly affected by the policies of downsizing public health services. The reduction of the disposable income of these strata implied the difficulty of their access to privately provided health services, while the contraction of the NHS meant their "partial exclusion" from critical care structures. For example, the mergers of hospital structures in combination with the phenomenon of underfunding of hospitals, limited both the points of supply and the quality of health services. Furthermore, the incomplete reform in the field of Primary Health further reduced the options available to citizens (Souliotis et al., 2018).

Important studies have highlighted the increase in the unmet medical needs in Greece, due to economic difficulties, during the crisis (Karanikolos et al., 2016 ; Zavras et al., 2016). In 2017 for example, Greece presented the second highest level of self-reported unmet medical care needs in the EU; 10% of Greek households reported that they did not have access to medical services when they needed them, mainly due to the high cost (OECD/EOHSP, 2019). In addition, unmet needs were also reported by almost one in five households in the poorest income quintile, but only by 3% of richer households. This fact, among others, underlines the large “socio-economic gap” within Greek society. Moreover, according to research for the first years of the crisis, vulnerable social groups, such as the unemployed and low-income retirees, unable to privately cover their health costs, have turned to public health structures, especially hospitals (Economou et al., 2014). Thus, the demand for public health services increased at a time when these services were deteriorating due to austerity policies[12].

The difficulty of the Greek citizens to satisfy their health needs concerned even extremely serious diseases. For example, a survey conducted in 2014 showed that 51% of cancer patients were unable to schedule a medical visit on time and 44% could not cover the cost of a visit to a private doctor (Souliotis et al., 2015). Other studies have shown similar problems for other diseases such as hepatitis C and rheumatoid arthritis (Souliotis et al., 2018).

Health Indicators during the crisis

In Greece, mortality from treatable causes is comparatively higher than in most Western European states. Additionally, there is clear evidence that treatable mortality has shown signs of deterioration during the economic crisis (Karanikolos et al., 2018). As a result, the efficiency of the health system has declined due to reduced funding for healthcare services and structures. At the same time, the higher treatable mortality compared to the rest of the countries of Western Europe, including those of Southern Europe, highlights the inferiority of the domestic health system[13]. On the other hand, prevented mortality is lower than the EU average. Nevertheless, it is a fact that Greece lacks adequate preventive health policies.

According to Eurostat data for 2016, premature deaths from cardiovascular diseases[14], represent 38% of all deaths from treatable causes and 25% from preventable causes. These deaths are due firstly to systemic

12 A 2014 study, for example, found that patients with chronic conditions and the elderly had greater difficulty accessing health services and treatments, especially when treated in hospitals. For more see: Kentikelenis A., Karanikolos M., Reeves A., McKee M., Stuckler D. (2014). Greece's health crisis: from austerity to denialism. Lancet. Feb 22;383(9918):748-53
13 Indicatively, according to the data of the evaluation of health systems of 35 countries by ECHI, Greece in 2018 was only in 29th place.
14 ischemic heart disease, stroke and hypertension

deficiencies, at the level of management of patients with ischemic heart disease, and secondly at the level of diagnosis and treatment, in patients at high risk of cardiovascular disease (OECD/EOHSP, 2019). Curable cancers also account for 1/4 of deaths from treatable causes. This is probably due to the lack of systematic screening programs for the general population. Infant mortality is another "sensitive" indicator of the quality of health care but also of the general socio-economic conditions. In Greece until 2017, a significant increase in infant mortality is observed and even a reversal of the previous downward trend.

In 2010 in Greece, there was a rapid spread of epidemics such as West Nile virus and H1N1, while in 2011 there was a malaria epidemic (Bonovas, & Nikolopoulos, 2012). The main causes of these outbreaks were environmental factors. However, lacks of prevention efforts, due to cuts, have exacerbated the situation by increasing transmission risks (Kondilis et al., 2013). Moreover, during the period 2010-13, there was a significant increase in HIV infections among intravenous drug users (Paraskevis et al., 2013). This increase is largely due to budget cuts in intervention programs for vulnerable groups. In addition, the recession resulted in the mental health of the Greeks deteriorating significantly. For example, there was an increase in the prevalence of symptoms of major depression in the general population, from 3.3% in 2008 to 12.3% in 2013 (Economou et al., 2016).

Findings from a study on economic fluctuations in Europe, in the period 1979-2007, suggest that there is an increase of 0.79% in suicides and homicides for each percentage point increase in unemployment (Stuckler, 2009). A positive relationship between rising unemployment and suicides has also been observed in Greece (Basta, et al., 2018). Thus, it is not unreasonable to argue that the dramatic increase in suicides in Greece after 2010 is due, inter alia, to the economic downturn, rising unemployment and declining incomes. The absence of integrated public mental health structures and the provision of psychological support became apparent during the crisis.

The main vulnerabilities of the NHS against the Pandemic and some basic remarks for the first two "waves"

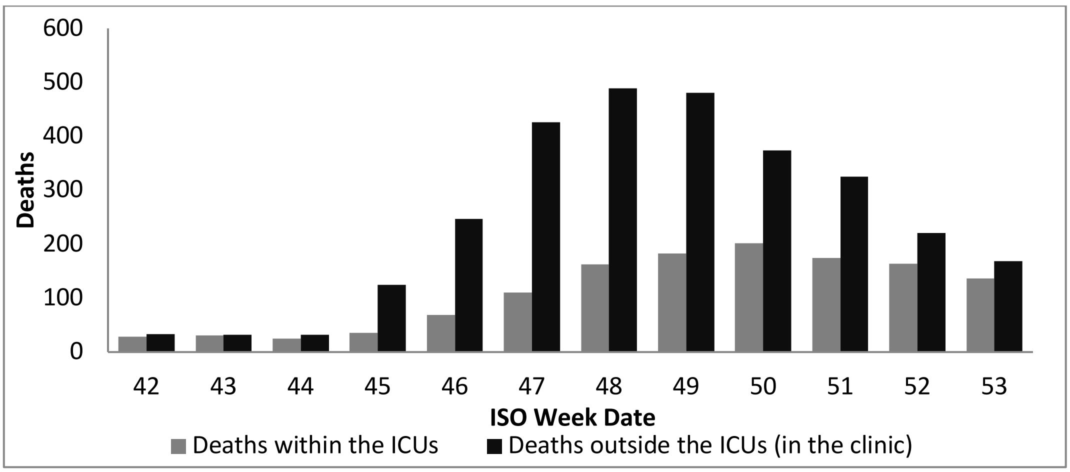
Shortly before the pandemic outbreak, the NHS showed structural weaknesses that made it particularly vulnerable to it. First, it had significant shortages in ICUs[15]. Throughout Greece, in February 2020 there were only 565 ICU beds. There were therefore about 5.5 ICU beds in Greece per 100,000 inhabitants, when the EU average was 12 ICUs per 100,000 inhabitants. Secondly, there were serious shortages of health personnel in general but also in critical specialties for the treatment of the pandemic, such as nurses, intensivists, infectious disease specialists and anesthesiologists. Third, there have been significant deficiencies in the area of hygiene and safety, deficiencies which, if left unchecked, can lead to nosocomial infections. These infections, among other things, limit the available medical and nursing staff. Fourth, Primary Care in Greece is underdeveloped. Primary Care is a critical area for identifying patients in need of hospitalization and thus can "discharge" large hospital units (Siettos et al., 2021). Fifth, there were shortages even in simple hospital beds, the effectiveness of which can save lives on the one hand, and "decompress" ICUs on the other. Sixth, the NHS had limited overall care capacity. As has been well documented, the direct health effects of the pandemic are not only related to increased morbidity and mortality from Covid-19 but also include increased morbidity and mortality due to under-treatment of all other diseases during the pandemic. In all the above problems, we must take into account the absence of an integrated system of epidemiological surveillance, "aggressive tracing"

15 Intensive Care Units

and systematic sampling. Such a system is necessary, among other things, given the rapid spread of SARS-CoV-2 (and) through its asymptomatic and pre-asymptomatic carriers.

Regarding the strengthening of the health system during the first two pandemic waves, we may mention the following: Expenditures of the Ministry of Health from the beginning of 2020 to November of the same year increased by 788 million euros, compared to 2019, ie by about 20%[16]. Almost all of the increase is due to pandemic-related costs. In addition, a very significant part of the total funding of the NHS was made through donations from individuals. Between March 2020 and February 2021, the NHS was strengthened with more than 7,500 new recruitments, through short-term contracts, medical, nursing, paramedical and other staff[17]. However, public hospitals lack at least 6,000 physicians and 25,000 paramedics (Siettos et al., 2021). Thus, during the outbreak of the second pandemic wave, understaffing of public hospitals was observed. As for the number of ICUs, at the beginning of November 2020 the NHS had at its disposal 1006[18] beds. In summary, in our view, the overall strengthening of the NHS was not sufficient to address Covid-19.

Figure 3: Greece: Deaths from Covid-19 (12/10/20-3/1/21)



Authors Elaboration with data from iMEdD Lab19

During the outbreak of the second20 wave of the pandemic, 69.08% of deaths from Covid-19 occurred outside the ICUs (Figure 3). This highlights the shortcomings in the NHS in general and in the ICUs in particular. It should also be noted that during the outbreak of the second wave, a large part of the NHS served

16 Hellenic Republic, Ministry of Finance: https://www.minfin.gr/web/guest/-/e-auxese-ton-dapanon-ygeias-opos-apotyponetai-sten-eisegetike-ekthese-tou-proupologismou-2021
17 COVID-19 health system response monitor: available from: https://www.covid19healthsys
tem.org/
18 825 of them were in public hospitals, 32 in military hospitals and 149 in private clinics
19 These data are based on the weekly reports of the National Public Health Organization which are sent to the Ministry of Health for information of the Committee of Experts. For more see the article by Thanasis Tromboukis at iMedD Lab: https://lab.imedd.org/thanatoi-ektos-icu-excess-mortality-greece-2020/
20During the first wave of the pandemic, which took place mainly in the spring of 2020, the NHS did not receive pressure. Indicatively, the number of intubated patients remained low.

almost exclusively pandemic-related needs. Naturally, this development led to the deterioration of the population's health and made it significantly more difficult for citizens to access key health services. Probably the excess mortality of the second wave period, which is not entirely explained by the deaths due to Covid-19, is due (and) to NHS malfunctions. Furthermore, we are obliged to mention that the pressure received by the NHS was such that it reached the brink of "collapse". Many of the problems we identified during the second wave were repeated at the outbreak of the third. Finally, it is very important to mention that all this happened at a time when in Greece, from the beginning of November 2020, drastic restrictive measures of social distancing and isolation were in force.

Conclusions

In the last 20 years, humanity has faced frequent epidemic outbreaks such as H1N1, SARS, MERS and Ebola. Scientists and organizations, including the WHO, had repeatedly warned of a possible pandemic. However, almost no state, including Greece, was properly prepared to deal with a health crisis. Thus, arose the need to strengthen health systems, and in particular the public, in order to deal holistically with the pandemic. The NHS, however, did not face fundamental problems just because it did not strengthen satisfactorily during the pandemic. It was ineffective due to the degradation suffered by the implementation of fiscal adjustment programs. This degradation, therefore, combined with the structural weaknesses of the NHS, contributed to the lack of adequate health care and psychological support of the general population, which is observed throughout the decade of 2010 and intensifies, in the most violent way, during the Covid-19 pandemic.

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THE EPIDEMIC OF COVID -19 AND ITS NEGATIVE OUTCOMES FOR THE REFUGEES AND ASYLUM SEEKERS

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Abstract

Being a vulnerable group representative such as migrant, refugee, asylum seeker or internally displaced person bears a great health risk. Its impact depends on the type of migration, the conditions and stresses encountered a long way, and the provision of health care in transit countries and destinations. Moreover, several social determinants, such as poverty and related conditions, can affect their health. Due to the complexity of the topic, health problems associated with migration sometimes extend beyond the health sector and therefore fall within the mandate and responsibilities of other ministries. Although the health problems of migrants and refugees are similar to the host population, the available evidence indicates an increased risk of lower health outcomes and an increased prevalence of certain diseases associated with migrant and refugee status. Thus, the paper is focused on the challenges of vulnerable groups, violation of their human rights, and lack of preventive mechanisms to combat a new, unknown for humanity virus COVID -19, putting their lives at great risk. The work aims to provide the necessary information about migrants' health care policy, luck of necessary conditions and goods, certain legal or illegal obstacles that hinter all kinds of integration processes.

Keywords: *Migrants, Vulnerable Groups, Development, Integration Policy, COVID -19.*

Introduction

Several social determinants, such as gender, suboptimal governance, can adversely affect the health of migrants, ethnicity, and poverty with all the ensuing problems, as well as economic, environmental, and other determinants of health. Generally, migrants do not pose an additional threat to the transmission of infectious diseases; nevertheless, they are one of the priority groups in terms of prevention and control of infectious diseases, as the potential impact of poor living conditions and the hardships of the journey makes them more vulnerable to transmission and development of infectious diseases. We have to highlight that appearing in such poor conditions migrants face a great threat, especially in the era of a new pandemic called COVID 19 (Alaverdov, 2021).

Even though the world's refugee defense system was created to offer international protection to the representatives of vulnerable groups, human insecurity is still at the greatest risk and challenge. A large part of refugees are people who escaped the conflict areas and try to find shelter in faraway European countries (UNHCR, 2012). It appears so that the receiving countries play double standard games, they offer the refugees protection and at the same time violate their rights locking them in the overcrowded refugee camps, with poor sanitary conditions. It should be noted that in such conditions it is practically impossible to keep social distance and other basic preventive activities, which directly contribute to the spread of infectious diseases. It should be highlighted that the refugees have limited or even almost no access to the health care units. Moreover, in such conditions, it is almost impossible to monitor the situation and combat the spread of the virus (Litzkow, 2020). However, the migrants receiving countries have taken commitments to ensure human rights and give them international protection (EUAFR, 2020).

Regulation of Modern Migration Crisis

Migration to European countries in recent years is closely linked with the processes of globalization, socio-economic and political stability, and national security, as well as with the preservation of the cultural identity of the EU countries. Globalizing migration movements require concerted efforts of different states due to a qualitatively new migration situation and the ineffectiveness of their migration policy. In addition, the growing mass migration in Europe has led to demographic, ethnic, and even mental changes, when values change. Migration flows are increasingly influencing the development trajectory of European integration. The entire process of European integration represents the search for answers to constantly emerging challenges and attempts to resolve differences through supranational acts, negotiations, and compromise solutions. One of the factors influencing the transformation of European integration is the growing uncontrolled migration, which manifests itself in different ways in individual European countries. Changes in the quantitative and qualitative composition of migrants, the emergence of new forms of migration have led to the transformation of the very context of the movement of people in Europe. The main types of migration flows are still classical post-colonial migration and the attraction of foreign labor, and its components are the traditional ethnic trajectory, internal migration between EU member states, and migration from east to west after the enlargement of the European Union. Migration channels are increasingly directed "upside-down" as the number of immigrants from third countries continues to grow, despite attempts to limit their inflow.

Currently, migration in the EU countries is a complex interweaving of demographic, economic, political, socio-cultural, and confessional problems. Modern migration flows are influenced by the processes of globalization and integration in the European Union, and migration itself has become the most important structural factor influencing the economies of the EU countries. The ever-increasing migration has led to increased challenges and risks. The ineffectiveness of the unified migration policy of the European Union during the period of its formation also led to the fact that migration flows were excluded from the trajectory of general integration processes. Thus, political integration remains a weak point of the integration process; in crises, national interests while solving the migration problems come to the fore when solving.

The intensity of the impact of migration on socio-cultural space in the EU grew gradually as the trends in migration flows changed. The modern migrants, either legal or illegal are mostly migrants associated with conflicts and wars (Trofimova, 2019). They bear signs of challenges since the emergence of closed Muslim communities opposes the identity of European society and its ethnic and cultural-confessional component; it leads to xenophobia, racism, and nationalist sentiments; arise difficulties in the integration and adaptation of migrants from third countries in a secular European society. All these are assumed as the growth of the crime rate in the EU countries, as well as the threat of terrorism and extremism. Among the many challenging factors the most acutely perceived one can be identified the number of Muslims among foreign migrants and the strengthening of the Islamic factor in public life. It becomes very important since the Muslim communities emerging in Europe are far more beyond from the host society's culture and have opposed socio-cultural customs and lifestyle that seems almost impossible to integrate into the European society (Drbohlav, 2014).

Moreover, European society thinks that the emerging situation with migrants can lead to an imbalance between the indigenous and foreign populations, an increase in the proportion of the non-European population, mainly of Muslim origin, which becomes critical for the preservation of national identity and leads to an increase in social risks and conflicts in European society. According to the research conducted by Pew Research Center, in the following two decades the followers of Islam will increase twice (Pew Research Center, 2011). As for 2050, if the level of Muslim immigration to Europe grows according to the "moderate scenario", it will make up 11% of the European population. If the influx of refugees and migrants to Europe is higher, then according to the pessimistic scenario of a sharp increase, by 2050 the share of Muslims in European society will increase to 14%.

Regulation of migration processes in the XXI century has become an increasingly important area of the European Union's activity representing a priority item on the economic and political agenda of modern Europe. The EU has declared its goal to form a "comprehensive migration policy" based on common basic principles for the admission of third-country nationals to the territory of the member states" at the same time ensuring the protection of the common border of the European Union. There was adopted a law on the rights and conditions of entry into the EU of family members of migrants, students, researchers highly qualified specialists. An active EU immigration policy reflects public military sentiment: according to the Eurobarometer, in 2013 the European society paid attention more to the migration issues than to the European tax, pension, or education systems. The top fear of EU citizens is migrants since they associate the newcomers with terrorism where they see the traditional link between immigration and social and state security. The EU attaches increasing importance to the external dimension of immigration policy, believing that the effectiveness of regulating migration flows largely depends on the EU's relations with the outside world.

To describe the positive interaction between migrants and the host community are used many terms, the most common are - assimilation, integration, and incorporation. Among these, the best platform for interaction can be considered integration, which is a long intergenerational process of including migrants in the system of basic social institutions, relations, and status of the host community. For migrants, integration is the process of mastering a new culture, obtaining certain rights, as well as access to positions and statuses, and building personal relationships with members of the host society, as well as the formation of feelings host community and identity with him. At the same time, integration is the process of interaction between migrants and the local population: the host community also learns ways of communicating with visitors and adapts its institutions to their needs. Integration is not the only possible way for migrants to interact and the host community. On the contrary, reproduction of ethnic identity and integration into ethnic communities can lead to social segregation - separation from the host community.

Interdependence of Migration Processes and Health

It is worthy to point out that migration and health are interconnected, as people on move represent a great risk of danger to their and others' health. World Migration Report 2020 highlights four types of key aspects of migration and health: 1- the health of individual migrants; 2- how migration can affect the health of populations; 3- health- care systems responses; 4- the global governance of migration and health. **The first** one is directly connected with the migration conditions; it may refer to either the country of migrants' origin or receiving country. The deterioration of a migrant's health can occur before the traveling period, during or after it. **The second one** is that migrants in many cases do not have a chance to the health care units' admission, which is much more dangerous for the receiving society. In this case, the key factor is the language barrier: migrants mostly neither know the language of receiving country, not the internationally acknowledged language- English; another factor is illegal migrants (Guadagno, 2020), who are afraid of being caught and sent back; and last but not least is lack of economic resources, hence money. The lack of medical care is more dangerous because it contributes to the spread of infectious diseases. In this regard, if we consider a new type of unknown to the human virus called COVID -19, the situation becomes much more acute. Here we have to admit that **the third** key question is directly connected with the second, as it concerns the health care system's response. There is no proper monitoring system of migrants' health, which can ensure its satisfactory situation. In this case, we can consider the discriminating factor and human rights violation. **The fourth** issue combines all the first three, as it is dealing with the global regulation of the migration system, which includes their health protection as well (IOM, 2019).

In the United Nations General Assembly in September 2015, Member States committed to "cooperate internationally to ensure safety, orderly and regular migration, with full respect for human rights and proper treatment of migrants, regardless of their status, either they are refugees and displaced persons " (WHO, 2018).

In the European Region of the World Health Organization, the ministries of health care and their representatives have pledged to protect and improve the health of migrants and refugees by adopting the Strategy and Action Plan for the Health of Refugees and Migrants in the WHO European Region at the Regional Committee meeting in September 2016. The adopted strategy refers to the public health of newcomers, in case of permanent improper treatment and limited resources, the large surges of migrants can be a threat to the host society. Thus, the situation needs a certain urgent measure and coordinated solidarity-based response (WHO, 2016).

Another resolution about the promotion of the health of refugees was a document was adopted in the World Health Assembly, in 2017, to strengthen interaction cooperation on the health of refugees and migrants following the New York Declaration for Refugees and Migrants (WHO, 2019). To overcome the existing crisis caused by COVID-19, all the people must have access to the health care units, without any discrimination, regardless of their racial, political, or any other status (WHO Europe, 2020). Certain countries started to provide integrational policy, such as language courses, which include cultural studies and integration for the newcomers even before pandemic (Guadagno, 2020).

Integration of Migrants

There can be highlight four main forms of integration (Powers, 2013): cultural integration a process when locals and newcomers learn and accept each other's cultures; structural – when migrants find their place in the receiving community: get and enjoy civil rights, enter the labor market, become members of the local community. Communication integration: a process forming relationships and social networks. It includes establishing friendships, work or romantic relationships, marriage. The essence of communication integration - communication between local and migrants. Integration of belonging- migrants begin to feel like a part of the host society. As a result of such integration, migrants cease to feel themselves, strangers.

A migrant whose integration has been successful is familiar with local culture and speaks fluently the local language, occupies adequate to his education and cultural level position in the labor market, communicates mainly with the local population, as well as is emotionally attached to the country where he lives. It is important to make several preliminary assessments necessary to understand integration and complex reality, which stands behind this word, and clarify the role of culture in the process of integration of migrants.

Integration is interconnected and interdepended with culture, it unites peoples' all symbols and meanings: common language, common memories, common values and traditions, general ideas about how to build a family, work, rest, and much more. In this case, it is worth saying that the presence of a common - in whole or even partially is a condition for their successful integration. Moreover, the way of cultural coexistence will significantly affect characteristics of integrative behavior, since culture influences a person's attitude and feeling either positively or negatively. Thus, it is the culture that acts as the main actor for integration (Varshver, 2014).

Conclusion

Based on the above-stated documents and research we can conclude that the pandemic COVID-19 put into trouble the vulnerable groups, which threatens their lives. Managed to flee from death in their own countries (a large part of migrants and refugees are the victims of Arab spring) they are caught into traps in host countries; being locked in the camps almost without any sanitary conditions and chances to admission to medical units. It should be highlighted the effort of hosting countries and international organizations to somehow combat the health crisis and fulfill the taken obligations in the frame of human rights. However, there is still much to do to ensure the protection of vulnerable groups, giving them chance to enjoy the basic standards of human rights.

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HOW INNOVATIVE CAN GOVERNMENT BE THROUGH THE USE OF ICT? - THE CASE STUDY OF AZERBAIJAN

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Abstract

The purpose of this article is to analyse public administration reform and particularly, to look at the evolution of the OSS model which introduced with the overwhelmingly use of ICT in public service delivery in Azerbaijan. This article attempts to analyse its effectiveness and efficiency in terms of user-friendliness, transparency, and timeliness were reached by the widely use of ICT tools. In particular, the article reports on a case article of a one-stop-shop model portrayed in the form of State Agency for Public Service and Social İnnovations (SAPSSI) and "ASAN service" centres. It studies the case of the one-stop-shop (OSS) public service delivery model in Azerbaijan in the context of the ASAN services. Several public services are provided in a single building rather than different government offices in a business-like style of service delivery and in a modern physical environment. The article also attempts to answer whether the "one-stop-shop" model is efficient to deliver public services in a customer-friendly, transparent and timely manner. Moreover, the paper touches policy transfer, the role of international organisations on public administration reforms. This article focuses on the case of Azerbaijan as a unique and recent example for observing the evolution of public administration reform from the starting place of the unsuccessful state to a state which embraced and implemented the revolutionary public service delivery reform. The radical changes in public administrative management system brought by the Government of Azerbaijan in 2012 invite detailed analysis of public administration reform and the role of OSS in the reform. The article is based on a number of sources, including online and published a governmental document. The article finds that the reform succeeded in replacing the extractive model of the public service delivery with the most wide-ranging model of one-stop-shop. The "ASAN service" successfully provides customers with public services with the help of ICT and massive use of internet of things opportunities.

Keywords: *One-Stop-Shop, Public Service Delivery, Public administration, Governance, Customer, Citizen, Government, Data, Management, Reform.*

Introduction

ICT Development in Azerbaijan is guided by a national-level ICT strategy formulated by the Office of the President of the Republic of Azerbaijan. The strategy would be translated into a formal state program, and jointly put into action by Azerbaijan's Ministry of Communications and High Technology (http://www.mincom.gov.az/home), State Agency for Public Service and Social Innovations (http://vxsida.gov.az/), as well as the Special Communication and Information Security State Agency (http://cert.gov.az/en/index.html).

Over the past decades, the case of public service delivery and introduction of one-stop-shop have been increasingly studied and debated. Governments throughout the world have been keen to demonstrate that they are engaged in improving the services for which they are responsible. Pressure has come from citizens with heightened expectations of what they should receive or who are annoyed from the poor quality of what governments offer. Following the directions of developed countries and under pressure levied by the international donor agencies, Azerbaijan and as well as a number of transitional countries have been trying to redesign their public administrative systems along the approaches to New Public Management (NPM).

Likewise, civil society and business organisations have also added their voices to those of the citizens while politicians, incumbent and aspiring, have recognised the necessity of promising better government service delivery if they are to avoid disaffection, unrest and removal from office. Scholars and practitioners of public administration reforms agree that the reforms deliver many benefits but also create significant problems.

Administrative transformation proccess in Azerbaijan

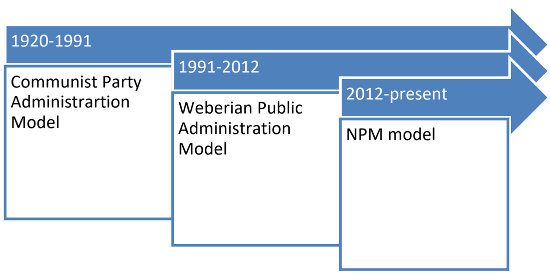
Azerbaijan is a centralized country ruled by a presidential system. The structure of government administration is based on the principles of separation of powers among legislated, executives and judicial branches (UN report, 2014). In practices, the president and other executive bodies services full control over the judiciary and the Parliament. Likewise, their reach extends well beyond the capital city of Baku, as a regional centre are controlled by presidential appointees at the municipal level (Freedom House, 2010).

The collapse of the Soviet Union in the early 1990s brought chaos and uncertainty in public administration and particularly in public service delivery. After a collapse of the USSR, post soviet countries including Azerbaijan has started to build public administration based on the principles of Weberian bureaucracy (Meyer-Sahling, 2009). This tendency occurred under the few circumstances and one of them was having a significant pressure from international organisation and requirements of market-based economy.

Nevertheless, Azerbaijan's public administration was prepared to accept those ideas neither morally nor practically. Since the NPM theory to existing social needs and catastrophe of traditional bureaucratic mode, thus one question whether NPM can be applied to the public sector in the countries where stable the traditional model is operating or maybe the traditional bureaucratic model is not prerequisite for NPM (Reinholde, 2006, p16).

Administrative change process based on NPM has foreseen introduction of private sector management techniques to the public sector. According to the Communist regime public administration, the main basic features were the limited private sector participation and lack of private property (Perry& Rainey, 1988). Therefore, Azerbaijan society and bureaucracy had not experienced of involvement of private sector. In such a situation, a precondition for the NPM theory - to evaluate methods to be transferred to public sector – cannot be fulfilled Info graph#2: Conceptual development of Azerbaijan's public administration.

Figure 1. Transformation proccess in Azerbaijan



Unlike some government bodies, international organisations, including UNDP, are very active in this sphere. For this purpose, UNDP has implemented the "Good Governance through civil service reforms:

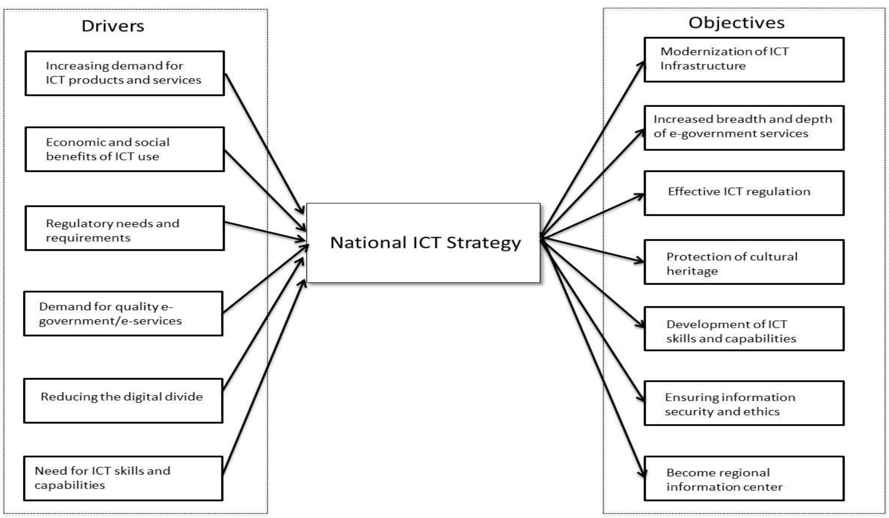
Implementing the MDG 9" project where the overall objective is to operationalise the commitment of the Government of Azerbaijan to "Good Governance" and public sector reform (Bayramov, 2010).

ICT development in Azerbaijan

Enhancement of ICT in Azerbaijan begins with the creation of a National ICT Strategy by the Office of the President of the Republic of Azerbaijan. The current strategy is named the "National Strategy for Information Society Development in Azerbaijan" that will be in place for the period between 2020 and 2025. It was preceded by Azerbaijan's inaugural National ICT Strategy that spanned the period between 2014-2020. The necessary demand for a National ICT Strategy is determined by several factors, including the growing potential of ICT in generating economic and social benefits, satisfying the increasing demand for ICT products and services, and bridging the digital divide. The National ICT Strategy, in turn, consists of a wide-ranging array of objectives, such as the modernization of the national ICT infrastructure, the expansion of e-government services, the protection of Azerbaijan's cultural heritage, as well as the development of skills and capabilities within the ICT sector (refer to Figure 1). The National ICT Strategy of Azerbaijan are correlated with numerous traits that enhances its effectiveness. First, as the strategy is approved personally by the President in his capacity as the head of state and government, the strategy is not only a blueprint, but a directive for all the ministries and public agencies that signals the dedication and determination of the government.

The following, it encompasses strategic priorities that resemble with a full range of ICT-related developmental areas, this includes e-government, infrastructure development, as well as education and training. This ensures that the ICT development endeavours of the Azerbaijani government are expansive and holistic in nature, and the various aspects of ICT advancement that tend to be connected and interdependent (e.g. ICT infrastructure will influence the quality of e-government services - see West, 2004) are systematically accounted for.

Figur 1: The Drivers and Objectives of Azerbaijan's National ICT strategy



Source: Azerbaijan Ministry of Communications and High Technology (2019)

Third, the National ICT Strategy is aligned with the broader developmental aims of the country, so that ICT development is not enacted for its own sake, but to enable the attainment of several higher-order socioeconomic objectives. In Azerbaijan, these aims are demonstrated in the in the "Azerbaijan 2020 – Vision of the Future" concept, which was confirmed by the decree of the President of Azerbaijan in 2012.

And yet, while the National ICT Strategy is intended for charting the broader direction for ICT development, it is inherently an abstract vision that cannot provide concrete guidance for action. Consequently, to carry the National ICT Strategy to fruition, the strategy is translated into a series of state programs that are spearheaded by the Azerbaijan Ministry of The State Program is described in a detailed plan that consists of specific action items in the form of activities, outcomes and deliverables, as well as the agency responsible for implementation and expected duration of each item. The plan would also provide details on how the various action items would be funded and resourced. By systematically specifying the initiatives to be implemented, the scope of ICT development is made clear, and by delegating responsibility for the initiatives, the plan provides the basis for coordinating the efforts of the relevant public agencies to achieve the objectives laid out in the National ICT Strategy in a collective and synergistic manner.

E-Government

Another main strategic importance of the current National ICT Strategy of Azerbaijan connected in e-government, with the overall objective of achieving an "increase of efficiency, provision of accountability and transparency, increase of quality and use of e-services by application of modern ICT in public administration, as well as creation for suitable conditions for participation of citizens…" (Azerbaijan Ministry of Communications and High Technology, 2014, p. 51).

The introduction of e-Government launched over 15 years ago, initiated by the inaugural National ICT Strategy that was in place from 2003 to 2012, which resulted in the launch of the E-Azerbaijan state program in 2005. There have been four successive iterations of the E- Azerbaijan program since its inception, with the first in place till 2008, the second from 2008 to 2010, third from 2010 to 2012 and fourth 2012-2018. The E-Azerbaijan program was eventually superseded by the State Program for the Expansion of Electronic Services in Public Administration and Development of e-Government that was introduced in response to the existing National ICT Strategy. This new state program will be in place from 2020 to 2025.

The major e-government initiatives that were launched because of the consecutive state programs over the years include an eTax system, the National Certificate Service Center (NCSC – which issues and manages a registry of electronic signatures for public authorities, citizens, and business entities), an integrated online single window portal and a population register . The timing of the launch of these initiatives was dependent on the availability of supporting ICT infrastructure and services (e.g. a mobile portal was developed with the needs of younger citizens in mind but this was only possible after 2013 with increasing smartphone penetration). According to a survey sponsored by the US Agency for International Development (USAID) conducted in 2016, there are currently 122 electronic services offered by 18 different public agencies over the various service channels in Azerbaijan (Muradov, 2016).

ASAN Service

The management of ASAN is highly centralised. SAPSII is the central body of executive power that carries out the unified management of ASAN service centres as well as coordinates the work of the staffs of the state entities acting in those centres, holds control and provides assessments, carries out the mutual integration of databases of state agencies, accelerates the organisation of electronic services and improves the management system of centres (The Vision, 2015b, p 20). At the lower level of management, the ASAN service centres have been equipped with the right public servants with the right skills – they have a highly-motivated, flexible, diverse and skilled workforce which is capable of providing high-quality, personalised public services (Jafarov, 2013). Decree # 706 signed in 2013, defines the regulations governing the “ASAN service” centres. The order explained the authority, functions and structure of the offices. The centres are considered as a territorial branch of SAPSII and are directly accountable to the headquarters. Each may have a stamp and specially defined coding requisites. In terms of functions, the centres are obliged to accept and respond to requests that refer to the public services provided by “ASAN service”. It ensures that customers receive the requested information either in paper or in electronic form and provides other necessary consultations (huquqiaktlar.gov.az, 2016).

Conclusion

Through a case study of the national ICT development journey of Azerbaijan, from the formulation of its national ICT strategy to the implementation of various ICT initiatives, we have generated insights into how governments can be innovative through intensive use of ICT and leapfrogging can be achieved.

This article set out to determine how analyses the implementation of the NPM ideas in Azerbaijan, using the case of the ASAN service. The research evidence also shows that the extent to which NPM ideas were imported was limited and constrained by the institutional framework and culture prevailing in the Azerbaijan bureaucracy.

OSS policy in Azerbaijan was driven both by the global trends for managerial reforms and by country-specific political, organisational, technological, and cultural factors. The global drivers for integrated service provision in Azerbaijan were diverse. These included globalisations, pressure from the international organisations, public unhappiness with the management, and definitely opportunities offered by the ICT for shifts in service delivery. A mixture of these aspects influenced the government’s intention to turn to the opportunities presented for integrated working. The concepts of clear targets, performance indicators and transparency collided with a culture that was strongly influenced by legal control, a patronage system, and bureaucratic administrative procedures. Political leadership pushing the government bodies to integrate services rapidly and tend to give more authority. This article provided a snapshot not only of the “ASAN service” policy implementation but of the overall political and administrative situation, the role of local and international stakeholders in Azerbaijan. This article exposed striking correspondences in Azerbaijan with other transitional republics in terms of facing both administrative and socio-cultural constraints during the implementation of managerial reforms.

Implementation ICT has taken the pivotal role in the success of reform. The concept of ‘e-Government’ became famous in the process of administration reforming, as it provided citizens with rapidly information and improved access to services while representing, for the first time, a highly innovative way to improve the participatory equality (Pollitt & Bouckaert, 2011). Christensen and Laegreid (2011) argue that reforms in the public sector are characterised by "combination, complexity, layering and hybridization, rather than by dominance, substitution and pendulum swings". Later they add, reforms in the public sector consist of numerous elements, and the orchestration of those elements is a motor for reform (Christensen and Lægreid, 2011, pp407-423).

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EXAMINING THE HEALTH, ECONOMIC, AND SOCIAL BURDENS OF PANDEMIC-RELATED FAMILIAL CARE WORK ON LOW-INCOME WOMEN IN KOLKATA, INDIA

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Abstract

Introduction: *In India, the fragmented and heavily under-sourced diversion of resources towards the COVID-19 Pandemic has heavily limited the workings of non COVID-related health services. Several factors, including the suspension of transport-facilities, shutdown of private-facilities, conversion of public-health-facilities into COVID-19 treatment centers, and diversion of medical professionals towards COVID-19 emergency-response have lengthened these-restrictions. This has gendered-implications for low-income women and girls. A lack of structured social-security and healthcare-provision-systems obligates these persons to assume the primary caretaker role in their households.* ***Aims:*** *This session aims to outline evidence for the lived-experiences of low-income Indian women as they strive to balance their paid-work and unpaid-caretaker-obligations during the COVID-19 Pandemic. On a macro level, our work aims to assess the extent to which women's-health, economic, and social-empowerment can be achieved through existing-programs and policies.* ***Methods:*** *Our findings were drawn from qualitative research conducted in urban and peri-urban regions of Jaipur and Lucknow. A mixed-methods approach was used, combining online-surveys with semi-structured interviews and participatory-exercises to generate high-quality data. All girls and young women selected for participation were in-between the ages of 15-24.* ***Results:*** *Interviewees described their caretaking experience as "physically and emotionally depleting" (Goh). As substitute providers of care, they felt unprepared and unfit to administer health procedures. Although many felt that they "needed" to earn some sort of income, their paid work options were few and poorly paid. As a result, most participants could only fulfill their caretaking responsibilities in the most basic capacity. Analysis of participants' survey reports revealed that women had little knowledge of the COVID-19 pandemic and its consequences on their lives in relation to various politics, economy, and health.* ***Conclusions:*** *The strengthening of social security measures is of the utmost importance. In future, policy should take into consideration the costs of womens' caregiving responsibilities on themselves, their children, and their families. A gendered approach to political economy must be adopted.*

Keywords: *Healthcare, Women, Women's health.*

Introduction

Since its onset in early 2020, the COVID-19 pandemic has affected nearly all aspects of society. In India, the fragmented and heavily under-sourced diversion of resources towards the Pandemic has heavily limited the workings of non COVID related health care services. To slow the spread of COVID-19, the government has implemented pandemic containment measures such as lockdowns and social distancing mandates (International Monetary Fund, 2020).

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Several factors, including the suspension of transport facilities, shutdown of private facilities, conversion of public health facilities into COVID-19 treatment centers, and diversion of medical professionals towards COVID-19 emergency response have lengthened these restrictions.

Amidst day care and school closures, the pandemic has also intensified demand for care work at home, particularly for women with young or school-aged children (Calarco et al., 2020). Increased care demands have compelled some parents to make significant adjustments to their paid and unpaid work routines (Petts et al., 2021). Women are potentially affected more by these demands than their male counterparts because in many contexts they are considered to be less productive and subsequently have a lower position and rank in society (Chakraborty 2020).

Given the unprecedented disruptions to both work and family life brought about by the pandemic, a large and rapidly growing body of social sciences research has emerged to better understand the impact of COVID-19 on social inequalities. As a disastrous event, the pandemic has revealed some of the entrenched social conditions and processes that have existed long before COVID-19. Producing power imbalances within the labor market and within the home, it has aggravated these gender inequalities and vulnerabilities. The COVID-19 pandemic is, therefore, characterized as a gendered pandemic in combination with its classed and racialized dimensions (Harvey 2020).

COVID-19 has unevenly impacted women and girls in the domains of health, economy, social protection, and gender-based violence (UN 2020). Focusing especially on low income women and girl who work within informal labor sectors, the female-headed families of India are significantly affected by COVID-19 and are unable to meet household needs due to the lack of economic options that are available to them (Kamanga-Njikhoand Tajik 2020). Although, according to one estimate, more than 94% of women work in informal sectors, the informal sector in India is highly insecure and unregulated, with little to no social security provisions. COVID-19 is expected to have a long-term impact on informal sector workers (International Labor Organization 2020) as they are the most vulnerable parties involved and are more exposed to the current global pandemic (Sengupta and Jha 2020) than their more financially stable counterparts.

Furthermore, the lack of well-developed and adequately funded social protection systems, including national health systems, has profound implications. When national health systems are fragmented and under-funded, *and* the bulk of health care resources are channeled towards certain diseases only, poorer populations are unable to get health care for a variety of other illnesses. That has gendered implications because the responsibility of tending to unwell persons who cannot afford medical care usually falls on the shoulders of their female relatives. Those women and girls from low-income households have to perform their ‘normal’ familial care work, work outside the home for pay, *and* take care of those unwell family members (Meghani 2021).

Aims

Our examination aims to outline evidence for the lived experiences of low-income Indian women as they strive to balance their paid work and unpaid caretaker obligations during the COVID-19 Pandemic.

On a macro level, our work aims to assess the extent to which women’s health, economic, and social empowerment can be achieved through existing programs and policies. Examining the public health and ethico political significance of fragmented and under-resourced national health systems on the gendered familial care work responsibilities of women and girls from low-income households, a central theme imbued in our findings will be the need of state actors and non-state actors -- both within nations and internationally -- to support and bring about structural, systemic changes that will improve the lives of women and girls from low-income households in West Bengal, India.

Methods

Our findings were drawn from qualitative research conducted in urban and peri-urban regions of Jaipur and Lucknow from May to June 2020. These localities are slums, largely occupied by female laborers originating from different parts of the country, mainly from West Bengal, Bihar, and Uttar Pradesh. As a general trend, these women live in such areas as a result of a diversity of socio-economic and historical reasons including poverty, underdevelopment, and high rates of unemployment. Most of the women in this region are engaged as factory workers, construction laborers, rickshaw pullers, street vendors, unskilled office workers, and domestic helpers (Azeez 2020).

A large portion of these women live in slums and other marginalized localities in the cities. All of the slum areas studied share similar characteristics in terms of cleanliness, water availability, and sanitation facilities. Most of the slum dwellers live in rented accommodations, with cramped conditions and little privacy.

A mixed-methods approach was used, combining online surveys with semi-structured interviews and participatory exercises to generate high-quality data.

All girls and young women selected for participation were between the ages of 15 to 24. These data were disaggregated into the age groups of 15 to 19 and 20 to 24. 34 participants were selected using snowball sampling. They were required to speak English sufficiently to provide informed consent, and participants with cognitive impairment were excluded.

The interviews were facilitated by a local NGO in Jaipur and youth volunteers from universities and high schools in that area.

The time slots for the interviews were arranged with the participants who took part in the interviews virtually. The participants took part in the interviews by using the electronic devices of the NGO personnel and volunteers. The involvement of a third party was necessitated when realized that most of the participants did not possess or own any electronic devices themselves.

The study strictly adhered to appropriate ethical considerations. All the participants were contacted by telephone and informed about the nature and objectives of the study and the voluntary nature of participation and their rights were explained. Written informed consent was obtained from every participant.

A semi-structured qualitative interview schedule, consisting of questions focusing on the health related experiences of women during the nationwide lockdown, guided our collection of data. The lockdown and restrictions on movement imposed due to the COVID-19 outbreak did not allow for face to face interviewing. In this circumstance, to ensure the real-time dialogue between the researchers and participants, all the interviews were conducted virtually with computer-mediated communication. Video conferencing was preferred for the data collection since it would help understand the women's experiences in detail and the verbal and non-verbal cues associated with such experiences. Interviews lasted between 60-75 minutes and were conducted in Hindi. All the interviews were video recorded and transcribed verbatim in Hindi. Later, the Hindi transcripts were translated into English (Abdul).

After completing the interviews, participants filled out a Strength and Difficulty Questionnaire or SDQ on an optional basis to help us further analyze our data.

Results

Five themes were developed from the interview data about the impacts on, and experiences of, women as familial caretakers during the COVID-19 pandemic: loss of livelihood; family compromises; burden of responsibility; disrupted access; and insufficient support.

1.1 Loss of Livelihood

Wages and potential earnings are comparatively high in the surveyed localities. The outbreak of COVID-19 and the subsequent unprecedented lockdown has seriously impacted the livelihood options of women in these areas. The theme *loss of livelihood and resulting debt* represents the womens' experience of a complete loss of livelihood opportunities and the resulting increased debt. This is a common experience for the participants during the lockdown and subsequent period, as they expressed in the interview and Strength and Difficulty Questionnaire. The complete closure of economic activities accompanied by mobility restrictions have, therefore, negatively impacted laborers within the informal sector, many of whom are women.

Most of these individuals were dependent on daily wages, and their loss has negatively impacted their daily life. Though the complete lockdown was not in place for the majority of quarantine, many of the women interviewed were not able to access the same employment options as before.

Opportunities, in terms of daily work, were reported to be significantly less. Even if they were able to get some work, most of the women interviewed still had to pay for rent or familial health costs as well.

1.2 Compromise

The economic distress resulting from the loss of livelihood compelled the participants to compromise in different areas of their lives. The theme, *compromise*, refers to the participants' need to make life-changing adjustments in response to unprecedented situations, such as those that arise during pandemics. With the additional loss of livelihood and the limited resources they had available, many participants reported that they were not able to meet their own health needs nor those of their families.

All of the interviewed participants emphasized their experience of compromise, with the extent of compromise varying greatly from participant to participant. Women shared that their experiences of compromising corresponded with their unmet need for menstrual pads, food, and health services for the entire family.

1.3 Isolation

The feeling of captivity and isolation was a common experience amid the pandemic among all segments of the population due to the mobility restrictions. However, the studied demographic has been especially impacted due to their impoverishment, limited access to health services, and the burden of familial responsibilities.

Interviewees reported feeling overburdened with household responsibilities and childrearing. The gendered nature of caring roles and household duties were found to have doubled their responsibilities amidst the pandemic.

1.4 Disrupted Access

Normal access to health resources, services, and facilities has been severely disrupted due to COVID-19 and lockdown. For women living in slums, whose access was already limited, this has become particularly problematic. The theme *disrupted access* refers to the studied participants' experiences of difficulties in accessing necessary health services and facilities during the lockdown and throughout the pandemic, which, coupled together, make everyday life a struggle.

The disrupted access to resources and facilities added further distress to the experience of participants amid the pandemic. This has become a challenge for many due to the closure of clinics operated by informal healthcare practitioners and limitations imposed on government clinics and hospitals.

1.5 Insufficient Support

Almost all sections of society have been negatively impacted by the COVID-19 crisis. However, within underprivileged sections of society, women in particular require additional support from government systems and measures. The theme, *insufficient support*, refers to the participants' experience of limited support from the government and other sources.

The sudden declaration of lockdown has created a vacuum in the life of the socio-economically weaker sections of society. Prior to the crisis, women expected proactive support from the government in the absence of any other viable sources of income and health service. Although a small number of the participants received support from local NGOs in terms of health rations, most interviewees felt as though support from governmental institutions has been minimal or even non-existent.

Discussion

The present study attempted to explore the impact of COVID-19 on women in West Bengal, India. The themes that emerged illustrate the widespread impacts of the pandemic on individuals and their families. The unplanned lockdown consequent to the spread of COVID-19 has resulted in the plight of people in the informal and laboral sectors. The nation-wide lockdown and closure of economic activities have, as a general trend, adversely affected women in terms of livelihood options available.

The dominant theme that emerged from our interviews was the loss of livelihood and the increase of debt amongst women and their families. Most of the women we surveyed worked for daily wages and struggled to meet the health needs of themselves and their families.

As a general trend, interviewees described their caretaking experience as "physically and emotionally depleting" (Gosh). As substitute providers of care, they felt unprepared and unfit to administer health procedures. Worrying primarily about their loved ones' well being, participants reported regularly deprioritizing their own health needs. Although many felt that they "needed" to earn some sort of income, their paid work options were few and poorly paid. As a result, most participants could only fulfill their caretaking responsibilities in the most basic capacity. Analysis of participants' survey reports revealed that women had little knowledge of the COVID-19 pandemic and its consequences on their lives in relation to education, wellbeing, economic security, livelihood, and access to technology.

The lack of resources and loss of livelihood has compelled many families to cut down their expenditure on food. This will have negative impacts on the health status of the most vulnerable populations, especially women and children. Gender dynamics play a crucial role in these compromises. Though the entire family is affected by the impoverishment caused, women are at the forefront in skipping meals, having a reduced quantity of food, and compromising their sanitary and hygienic needs (Abdul 2020).

The third theme is the experience of captivity and the burden of responsibility. The lockdown has more or less removed any options for women to engage in work outside of the home. The burden of responsibilities accompanied the necessity of living with limited resources. Sudden changes in routine and child-care required by social distancing were stressful for the women. In the literature, it has been demonstrated that the care burden of women has increased significantly due to the COVID-19 crisis (Power 2020).

The fourth and fifth themes make evident that the urban poor largely depend largely on informal healthcare providers for healthcare (Abdul Azeez et al. 2020). The closure of such clinics also impacted the health access of women workers.

The women surveyed here indicated that government measures devised to meet their needs are insufficient. Most of the participants did not receive any support from the government. The two-month, nation-wide lockdown in India has been criticized in news media for a lack of planning, as many of the measures devised by the government to alleviate COVID-related suffering have excluded the vulnerable segments of society.

Conclusions

The COVID-19 pandemic has ubiquitous impacts on people across the globe. The vulnerable segments of the population, however, have been disproportionately impacted by the pandemic, and the case of women laborers in countries like India is an issue of grave concern.

The participants had to compromise many essential requirements in their daily lives. The burden of responsibility and captivity made the life of women stressful. Women experienced a significant disruption of access to services as a result of lockdown and restrictions. Furthermore, the government measures devised to mitigate the negative effects of the pandemic have not reached the most vulnerable sections of society, and, by extension, most of the participants we interviewed.

The strengthening of social security measures is of the utmost importance. In future, policy should take into consideration the costs of womens' caregiving responsibilities on themselves, their children, and their families. A gendered approach to COVID-19 response and care must, therefore, be adopted.

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TAXATIONAL MEASURES WITHIN THE SCOPE OF COVID-19 PANDEMIC AT TURKEY AND SOME COUNTRIES

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Abstract

The coronavirus is one of the most dangerous pandemics of the last century. Covid-19 in Turkey was seen for the first time in March 2020. Some business has stopped/reduced their activities, some companies have gone bankruptcy. People's production and consumption decisions, employment and distribution policies have changed because of pandemic. The pandemic has affected tax revenues on income, expenditure, wealth, and tax collection potential of the state decreased. Thus, each country has taken many measures and countries have postponed taxes and brought some convenience to the taxpayers. The measures have been formed and shaped depending on the socio-economic structure of countries, financial power of the public economy, the power of the infrastructure such as health, education, and science. In this study, the taxational measures taken because of covid-19 have been explained for Turkey, and selected countries and it is emphasized these measures should continue for a while after the pandemic.

Keywords: *Pandemic, Tax, Taxational Measures, The Effects of Covid-19*

JEL Classification Codes: *K34, I18, H12*

Introduction

The coronavirus (covid-19), which emerged for the first time in China and spread all over the world, is a dangerous epidemic with devastating effects on the economy. The aim of all countries affected by the pandemic is to overcome the disease with the least damage. Efforts to overcome the pandemic have led all countries to take serious measures. The pandemic, which affects almost every field, has caused the economy to slow down, bankruptcy of companies, increase in poverty, rise to unemployment rate, and adversely affect many sectors.

World Health Organization declares coronavirus pandemic as a public health emergency and has invited countries to take measures. The pandemic has disrupted not only human life but also economic and social life. The pandemic has threatened the economic stability of countries and human life. Countries have taken measures and implemented the measures step by step to minimize the damage caused by the pandemic to the economy. It is necessary to see about the effects of the coronavirus pandemic so far and to evaluate how the effects will occur from now on. It needs to be considered how long the epidemic will last, to what extent the measures taken are effective and to what extent other measures should be taken is an issue.

Taxational Measures within the Scope of Covid-19 Pandemic in Turkey

Many tax measures have been taken to reduce the effects of coronavirus. These measures are shown below.

Stabilization program called "Economic Stability Shield" has been prepared to reduce effects of the epidemic. It has been purposed to advantages to taxpayers affected by the pandemic with tax and tax-like measures. Tax measures included in the stabilization program are described in table 1.

Table 1: Tax Measures within the Scope of Economic Stabilization Program

Tax Measures	Regulations to Be Made
Postponement of payments in April, May and June related to withholding tax returns, value added tax returns and Social Security Premiums and service documents for six months for companies operating in certain industries (retail, iron steel, automotive, logistics and transportation, cinema and theatre, accommodation, food and beverages, textile and garment and event organization)	Law
The accommodation tax is not collected until November	Law
Postponement of payments in April, May and June related to right of easement fees and revenue share payments for six months for hotel rentals	Notice
Value added tax rate for domestic air transport were decreased to 18% and 1% for three months	Presidential Decree

Source: Anadolu Agency; Cumhurbaşkanı Erdoğan Ekonomik İstikrar Paketini Açıkladı", https://www.aa.com.tr/tr/vg/videogaleri/cumhurbaskani-erdogan-ekonomik-istikrar-kalkani-paketini-acikladi/, accessed on February 3, 2021. Note: Table 1 was edited by us

Turkish treasury and finance ministry has also taken many measures to protect taxpayers in addition to Economic Stability Shield Program. The main topics of these measures are shown below (Gelir İdaresi Başkanlığı, 2021 & Kocaeli Chamber of Industry and Trade, 2021):

- There have been announced that some taxpayers considered within the scope of force majeure situation,
- There have been delayed in filling income tax return and to pay income taxes,
- Corporate tax accrual and payment periods have been extended.
- There have been delayed in filling value added tax and withholding tax return and to pay income taxes,
- There have been delayed regarding electronic ledger,
- There have been delayed to delivery of the sworn-in certified public accountant reports that have to be submitted to the tax offices,
- There have been delayed to tax liabilities for taxpayers who are under curfew,

- Due to force majeure, there has been an extension in the export periods regarding export registered deliveries.

- "Force majeure situation query screen" has been opened in online tax office website of revenue administration and it has been provided to business to learn whether they can benefit from force majeure decrees on the internet.

The tax measures taken in Turkey has provided to facilitate the liabilities of taxpayers and they have provided to ease of payment to taxpayers in economic and financial difficulties. Thus, it is tried to provide social balance.

Thanks to the tax measures taken in Turkey, reducing the financial burden of taxpayers will help the continuation of their liabilities. Besides, the positive contribution of tax fulfilment and litigation proceedings on taxpayers is great. However, the cessation of tax attachment delays collection of receivables and this situation causes the administration to lose income. Real losses due to inflation increase this loss even more for the administration.

Overview of World Practices in Terms of Tax Measures in Coronavirus (Covid-19)

Tax measures taken in many countries to reduce the negative effects of the coronavirus epidemic on households and businesses are shown below (PWC, 2021):

- Tax and social security contributions on wages are abolished or postponed reducing labor costs.

- Taxational incentives are provided for overtime wages of employees in health and emergency management sectors.

- Tax refund processes shortened.

- There have been delayed in filling tax return and to pay taxes.

- There have been delayed paying value added taxes and customs on exports.

- Advance taxes for the previous period are postponed and future estimates have been corrected.

- Uncollectible receivables are deleted.

- Some taxes such as property tax are postponed or abolished, the basis of which does not reflect the current real value.

- Facilities have been provided for deducting financial losses.

There are some facts reflected by these tax measures taken under Covid 19. These are shown below:

- It bends existing tax practices and makes easier.

- It eased taxpayers' tax liabilities.
- It changed the normal period tax practices of countries.
- The rights and advantages provided to taxpayers who are in trouble have contributed to their business life.
- Post-pandemic tax practices have been reviewed and thus, it has emerged that tax practices need to be rearranged.

When the tax measures taken by countries during the pandemic are examined, it is seen that tax measures taken like each other to a large extent. When we examine that these measures on a country basis in some country, it is possible to see this similarity. Tax measures taken by some OECD countries due to the pandemic are given in the table 2.

Table 2: Major Tax Measures Taken in Some Countries due to Coronavirus

Countries	Tax Measures
Albania	There have been delayed in filling tax return and to pay taxes for all taxpayers.
Argentina	Wealth tax entered into force in Argentina. If an individual asset exceeds ARS 200.000.000 (approximately US$ 2.3 MM at official exchange currency rate), people will be subject to extraordinary contribution. The tax rate is 2% to 3.5% on assets.
Austria	There have been delayed in filling tax return and to pay taxes. The number of installments in taxes has been increased. Interest is removed for a certain period in tax payments and tax audits delayed.
Australia	There have been delayed paying taxes. Tax penalties is removed.
Belgium	There have been enlarge in filling tax return and to pay taxes for all taxpayers. Tax debts have been delayed.
Brazil	There have been delayed paying taxes for small enterprises. Tax incentives entered into force for small enterprises.
Canada	There have been delayed in filling tax return and to pay taxes. Tax penalties, tax audits and interest have been suspended.
Chile	There have been delayed in paying taxes for only companies. Tax penalties and interest have been suspended. Tax audits have been suspended temporarily.
China	There have been enlarge in filling tax return and controls of tax audit have been eased. Tax relief measures applied by banks entered into force. Value added tax incentives entered into force for medical field. Tax loss bearing period entered for companies (five to eight years) affected by the pandemic.
Croatia	There have been enlarge in filling tax return and to pay taxes. It has been decided not to charge late payment interest if payments are delayed. installments in taxes and social security premiums payments have been made possible.

Czech Republic	There have been enlarge in filling tax return and to pay taxes for all taxpayers. There have been facilities for taxpayers who lose money. installments in taxes payments have been made possible for taxpayers in a tough position.
France	New tax audits will not be initiated. Companies have been given the right to demand deferral in the payments of tax and social security premiums. Tax penalties have been suspended. A solidarity fund has been established by the state entrepreneurs, tradesman, and craftsman
Germany	There have been delayed in filling tax return and to pay taxes. Tax penalties and interest have been cancelled for taxpayers in a tough position. Notice of attachment have been suspended.
Greece	There have been enlarged to pay taxes. The state has taken financial measures for employee and employer in order that they dispose of financial obligations.
Hungary	Covid-19 has been accepted as a force majeure. There have been the installments in taxes and long-term tax debt payment have been made for taxpayers.
Italy	Tax liabilities have been suspended initially in some areas then more widely. There have been delayed in filling tax penalty payments.
Japan	There have been delayed in filling tax return and to pay taxes. Taxpayers have been given the right to demand deferral in the payments of tax
Norway	There have been enlarged to pay taxes. Taxpayers have been given the right to demand debt plan in the payments of tax
Romania	Romania announced that they will not go to financial audit during the pandemic process. Tax penalties and interest have been suspended.
Russia	There have been provided support to local governments that pay unemployment pensions on the federal budget. Russia entered into force Robin Hood tax. 13% tax was collected from interest income of deposits above 1 million rouble and it is purposed that the money gives the taxpayers and companies affecting the pandemic.
Spain	Financial incentives entered into force for small enterprises. There has been moratorium of payment for some taxes. Notice of attachment have been suspended.
Switzerland	There have been delayed paying taxes. Tax penalties is removed. A solidarity tax fund has been created to support the crisis of the rich people. An additional tax (10%) has been levied on high earners.
United Kingdom	Tax penalties and interest payments for taxes have been delayed. Cash flow support was provided with the tax system. Government provided salary support (80%) to taxpayers who could not go to work.
United States	There have been delayed paying tax periods. Tax penalties and tax interest have been suspended.

Source: OECD (2020), Tax Administration Responses to COVID-19: Measures Taken to Support Taxpayers, OECD, Paris & Evrensel News (2020), "Arjantin'de Servet Vergisi Yasalaştı", https://www.evrensel.net/haber/420372/arjantinde-servet-vergisi-yasalasti, accessed on February 4, 2021 & Salihli Chamber of Industry and Trade (2020), Çin'de Covid-19 Salgını, Salihli TSO & Türkrus News, "Koronavirüs için Robin Hood Vergisi", https://www.turkrus.com/1079832-koronavirus-icin-robin-hood-vergisi-mi-xh.aspx, accessed on February 4, 2021 & Euronews (2020), "İngiltere'de koronavirüs nedeniyle işe gidemeyen çalışanlara devletten yüzde 80'lik maaş desteği", https://tr.euronews.com/2020/03/20/ingiltere-de-koronavirus-nedeniyle-ise-gidemeyen-calisanlara-devletten-yuzde-80-lik-maas, accessed on February 6, 2021 & İktisadi Kalkınma Vakfı (2020), "Koronavirüs Salgınının Ekonomik Etkilerine Karşı AB ve Üye Ülkelerin Aldığı Önlemler, https://www.ikv.org.tr/ikv.asp?ust_id=3631&id=3757, accessed on February 7, 2021 & Türkiye Cumhuriyeti Ticaret Bakanlığı

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As seen table 2, countries have tried to support their taxpayers with tax measures as much as possible to minimize the impact of pandemic. However, with the pandemic, the issue of collecting wealth tax has come to the world agenda again. Wealth tax with the scope of measures entered into force in Argentina. In countries such as Russia, Switzerland, steps have been taken on wealth tax. Pandemic countries changed the structure of their tax systems. Thus, countries made their tax policies suitable for the crisis.

Evaluation Tax Measures Related to Coronavirus (Covid-19) and Suggestions

The effects of the coronavirus and the consequences of the measures taken within the scope of these effects will be different in each country. Within this scope of:

- Social, economic, and financial structure of each country is different. Although the policies carried out are the same, different results occur. For this reason, each country should carry out policies appropriate to its own structure.

- It is necessary to evaluate the consequences that countries take taxational measures in the long term. It is important to continue taking tax measures for a while after the pandemic.

- The measures taken during the pandemic have been caused the business to be carried out from home, to decrease in the production of goods and services, to reduced consumption of consumers and so to be turned to certain products by the consumers, to decrease in economic activities. Most of the tax measures are aimed at revitalizing sectors that have gone into recession. Sectors that are living also need to be supported to ensure their survival. In this way, it is possible to overcome the pandemic without causing permanent damage.

- It is more important that the tax measures taken are successful in developing countries. Because developing countries are more affected by the crisis. The poor', the unemployed', small and medium enterprises', tradesmen' damage in developing countries deepens the economic shrinkage and causes greater social problems than developed countries. For this reason, developing countries need to implement their tax measures policies more carefully, widely and for a long time.

- The tax measures of all countries, whether developed or not, should be supported by other fiscal and monetary policy measures. With the impact of the crisis, not only those working for someone else but also employers were unemployed. This situation reveals the necessity of implementing tax measures for employment in different extents in the short, medium, and long term.

- Pandemic has more affected small business owner and farmers without social security in Turkey and many countries. Because those earning daily wage do not work during pandemic, they are supported by measures providing cash flow. However, it is considered that the burden of these measures will increase over time on the budget. This situation reveals the necessity and importance of an international cooperation and solidarity.

- With tax measures, states will be able to achieve a lot. However, as economies shrinkage, tax revenues will decrease over time. Taxational expenditures may be insufficient. This situation has increased the need for all kinds of resources regardless of their economic and social effects and the need for resources will increase over time.

- In certain cases, tax penalties and interest of default practices should be delayed until the taxpayers exit the crisis.

- Fighting against informal economy is important. It is needed that audits be suspended except for tax evasion and taxpayers not to be inspected unless necessary. This situation caused the taxpayers to recover economically and psychologically. This practice should continue until the effects of the pandemic are eliminated and the taxpayers are economically stronger.

- In many countries, practices that easing tax services of taxpayers have been implemented. These practices are important in terms of supporting taxpayers as long as taxpayers and revenue administration have a connection. Nevertheless, it is needed that taxpayers who has difficulties experience in digital transportation be reached by phone and that digital service applications be made more widespread and that taxpayer services be made easy as possible.

Conclusion

Each country has taken tax measures appropriate to its own structure in order to reduce the negative effects of coronavirus (covid-19) in the economy. It is aimed that these measures mitigate the destructive effects of pandemic on taxpayers. Moreover, it is aimed to reduce financial difficulties and to revive the economy that has been dragged into recession with these measures. However, tax measures taken may have negative effects as well as positive aspects. Continuity of economic activities will be provided thanks to taxational measures. Tax losses within the scope of tax measures may leave the administration in a difficult situation in the long term. Late tax collections and uncollected taxes may lead to a decrease in tax resources over the time. For this reason, it is needed that countries should seek new resources in the long term and countries should point the implementation with tools to increase employment and prevent poverty.

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COVID 19 IMPACTS ON EMPLOYMENT LEVELS IN EUROPE

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Abstract

The COVID-19 pandemic which started in the beginning of 2020 has affected the global economy more than the financial crisis in 2008-2010 and has caused serious problems for development and growth in both developed and developing regions. This paper explores the impacts of the COVID-19 crisis in Europe in terms of employment implications and the relevant policy measures which were introduced by EU governments to tackle the problem with unemployment levels. The paper treats the primary economic measures taken by governments during the onset of the epidemic and discusses their major impact on the economic systems in Europe. Thus the paper also comments on the policy dynamics during the COVID-19 process.

Keywords: *COVID-19 Pandemic, Economic growth, Development, Unemployment.*

Introduction

It is important to consider the reasons behind difficulties in economic development during crisis periods, driven by non-economic factors but having profound economic impact. The pandemic from the spread of the novel coronavirus (referred to as COVID-19), which started in the beginning of the year 2020 has definitely affected the global economy more than the financial crisis in 2008-2010 and for just one year it has reached levels of economic downturn more than double than those achieved during that crisis period 13 years ago. As a result, the anti-coved measures implemented by governments, which led to general restrictions on economies worldwide, have caused serious problems for development and growth in both developed and developing countries.

The aim of this paper is to comment on the impacts of the COVID-19 crisis in Europe in terms of its employment implications as well as the policy measures which were introduced by EU governments to tackle the problem with unemployment levels. The paper treats the primary economic measures, in view of employment, taken by governments during the onset of the epidemic and discusses their major impact on the economic systems in Europe. In addition and to explain the effectiveness of the measures, it comments on the policy dynamics during the COVID-19 process.

Employment implications of COVID-19 in Europe

According to the Eurofund Report[21] in Q2 2020, 5.7 million fewer people were in employment in Europe than in Q4 2019, and the EU27 unemployment rate increased from 6.6% to 6.7% over the same period. However, a clearer picture of the impact of COVID-19 on the labour market emerges when observing trends in weekly hours worked and when the share of those employed but who did not work are considered. In addition, it is reported that between Q2 2019 and Q2 2020, EU employment declined by 2.4%, average

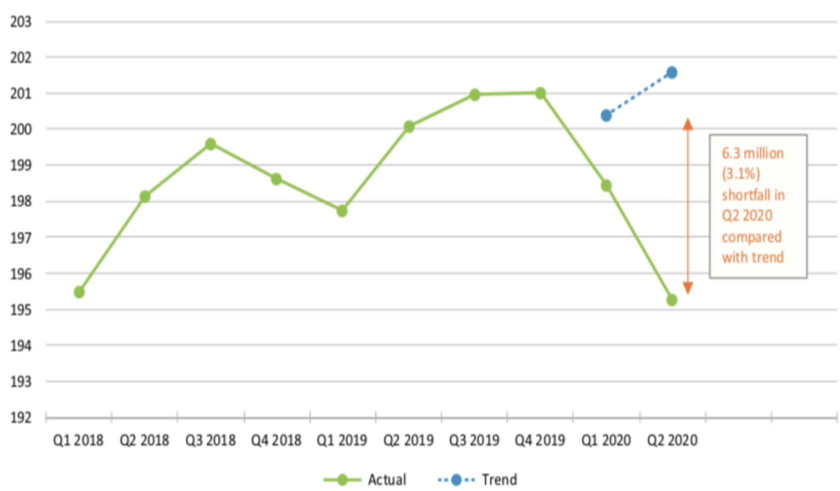
21 Eurofound (2021), COVID-19: Implications for employment and working life, COVID-19 series, Publications Office of the European Union, Luxembourg.

weekly hours worked of those who attended work reduced by nearly one hour, while the share of workers employed but not working more than doubled to 17%. There are significant differences between Member States and also young people were most impacted by reductions in employment levels. They were also highly represented among furloughed groups. Prime-age workers in the age group 25–54 years and older male workers were most likely to be working reduced hours.

It is interesting to note that while the 2008–2010 financial and economic crisis hit the male-dominated manufacturing and construction sectors in particular, the COVID-19 pandemic mainly affected the more female-dominated accommodation, food and beverage, travel and tourism and arts and entertainment sectors. This was somewhat balanced by a rising demand for workers in other female-dominated sectors. Another important observation is that while the 2008–2010 crisis saw the greatest losses in the middle of the wage distribution whereas, up to Q2 2020, the COVID-19 crisis had impacted mainly on the lowest paid workers.

These observations point to a rather differential impact of the pandemic which in addition is also seen in the large shift to telework. It is reported that by July 2020, nearly 50% of the EU workforce had moved to exclusive or partial telework. As this option is not available to all, this opens up new labour market gulfs, as the more highly educated and those in urban areas are more likely to have their jobs protected through the ability to telework. *They are also the ones who turn to be more adaptable to the impossibility to work in office than whereas the workforce in low skilled labour had no other option but to remain out of business activity and hence be more vulnerable and prone to unemployment.*

Figure 1: Employment levels, Q1 2018–Q2 2020, EU27 (millions of workers)

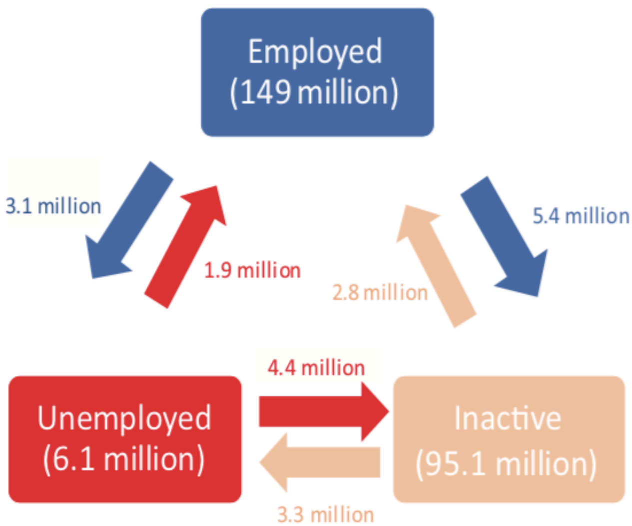


Source: Eurofund Report 2021

When explaining the discrepancy between the change in unemployment rate and the change in employment level as a result of the crisis, it is obvious that the main reason for that is that most of the decline in employment occurred as a result of transitions to inactivity rather than unemployment. People who lose their jobs and are no longer seeking work are classified as inactive and outside the labour force and the fact is that these forms of temporary joblessness are not measured in the unemployment rate.

When observing the dynamics of the data illustrated in Figure 2 it shows that labour market transitions were strongly employment negative between Q1 2020 and Q2 2020. The net flow out of employment into unemployment (+1.2 million) was less than half of the net flow from employment to inactivity (+2.6 million). Also, the gross flows for each of these transitions were the highest recorded for any quarter in the last 10 years. It is then evident that the outcome was that employment shrank by 3.8 million in the quarter marking the first wave of the pandemic. Nearly all of this decrease was reflected in a large increase in inactivity (+3.7 million), with a much more modest increase in unemployment (+0.1 million). In addition, there was a net flow of 1.1 million people from unemployment to inactivity, which further mitigated increases in unemployment in the quarter. *Hence, inactivity on the labor market due to suppressed economic conditions should be considered as a form of exceptional unemployment which is born not by economic difficulties or by inconsistency of the qualification of human resource with the economic structure. Rather, this is a form of unemployment resulting from short or long-term closures of specific sectors to reduce the possibility of virus transmission.*

Figure 2: Employment levels, Q1 2018–Q2 2020, EU27 (millions of workers)



Source: Eurofund Report 2021

In addition, it is reported that demand for services in the knowledge-intensive services sectors appears to have been boosted as ongoing processes of digitalisation accelerated as a result of the crisis. One sub-sector in manufacturing – pharmaceuticals – has also been largely unaffected by the crisis and it is also a 'knowledge-intensive' sub-sector, one of the few in manufacturing enjoying structural employment growth. It has most likely benefited from increased research activity and product demand arising from the public health emergency. The other unaffected sector is construction but as the economies have been trying to revive in Q1 and Q2 of 2021, it turned into a source of unforeseen price increases for the basic construction materials.

The studies performed indicate that each Member State has regulated the pandemic-related lockdown mainly by identifying essential and non-essential activities by sector, broadly related to the satisfaction of basic needs, primarily health, food and security (Fana et al, 2020). Another interesting tendency observed is that the levels of agricultural employment, which are otherwise in general decline, have been supported and as a result labour inputs in this sector have declined only marginally.

The pandemic in 2020 has been more seriously affected by unemployment that the crisis period 2008-2010, considering that the unemployment levels have outgrown them for just one year. Based on EU-LFS quarterly data provided by Eurostat[22], employment levels in the EU27 declined by 4.9 million in the 12-month period from Q2 2019 to Q2 2020, a larger fall than the 4.3 million decline recorded in the two years between Q2 2008 and Q2 2010. Also, employment losses during the current crisis were therefore larger and occurred more quickly than those experienced during the global crisis, despite the huge fiscal supports mobilised to protect employment.

Policy measures as a response to COVID-19 impacts on EU level

While the COVID-19 crisis was unfolding, the EU Member States have taken action to minimise its impact on businesses, workers and citizens. In particular, the a broad range of financial and other support measures were adopted on EU level to assist Member States in their efforts to mitigate the worst effects.

In early April 2020, a €540 billion emergency rescue package was proposed which included a pan-European Guarantee Fund established by the European Investment Bank, providing €200 billion in financing for companies (particularly small and medium-sized enterprises (SMEs)), and a new fund, the SURE instrument, providing up to €100 billion to support Member States in the implementation of short-time working schemes and similar measures in an effort to safeguard jobs. As a mechanism and by definition, the SURE instrument provides loans on favourable terms to EU countries facing a 'sudden and severe' rise in public expenditure to protect employment. Another approach was the flexibility in the use of the EU Structural Funds which was increased to allow Member States to transfer money between different funds and regions in order to reduce the impact of the pandemic on economic life in the region. Specific sectoral measures have also been developed to support the most hard-hit sectors, particularly the tourism sector. A plan to borrow €750 billion to support recovery efforts in the EU was agreed by EU leaders in July 2020 and a central role in this effort is the €672.5 billion Recovery and Resilience Facility (RRF). The goal of the RRF is to assist Member States in dealing with the economic and social impacts of the pandemic while ensuring that economies undertake green and digital transitions to make them more sustainable and resilient.

Also, income protection measures beyond short-time working made up the next largest share of measures. They emphasised the importance of extending support to groups not previously covered (such as self-employed people) and enhanced sick pay schemes for workers affected by COVID-19 or self-isolating. During the first wave of the pandemic in 2020, when schools and crèches were closed in many EU countries in the months April-June, the support of parents who were unable to work was considered to be crucial. These measures became less relevant in the context of the second wave in the autumn, as childcare facilities and educational institutions remained open in most countries. Most Member States extended access to – and in some cases increased the level of – unemployment benefit payments in order to assist both individuals claiming

22 https://ec.europa.eu/eurostat

unemployment benefits when the crisis struck and those losing their jobs as a result of the pandemic. In the face of diminishing job vacancy rates, many Member States reduced the requirements for job searching.

In addition, the information gathered in Eurofound's COVID-19 EU PolicyWatch database demonstrates that the expansion of what it categorises as 'employment protection' 11 schemes has been one of the key features of the pandemic, building on lessons learned during the 2008–2010 financial and economic crisis (Eurofound, 2020). It is important to note that, as reported, the use of such schemes to preserve jobs in companies experiencing a temporary drop in demand received strong backing from the European Commission and the Council of the European Union with the introduction of the SURE instrument.

In addition, twelve countries introduced new schemes during the first phase of the pandemic (Cyprus, Denmark, Estonia, Greece, Hungary, Ireland, Latvia, Lithuania, Malta, Poland, Romania and Slovenia). The other countries amended existing measures and these amendments primarily revolved around simplifying administrative access and broadening eligibility criteria. As observed, Austria, Finland, France, Germany, Italy, Portugal and Spain increased access to groups of workers not previously covered (for example, apprentices and workers on non-standard contracts, such as part-time and fixed-term contracts, and agency workers or workers in domestic settings). Also, eight countries enhanced the generosity of benefits by temporarily increasing income replacement rates. These were Austria, Belgium, Czechia, France, Germany, Slovakia, Spain and Sweden.

It has been reported that the 'traditional' distinction between temporary unemployment and short-time working was often maintained in countries newly introducing such schemes and this means that both types of measures now exist in Cyprus, Romania and Slovenia. Also, a temporary unemployment scheme was created in Denmark to meet the restrictions imposed in many sectors by the lockdown. This complemented a pre-existing job-sharing scheme that is similar to short-time working arrangements. By September 2020, Latvia had introduced only a temporary unemployment scheme requiring the full cessation of working hours.

Apart from that, many new schemes and amendments to existing measures were introduced very quickly in the early phase of the pandemic response (in early to mid-March 2020). The effort was to avoid large-scale job losses because parts of the economy were forced to close down or had their operations significantly limited as a result of government public health measures. Thus, existing systems of collaboration and consultation were disrupted or functioned less effectively in some countries. Because of the evolution of public health measures and their economic impact over time, many schemes were subject to a range of further changes in the following groups:

- explaining and addressing initial shortcomings and anomalies, usually soon after their initial implementation

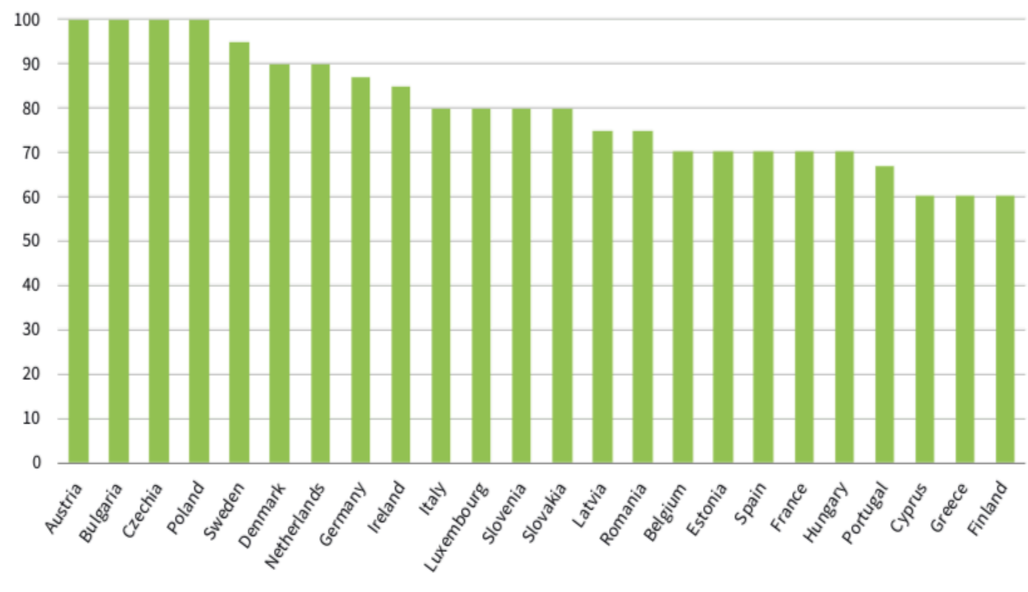
- consideration on the longer-term nature of the economic impact of the pandemic and the requirement to adjust measures in response to the gradual opening up of the economy

It has been argued that the latter types of amendment can also be seen as efforts to ensure sustainability and prevent the emergence of adverse effects linked to the longer-term use of short-time working schemes, which includes also the deadweight effects or the sustaining of 'zombie companies' that would not have survived in the long term (Cahuc, 2019; Hijzen and Martin, 2013). A key feature of the clarifying adjustments was the inclusion of additional groups of workers. Ireland for example revised its temporary wage subsidy scheme to address unintended anomalies that had emerged, such as the exclusion of women who were on maternity leave and apprentices who were on block release for training on the cut-off date for access to the measure. The pressure from specific interest groups was also addressed as for example Romania adjusted its scheme to include freelance workers.

In order to reduce deadweight effects, several countries (for example, France and Spain) increased the requirements for employers to cover a higher share of the costs if they wished to continue to receive support. In Estonia further eligibility criteria for access were introduced that had initially provided broad support in order to reduce deadweight effects. Overall, all new and amended schemes were conceived to be time limited, with a number expiring by November 2020. Some schemes were subsequently reactivated with the emergence of the second wave of the pandemic in October 2020.

Figure 3 shows that schemes in Austria, Bulgaria, Czechia, Poland, Sweden, Denmark and the Netherlands offered replacement rates of between 100% and 90% of previous salaries, with Cyprus, Greece and Finland offering the lowest rates of up to 60%.

Figure 3 Replacement rates as % of pre-Covid salaries



Source: Eurofund Report 2021

In addition, caps applied to the maximum levels of wage support available can have a significant impact on the actual replacement income received by workers. Most national schemes applied such caps and in some countries, the cap was expressed in relation to the minimum wage.For example, in France the cap was 4.5 times the minimum wage whereas in Portugal it was 3 times this level, and in Poland the limit was set at 40% of the national average wage. However, most other countries set a maximum level of wage support that could be paid. Therefore, irrespective of the percentage of income to be paid, the amount could not exceed this level.

Yet, in the medium to longer term the employment protection schemes can impact on workers' incomes through the extent to which (and the level) social security and pension contributions continue to be paid while a worker is working reduced hours and receiving a lower income. In all EU countries, with the exception of France, Hungary, Ireland and Latvia, these contributions continued to be paid at a level reflecting the full salary and in most cases, this cost was covered by the state.

Also, the duration for which support could be claimed varied significantly. Germany and France offered support for the longest periods of time while eligibility criteria were met, whereas in Belgium, support for full-time workers was limited to eight weeks. The relatively short durations over which support could be claimed in a number of countries, like Estonia, Hungary, Poland and Romania, were delimited by the time periods for which the measures were implemented.

In terms of source of funding, only Czechia, Estonia, Lithuania and Poland required employers to contribute to this cost from the outset. The share of the cost borne by the state in Finland was also limited, with the remainder covered by the unemployment insurance system, which is formed by contributions by both employers and workers. On the other hand, in Hungary, the state covered the full cost of hours not worked up to 50% of unworked hours. In Poland, the employer contribution required was set at 60%. In addition, these countries also required employers to cover a greater share of ongoing social insurance contributions. In France and Slovenia higher employer contributions were subsequently also introduced and Germany restricted the continued payment of employer social insurance contributions after June 2021 to employers offering training.

Conclusion

The paper made an overview of the main impacts on employment levels in the EU as a result of the COVID-19 pandemic. It commented on different levels of unemployment and the measures introduced by governments for the period 2020-2021. A major contribution of the paper is that it compares the dynamics in employment levels during the financial and economic crisis in 2008-2010 and the ones during the onset of the COVID-19 pandemic in 2020. Another important observation is that in the medium to longer term the employment protection schemes can impact on workers' incomes through the extent to which social security and pension contributions continue to be paid while a worker is working reduced hours and receiving a lower income. This is going to be another challenge to the social security systems worldwide, as well as to the healthcare package as both are also tied up to the salary levels. In this respect, the negative impact on employment is expected to have long term impacts on all economic indicators.

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THE PAST, THE CONJUNCTURE OF COVID-19 PANDEMIC AND THE FUTURE OF SECTORAL/OCCUPATIONAL COLLECTIVE BARGAINING IN GREECE

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Abstract

Until the beginning of the economic crisis in Greece, collective bargaining at the sector/occupation level was the predominant form of collective bargaining. The sectoral/occupational collective agreements determined the terms of employment and wages for the majority of the private sector employees. During the period 2010-2018, the sectoral/occupational collective agreements were drastically reduced, because of the reshaping of the institutional framework for the collective bargaining. This collapse of the centralized nature of the collective bargaining system was driven by the economic adjustment programmes (memoranda) imposed by the European Commission, the European Central Bank and the International Monetary Fund. However, in some sectors/occupations collective bargaining and collective agreements survived during the crisis, as well as after the formal expiration of the memoranda (2018). The COVID-19 virus pandemic further affects the decentralization of the Greek collective bargaining system in favour of the collective bargaining and agreements at the enterprise level and/or in favour of individual contracts. By constructing and using a database of over 2.000 collective agreements, in this paper we examine their evolution by sector during the period 2000-2020, taking under consideration the reshaping of the institutional framework for collective bargaining and the changing correlation of power in favour of the capital. In addition, we investigate the potential impact of the unemployment and of the gross value added per economic sector on the development of collective bargaining and their basic outputs, which are the collective agreements.

Keywords: *Collective bargaining, decentralization, Greek economic crisis, COVID-19*

1. Introduction

Until the onset of the economic crisis the sectoral collective bargaining was dominant in European countries over collective bargaining at enterprise level and/or individual determination of employment terms (Zisimopoulos et al., 2019; Zisimopoulos, 2019). The recent economic crisis accelerated the pre-existing – since the 1980s– trend towards the decentralization of collective bargaining systems (Marginson et al., 2003). In Greece, the decentralization of the collective bargaining system was accelerated by the imposition of fiscal adjustment programs (memoranda) and took the form of "disorganized decentralization". The collective bargaining coverage rate was sharply decreased which led to a deterioration of the terms of employment and working conditions for more than 1,200,000 employees (approximately 75% of private sector employees). The outbreak of the COVID-19 pandemic puts further pressure on the wage employees and makes the prospect of revitalization of the sectoral/occupational collective agreements questionable. In this context, the purpose of this paper is to critically examine the evolution of sectoral/occupational collective arrangements during the period 2000-2020.

2. Multi-employer bargaining: the institutional framework, the trade unions' strength and the decentralization trends

The extent to which the sectoral collective bargaining is the dominant level of bargaining compared to negotiations at the enterprise level determines the degree of centralization of a collective bargaining system (see Zisimopoulos, 2019). In centralized systems, the collective bargaining coverage rate is significantly higher compared to countries dominated by single-employer bargaining. In the latter, the potential of individual labour contracts use is expanded (Traxler, 2003).

The level of collective bargaining coverage is determined by: a) the strength of the trade union movement and b) the ensuring of the articulation of collective agreements at the different levels of bargaining (Zisimopoulos, 2019).

The articulation of collective agreements is based on two institutional pillars: a) the "favourability principle" and b) the "extension" of collective agreements (Marginson, 2015; see also Visser, 2013; Economakis *et al.*, 2016). The "favourability principle" ensures that collective agreements concluded at the enterprise level cannot contain terms that are worse than the terms of agreements concluded through multi-employer bargaining (sectoral/occupational level). The principle of "extension" ensures the binding nature of the sectoral collective agreements implementation even for employees who are not covered by collective bargaining, and thus increases the coverage rate and drastically limits the use of individual contracts (Zisimopoulos, 2019).

In the last three decades before the onset of the current economic crisis, a tendency towards decentralization of collective bargaining systems was developed worldwide. This process took the form of either (mainly) the maintenance of sectoral collective agreements but with a gradual undermining in favor of enterprise-level collective agreements (organized decentralization), or (secondarily) the replacement of sectoral collective agreements by enterprise-level agreements and individual labour contracts (disorganized decentralization) (Traxler, 1994; Traxler, 2003; Marginson *et al.*, 2003; see Zisimopoulos, 2019; Economakis et al., 2016). In both forms the decentralization is associated with the undermining of the "favourability principle" and, especially in the case of disorganized decentralization, is accompanied by the abolition of the "extension" of collective agreements. In the case of disorganized decentralization, the most obvious effects are a reduction of the coverage rate, the expansion of the individual contracts use and, consequently, the deterioration of wages and terms of employment (Zisimopoulos, 2019). In the same period a tendency towards unions weakening was developed worldwide.

During the current economic crisis, the decentralization trend has been strengthened (Marginson, 2015) and the countries where multi-employer bargaining was dominant have also decreased (Zisimopoulos, 2019).

3. The past of collective bargaining and trade unions in Greece

3.1 The period before the onset of the economic crisis

During the period 1955-2010, the Greek collective bargaining system was centralized. The "favourability principle" and the "extension" were in effect, while collective bargaining took place mainly at a national and occupational level and, from 1990 onwards, at a sectoral and enterprise level. In 1990, the Organization for Mediation and Arbitration (OMED) was founded, to the services of which employees could resort when employers refused to negotiate. The OMED's decisions were equivalent to collective agreements (Zisimopoulos, 2019). In addition, the union density remained high during the period 1955-2010 (48.22% in 1977) but demonstrated an overall declining trend especially after 1992 (37.6% in 1992, 22.23% in 2010) (Visser, 2019; see Zisimopoulos, 2019).

The centralized nature of the collective bargaining system ensured high collective bargaining coverage rates. This fact was particularly important for the coverage of employees by collective arrangements at the sectoral/occupational level, given the structure of the Greek economy and the dispersion of employment in small enterprises. In Greece, until 2010, the establishment of a union required the participation of at least 20 employees, while the concluding of a collective agreement at the enterprise-level was possible in enterprises with more than 50 employees (see Table 3.1).

Table 3.1 Private sector wage employment by enterprise size and sector of economic activity, 2008-2016 (3rd quarter)

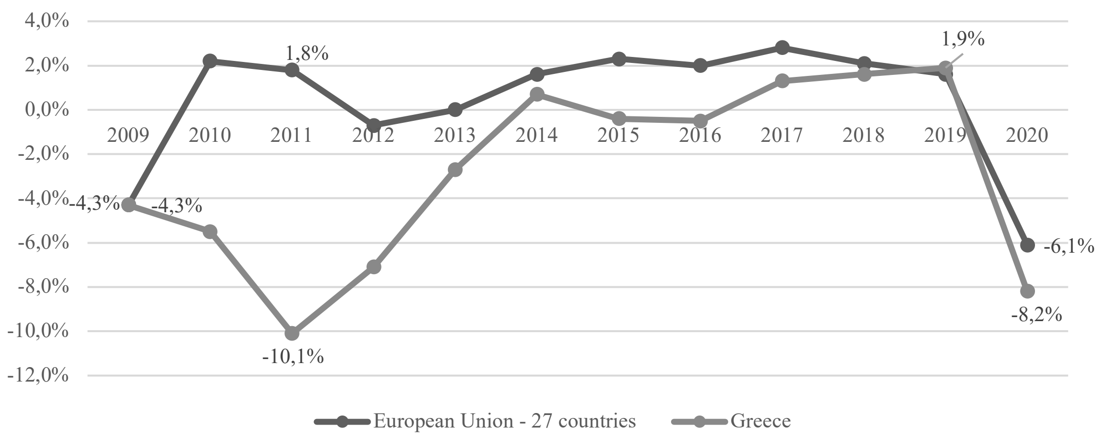
	20 employees or less		**50 employees or less**	
Sector of the economy/sector of economic activity	2008	2016	2008	2016
Primary sector	***85.18%***	***85.39%***	***91.85%***	***89.04%***
A	85.18%	85.39%	91.85%	89.04%
Secondary sector	***65.07%***	***50.12%***	***73.86%***	***63.66%***
B	40.43%	43.08%	51.69%	55.06%
C	49.90%	44.20%	62.86%	60.19%
D	55.20%	22.28%	56.68%	43.20%
E	47.45%	44.65%	67.14%	51.51%
F	87.51%	72.10%	90.32%	77.96%
Tertiary sector	***70.47%***	***63.01%***	***79.40%***	***73.81%***
G	72.94%	66.79%	81.73%	78.09%
H	52.72%	46.84%	67.70%	62.93%
I	76.64%	71.88%	84.32%	79.87%
J	41.41%	30.29%	50.65%	42.21%
K	48.10%	41.13%	62.58%	56.93%
L	76.16%	100.00%	76.16%	100.00%
M	75.14%	68.95%	82.56%	78.83%
N	67.91%	61.35%	77.22%	73.21%
P	75.74%	65.75%	84.06%	78.80%
Q	55.81%	53.09%	71.60%	64.81%
R	65.18%	58.74%	70.91%	64.09%
S	86.05%	86.39%	91.31%	91.72%
T	99.39%	98.69%	99.39%	98.69%
U	9.14%	23.86%	16.70%	58.71%
Total	**68.87%**	**60.77%**	**77.71%**	**71.98%**

Source: ELSTAT, author's calculations.
Note: the classification of the economic activities is based on NACE Rev. 2

3.2 The economic crisis period

The Greek economy has faced a deep recession since 2009 (Figure 3.1).

Figure 3.1. Real GDP growth rate in Greece and EU-27, 2009-2020



Source: Eurostat

The recession negatively affected all sectors of the Greek economy, which was expressed in the decline of Gross Value Added (GVA) in all sectors (Table 3.2).

Table 3.2 Gross Value Added and Compensation in Greece (million euro), 2008-2016

		2008	2016	% change	
A	GVA	6,793.3	6,134.1	-9.70%	-
	Compensation	1,123.6	776.6	-30.88%	-
	Compensation/GVA	16.54%	12.66%	-23.46%	-
B	GVA	816.8	780.3	-4.47%	-
	Compensation	556.3	288.2	-48.19%	-
	Compensation/GVA	68.11%	36.93%	-45.77%	-
C	GVA	20,578.3	14,138.5	-31.29%	-
	Compensation	9,133.4	6,088.9	-33.33%	-
	Compensation/GVA	44.38%	43.07%	-2.97%	-
D	GVA	2,292.0	4,877.8	112.82%	+
	Compensation	1,085.3	1,152.6	6.20%	+
	Compensation/GVA	47.35%	23.63%	-50.10%	-
E	GVA	3,489.2	2,071.6	-40.63%	-
	Compensation	1,129.6	927.9	-17.86%	-
	Compensation/GVA	32.37%	44.79%	38.36%	+
F	GVA	10,718.8	3,485.6	-67.48%	-
	Compensation	4,665.8	1,575.2	-66.24%	-
	Compensation/GVA	43.53%	45.19%	3.82%	+
G	GVA	27,501.8	18,065.8	-34.31%	-

	Compensation	12,438.1	8,539.4	-31.34%	-
	Compensation/GVA	45.23%	47.27%	4.51%	+
H	GVA	17,619.1	9,907.7	-43.77%	-
	Compensation	4,200.2	5,917.6	40.89%	+
	Compensation/GVA	23.84%	59.73%	150.55%	+
I	GVA	11,796.6	9,350.2	-20.74%	-
	Compensation	2,896.4	3,206.1	10.69%	+
	Compensation/GVA	24.55%	34.29%	39.65%	+
J	GVA	8,061.0	4,523.7	-43.88%	-
	Compensation	2,816.1	2,187.1	-22.34%	-
	Compensation/GVA	34.93%	48.35%	38.39%	+
K	GVA	9,396.3	8,682.2	-7.60%	-
	Compensation	5,664.8	3,063.6	-45.92%	-
	Compensation/GVA	60.29%	35.29%	-41.47%	-
L	GVA	28,303.0	26,825.9	-5.22%	-
	Compensation	114.9	178.4	55.27%	+
	Compensation/GVA	0.41%	0.67%	63.81%	+
M	GVA	8,111.8	5,149.3	-36.52%	-
	Compensation	2,521.5	2,326.7	-7.73%	-
	Compensation/GVA	31.08%	45.18%	45.36%	+
N	GVA	5,537.3	2,269.8	-59.01%	-
	Compensation	1,724.8	1,277.8	-25.92%	-
	Compensation/GVA	31.15%	56.30%	80.73%	+
O	GVA	19,156.3	16,058.6	-16.17%	-
	Compensation	14,082.2	11,482.0	-18.46%	-
	Compensation/GVA	73.51%	71.50%	-2.74%	-
P	GVA	11,971.1	8,554.1	-28.54%	-
	Compensation	9,461.6	7,211.7	-23.78%	-
	Compensation/GVA	79.04%	84.31%	6.67%	+
Q	GVA	12,840.8	6,281.4	-51.08%	-
	Compensation	4,893.7	4,139.0	-15.42%	-
	Compensation/GVA	38.11%	65.89%	72.90%	+
R	GVA	3,071.8	2,152.7	-29.92%	-
	Compensation	587.7	677.2	15.23%	+
	Compensation/GVA	19.13%	31.46%	64.43%	+
S	GVA	4,433.6	2,071.3	-53.28%	-
	Compensation	2,751.6	1,445.9	-47.45%	-
	Compensation/GVA	62.06%	69.81%	12.48%	+
T	GVA	1,330.0	558.7	-57.99%	-
	Compensation	1,100.0	526.4	-52.15%	-
	Compensation/GVA	82.71%	94.22%	13.92%	+
U	GVA	0.0	0.0	-	
	Compensation	0.0	0.0	-	
	Compensation/GVA	-	-	-	
Total	GVA	213,818.9	151,939.3	-28.94%	-
	Compensation	82,947.4	62,988.5	-24.06%	-
	Compensation/GVA	38.79%	41.46%	6.86%	+

Source: Eurostat

The recourse of the Greek governments to the support mechanism was accompanied by the Memoranda imposed by the EU-ECB-IMF and incorporated into Greek legislation. The memoranda focused on austerity measures (see Zisimopoulos & Economakis, 2018) and the reforming of the institutional framework for collective bargaining (Zisimopoulos et al., 2019; Economakis et al., 2016), and took place in conditions of increased unemployment (Table 3.3) and, therefore, of intense pressure on the labor movement (reduction of union membership by 26.45%).

Table 3.3 Unemployment by sector of the economy and by sector of economic activity in Greece, 2008-2019 (3rd quarter)

Sector of the economy/sector of economic activity	2008	2013	2019
Primary sector	***1.01%***	***3.43%***	***2.62%***
A	1.01%	3.43%	2.62%
Secondary sector	***5.44%***	***33.16%***	***15.48%***
B	5.27%	21.93%	6.37%
C	6.12%	26.38%	12.82%
D	4.13%	19.07%	10.79%
E	11.62%	36.16%	23.69%
F	4.07%	45.08%	21.34%
Tertiary sector	***4.35%***	***20.47%***	***11.56%***
G	4.37%	23.28%	12.07%
H	3.36%	21.89%	8.67%
I	7.05%	26.86%	14.09%
J	6.01%	23.96%	8.85%
K	2.78%	10.84%	4.31%
L	0.00%	27.56%	17.57%
M	2.98%	15.04%	7.93%
N	6.39%	31.50%	15.71%
O	2.71%	15.57%	9.57%
P	4.47%	14.77%	12.10%
Q	3.16%	13.99%	9.47%
R	8.18%	29.62%	21.20%
S	4.81%	22.33%	16.80%
T	4.82%	27.55%	21.20%
U	0.00%	16.74%	3.33%
Total	7.27%	**27.20%**	**16.36%**

Source: *ELSTAT, author's calculations.*

The legal reforms implemented for the implementation of the memoranda guidelines led to: (see Economakis et al., 2016; Kouzis, 2018; Zisimopoulos, 2019):

a) the weakening of the National General Collective Agreement

b) the abolishment of both the "favourability principles" and the "extension" of collective agreements

c) the abolishment of trade unions' right for unilateral resort to the OMED services (until 2014)

d) the strengthening of collective bargaining at the enterprise level, even in enterprises that employed less than 20 employees.

The immediate consequences of the "disorganized decentralization" of the collective bargaining system were (Zisimopoulos, 2019):

1) The drastic reduction of collective arrangements at sectoral/occupational level and a marginal increase of those at the enterprise level

2) The drastic reduction of the coverage rate (100% in 2010, 21,93% in 2014, 25,46% in 2016).

For a very short period of time (August 2018-October 2019) after the official expiry of the memoranda, there was a weak revival of the "favourability principle" and of "extension" that did not lead, however, to a remarkable increase in the volume of collective agreements (Zisimopoulos *et al.*, 2019; see Section 7). In October 2019, the neo-liberal government of New Democracy set new restrictions both on the implementation of the "favourability principle" and of "extension", as well as on the use of trade unions' right for unilateral resort to the OMED services (Zisimopoulos, 2019). At the same period, both the SYRIZA-ANEL government (Law 4512/2018) and the New Democracy government (Law 4635/2019) sought to impose restrictions on the unions collective action, and in particular on their right to strike, which is the basic mean of exerting pressure during a period of collective bargaining (Zisimopoulos, 2019).

4. The period of covid-19 pandemic

The outbreak of the pandemic found the Greek labor movement already in a difficult position, due to the conditions that had already formed during the economic crisis period and immediately after the official expiry of the memoranda. In contrast to other European countries where the employment protection measures during the pandemic have been the subject of collective bargaining with the unions and have been reflected in collective agreements (Kapsalis, 2021), in Greece protection measures have been the result of unilateral imposition by the government. The key features of the measures taken during the pandemic and lockdown (March 2020-May 2021) are the limited protection against redundancies, the flexibility regarding the working time and workplace, the suspension of employment contracts, the salary substitution from a "special purpose allowance", and the limited control over violations of labor legislation (*ibid.*).

As a result of the conditions shaped during the pandemic, 52% of employees work overtime, 40% are not paid for overtime work, and 60% of part-time employees report that work more hours than those set in their contracts (INEGSEE, 2021). A study by Eurofound (2021) points out that Greece is the country that has suffered the highest portion of job loss by employees among all EU members during the pandemic.

5. Methodology

The research question empirically investigated is the evolution of collective arrangements (collective agreements and arbitrational decisions) at the sectoral/occupational level during the period 2000-2020. For this purpose, the qualitative content analysis is adopted. The data consist of 2,284 collective arrangements which are derived from the OMED online database.

It must be noted that we use the term "sectoral/occupational level collective agreements" because in most cases collective agreements at sector level do not cover all the employees of a sector, but the employees of certain occupations within a sector.

6. Results

The analysis of the collective arrangements during the period 2000-2020 (Tables 6.1 and 6.2) shows that their majority was concluded in the tertiary sector, while in the period 2011-2018 there was a drastic reduction of the collective arrangements in all sectors of the economy. The partial restoration of the "favourability principle" and of "extension" seems to have led to a marginal increase of collective arrangements in 2018. However, the re-undermining of the institutional framework for collective bargaining (2019) and the outbreak of the pandemic (2020) explain the reduction of collective bargaining in the period 2019-2020.

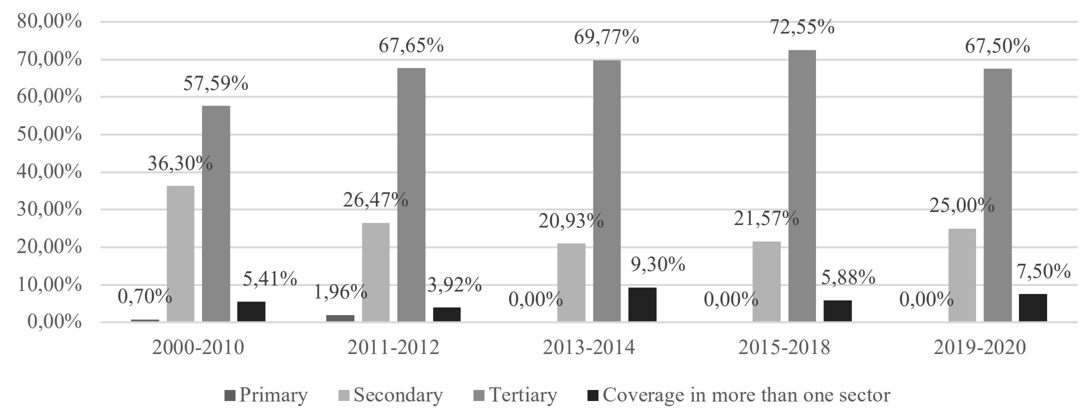
Table 6.1 *Collective arrangements at sectoral/occupational level by sector of the economy, 2000-2020*

Average	Primary	Secondary	Tertiary	Coverage in more than one sector	Total
2000-2010	1	66	105	10	182
2011-2012	1	14	35	2	51
2013-2014	0	5	15	2	22
2015-2018	0	6	19	2	26
2019-2020	0	5	14	2	20

Source: *OMED, 2021, Author's calculations.*

Figure 6.1 shows that since 2010 a significant redistribution of collective arrangements between secondary and primary sectors in favor of the tertiary sector has taken place.

Figure 6.1 *Collective agreements at sectoral/occupational level by sector of the economy as % of all collective arrangements, 2000-2020*



Source: OMED, 2021, Author's calculations.

The largest decrease of collective arrangements in the secondary sector is mainly fueled by the reduction of collective arrangements in the manufacturing and construction sectors (see Table 6.2). In addition, the secondary sector as a whole and especially the construction sector, faced higher rates of unemployment from 2010 onwards (see Table 3.3), that weakened trade unions and collective bargaining.

It must be noted that the collective arrangements in all sectors of economic activity have decreased.

Moreover, Table 6.2 depicts that among the collective arrangements concluded during the period of the “disorganized decentralization” of the collective bargaining system, most were concluded in the sectors of “Manufacturing”, “Transportation and storage”, “Accommodation and food service activities”, and “Administrative and support service activities”. The collective arrangements in the last three sectors –that related to the so-called “tourism industries”– represent the biggest part of the collective arrangements concluded in the tertiary sector of the economy. In these sectors and in conditions of a GVA decrease, the share of compensation in GVA tend to be increased between 2008 and 2016 (Table 3.2). The survival of collective arrangements in these sectors potentially contributes to this result, but this finding needs further investigation.

Table 6.2 Collective arrangements at sectoral/occupational level by sector of economic activity as % of total collective arrangements at sectoral/occupational level, 2010-2020

Sector of the economy	**Sector of economic activity**	**2000-2010**	**2011-2018**	**2019-2020**
Primary	A	0.70%	0.81%	0.00%
Secondary	B	2.40%	2.02%	0.00%
	C	30.80%	17.00%	17.50%
	D	0.00%	0.00%	0.00%
	E	0.45%	1.62%	5.00%
	F	2.15%	0.81%	0.00%
Tertiary	G	3.96%	5.26%	2.50%
	H	4.46%	9.72%	10.00%
	I	4.51%	11.34%	22.50%
	J	7.41%	8.10%	10.00%
	K	1.10%	1.62%	5.00%
	L	0.00%	0.00%	0.00%
	M	0.95%	0.40%	0.00%
	N	4.66%	11.34%	5.00%
	O	11.22%	4.86%	5.00%
	P	4.26%	2.83%	0.00%
	Q	6.06%	4.45%	0.00%
	R	3.46%	7.29%	5.00%
	S	1.90%	0.81%	0.00%
	T	0.35%	0.00%	0.00%
	U	0.40%	0.00%	0.00%
Coverage in more than one sector of economic activity		8.81%	9.72%	12.50%
Total		100.00%	100.00%	100.00%

Source: OMED, 2021, Author’s calculations.

7. Discussion

The Greek collective bargaining system was centralized until 2010. During the priod of the economic crisis the process of "disorganized decentralization" led to the drastic reduction of collective arrangements and to a decrease of the collective bargaining coverage rate. The collective arrangements at sectoral/occupational level have been further weakened during the pandemic COVID-19 period. The neoliberal government of New democracy has planned to pass a new law in June 2021 that is oriented towards further employment flexibility, the undermining of multi-employer bargaining, aiming to restrict the trade unions' collective action.

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PROBLEMS OF PROTECTION OF CIVIL LIBERTIES UNDER COVID-19

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Abstract

The issue of protection of civil liberties under COVID-19 is one of the most acute problems in modern democratic discourses. Because there are significant contradictions between the requirements for ensuring human health safety and civil liberties. Maintaining a certain balance between them is a matter of fundamental importance for the viability of democracy. In the research, the authors analyze the contradictions that exist between the requirements for human security, arising during COVID-19 and civil liberties. In this context, the authors discuss Western and Asian approaches to effective epidemic management, based on different views on the use of the right to legitimate violence by central powers. ***Research Hypothesis.*** *In formulating the research hypothesis, we used the theory of the Greek classicist Thucydides (460-395 BC) as a theoretical framework, which he developed in his work "History of the Peloponnesian War". In addition to the description of the war, the author devoted huge attention to the so-called "plague of Athens", which took place 430 BC in summer and is considered to be the first description of an epidemic in human history. Thucydides believed that this pandemic played a decisive role not only in the course of the war but also in the further development of Athens (city-state) and for many years to come determined the history of the city-state as it sowed the seeds that destroyed the democracy of Athens. We believe that, as in the past, today, in the case of COVID-19, the international community is facing a similar dilemma. COVID-19 is not just a health problem; It is a challenge that has tested the political, economic, social, and governance systems of the entire world. Accordingly, we hypothesize that COVID-19 is a serious threat that could lead to a backlash against democracy in global politics and the strengthening of authoritarian regimes. It is, therefore, necessary to activate this issue and bring it to the public's judgment.* ***Research question.*** *The main question of the research is the following: Can a balance be maintained between the requirements of human security and civil liberties?* ***Research methods.*** *The research mainly uses proven research methods established in historical and political science - comparative analysis, systematic and structural-functional methods.*

Keywords: *COVID-19, Coronavirus, Pandemic, Climate Change, Total Control, Global Elite, Management Methods, Artificial Intelligence Technologies, Lock Step, Global Financial - Economic Crisis, New World Order.*

Introduction

Pandemics can be compared to large natural disasters such as volcanic eruptions, hurricanes, tsunamis, and so on that occur not only locally, but globally. During all the great pandemics, the number of human casualties and economic losses was colossal, besides, they also had a great impact on the human psyche, culture, and even the genetic composition of the population.

Statistics on the pandemic of the new type of coronavirus - COVID-19 - are far ahead of the epidemics of SARS, MERS, Swine Flu, and Ebola that occurred earlier this century. Some reviewers compare the current pandemic to the spread of the "Spanish flu" in 1918-19, which killed between 40 - 50 million people.

The hotspot of the new coronavirus is thought to be the market for seafood and animals in Wuhan, Hubei Province, China. In December 2019, 41 people were diagnosed with pneumonia in the province, without any obvious indications, which raised the suspicion of the existence of an unknown virus, and what studies have even confirmed - there was a new coronavirus disease for which no cure or vaccine existed. On January 9, 2020, the first death from the virus was reported. On January 21, China confirmed that the coronavirus was contagious and shut down Wuhan, but the virus spread rapidly both in China and abroad. On January 30, the World Health Organization declared the coronavirus as a global threat, and on March 11 as a pandemic.

The virus spread in Japan on January 10, 2020, in Thailand on January 13, in South Korea on January 20, in the United States on January 21, in Singapore on January 23, in Vietnam and France on January 24, in Canada, Switzerland, and Australia on January 25, in Germany on January 27, in UAE on January 29, in Italy On January 30, in Russia, Spain, Great Britain, and India on January 31, on February 19 in Iran, on February 26 in Georgia and Brazil, on February 28 in Azerbaijan, on March 1 in Armenia, on March 11 in Turkey, etc.

According to the data of the sick and the dead people as of April 28, 2021, the USA takes first place. The death toll from COVID-19 has risen to 279,867, while the number of infected has risen to 14,314,265; In England, the total number of deaths due to the virus increased to 59,699, the number of infected became 1,069,256; In Germany, 17,812 people died from the virus and more than 1,105,800 were infected; 107,565 people died in Mexico and 1,133,613 were infected with the virus (Abesadze, 2020). The pandemic continues to spread actively to various regions of the earth, including Australia, the United States, South Africa, and India. It is currently detected in 215 countries around the world (BBC, 2020).

Scientific political discourses on Covid-19

The coronavirus pandemic coincided with the emergence of signs of crisis in the liberal world order and the intensification of the aggressive policies of authoritarian regimes. From the current political discourse on the relationship between the pandemic and democracy, we think it would be interesting to review the article of William Engdahl - "Lock Step, This Is No Futuristic Scenario: Panic and the Post-Pandemic Future?", who is a modern-day anti-globalist, "conspiracy theorist", American economist, and political scientist Ph.D. in the University of Princeton (Engdahl, 2020). The article reveals that ten years ago, in 2010, a scenario - a pandemic panic, was prepared. The document was released with the support of two organizations - the Rockefeller Foundation and the Global Business Network. The founding of the latter organization is linked to Peter Schwartz (Chikobava, 2020), who is considered to be one of the competent American futurologists. It was Schwartz who outlined four scenarios for world development in his 2010 report, one of which - a special operation called Lock Step, the same as COVID-19, totally coincides with what is happening in the world nowadays - the fight against the coronavirus under the guise of liberalism and the establishment of new world order.

William Engdahl prepared a report on global climate change for the US military -,,Pentagon Climate Change Report – 2004“ (Engdahl, 2020), which speaks to the fact that the normally drowsy state will wake up and start fighting the pandemic. And it will start to do so roughly, violating what is usually the notion of democracy and human rights. Not only will it impose stricter rules and restrictions during the pandemic, but even after the pandemic is over, this authoritarian control and oversight of citizens and their activities will remain in place and will even be strengthened.

Scientist believes that because the world is entering a phase of terrible danger (climate change, international terrorism, viral pandemics, environmental pollution ...), therefore, we must forget democracy, freedom, human rights, which we have been taught for decades, we must forget the previous standard of living, because Security requires sacrifice. Strict regulation of key sectors, which is vital to the national interest, restores both order and, most importantly, economic growth. Citizens voluntarily relinquish part of their sovereignty and their private lives in exchange for greater security and stability (Global Business Network, 2010), what happened in the recent past, after the events of September 11, 2001, in the United States, when the Patriot Act was passed, which deprived many Americans of certain rights and freedoms and citizens "perceived" these measures. The scholar believes that since then the conversations about human rights and freedoms have gradually subsided and the hysteria started in the fight against the pandemic, which will continue until the remnants of democracy and freedom are completely destroyed.

The pandemic-induced global psychosis and recession in the reports of the Club of Rome is part of a plan by the global elite to establish total control, with the ultimate goal of leaving the "optimal billion" out of the extra seven billion people on the planet. As well as the abolition of state borders and the creation of a new world government that will create a new world order under the excuse of fighting the coronavirus - a prison that would be more complete than the one portrayed by George Orwell in the "1984" (Chikobava, 2020).

This plan will be implemented by consolidating all medical information about people in a centralized database, the so-called Launching a Social Rating System, similar to the one already introduced before the pandemic in China. As well as control over human movement and behavior through video surveillance cameras, microphones, and microchips inserted into the human body. Voluntary and forced isolation of humans and international isolation, during which the arrival and departure in the country will be subject to stricter restrictions than was in the Soviet Union.

Even before the pandemic, Russian political ideologist Alexander Dugin hoped that the COVID-19 crisis and the imperative of physical survival would push states to abandon liberal and transnational approaches (Memri.org, 2020). According to Dugin's main argument, institutions based on the principles of globalism, liberalism, and international cooperation mechanisms have completely failed to prevent the spread of the virus and to provide an effective response to the pandemic. He argues that the only way to manage the crisis is to close borders and restrict fundamental freedoms. Such reasoning leads him to the conclusion that the pandemic hastened the inevitable defeat of revisionist regimes, while democracies are expected to gradually degenerate, as the example of Hungary and some other Western countries shows. In the concluding section, Dugin generalizes the unprecedented circumstances caused by the global pandemic to modern geopolitics and suggests that globalism as a phenomenon is over and the world has already taken a multipolar form.

Contrary to Dugin's findings, Harvard University professor Joseph Nye argues that the Covid-19 crisis will not be enough to change the world order (Nye, 2020). He acknowledges the inevitable changes, but at the same time is skeptical about the emergence of a new, post-globalization reality. He concludes that "walls, weapons, and tariffs" will not impede the transnational action of these key aspects. Nye does not mention Russia at all and considers China insufficiently developed to pose a global threat to the United States. He believes the pandemic has damaged the economies of both countries, but despite the heavy stroke, the United States has maintained its superiority in the energy sector, technology, demographics, and quality of education.

The above scientific discourses have made even clearer the challenges and dilemmas of democracy caused by the close cooperation and coordination of authoritarian regimes against Western interests and values over the past decade, which have been exacerbated by the pandemic crisis.

Pandemic management methods

Restrictions on civil liberties by the government under COVID-19 have been implemented inconsistently in countries around the world. Some imposed strict restrictions from the beginning, some delayed, and some refused the restrictions at all. Accordingly, different methods of pandemic management were identified: first, the totalitarian system of pandemic management by authoritarian states, in which civil rights were completely ignored, and which we have already talked about;

Second, the European approach, in which the state increasingly seeks to avoid exercising the basic function of the state - the right to legitimate violence if necessary. It stems from the high sense of responsibility of rational and law-abiding citizens, both to themselves and to society. Sweden stands out in this regard. To date, Sweden's strategy is based on trust towards the people of Sweden and fighting pandemics with minimal restrictions - voluntary social distancing recommendations and without declaring a state of emergency, closing borders, closing businesses, and wearing a mask. However, the Swedish political experiment, in our opinion, has gradually lost its attractiveness, because according to a medical examination, conducted in late March 2021, one-third of Sweden's population of 10 million had already been infected with the coronavirus. About 2,000 Swedish researchers have signed a petition calling on the government to "take immediate steps following the recommendations of the World Health Organization" to fight the coronavirus. Among the signatories was the chairman of the Nobel Foundation, Carl Henrik Heldin (Synovitz, & Mastrin, 2020).

Unfortunately, this strategy has been less successful in other EU countries as well, where, like Sweden, the emphasis is on citizen responsibility. Citizens' disobedience to quarantine rules is often a serious problem here, creating new outbreaks of Covid-19 in Europe.

Scholars also speak about the balance of the European approach based on citizen responsibility and stricter central enforcement mechanisms, based on the judicious use of artificial intelligence technologies.

In this regard, the so-called "Asian Tigers" - Singapore, Hong Kong, Taiwan, and South Korea, are distinguished. They managed to keep the COVID-19 cases below the critical mark using a combination of early mobilization, technology, and transparency. The latter - "Transparency", we believe, in case of the use of personal data will be the main guarantee that they will be used only to control the COVID-19 epidemic and any political risk will be excluded. The undeniable leader among these countries is South Korea, which, according to 2016 data, was among the countries with full democracies according to the World Democracy Index. It is ahead of countries such as Japan, France, Italy. The index determines the degree of democracy through the following five data: political activism and political culture, the electoral process and pluralism, civil rights, the functioning of government (Bliadze, 2017). It is the degree of democracy in South Korea that counteracts the risk of sharing the vicious experience of using personal data for political blackmail. South Korea monitors cellphones via satellites to detect clusters of infection. Notably, through early aggressive testing of suspicious clusters and social distance control, South Korea managed to contain one of the largest early outbreaks of the virus outside China and stabilize the spread curve.

Singapore also relies on surveillance technology to fight COVID-19, as well as "transparency, complex testing and rapid isolation and quarantine of suspicious cases". Among the surveillance and information tools used by Singapore to control COVID-19 is the mobile app TraceTogether, which shows the user's proximity to other people and warns those who have been in contact with people already infected with the virus or are at high risk (Kolenov, 2002).

Hong Kong and Taiwan also have a centralized management system for artificial intelligence technologies. Compared to other countries, the measures that are taken in Taiwan (social isolation, hygiene, facemask use, etc.) are not very strict (Chesnokov, 2020). In the case of Taiwan, its prudent approach to surgical masks and other medical equipment is also noteworthy. While the World Health Organization and Western governments have considered the use of surgical masks unnecessary for the population, Taiwan has increased the production of masks to 10 million a day and introduced a mask distribution system to allow the population to access them without deficit. Today, everyone agrees that wearing a mask protects a person from COVID-19 and is one of the most important factors in preventing the virus from spreading again in the post-quarantine period.

Thus, the Asian Tigers managed to balance the mechanisms of strict central coercion with combined use of technology and transparency, as well as individual responsibility and the ability to adapt socially to new threats, without which no control mechanism can detain an epidemic. In this case, Asian social norms, such as touch-free greeting and social distance, significantly contribute to the East Asian states' resilience to the spread of the virus. Georgia is part of the Mediterranean culture in this regard, where physical contact and kissing is a form of daily greeting and social life is also very active. However, to deal with COVID-19 and better prepare for future epidemics, Georgia needs to assimilate some of the Asian cultural habits (Lebanidze, 2020).

Conclusion

The coronavirus pandemic has had and continues to have a major negative impact on the whole world and individual countries in all directions, in terms of health as well as restrictions on economic, social, and human civil liberties.

In the case of the COVID-19 pandemic, the requirements for ensuring human health safety and the interrelationship between democracy are an actual topic in modern political discourses.

The problem of the balance of the COVID-19 pandemic and the protection of civil liberties is also a matter of fundamental importance for the viability of Georgian democracy. In this respect, the pandemic, in the given reality - in the conditions of strengthening authoritarian tendencies, is also a test for the Georgian political system. "Legitimate" grounds have been created for the government that can justify interference in the daily lives of citizens. There is a reasonable suspicion that the government may use the pandemic as an excuse for measures to achieve the desired political results. Such interventions significantly restrict the individual rights of citizens.

The experience of Asian tigers about pandemic management methods, using artificial intelligence and user databases against COVD-19 is appealing. But, on the other hand, we consider the use of personal data for control to be a very arguable issue, especially for illiberal countries, including Georgia. For us, as a new democracy, it is very important for the attention of international partners to prevent the use of pandemic-justified measures for individual rights and long-term restrictions on the political process. Otherwise, Georgia's democratic achievements may become the main victims of COVID-19. We, therefore, consider it necessary to activate this problem and get an adequate response from civil society, which is as urgent and important as dealing with the immediate consequences of the COVID-19 crisis.

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ONLINE EDUCATION IN HIGHER EDUCATION INSTITUTIONS

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Abstract

Due to the pandemic, higher education institutions (HEIs) also faced a serious challenge, they had either to stop the educational process or continue in safe conditions. In order not to interrupt the educational process, higher education institutions switched to distance learning, which was provided through the Internet. Concerning the new situation a variety of terms have been used, the definitions of which have caused a wide discussion not only in Georgia but also in the world. Due to the emergency created by COVID19 in Georgia, the Law on Higher Education was amended to create a legal basis for a new form of teaching and the term "distance learning" was added to it. "Distance Learning - an educational process based on information-communication technologies organized in the higher education institution of Georgia, for obtaining any level of higher education, which is not provided in a specific place. To implement distance learning, it is necessary to properly plan the curriculum, to use appropriate approaches and methods for organizing and conducting the learning process "(Law of Georgia on Higher Education).

Keywords: *Pandemic, Distance Learning, Learning Process, Covid-19.*

Introduction

Modern requirements and conditions of the 21st-century education system, technical progress, and technological processes create new problems and have a great impact on the process of reforming the current education in the country and search for ways for their implementation, which leads to the development of new information technologies. If we follow this and have the desire to achieve the estimated goal, it is necessary to combine existing pedagogical experience and scientific research with modern information technologies. This coordinated interaction will lead to qualitative changes in the educational space and bring to the surface a variety of new teachings and technologies that determine the future of education and build on the socio-economic development of our country, adaptation to the rest of the world. One of these forms is distance learning, which in modern pedagogical terminology is called Internet education. It is noteworthy that the field of Internet education today is a rapidly evolving technology, it receives a lot of attention in the world educational space and occupies a special place in government programs.

Based on the existing definitions and the personal sentence on the latest pedagogical technology of distance learning as a teaching of the XXI century, a Georgian scientist, Professor G. Chachanidze gives its definition and says: "Distance education is all forms of traditional education, school, extracurricular, correspondence education evening, etc. Qualitative change in organizational, methodological and technical support; it is characterized by evolution, is a natural phenomenon in the development of the information society and is realized through new information and telecommunication technologies". (Chachanidze 2004). Distance learning is included in the higher education system as a full-fledged, promising form of specialist training. The development of distance learning is an integral part of the higher education system and represents a transition from traditional models of student education to more modern modules. Receiving relevant, active, and constructive education based on joint work (Metreveli, 2005). Distance learning in Georgia has gradually become an object of fundamental research, which defines the systemic approaches and directions for the development of this form of a didactic model of teaching, its place, and its importance in the higher education system. Practice shows that today in the time of COVID-19 the role and value of distance learning is great in both higher education and schools.

Online Education as a Way to New Opportunities

Due to the pandemic, higher education institutions (HEIs) also faced a serious challenge, they had either to suspend the educational process or continue in safe conditions. To maintain the learning process, higher education institutions immediately switched to distance learning, which provided online learning. Various terms have been used concerning the new situation, the definitions of which have caused a wide discussion not only in Georgia but also in the world. Generally, even before COVID-19, there was no unified, universal understanding of terms related to non-traditional forms of education at the international level. Different terms are used around the world about forms different from traditional teaching-learning. These are e-learning, distance education/distance education, online education/learning, blended learning, hybrid learning. Contrary to the terms distance and online learning in Covid19, the term "emergency distance learning and teaching" was coined. This term is used by the European University Association (EUA) in the September 2020 summary about "European higher education in the Covid-19 crisis". The term "emergency remote teaching" focuses on a similar term in North America, where most universities conducted both traditional and online teaching before the pandemic. Thus, the transition of the traditional learning process to the online format under COVID-19 revealed differences between "existing online education" and "temporary online education". Distance learning - an educational process based on information-communication technologies, organized in the higher education institution of Georgia, for obtaining higher education at any level of higher education, using a part of the information or other means of communication, which does not provide Simultaneous presence of the student and the staff of the higher education institution in a designated place. To implement distance learning, it is necessary to properly plan the curriculum, to use appropriate approaches and methods for organizing and conducting the learning process" (Law of Georgia on Higher Education, 2004).

English-speaking countries have extensive experience in distance education, online, and e-learning. They use such forms of teaching as:

- distance education/learning
- e-Learning/eLearning)
- online learning
- blended learning
- hybrid learning

When talking about distance learning in higher education during emergency remote teaching, it is important to distinguish terms. For example, e-learning involves the use of information and communication technology (ICT) to enhance/enhance and/or support teaching in higher education. This includes a wide range of systems, from student use of email and online access to course work while studying on campus (school) to full online applications. E-learning can be divided into several different types. In all cases, the programs are implemented by a campus-based institution, but to a different extent use e-learning related to the Internet or other online networks. Web-supplemented program is focused on teaching in the audience but includes elements such as program outline, online access to lecture notes/notes, use of e-mail, linking to external online resources/links (Kupatadze, 2009). Web-dependent program requires students to use the Internet for key elements of the educational program, such as online discussions, assessment, or an online project/collaboration, but without significantly reducing the time spent in the classroom. In the mixed-mode program, the e-learning element begins to replace audience time. Online discussions, assessments, or project / collaborative work replace face-to-face teaching and learning, although significant on-campus (part-time) learning is part of this mixed form. When the program is offered in full online, students can study the program offered by the university from another city, country, or time zone. The OECD publication on COVID-19 in 2020 explains only the terms and forms of online and distance learning. However, it is noted that e-learning, online, and distance learning are not synonymous. According to the research conducted by Organization for Economic Co-operation and Development, online learning (often referred to as e-learning) involves the use of digital materials to support learning. It does not have to be done remotely. It can be used in addition to more traditional teaching methods in the physical classroom, in which case it is called mixed learning. Distance learning refers to learning that takes place away from the classroom or workplace. Traditionally, it included correspondence/correspondence courses without a direct link when the student contacted the institution by mail. Today, it mainly includes online education, where the teacher conducts lessons digitally and gives assignments (OECD, 2020). Based on the above, it is interesting to know what form of education was used by higher education institutions in Georgia.

If we look at the definition of terms given by the OECD, it becomes clear that the training was carried out on a hybrid / mixed model, as it included elements of different forms of teaching. Both distance and online, synchronous, asynchronous, and mixed learning models were used. It is preferable to distinguish between university and school education systems. In turn, the functioning of undergraduate and graduate / doctoral programs at the university level does not carry the same risk. Distance learning at the master's and doctoral levels can be done with the least loss (excluding access to literature that is not digitized and is necessary for research activities). Because the axis of gravity at these levels is shifted to the individual work of the student (postgraduate/doctoral student) and is aimed at developing the researcher's skills, he/she (the student) can (should be able to) acquire and direct his / her competencies independently, even in distance learning. In such a case, the role of the professor (mentor) may even be minimal; he should act as a kind of crutch and help to develop individual skills. Moreover, distance learning creates more opportunities for the development and implementation of joint inter-university programs even at different levels of the country. Both in teaching methodology and the amount and content of theoretical material. It is important to note that higher education institutions had more experience than schools in managing the learning process remotely. Even during the Soviet Union, several higher education institutions offered various courses and programs of correspondence education to the beneficiaries. Accordingly, there was the experience of curriculum modification and it can be said that it was a proven form of teaching. However, non-attendance training did not provide for e-learning, and through modified curricula for a certain period, student-professor / teacher synchronization or physical attendance was provided (Fedko, 1998).

Going to online training immediately was a temporary solution to an unexpected problem. Current educational programs are accredited to traditional, face-to-face quality assurance standards that do not provide for online learning. It is unreasonable to expect that training courses designed for traditional teaching will fully meet the requirements for online courses/modules and ensure the quality of teaching. During an emergency, online learning is likely to reduce the quality of teaching courses/modules. In other programs such as medicine and laboratory, if practical training, it has become highly complicated, or even impossible, to achieve some learning outcomes. In addition, there is no doubt about the fact that in some cases there were no necessary electronic manuals, other auxiliary electronic materials, and virtual laboratories. The software accreditation standard for the traditional teaching form does not preclude the existence of electronic textbooks, but it is not mandatory (Levites, 1998). The mixed-learning form also challenged professors who conducted lectures online and in some cases offline, as well as video recordings and video lectures for students. This format of teaching was also unfamiliar to some of the academic staff and created difficulties for them, in terms of efficient use of technology. Almost all higher education institutions experienced a shortage of e-learning resources, although all of them were able to increase access to e-learning resources in the school libraries. It should be noted that given the current situation, the libraries of all schools and not only schools, but public and private e-mails provided e-textbooks to students on an open-access basis. Private publishing houses have made a significant contribution to the effectiveness of the e-learning process in electronic form, which has also enabled pupils and students to access the literature published by them. We think that the role of the community in contributing to the promotion of the online educational process should be mentioned separately. Numerous public figures, writers, and professionals from various fields have launched a series of free webinars aimed at moving and unlocking real space locked in quarantine. We believe that public awareness and readiness for online education are one of the most important factors for effectively managing the online learning process. Any form of teaching requires the appropriate organization of the educational space. If in traditional teaching the decision to determine the number of students depends to some extent on the specific physical resources required for the program, online and mixed learning already brings in other factors. Physical space is either not needed or little used for these forms of teaching. Consequently, the material infrastructure for online or mixed learning takes a back seat, not counting online audiences. Instead, digital technology-based infrastructure is critical to online learning, it is necessary to develop infrastructure supported by digital technology and create a virtual learning environment. Including virtual labs; E-learning materials and textbooks, etc.; Lecture audio-video recordings, digital libraries, teaching management systems, etc. Due to the above-discussed issues, online educational space becomes even more important. Online and blended learning enables the virtual mobility of students and academic staff. Mobility is possible both abroad and within the country. At the same time, it is necessary to revise the existing regulations in the country to promote virtual mobility and recognition. As the observation showed, the quality of online education also largely depends on the country's economy, as economically strong countries have more effectively cope with the pandemic difficulties in the education system than countries where economic development is relatively low.

We can claim that adapting teaching methods to the needs of students is also crucial when teaching online. It is known that several faculties of higher education institutions offer specific educational courses, which do not only include lectures given in the auditorium but also are conducted in the form of practical training. These courses can be implemented in the space of higher education institutions, as well as in industrial institutions. In this case, various higher education institutions around the world offer their students virtual laboratories equipped with high technology, which was, unfortunately, lacking for Georgian students, as it was less accessible in our reality. In addition to practicalities, when we talk about teaching methods, we also mean the use of discussions, debates, independent and collaborative teaching methods, which should be tailored to the form of online teaching. While discussing the quality of education in general, we rely on the assessment carried out by educational institutions, therefore it is important that the assessment system of students, if not students, be adapted to the forms of teaching. Credits should be defined, or in the case of general education, not only points but also assessment indicators, according to which the learning outcomes will be monitored or evaluated.

The Pros and Cons of Online Education

As we have mentioned many times, the world's leading universities have long used the form of online teaching. Since the above form of teaching is functional accordingly, likely, it is also in demand. Otherwise, high-ranking higher education institutions would not spend financial or human resources on organizing and operating such training courses. Online education opens up new opportunities for people and allows them to get comprehensive information on topics of interest to them. For the most part, students, as well as pupils, have access to education at the world's leading universities, including free online courses (Silagadze, 2020). It is true that getting an online education, unlike traditional teaching, requires different skills from the student, but we think that this is one of the positive aspects when students start thinking about self-development and mastering new skills. They no longer spend time in one particular space, but rather master an interesting and highly practical course for them. It can be said that the information and materials provided on online educational platforms are much more informative than a thematic syllabus compiled by one of the educational institutions. Learners are also allowed to adjust their study schedule and time, which is practically impossible in terms of the audience. This means that a person is completely free to study the received materials and to redistribute the time of performing practical exercises (Vishtak, 2005). At the same time, if we consider the skills of the modern generation of technologies, unlike the older generation we can confidently say that the future is online education and relevant platforms), new communication and learning platforms will be ahead. On the positive side of online learning, in the case of traditional teaching, the educational process is usually adapted to the interests of the majority of the group, and the interests of the individual are less taken into account. In addition, when teaching traditionally, deviations from the main subject, non-thematic discussions, and mistakes in time and schedule are frequent. Online learning solves all these problems easily - you can buy the desired training course, listen to what and when you want, as many times as you want and did not depend on others, but take into account only your desires and interests. Unlike traditional forms of teaching, online learning is accompanied by comfort. Less time and financial resources are spent on transportation and transportation. It is also possible to create more comfort at home than in a formal setting. This applies to both the dress code and the learning process. Although initially, people had some discomfort from being at home all the time, today most recognize that crowded audiences and less comfortable environments prefer to study at home, in a quiet and cozy environment. Many also point out that they do not need to wake up early in the morning and think about not being late for a lecture, not being stuck in traffic, and so on. Consequently, for some students, getting an education at home was more of a comfort than an inconvenience. When receiving education in the traditional form, students often have to refuse a job because the work and educational process are largely inconsistent with each other. In addition to work, in most cases, the youth are also engaged in various activities, the implementation of which was also planned according to the schedule of the lecture course. We think that this kind of planning freedom is more desirable for students than adjusting to a specific schedule. While online education today is seen as a kind of window to new opportunities, it has some downsides as well. We will say again that in economically strong countries, online education may have fewer obvious disadvantages, but a country like Georgia has serious difficulties with online education.

Problems of online education can be divided into several groups. The main problem in our opinion is access to distance learning. In this case, we are talking about universal access to technology and the Internet. We think that in Georgia this issue is the most painful, given the number of vulnerable, large, and vulnerable groups living in the country. Also problematic is the scale of coverage of the country's territories via the Internet. The problem of access is exacerbated by the economic inequality between urban and rural students. It is also known that even more problems are characterized by the issue of proper operation of technologies in the highlands of Georgia, or even access it. Due to geographical, meteorological, or other peculiarities, technical defects caused by unforeseen natural events or other circumstances, as well as communication difficulties are common. We think that the biggest problem related to the competence of teachers deserves to be highlighted. Most of them did not have the practical skills of online teaching, which created a problem in both city and district schools. The selection of staff for online training in different countries of the world is done taking into account the specifics of the form of training, which we have completely ignored. The lack of technology use skills by professors/teachers has created difficulties in managing the online learning process. There have been cases of internet bullying and discrimination. Another problem that arose during the online training was the relevance of the assessment of academic results. It is known that academic performance is derived from assessment indicators that are related to the goals and outcomes achieved in teaching the subject. The lack of an adapted curriculum for online learning has led to the lack of an appropriate assessment system, while the assessment provided in a face-to-face learning format has made it irrelevant. That is why schools were advised not to evaluate students in the online teaching format with defining scores and to evaluate students' academic achievements only by developmental comments. Another problem was that teachers did not have guidelines or recommendations on how to change learning or achievement goals and objectives. Most of them tried to achieve the same results as provided in the previous ordinary teaching format and to achieve this they tried to increase the teaching time of students in the online space. This harmed the students, as the hours spent at the computer screen increased, which in turn created several accompanying psycho-emotional or physical health problems for the students-young people. According to experts, the future of distance learning is more related to the opportunities that have arisen. Particularly they state that during the pandemic, it was positive that a significant number of teachers acquired new competencies in the use of technology and children gained experience in distance learning. This means that even when the pandemic situation is over, teachers will have the opportunity to incorporate elements of distance education into normal school life. According to the thoughts of the leading expert in the field of education, S. Janashia distance learning was important in terms of revealing the daily activities of children and teachers. The parents may choose this interest, which will increase the demand for the school because they know more about the educational process (Janashia, 2017).

Conclusion

In the future, it is important to understand the perspectives of distance, online, and e-learning at the state level to use these forms of learning more effectively. Thus while talking about it and expecting distance learning to become either even more relevant over time, or maintain its relevance over a period, and relates to future technologies, it would be better to understand these perspectives on time perception.

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ELECTIONS DURING THE COVID-19 PANDEMIC IN POST-SOVIET COUNTRIES (AT THE EXAMPLE OF POLAND, ESTONIA, AND GEORGIA)

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Abstract

The article presents research on elections during the covid-19 pandemic. The pandemic is the number one challenge on the world agenda. Covid-19 has put countries in a state of universal crisis. The pandemic affected almost every area, including elections. According to the International Foundation for Electoral Systems, more than 60 countries have postponed elections due to the pandemic. However, there are, of course, countries where elections have not been postponed or canceled despite the pandemic. The planning elections, which usually require extensive person-to-person interaction, during the historical crisis. Officials worldwide have struggled with securing enough funding to implement safety precautions, expanding postal voting, and communicating changes with the public, among other obstacles. The article discusses, from post-soviet countries, the Polish Presidential elections and the Georgian Parliamentary elections, both in the pandemic. In addition, the example of Estonia as an innovator state is given. Polish Presidential and Georgian Parliamentary elections, both have taken place in the pandemic. The article is based on research methods established in political science. In particular, from research analysis of qualitative is used - content analysis. It includes research on literary material on elections during the covid-19 pandemic, reflecting on the transformation of events and processes on the issue, and drawing relevant conclusions.

Keywords: *Elections, Covid-19, Pandemic.*

Introduction

Pandemic has influenced the countries that have had elections or referendum in 2020. States began to think about the postponement of elections, and the part of the countries began to introduce the formation of the mutual forms to hold the planned elections. All this turned out to be a very difficult process. In the decision of each state, it should be extended to the safety of human life as well as the quality of democracy. Most importantly, the decisions made by the states should be relevant to their constitution to provide democratic institutions in the same way as in common conditions. According to the latest data, more than 70 states have postponed elections due to the Covid-19 pandemic. The decision on postponing elections, on the one hand, serves the health and life of people, however, on the other hand, it causes suspicion of the regular nature of the elections and the confidence of citizens' democracy. Experts suggest that during the pandemic, democracy can be reduced by the elections because their free and fair nature can be suspicious (International IDEA, 2021). To hold safe elections in the pandemic of conditions, the main obligation of the states became the health of the voters and election staff. To avoid the risk of spreading pandemic, the forms of voting, such as postal and el-voting ought to be used.

The Aim and Research Methods

The study aims of the research are to evaluate the impact of the pandemic in the post-socialist countries (Poland, Estonia, and Georgia), assessing the forms of favorable voting in the conditions of the pandemic, the amendments to the electoral legislation, the security standards developed by the countries. Discuss the works of existing international organizations, scientific papers, and various sources, to use the results of the analyses of various relevant institutions, referring to both: qualitative and quantitative methods.

Elections during the Covid-19 Pandemic and International Standards

Elections play a significant role in democracy, through which citizens elect their representatives of their country's management. In other words, the election is the basement of democratic governance. To demonstrate the will of the voters, the elections must meet basic standards anchored both at the level of national legislations and in acts of international reach.

The right to free elections is protected by the European Convention on Human Rights (Council of Europe, 1952). It is one of the most fundamental democratic guarantees against the abuse of political power. The ability of people to express themselves peacefully and to make their own choices at the ballot box is crucial to the stability of any society, as well as to the democratic security of Europe.

International elections standards are universal principles and guidelines to promote genuine democratic election processes and to protect democracy and human rights. According to internationally recognized principles, democratic elections are held following the electoral law, constitutional principles, universal, equal, free, secret, direct suffrage, and also and correspond to the principles of a democratic state based on the rule of law (NDI, 2013).

This, in turn, means that the election law should be relatively stable and should provide personal election rights, and represents effective procedural guarantees. In order to talk about democratic elections, these requirements should be implemented jointly, regardless of what conditions should be held.

The international standards of elections are shared by the countries discussed in this article. According to The Constitution of the Republic of Poland, the elections of the Presidency of the Republic of Poland, to the Sejm, to the Senate, and organs of local government shall be elected by the Nation, in universal, equal, and direct elections, conducted by secret ballot (The Constitution of Republic of Poland, 1997). In the Republic of Estonia, the elections are general, uniform, and direct. Voting is secret (The Constitution of Republic of Estonia, 1992). Voters in Georgia make free, equal, and direct suffrage (The Constitution of Republic of Georgia, 1995).

Based on the above, the countries faced a great challenge. The decisions adopted by the states should simultaneously ensure high standards of democratic values and the health of citizens.

Due to the current situation, the part of the countries decided to delay the elections, for example, Poland, where the 2020 presidential elections were held on June 28 instead of May 10. On the one hand, the revision decision of the crisis is protecting human health, on the other hand, the election is related to the threats, such as, with the expiration of the term of elected officials and parliamentarians, the legitimacy of the decisions made by them is suspected. It may be a violation of the fundamental rights of democracy, which means, that the state of emergency announced in many countries may become a weapon of power with authoritarian trends. In addition, the postponement of elections creates a dangerous precedent for states, which may be abused in the future to maintain power (IDFI, 2020).

Background of the pandemic, the countries had to deal with the risks of holding the elections. It is interesting how Poland and Georgia have provided safe voting on the pandemic, how governments worked on the pandemic management of the global perspective, what election technologies or measures are used and how Estonia is preparing for local elections.

Presidential Election in Poland During the Covid-19 Pandemic

The presidential election in Poland was scheduled for May 10, it was supposed to be the first presidential election in Europe since the day the pandemic was declared. However, the crisis caused by the coronavirus changed the situation. Because of lockdown, the election campaign has shifted to the media and the Internet. Campaigning in such conditions has become virtually impossible, except for the trip of incumbent President Andrzej Duda around the country, during which the state media covered in detail the fight against President Coronavirus. President Andrzej Duda (PiS) found himself in the spotlight, where he demonstrated effective management against the Covid-19 pandemic, which further increased his popularity.

In Poland, an active discussion was conducted on the elections to be held in pandemic conditions. The ruling party (PIS) presented a month before the elections, made the draft law on the expansion of voting. The ruling party has resisted opposition parties they thought that the postal voting needed a lot of time and they could not provide the election of democratic standards. The Sejm approve the bill, but the Senate rejected it, where most of the votes belong to the opposite parties. The Polish government also discussed an alternative solution to the current president for 2 years, but this draft law failed. The draft law was undemocratic, as the Polish presidential election should have been free, fair, and safe (Human right, 2020).

According to the mentioned bill, the postman would become election agents and social distances and lock-down measures, there was no conviction that the ballot papers were effectively delivered to citizens. The postbox would be turned into a mobile ballot box, but the law did not explain where and how can citizens place the ballot boxes. The new law did not provide any of the ballot papers in the polling stations and a sheet of paper or counting the votes could have been lost, because of the procedures. Finally, as it is noteworthy, the poles living abroad or the blocked covid-19 crisis of the country were not sure that they would receive ballot papers and were able to get them on time in the counting centers. Overall, access to all citizens will not be guaranteed and the universal character of the elections will be violated. The entire process of voting correspondence can be void (Institut Montsigne, 2020).

The initiative of the Polish government to fully switch to postal voting only during the pandemic presidential elections was highly criticized in the OSCE report. (OSCE, 2020) The report also referred to the Code of Practice for Elections prepared by the Venice Commission (Venice Commission, 2002). The principle of democracy requires that voting at the polling station remains the main way to demonstrate direct democracy. Citizens' choice of political choice by post (including electronically, mail-in-voting), which is considered independent of the pandemic in some European countries, is considered and should remain only as an alternative voting method (OSCE, 2020).

Due to the severe epidemic situation in the country, elections were held on May 28 instead of June 28. Finally, the Polish Sejm approved a law that would allow a mixed vote in the presidential election. Voters were able to vote according to their will, at the polling station, or by mail. The first round of the presidential election in Poland was held on June 28, with polling stations opening at 07:00 and closing at 21:00. There were restrictions on the number of people who could enter the polling station. Voters should observe a distance of two meters from each other and cover their faces, face masks could only be removed temporarily to identify voters. Voters were also advised to take their pens and use disinfectants when entering polling stations (OSCE, 2020).

There were 11 presidential candidates in the elections. Outgoing President Andrzej Duda (Law and Justice, PiS) won 43.67% of the vote, and Rafal Trzaskowski, Mayor of Warsaw and former Minister of Administration and Digital Affairs (2013-2014), candidate of the Civic Platform (PO) led by Grzegorz Schetyna, who obtained 30.34% of the votes. The third place was an independent candidate, journalist Shimon, who received 13,85% of the votes. The rest of the eight candidates could not accumulate a double-digit indicator. The second round was held on July 12, where Andrzej Sebastian Duda received 51,03% of the votes and won.

According to the 2020 ODIHR Special Election Assessment Mission Final Report Despite shortened timeframes, the election administration fulfilled it is mandated professionally and met all legal deadlines related to the technical preparation of the election. Notwithstanding the changes to the composition of the NEC, which took effect following last year's parliamentary elections, the election administration at all levels enjoyed overall confidence among stakeholders. Short deadlines for delivery and retrieval of postal ballots, especially concerning the second round, were a logistical challenge, in particular regarding out-of-country voting. Persons with disabilities could vote in person, via mail, or by proxy (OSCE, 2020).

Georgian Parliamentary Election During the Covid-19 Pandemic

Finding out whether the pandemic situation allows elections to be held safely, or whether elections should be postponed has become a challenge for many countries during the pandemic, including Georgia. Due to the pandemic, the strict quarantine regime and the state of emergency were lifted on May 22, and the next parliamentary elections were scheduled for October 31 by the decree of the President of Georgia in August 31 (Decree by the President of Georgia, 2020).

As a result of long-term negotiations between the ruling party and the opposition, for the first time in the history of Georgia, the parliamentary elections were held with a distribution of 120/30, where 120 seats were distributed proportionally and 30 by the majority. This change serves the diversity of the political environment in the country.

It is important that the government started the discussion in time and worked on adapting to all possible scenarios of the election process, which included conducting previous election campaigns through social media and other remote means. The main focus was on Election Day to ensure that the elections were conducted in full compliance with democratic principles, as well as to protect voters, election officials, observers, and all parties involved. Regarding the safe conduct of elections in the pandemic, the Central Election Commission of Georgia, in consultation with the parties involved, based on international experience and under the current pandemic situation in the country, has developed a resolution on the Epidemiological Protocol for the Election Day. The protocol described in detail the sanitary-hygienic requirements to be fulfilled by persons in polling stations. Every person`s temperature was checked in the polling stations, except the voters. Wearing a face mask was mandatory. For identification, voters removed their facemasks twice, first in the polling station when presenting a Georgian citizen ID card or Georgian passport to a member of the commission regulating the flow of voters; When checking compliance with the data (CESKO, 2020).

The first and second rounds of the parliamentary elections in Georgia were held following the abovementioned protocol. Polling stations opened at 8 p.m. Voters had until 20:00 to make their choice. It should be noted that the Central Election Commission for October 31, 2020, parliamentary elections registered 50 electoral subjects (48 parties and two blocs of seven parties), which offered voters a wide variety of choices in the form of parties and candidates. In the proportional part, the Georgian Dream party won the largest share of the vote, 48%, while according to the voters, the United National Movement - United Opposition "Power is in Unity" was in second place with 27%. As for the majoritarian part, on November 21, the second round of elections under the majoritarian system of the Parliament of Georgia was held in 17 majoritarian constituencies, following the sanitary-hygienic requirements and preventing the spread of other Covid-19 pandemics.

The pandemic has made it clear that traditional electoral processes need to be improved. Although the Georgian government had more time to implement the new voting mechanisms than Poland did to implement the postal election system, it still failed to introduce innovations in Georgia. There was an opinion on the prospect of e-voting, given that a significant part of the required IT infrastructure has already been introduced and is operational in Georgia. In particular, we are talking about an electronic ID card, the identical technology of which has been used since 2005 to conduct online elections in Estonia. However, cybersecurity issues need to be considered in this case. It should be noted that electronic technology was used in several precinct election commissions in the 2018-2019 by-elections under the auspices of the pilot program in the election process in Georgia.

It is significant to note that the draft law on electoral reform is currently being discussed in Georgia, one of the points of which is Includes the introduction of electronic voter registration and ballot counting system.

Electronic Voting in Estonia, Preparing for Local Elections 2021

Estonia is a poster child for a successful post-communist transition to democracy. Corruption and poverty reigned in the country in the early 1990s. However, the Soviet Union soon emerged as a state with a digital revolution. As a result of a lot of hard work, the Estonian healthcare sector is electronic. Overall, 99% of public services in this Baltic country are digital (Techrepublic, 2019).

It is noteworthy that e-voting has been introduced in Estonia, the local self-government elections in Estonia in 2005 were different from all previous elections in the world. Estonia became the first country to cast its ballots online or by "electronic voting" throughout the Country. The number of e-voters was only 9,317, or 1.9 percent of the electorate. In 2019, it received 247,232 votes online - or 43.8 percent of the vote. The system will certainly make it easier for them to hold a pandemic in the fall of 2021, however, with more than half of the electorate voting in the polling station. That is why the issue of elections is being actively discussed in the country (Marcus, 2020).

On the one hand, the ruling party believes that the postponement of the elections can only be considered in extreme cases and it is not in favor. Its representatives hope that online voting and vaccination means holding elections. On the other hand, there is a sense of postponing the elections, as the current legislation does not provide for fully electronic voting, if the epidemic situation in the country worsens, it will create problems with the electoral process.

State Electoral Office (VVK), the body, which is responsible for organizing all four types of Estonia Regular Elections - Renikogu, Local, European, and Presidentship, is already working on how the local elections of October will be organized by the direct and presidential elections in the covid-19 Pandemic.

It should be remarked that the Information System Agency in Estonia, which takes care of the technical and cybersecurity aspects of Internet voting, writes in its book, that it hopes to start "m-voting" in 2021. Completely safe technology and voting can be used in the 2021 local elections, Estonia will become a leader at this level in this field. Some academics and politicians are trying to improve transparency in this Internet-voting system by applying the principles of blockchain - distributed ledger technology - to create a database that is decentralized and verifiable. Potential hackers will need more than half of the total computing power to intervene in encryption, making it very expensive (invest in Estonia, 2020).

Conclusion

In the modern world, holding elections to high democratic standards is one of the major developments. Among them are the former socialist countries, which after a difficult path were formed into democratic states. Due to the pandemic, the countries that had to hold elections in these conditions found themselves in a particularly difficult situation. At the same time, they must uphold the two most important things, the right to life, the right to health, and the fundamental values of democracy. Postponing elections may have been the only solution in countries where election dates coincided with the most critical periods and the government suddenly had to deal with the challenges of the pandemic (i.g. Poland). During the corona-virus period, the main recommendation of epidemiologists is social distancing and avoidance of crowded places. Consequently, skepticism arose about the existing, traditional electoral model, and more actively began to talk about the need to create alternative models, such as the introduction of electronic voting and postal voting systems.

Analyzing the examples of Poland and Georgia, it became vivid that with an adequate assessment of the situation in the country and following the available resources, proper planning is possible to hold elections in the pandemic. And, the example of Estonia once again clearly has shown us the advantages of introducing innovative technologies. Last but not least, the processes conducted by each state should serve to ensure the most transparent, free, and equal elections.

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ECONOMIC STRATEGIES BASED ON COVID-19 IN THE PROGRAM DOCUMENTS OF GEORGIAN POLITICAL PARTIES (ON THE EXAMPLE OF 2020 ELECTIONS)

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Abstract

COVID -19 has harmed the entire contemporary global economy. The result of it has been reflected in most of the courtiers. Several targeted measures have been proposed by international organizations to reduce the existing negative economic impact. Countries at the legislative level seek to promote sectors that are affected by the coronavirus. On March 14, 2020, the Government of Georgia with tight collaboration with the economic team presented a certain plan of measures to stimulate the country's economy. The government started fighting on two main fronts- the health and life of citizens, the economy, and social security, all these were exactly during the preparations for the 2020 parliamentary elections, the entire pre-election process. Thus, the deals with the current situation and presents the election documents of the main political parties that gain a place in the Georgian parliament. In this case, we have to highlight that the parties offered their versions of saving the country's economy. The issue is considered relevant because it presents the views of the parties on how to ensure the economic growth of the country and the priority of their economic strategy.

Keywords: *Georgia, COVID-19, Economy, Parties, Elections, Programs.*

Introduction

At the modern stage, COVID-19 has changed the lifestyle of the world's population worldwide. The virus, which appeared in China at the end of 2019, was declared a pandemic in a few months, on March 11, 2020, by the World Health Organization and became a threat not only to the world health system but also to the economy (COVID-19 Coronavirus Pandemic, 2021). The current situation has dealt a significant blow to several areas of the world economy. Thoughts and fears about both the current and the impending economic crisis in many countries.

Generally, the situation in the world is dire, especially for developing countries. The economic situation in Georgia, like most countries in the world, is acute and has been triggered by some processes, tourism restrictions, isolation, and several related problems, including the questions about the country's economic situation, an economic priority, and the initiatives of overcoming the economic collapse. Therefore, the study of the issue is very relevant for the Georgian reality, both in the everyday life and pre-election process.

The paper presents the situation in the pre-election process by examining the existing documents and empirical material by the method of situational analysis of the processes; the main actions of the country's authorities to manage the current economic situation; the views of the political parties in this regard, as the recommendations and initiatives developed in the paper, and if taken steps and measures by the government, can work in the favor of the Georgian reality.

The paper deals with the main research question: which refers to the reality and activities and attempts of the government and the political parties involved in the pre-election process to improve the situation, to receive the votes, considering the existing reality - to offer their versions of economic difficulties and regulation.

Georgia on the Background of the Existing World Processes during Covid-19

The current world situation, the threats posed by Covid-19, has endangered the population and economy of many countries (UN Sustainable Development Group, 2020), therefore, the agenda for specialists, everywhere, including in Georgia, has become a proper analysis of the situation and search for solutions. Lado Papava, professor, an economics expert, said: "Coronavirus will soon become an „economic pandemic". No one knows how long this crisis will last, because economics has become is a hostage of medicine"(Kakulia, 2020).

From the point of world experience, we can recall several opinions were expressed. Particularly, they stressed that such a situation would slow down the pace of negotiations on free trade agreements; the global crisis is highly likely to have winners and losers; a pandemic may be in favor of certain industries if they adapt to changing market demands (Minashvili, 2020).

It is worthy to say that the countries with the highest prevalence of Covid-19 will receive the main economic blow. Another crisis countries will be those that mostly dependent on tourism, oil, and other exports. According to many experts, the current state of the world economy is equated to the crisis of 2008-2009 (NDI and UK Aid Direct, 2021).

In addition, the development of the tourism sector must be directly related to the regulation of the economy. In this regard, Secretary-General of the World Tourism Organization (UNWTO) Z. Pololikashvili highlighted that millions of worldwide jobs depend on tourism (Pololikashvili, 2021).

According to the World Tourism Organization (UNWTO), instead of the expected tourism growth in 2020, traffic will decline, leading to a further setback in the sector, which will have a severe impact on the economies of tourism-active countries such as France, Italy, Spain, etc.

In this regard, Georgia is not an exception, here several factors have complicated the situation during the pandemic. The closed borders for tourism caused by COVID-19 in the world have naturally affected Georgia as well. Here it should be noted that in recent years, tourism became one of the most important sectors for the Georgian economy and on which the restaurant business, trade turnover, etc. rely.

The international situation, mainly the situation of major investor countries where the pandemic is raging, hinders cooperation, in this regard, international trade is also complicated, however, due to the location of Georgia, the development of the country's economy is directly related to the smooth and efficient operation of transport sectors, which is hampered by the pandemic. Consequently, the country's economy faces some challenges, which have aggravated the social background in the country (Economic Policy Research Center, 2020).

As soon as the situation in Georgia worsened, specialists began to take steps and measures to save the country's economy. Recommendations were related to tax incentives; medium and small-scale entrepreneurial assistance;

payment of loans were stopped; banking assistance; the tourism-related sector needed significant assistance as well, where it was difficult to find ways out of the situation.

To regulate the current situation, a Coordination Council was established in Georgia on January 28, 2020, here we have to say that on February 26 the country had the first infected and on March 21 a state of emergency was declared. Initially, two main directions of the Council's work were identified: citizens' health and saving the Georgian economy (Bochorishvili, Kavtaradze, 2020).

The first steps to help the citizens started on March 13, were significant: it was an aid in terms of utility bills; the insurance of price increase for 9 basic products. The government also did its best to help entrepreneurs, making several important decisions that are critical and essential for companies and entrepreneurs.

The government of the country was well aware of the importance of one of the most significant and vital components such as agriculture and therefore took care of it as well. While referring to agriculture we have to say that e its function and role has become clear today, the fact is that it must meet the demand generated in the country, for basic food products, therefore, the development of local production becomes extremely important (Government of Georgia, 2020).

The Government of Georgia in March 2020 developed the measures to support the economy to mitigate the negative impacts caused by the spread of the coronavirus, which provided several benefits to businesses, citizens, companies engaged in tourism activities; hotels and restaurants, travel agencies, transport companies, excursion activities, organizers of cultural and sports events, etc.

It is worth saying that, the tourism industry was added to the vaccination priority groups by the decision of the Coordinating Council. Particularly, legally registered travel companies, accommodation, and catering facilities have the opportunity to undergo pre-registration for voluntary vaccination. Georgia is the first country in the region to claim that the tourism industry will be the safest and is ready to host international tourists with vaccinated staff employed in the tourism industry.

We have to highlight that Georgia is actively involved in the UN Development Program, which helps to overcome the problems caused by the coronavirus in the country (UNDP-Georgia, 2021). However, despite the acute international economic situation, and many measures taken by the government, the economic situation in Georgia is still very tough.

Policy Documents of Political Parties on Economic Strategies of 2020

In the pre-election process, political parties always try to adapt their action plan, programs to the topics relevant to the country, to win the hearts of the voters. Naturally, the parliamentary elections held on October 31, 2020, were no exception, especially because the spark of tension in the society during the pre-election process was very high.

Therefore, it is obvious that in the period of acute economic crisis, the most significant issue for the political parties was the main problem of the country - the regulation of the economy and its development. Thus, it is worthy to know their economic strategy, the priority, specific initiatives. All these are presented in their official documents and on a special website within the project funded by the Embassy of the Kingdom of the

Netherlands. It provides information to the public as well as researchers to make an accurate assessment based on a study of awareness of how to overcome the existed hardships (EECMD, 2020).

The paper deals with Political parties that overcame the set minimum of electoral barriers, in the parliamentary elections 2020. Totally there were nine political entities and political unions: 1. "Georgian Dream - Democratic Georgia" (gathered about 48.22%); 2. Bloc "United National Movement - United Opposition" Power is in Unity "(27.18%); 3. "Bakradze, Ugulava, Bokeria - European Georgia - Movement for Freedom" (3.79%); 4. Block "Giorgi Vashadze – Political Platform Strategy Aghmashenebeli" (3.15%); 5. Lelo-Mamuka Khazaradze (3.15%); 6. "Davit Tarkhan-Mouravi, Irma Inashvili - Alliance of Georgian Patriots" (3.14%); 7. "Girchi" (2.89%). 8. "Aleko Elisashvili - Citizens" (1.33%); 9. "Shalva Natelashvili - Georgian Labor Party" (1.00%) (Darchashvili, 2021).

The ruling political force, the Georgian Dream - Democratic Georgia, promised to maintain the leading reforms in the Eastern European region in case if it comes to power again. The leaders say that they would continue reforms for economic progress to ensure economic stability so that the country could return to the pre-pandemic situation by 2021. Among the promises the most important were: the inviolability of property; principles of a free-market economy; low level of budget taxes; funding private sector support projects; intensification of the country's foreign economic relations; completion of reforms in the law on entrepreneurs, energy and tax disputes; increase the Georgian economy at least for 40% by 2024, create an additional 200 thousand jobs; which means more prosperity for each family and the integration of the Georgian economy with the European Economic Area.

The United National Movement - United Opposition, which is in second place in terms of votes in the elections, stated that its goal is: the economic empowerment of families and that Georgia would become the fastest growing economy in the world; investments in the Georgian economy have created hundreds of thousands of new jobs; income taxes would be abolished, low-interest rates on loans and would create more income for families and businesses; business and private property would be protected; financial police would be abolished and economic prosecution for economic crimes would no longer exist. According to their plan, as a result of the implemented reforms, the economy will recover, businesses will be able to develop rapidly, which, naturally, will create new employment opportunities in the country; most disputes between the state and the private sector will be eliminated and a fair, simple and secure business environment will be created; moreover, it will increase the country's investment reputation and attractiveness, which would facilitate the inflow of investments.

The European Georgia - Movement for Freedom political team believed that lowering taxes and budgeting was necessary to improve the economy, with less money for bureaucracies, more money for people and businesses. European Georgia's specific initiatives were: reduction of excise duties on gasoline, diesel, and gas, which would hinder the rise in prices; as well as considering several processes to reduce taxes; return of government-owned lands and property to the people; Free Trade Agreement, attracting international funds and investments; leaving more money in the district budget; develop mechanisms to prevent the devaluation of the national currency; creation of jobs.

Political Platform "Strategy Aghmashenebeli" says Georgia should reduce its import dependence and intensify its export opportunities; this required the complex development of sectors of the economy. Manufacturing, agriculture, service economy, tourism, knowledge economy, etc., should be developed in stages, in harmony with each other; according to their plan, 9 different industrial parks of different profiles should be built in different regions of Georgia. It will help to attract investments, arrange infrastructure; launching enterprises, producing products; implementing this plan would reduce import dependence and increase exports, strengthen the Georgian currency, create productive jobs places, and reduce poverty in the country.

The goal of the political party "Lelo" was to create a strong middle-class society in the country because the middle class is the backbone of the country and a solid foundation for democracy. To achieve this, they considered it necessary to: strengthen small and medium-sized businesses; developing new mechanisms for attracting investment; turning peasants into wealthy farmers; doubling GDP; transform Georgia into a regional center in the field of finance, tourism, education, industry, and innovation; for it, they have established the medium and long-term plans and acted according to it, with the aim achieve country's high rates of development.

The political union "Alliance of Patriots of Georgia" presented quite interesting promises to the population. They emphasize that professional staff should be in a responsible position; the priority for the state should be people and taking care of them. Accordingly, the issue of improving various spheres of life will be discussed in detail. They planned to achieve the welfare of the community by promoting the local economy.

The new "Political Center - Girchi" believed that to overcome the difficulties in the country, it is necessary to transfer state-owned property to the people. That this property is the belongings of the citizens and should be distributed equally among them. Only in this way is it possible for citizens to get rich quickly and, at the same time, incorporate large amounts of new real estate into the economy. Also, for the recovery of the economy, it is necessary to reduce the tax burden (by 30-50%) and restrictive regulations. This should be followed by a sharp reduction in bureaucracy, which will give people an incentive to start activities.

The priority in the economic strategy of the party "Aleko Elisashvili - Citizens" is to create the most attractive environment for foreign investment in Georgia; they state that in the conditions of the pandemic, foreign direct investment has decreased, tens of thousands of jobs have been lost. Under these conditions, in the point of view to develop mountainous regions, the state should have two types of economic plans: short-term and long-term. According to the short-term economic plan, taxes should be reduced as much as possible: for small and medium-sized businesses; according to the long-term economic plan, the most secure investment environment should be created in Georgia. For this, it is necessary to work in three directions: 1. a high standard of democracy must be established in the country; 2. a pro-Western course must be declared; 3. an independent judiciary should be established.

The economic strategy for the Labor Party is to fight the oligarchy and dismantle the monopolies, both at the legislative and executive levels; creating a healthy competitive environment by banning non-core activities for banks; increase transfers from the central budget for infrastructure projects in the regions and arrangement of tourist spaces; establishing tax and credit benefits for small and medium-sized businesses; implementation of large - scale programs to support cooperative farms.

Political parties with program documents, in addition to influencing the electorate, also cared about the future of the country. However, none of them is focused on risk factors caused by COVID.

Conclusion

Based on the assessment of the current situation discussed in the paper, the difficult economic situation in the world and Georgia, we can say that unfortunately the number of visitors, foreign direct investment, export-import is significantly reduced since March 2020. Moreover, the external debt of the country has increased during this year.

Due to the world's unsteady current situation, it is difficult to make any kind of forecast, however, we can state that the economic situation in Georgia is unstable and difficult. The Georgian economy depends on the world's current situation, especially, on the main directions of the Georgian economy - tourism, investment, trade, etc. Political parties, while discussing the economic issue in their program documents and giving promises, could not even imagine that the pandemic would last so long, and therefore making it almost impossible to fulfill their promises in the current conditions.

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GLOBAL POLITICAL ECONOMY AND POWER POLITICS

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Abstract

The COVID-19 pandemic may be a crisis like no other. It looks like a war, and it is in many ways. People are dying. The medical staff is on the front line. Those working in essential services, food distribution, delivery, and utilities are working overtime to help with the effort. And then there are the hidden soldiers: those fighting the epidemic confined to their homes, to completely contribute to production. According to the World Bank (2020), the Covid-19 pandemic is destabilizing the planet economy and would lead it to a recession thanks to the decline in activity observed in China (during the first quarter of 2020) and which should impact other countries hit by the pandemic, in particular the USA and the euro zone. We have also witnessed the fall in the prices of raw materials (especially the prices of oil and those of industrial metals) and a high volatility of the world stock markets caused by the uncertainties concerning the duration and the effects of this pandemic, not to mention the Depreciations of the currencies of emerging and developing economies as well as the outflows of capital from these economies (other than China) exceeding those observed at the worst time of the financial crisis of 2008.

Keywords: *COVID – 19; Global Politic; Power Politic; Economic Policy*

Introduction

During a war, massive expenditure on armaments stimulates economic activity and special provisions guarantee the delivery of essential services. In the current crisis, things are more complicated, but the increased role to be played by the public sector is a common element. At the risk of oversimplifying, two phases should be distinguished for the action of public authorities:

First phase: the epidemic is in full swing. To save lives, mitigation measures dramatically reduce economic activity. This phase can be expected to last at least one or two quarters.

Second phase: recovery after the war. The epidemic is under control with vaccines or drugs, partial herd immunity, and containment measures that persist but less disrupt activity. As the restrictions are lifted, the economy begins to function normally, perhaps hesitantly.

The epidemic is under control with vaccines or drugs, partial herd immunity, and containment measures that persist but less disrupt activity. As the restrictions are lifted, the economy begins to function normally, perhaps hesitantly. The pace of recovery depends to a large extent on the measures taken during the crisis. While these measures ensure that workers do not lose their jobs, that tenants and homeowners are not evicted, that businesses avoid bankruptcy, and that commercial networks are preserved, the turnaround will occur sooner and more peacefully. This is a major challenge for advanced countries where the state can easily finance an extraordinary increase in spending even as revenues decline. The challenge is even greater for low-income countries and emerging countries facing capital flight: these countries will need donations and funding from the international community. Unlike other economic downturns, the decline in production during the current crisis is not driven by demand: it is an inevitable consequence of measures being taken to limit the spread of the disease. The role of economic policy is therefore not to stimulate aggregate demand, at least not immediately. Economic policy has three other objectives:

- Guarantee the functioning of essential sectors. Resources for testing and treating COVID-19 need to be increased. Regular health care, food production, and distribution, and essential public services and infrastructure must be maintained. The state could even intervene in an intrusive manner to supply essential goods by resorting to powers of war which allow it to prioritize public contracts relating to essential means of production and final goods, to reconvert industries, or to carry out selective nationalizations. Examples include the rapid confiscation of medical masks in France and the activation of the defence Production Act in the United States to ensure the production of medical equipment. Rationing, price controls, and rules against storage could also be justified in the event of extreme shortages.

- Provide sufficient resources to those affected by the crisis. Households that lose their income directly or indirectly as a result of the containment measures will need state help. This support should help people stay at home while keeping their jobs (state-funded sick leave reduces the displacement of people, and therefore the risk of contagion). Unemployment benefits must be increased and extended. Cash transfers are needed for the self-employed and the unemployed.

- Avoid excessive economic disruption. The network of relationships between workers and employers, producers and consumers, as well as lenders and borrowers, should be preserved so that business starts up when the medical emergency subsides. Business closures would mean a loss of organizational know-how and shutdowns of long-term productive projects. Disruptions in the financial sector would also exacerbate the economic difficulties. Governments must provide exceptional assistance to private enterprises, including wage subsidies, with appropriate conditions. Vast loan and guarantee programs have already been put in place (the risks being in absolute terms borne by the taxpayers) and the European Union has facilitated direct injections of capital into companies by relaxing its rules relating to financial aid. 'State. If the crisis worsens, one can imagine the establishment or expansion of large state-owned holding companies that would take over struggling private companies, as was the case in the United States and Europe during the Great Depression.

The urgency warrants greater public sector intervention as long as the exceptional circumstances persist, but this intervention must be transparent and be accompanied by clear sunset clauses. Support measures for households, businesses, and the financial sector will relate both to their liquidity (supply of credit, deferral of financial obligations) and their solvency (transfer of real resources).

It will be necessary to manage several arbitrations. If transfers or soft loans are made to a large corporation, they should be conditional on continued employment and limited executive pay, dividends, and share buybacks. In the event of bankruptcy, shareholders would share some of the costs, but there would also be considerable economic disruption. An intermediate option would be for the state to take a stake in the company. When liquidity is the issue, credit from the central bank (through an asset purchase program) or other state-controlled financial intermediaries (through loans and guarantees) is effective in previous seizures. There are also many practical questions when it comes to identifying and assisting small and medium-sized businesses or the self-employed who are hard hit. For them, direct transfers should be considered, based on taxes that have been paid previously.

These national measures must be underpinned by continued international trade and cooperation, which are essential to overcome the pandemic and maximize the chances of early recovery. It is necessary to limit the movement of people for containment. But countries must resist the temptation to stop trade, especially in health products and the free exchange of scientific information. It will also be difficult to promote recovery, not least because public debts will be higher and new parts of the economy may be under state control. But relative success in the first phase will ensure that economic policy can once again function normally. Budget measures to stimulate demand will become increasingly effective as more people are allowed to leave their homes and return to work. It was predicted before the pandemic that interest rates and inflation would be low for a long time in most advanced countries. Preventing major disruptions to supply chains should prevent inflation during emergencies and recovery. If the measures taken to limit the spread of the virus are effective, the necessary increase in the public debt ratio will have been substantial, but interest rates and aggregate demand will likely remain weak during the recovery phase. Under these conditions, fiscal stimulus will be appropriate and very effective in most advanced countries. And that will make it easier to abandon the exceptional measures that were adopted during the crisis.

Speaking of volatility on financial markets, in its report on financial stability in the world, the IMF (2020c) notes that the Covid-19 pandemic has significantly impacted the global financial markets : there is a strong fall in stock prices, widening credit spreads in credit markets (especially risky segments), falling oil prices , lower yields on safe-haven bonds with the race to secure assets. quality, etc. There was a worsening of the variation in asset prices which quickly contributed to tightening financial conditions. There were financial strains in the main short-term funding markets and a sharp deterioration in market liquidity. Regarding the consequences of the Covid-19 crisis on the banking or economic system, most researchers agree on the possibility of financial instability over time, the absence of appropriate response measures and effective, which would include: fear and uncertainty (Albulescu C., 2020b and 2020c; Mann C., 2020; Baker S. et al., 2020), the absence of clear and honest communication from the authorities around the pandemic (Weder M., 2020; Ceccheti G., 2020), the lack of communication between the supervisory bodies and the banks (Tobias and Aditya, 2020), the lack of liquidity (Weder , 2020; Beck, 2020;), the non-assistance of vulnerable firms and households (Boone L., 2020; Wren-Lewis S., 2020), inadequate response measures (Beck, 2020), the solvency problems both for firms or households and for banks resulting in an increase in non-performing loans (Beck, 2020), the ef feces of contagion following the interconnection of banks (Ceccheti, 2020), mismanagement of credit risk (Tobias and Aditya, 2020), lack of international collaboration of national regulators (Tobias and Aditya, 2020;)

As for Africa, the World Bank (2020) notes that the Covid-19 pandemic is a crisis on top of many other crises, including locust invasions, drought, change climate, fragility, conflict, violence, and underdeveloped food markets. World Bank experts point out that, in general, weak external demand, the sharp drop in commodity prices, and the upheaval in the tourism sector - resulting from the Covid-19 crisis - would have a negative effect on tourism. economic activity in sub-Saharan Africa. They also specify that Africa is characterized by the precariousness of most jobs, the large size of the informal sector (89% of total employment), the limited coverage of pension and unemployment insurance schemes, and the predominance of micro, small and medium enterprises (90% in business activities). These problems facing the African continent could call into question the effectiveness of the measures taken to limit the spread of Covid-19, in particular containment.

Main characteristics and prospects of the Congolese economy before Covid-19

Regarding the Congolese economy, it should also be noted that the Covid-19 crisis is likely to further deteriorate the economic fabric of the country, in the absence of response measures capable of guaranteeing an economic recovery and sustainable growth. in the postCovid-19 period. Indeed, the DRC has a poorly developed industry and derives most of its wealth from the exploitation of minerals(wholesale and retail trade also) which constitutes the main activity of the country, which operates several others. sectors and provides the foreign exchange reserves essential to guarantee the equilibrium of the foreign exchange market. Between the end of December 2019 and March 2020, with the slowdown in the Chinese economy, the price of copper and that of cobalt fell by 15.21% and 3.20% respectively.

The fall in commodity prices weighs negatively on the Congolese economy.

There are more and more tensions in the goods and services and foreign exchange markets, budget deficits limiting the State's room for maneuver in the response against Covid-19, declines in imports and exports, a contraction (stop) economic activity (both in the formal and informal sectors) with containment measures, the decline in purchasing power and the worsening of poverty, etc. As with any exogenous shock that the Congolese economy would face, in particular, the financial crisis of 2008 or the fall in the price of raw materials recorded in 2016, the channels of transmission of the effects of the shock of Covid-19 on the Congolese economy are not difficult to trace. Indeed, by destabilizing China and the world, the Covid-19 pandemic should lead in the DRC to the deterioration of the balance of payments, through the decline in trade or the country's transaction volumes with the outside world (decline in financial flows, the volume of aid and foreign direct investment), in turn leading to the fall of foreign exchange reserves, the accentuation of depreciation and inflation; the decline in the country's exports (negative shock to the mining sector), with the drop in world demand for minerals (especially Chinese demand) and commodity prices, which should reduce public revenues and increase deficits public funds in a context of increased government spending, all of which should result in the acceleration of inflation fueling uncertainty, the instability of the macroeconomic framework, the deterioration of household well-being (drop-in), the contraction of economic activity and the increase in unemployment. Faced with this Covid-19 crisis, the absence of a vaccine until these days (research around the vaccine continues, although not unanimously, especially in the African continent; the virtues of " artemisia "being tested), public authorities around the world are expected to adopt response measures against the said pandemic. According to McKibbin (2020), because of its multisectoral effects, the health shock of Covid-19 requires the mobilization of monetary (to support demand), budgetary (to support production and vulnerable households), and health policies. Thus, to limit the negative socio-economic effects (especially on the financial or banking sector) of the Covid-19 crisis, some researchers (Tobias and Aditya, 2020; Wren-Lews, 2020; Cochrane, 2020; Cecchetti and Schoenholtz 2020; Beck, 2020; Weder, 2020; Boone, 2020; Voth. 2020) have proposed response measures, including containment and social distancing; budget support (tax breaks, direct subsidies or paid in cash and kind free of certain basic services, etc.) in favor of employees and economic agents (households, businesses) in difficulty to repay their loans or finance their activities; the easing of monetary policy, the acquisition of various assets and the provision of liquidity (raising the amount or extending the maturity of refinancing operations, widening the range of collateral accepted, reducing reserve requirements, etc.), the financial system to cope with financial constraints and support credit to the economy; the use of loan restructuring by banks for households and businesses that are solvent and in difficulty to repay their loans; clear and honest communication from the authorities around the pandemic; regular and transparent communication from the monetary and regulatory authorities; the coordination of economic policies and the free movement of goods and capital in regional economic communities; the international collaboration of national regulators; financial support from the international community to the most affected countries and debt restructuring for heavily indebted countries; etc. Some analysts do not support the easing of monetary policy at this time, this is the case of Cochrane (2020) who believes that the Fed should not have lowered its key rate when the stores are closed and that 'this is a small solution to a problem fundamental.

State of play of the evolution of Covid-19 in the world

Since January 2020, the world has been struck by a coronavirus disease (Covid-19) which is spreading in different countries (rich as well as poor) or continents (China, Japan, Vietnam, United States, Germany, France, Italy, Australia, South Korea, Iran, Nigeria, South Africa, DRC, etc.), kills thousands of people and becomes a global health emergency as decreed by the World Health Organization / WHO on January 30, 2020, three weeks after the identification of the virus. According to Ibanda (2020), a public health emergency of international concern, in the acronym USPPI, is an unusual and serious public health problem whose consequences (damage) extend beyond the borders of the country concerned, requiring an international action or response urgent. In this case, the response is essential to limit the spread of the virus in countries whose health system is not sufficiently developed to manage the health crisis. Among the reasons for the rapid spread of coronavirus disease around the world, the delay (i.e. 1 month) of the Chinese government in alerting the community is often mentioned.

International report on the outbreak of the disease in Wuhan and the implementation of response measures (the city of Wuhan was placed in quarantine on January 23, 2020). This delay would have favored the travel around the world of several individuals from Wuhan and, therefore, the spread of the pandemic. As of February 25, 2020, there were already more than 25 countries affected by Covid-19. The number of cases of Covid-19 infection in China has exceeded that of the SARS coronavirus (in 2003) and the impacts could also be (Bouoiyour RefkSelmi, 2020). The pandemic has hit more advanced economies. As of March 2, 2020, six major countries were among those with the most infected cases, namely: China, Korea, Italy, Japan, the USA, and Germany. These countries account for 55% of global production and demand, 60% of global manufacturing output, and 50% of global manufacturing exports (Baldwin and Tomiura, 2020). However, according to statements by Dr. Matshidiso Moeti (WHO Regional Director for Africa), "The World Health Organization (WHO) fears the death of 83,000 to 190,000 people in Africa from Covid-19. Between 29 and 44 million could be infected in 2020 if containment measures fail, according to a new study from the WHO Regional Office for Africa, based on 47 countries in the WHO African Region, for a total population of 'one billion inhabitants'.

Conclusion

To limit the negative effects of the spread of Covid-19 on the banking system and the financing of economic activity in West Africa, the Central Bank of West African States (BCEAO) has taken certain measures , which apply to the eight member states of the zone, in particular: increasing the resources made available to banks to enable them to maintain and increase the financing of the economy; the expansion of bank refinancing mechanisms with the central bank to increase the financing of the economy; raising banks' awareness of the use of the resources available on the special window for refinancing loans granted to small and medium-sized enterprises (SMEs / SMIs) to promote this sector, which would be the most vulnerable in this period of crisis; the establishment of an appropriate framework, in collaboration with the banking system, to support businesses that have outstanding loans and are experiencing repayment difficulties because of the effects of the pandemic; encouraging the use of digital means and reducing transaction costs related to the use of these means, in collaboration with electronic money issuing companies, to limit contacts and travel; the supply to banks of high-quality and large quantity banknotes for the supply of automatic teller machines (ATMs) and their use in this period of pandemic for the continuity of services; and the reorganization of the schedule of issuance of government securities on the regional financial market.

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PANDEMIC: A NEW FACTOR OF MEDIA CHALLENGE

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Abstract

In the process of a pandemic, which contributes to the establishment of an unfavorable psycho-social environment, the role of the media is important: either it will take care to maintain calm in the society or contribute to the tendency panic and alarm establishment; prefer calm, balanced, expert views scandalous shock therapy. In this regard, Georgia is no exception, since Georgian media tries to provide operative and educational information to a wide audience about how to behave in a certain, what methods to use to manage their spiritual and physical potential, and how to adapt to the existing reality. It is obvious that the media have accumulated certain experiences, but still fails to cope with the challenges: there is a tendency to violate professional standards. Inconsistent, unbalanced presentation of facts, biased assessments negatively affect public behavior and attitudes, which was caused by the vaccination. Here we have to say that it is not surprising at all, as the media is facing a similar large-scale challenge for the first time.

Keywords: *Pandemic, Media, Challenge, Georgia, Crisis, Problem, Communication, Journalist.*

Introduction

The coverage of the crisis is one of the essential aspects, particularly; it is a vital tool during pandemics. Since it represents the psychosocial factor, which aims to consolidate human unity, raise mood and motivation, mobilize certain action, form public opinion, raise professional creativity and work enthusiasm.

In times of crisis, the media, together with government and officials, should help people cope with severely stressful psychosocial conditions, find sensible solutions to problems and implement them, and raise civic awareness. In this case, we can recall the natural disaster, which happened in Tbilisi in June 2015, which rased social consolidation based on moral values: the support of the victims (moral, material) taught the citizens of Georgia that the power of unity overcomes even a natural disaster. Despite the greatest human and material loss, the main factor that has become the basis of faith in society – unification became the power to cope with the difficulties, challenges that may accompany our daily lives. The crisis slows down the pace of life of citizens and hinders their development, which leads to the destruction of public and personal self-awareness, lowers the vital potential, including a sharp decline in the immune system. This circumstance is especially evident during the pandemic. In this process the role and position of the media are vital: it is interesting if it will do its best to maintain peace and security in the society or contribute to the tendency of panic and alarm establishment; it will prefer calm, balanced, expert views or give preference to scandalous shock therapy.

Any crisis weakens the perception of the process, which leads to the main mission of the so-called "fourth power" media: to provide a wide audience with operational and educational information, how to behave, how to manage their spiritual and physical potential, how to adapt to the existing reality; remain calm and follow the necessary advice.

In times of crisis, it is especially necessary to make the facts public and not to distort them at all. The golden rule of journalism about the sacred facts and free evaluation requires a separation of facts and comments from every journalist, from the editorial policies of all types of media. The spin factor or method of presenting the desired as reality (inconsistent, unbalanced delivery of facts and biased assessment), which is based in fact, may also be favorable to a particular group of people. In this case, the "fourth government" must be a true Watch Dog-controller, which will not allow spin-doctors to turn the media into a convenient tool for them (Lomidze, 2009).

The media has gained some experience during this year, trying to cope with the crisis, but still failed to cope with the challenges: here we can see certain are cases of professional standards violation, which harms public behavior and attitudes: it happened due to vaccination. In this regard, the media is facing a similar large-scale challenge for the first time.

The hypothesis of the paper is the experience of media in a large-scale pandemic and its challenges.

The list of research questions is the changes in the media work during the COVID-19; the lack of media during the crisis and its positive and negative impacts.

Research methods: Interviews; Content analysis; Survey on the social network.

Key Aspects of Media Work in Crisis Situations

The scale of the communication problem in a pandemic is due to its versatility and requires a complex study: understanding the essence of the crisis, discussing its management mechanisms, and learning from the experience of other countries. All this clearly shows the urgency of the issue and the need to develop appropriate policies for it.

The pandemic occurred to be an emerging crisis: it arose suddenly, and it lasted a long time. As a rule in emergency and crises, there arose misinformation, which is difficult to deal with and often goes out of control. In this case, the role of the media is to keep away the public from the damage caused by them (Lomidze, 2010.)

Any kind of crisis either local or large-scale must be managed. The main responsibility of anti-crisis management is that stakeholders identify the problem, quickly eliminate it, reduce damage, develop and apply the necessary innovations, sometimes even fundamentally change activities following current changes, take care of restoring public confidence (Galumov, 2004)

Crisis communication management theories play a crucial role in the close connection with all means of communication and the effective use of media. Thus, establishing connections with news channels with credible facts and data, understanding the needs of the target audience, and knowledge of media methodologies and techniques will help improve communication with them. Centralization of communication in a crisis is the control over the receipt and dissemination of information (Vekua & Rue, 2017). The main purpose of journalism is to inform, educate and entertain. The first two functions are vital during the crisis. Thus, the use of the media as a tool of Public Relations has revealed the main directions of the implementation of the state structures strategy during the pandemic: simultaneous communication reaction, satisfying the interests of the media representatives (answering all essential questions), and expressing appropriate emotion (grief, regret) (Vekua & Rue, 2017). The action plan is based on the following stages: dissemination of information, neutralization, and correction of negative information, its proper processing in the conditions of information, separation of credible information from misinformation. It should be noted the tactics of answering the questions asked by journalists are especially noteworthy. The use of tactical methods of "understanding", "objectivity of information" or "compassion" are the key sources of neutralizing the situation. The involvement of independent experts and specialists is also justified from a tactical point of view since the public and media trust in their speeches is much higher.

Journalists have to provide the public with complete, balanced information and news. In a crisis, it is difficult to verify the facts, which is allowed for interpretation and is unacceptable for extreme conditions. Accuracy, impartiality, and fairness are the basics of professional journalism (UNDP, 2007). The journalists want to be the first to spread the news, but they must understand that the story must be based on the truth. Sometimes speed and accuracy are incompatible in crisis conditions, however, this is possible in terms of professionalism and effort. Any kind of error must be corrected at once. Independent analysis, offering professional opinions on the issue, helps the audience to understand the essence of the events and allows them to make a correct decision. While working in crises, it is especially important for the journalist to prevent conflicts of interest, to set priorities, to separate facts and opinions, always to select the appropriate form of content and visual material.

The Changes Caused by COVID-19 the World Media Works

The coronavirus pandemic aroused panic around the world and the taken steps in response to it, are changing the social relationships that have been entrenched daily. The worldwide spread of the coronavirus and the declaration of a pandemic by the World Health Organization have also changed the agenda of the media - the so-called hot and main topic of world TV news, radio news, print, and online publications is the invisible enemy - COVID-19 remains.

Since the spring of 2020, part of the media organizations has started work remotely. The state of emergency declared in the countries and the social campaign "Stay at home!" have completely changed the daily activities of journalists – informing the population without leaving home has become the main challenge of the media.

With the new reality and the strict rules of safety, the newsrooms of the leading media organizations have forced them to use all technical possibilities, such as Liveblogging, podcasts, graphic content, or more (Kurtanidze, 2020).

COVID-19 is still in progress, according to the specialists' thoughts, we will have to live with it for a certain time. Since people faced such a challenge for the first time, it has become a dilemma for many professions, including journalists. Especially for those who have to gather material and social responsibility threatening their health to give qualified media products to the population.

Well-thought and formed media participates in the inclusion of activities in the public agenda. The main task of media communication became timely information and involvement of the population; answering doubts and questions among the population and health care workers; collaborate with healthcare professionals and public trusts; easy to understand for the audience, information reflecting the perfect reality, its transparency, truth. Hiding reality instead of stability can develop panic.

The presented material is based on the experience of the first period of pandemic spread. However, most media outlets have partially changed their tactics. For security reasons, reporters employed by newspapers worked from home. Leading newspapers switched to remote mode. Media workers covered the coronavirus from risk zones, and some continued to work in the office, in shifts.

During the first wave of the coronavirus, some of the world-famous media organizations went online to the best of their ability. Part of the online publications brings together all the news and visuals on the topic of Coronavirus (Kurtanidze, 2020). Separate sections of the coronavirus were posted on the websites to cover the issue. Constantly updated information was disseminated in the form of a specially created bulletin. In addition to data on the spread of the virus around the world, the materials include answers to frequently asked questions and infographics. Covid-19 news is covered daily. Hence, Georgian media organizations have switched to full or partial remote work. TV programs were temporarily suspended for some time and the news format was launched. The Georgian-language bureau of Radio Liberty divided the editorial office into two groups, staff could work online from home. However, a certain part of the staff had to work in the office. There were and still are some restrictions on the use of specific terms such as panic, disaster, horror, horror, incorrigibility, etc. (Vakhtangishvili, 2020).

The US Embassy noted the tireless work of Georgian journalists with limited resources and expressed its gratitude for the relevant post posted on the Facebook page of the diplomatic mission (Interpress News, 2020).

It is worthy to refer to the Handbook for Effective Communication with the Media in the event of public health alarms (2005) which outlines the steps that local health organizations and urge them to take effective measures to avoid panic and stress among the population. The document considers one of the main mechanisms to avoid panic and chaos to be the coordination of journalists, to whom, at clearly defined intervals, the staff of the organization will provide comprehensive, tailored to the needs of the local population, raising awareness and understanding; as well as for instructions on disease prevention measures and safety measures taken by the state. Such regular and timely communication is one of the ways to prevent panic attacks. International organizations offer media resources in addition to professional guidelines. Statistics and human histories are valuable to traditional media. In numerous analytical articles, the stories refer to the topics identified by the communication campaign. For instance, women Facebook users have shared several stories about the crisis with the public, the social media campaigns turned out to be interesting: distribute, for your safety, women on the front line.

Despite the above-described facts and events, media coverage of the pandemic has not yet been properly prepared, which can somehow be understood - a similar type of challenge is a surprise to the world. Journalists, willingly or unwillingly, violated safety and security rules, distorting facts that confused the public. The Georgian Communications Commission has also issued a statement in this regard, stating the activities of journalists threatening their health and the crucial importance of disseminating accurate, verified information by the responsible media.

Internet Space against the Pandemic Background: Challenges and Threats

The threat and frequency of disinformation on the Internet against the background of the virus have increased. In early February last year, a map was published on international news websites that allegedly showed the distribution area of Covid-19, when in fact it was a map of international flights. Another widespread and misleading information about a coronavirus cure was a screenshot with the headline "Marijuana Kills Coronavirus." Here we have to note that photos of the medical staff and patients from the series were circulated on social networks.

So, what is the role of the Internet in emergencies? It has become a leading informant, accompanied by several threats: government communications, including international organizations in the mode of videoconferencing, which is particularly appealing to intelligence and hackers. This means that the danger of spreading information is higher; especially when users move to the Internet, e-commerce transactions will increase, which poses certain threats to users (Pataraia, 2020).

One of the biggest dangers is disinformation campaigns aimed at destabilizing and sowing panic and which users inadvertently tell them about. In this regard, we need to filter the messages received through social networks as much as possible, since cybercrime has intensified in this area.

Conclusion

Georgian as well as international media, often try to provide operative and educational information on pandemic issues putting under the risk their health, about how to behave, what methods to use to manage their spiritual and physical potential, how to adapt to the existing reality. The media has gained some experience during this one year, but it fails to cope with the challenges: since there are certain cases of professional standards violation.

- In pandemic conditions, modern technologies have significantly expanded access to information and the ability to disseminate it. Social media has changed the attitude toward the media mainstream. If recently traditional media has been the main source for information, today it has been gradually replaced by social media. However, there are frequent cases when social media opportunities are used for misinformation or propaganda and mislead the user.

- Often the media do not know how to work in a specific extreme situation and deliberately or not violate existing standards, causing misunderstandings. It should be noted that this circumstance harms people's consciousness and mood, thus contributing to the establishment of an unfavorable psycho-social environment (introduction of fear, panic, alarm). Inconsistent, unbalanced presentation of facts and biased assessments hinder the creation of a healthy environment, which negatively affects the behavior and attitudes of society.

Recommendations

Considering the peculiarities of crisis communication conditions, the need to improve the joint media communication system and state bodies on social responsibility, based on the timely provision of truthful facts and competent analysis, is required:

From the Government: strict adherence to the basic principles of relations with the mass media and state structures: cooperation with the mass media in any situation.

From the Media:

- Pay special attention to the specificity, timeliness, accuracy, and completeness of the information. Ensure channel access and coverage with stakeholders;

- develop a communication strategy that will establish the correct response to the human crisis based on the content and form of the media product, considering rational and emotional factors; exclude the emergence of panic, fear, despair among the population;

- raise awareness of people about the risks, assist them in developing the right approach to crisis management, and be the ability to reflect appropriate behavioral responses based on relevant knowledge and approach;

- in the media curricula of higher education institutions such subjects as crisis management, ethics, and journalism training courses should be more widely covered;

- particular attention should be paid to the practical training of journalism in higher education institutions, generally to the study of news and fake news dissemination and separation mechanisms, and the issue of expanding media literacy.

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COVID 19 AND A NEW PHASE OF US-CHINA RELATIONS

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Abstract

The purpose of this paper is to address the main issues of strained relations between the US and China before and after the spread of the pandemic, such as information warfare - Coronavirus - the introduction of artificially created biological weapons by the United States to win the trade war with China and the US military to spread the epidemic in Wuhan. On the other hand, the US accuses China of hiding the extent of the virus and China deliberately hiding the exact death rate. Due to the mentioned and other important issues, the information war between the two countries is still ongoing. The article will also discuss the US support for financing companies to move their production from China to the US or other countries during the period of the pandemic.

Introduction

One of the most important issues in the 21st century is China-US relations, with the US on the one hand and the fast-growing People's Republic of China on the other. The trade war between the two superpowers began on March 22, 2018, when Trump imposed tariffs on $ 60 billion worth of Chinese exports to the United States, including aircraft parts, medical equipment, satellites, and weapons. In response, to this, the Ministry of Commerce of the People's Republic of China, on April 2, 2018, increased tariffs on 128 American products, including aircraft, aluminum, cars, and more. The United States had a simple answer to China's tariffs that many economists share the United States has never been heavily dependent on the Chinese market, and exports to China accounted for only 0.3% of the country's gross domestic product. In this regard, we have to note that, it seems that the fact that China is actively involved in the implementation of global infrastructure projects irritates the United States. Another reason that provokes not only America's attention but the most world's countries it that the People's Republic of China defeated the pandemic at the cost of severe economic and political damage, restored the economy, and left the world facing a serious challenge. We have to say that Donald Trump's trade policy has only had a negative impact, from which no one benefits. While talking about the negative consequences we have to mention the Tramp's accusation about the spread of virus. Particularly his administration declared that China had committed a crime against humanity and compared it with the genocide.

However, the situation took the positive discourse soon after the last elections, since, the newly elected President of the United States; Joe Biden has taken a clear negative stance on trade. He believes that there will be a healthy competition and deepening cooperation between the two strong states.

US-China Trade War and COVID-19

The international agenda of the modern world is determined by the rivalry between the US and China for world hegemony. After Donald Trump came to power on January 20, 2017, relations between the two superpowers shifted to new political rails. The telephone conversation between the Presidents of the United States and the People's Republic of China, which took place on February 10, 2017, is of great importance for assessing the prospects of US-China relations. In the first telephone conversation since the inauguration, Donald Trump and Xi Jinping discussed bilateral relations. This meeting was followed by a meeting between the Presidents of the United States and China in Florida on April 6-7 of the same year. At this summit, an agreement was reached between the two countries about the dialogue on Foreign Policy and Security, particularly:

1. Comprehensive dialogue on economic issues;

2. Dialogue on law enforcement and cybersecurity;

3. Dialogue on social and humanitarian issues (Vorobiev, Denisov, et.al., 2018).

After the summit, D. Trump said that the two big states would hold trade talks for 100 days but the details were not disclosed by the government. Relations between the two countries have been strained by United States allegations that the Chinese government is pursuing a deliberate repressive policy of mass arrests of religious minorities, the press, and Uighurs in Xinjiang. Due to the existing political approach, the US decided to use economic leverage against China. Chinese Foreign Ministry spokesman Geng Shuang responded to the accusation by saying that he did not recommend interfering in another country's domestic policy (Zengerle, 2021).

It was the issue of trade that became the cause of the trade war between the US and China. Before the issue, there were several disagreements with Peter Navarro, the White House director of trade and manufacturing policy, saying the measures taken by the United States were entirely defensive. He said the outflow of trillions of US dollars abroad created an annual deficit that was used by other countries to buy American property and assets rather than invest in the country. After a seven-month investigation, U.S. spokesman Robert Leitzer said the increased tariffs for China were calculated because of the economic damage it had done to the United States by stealing intellectual property and forcing foreign companies to transfer technology to China (Pipia, 2020). The Trump administration believed that trade deals should not be used to strengthen the "adversary" precisely because of national interests.

The start date for the trade war could be March 22, 2018, when Trump imposed tariffs on $ 60 billion worth of Chinese exports to the United States, including aircraft parts, medical equipment, satellites, and weapons. In response, the Ministry of Commerce of the People's Republic of China, on April 2 of the same year, increased tariffs on 128 American products, including aircraft, aluminum, cars, and more. The United States had a simple answer to China's tariffs that many economists share. The United States has never been heavily dependent on the Chinese market, and exports to China accounted for only 0.3% of the country's gross domestic product (Chkhladze, 2021). Still, the decision hurt American farmers, and the Trump administration set aside $ 16 million to help farmers (Petriashvili, 2019). The new trade barrier has caused great losses to American farmers and they have repeatedly demanded the removal of the trade barrier. The vast majority of businessmen were critical of Trump's trade policy.

On May 15, 2020, the US Department of Commerce announced new restrictions against the Chinese electronics giant HUAWEI. The reason given was that the owner of "HUAWEI" at one time held a high position in the Chinese military apparatus and the US intelligence service claimed that it was in his interests to facilitate the government to conduct interceptions. Additional restrictions came into force in September 2020 and it banned the use of American technology by third-party companies to produce software chips. Exceptions would be allowed in the case of a special license from the US Government. This year, sanctions have been added to the restrictions already adopted in 2019. The United States remains a global e-leader, and despite HUAWEI's success in technology development, it remains highly dependent on foreign companies, primarily American suppliers, in terms of technology and manufacturing. According to HUAWEI, these sanctions will affect the company's expansion, service, and continuous operation of the lines. Today, HUAWEI has more than 3 billion customers in 170 countries around the world (Finance, 2021). Donald Trump issued an ultimatum to another Chinese company, Tick-Tock, to sell the business to Microsoft in 45 days or leave the country. According to Mike Pompeo, the company was accused of espionage, that the Chinese social network collects information and transmits it to the government. Donald Trump said tick-tock operations were purchased only by any U.S. company to protect national security. The Biden administration has asked the Department of Commerce to look into how threatening the tick-tock operation is to national security (McKinnon & Leary, 2021). For the US administration, the issue of tick-tock is not only a threat to the country's security, but it underscores China's success in technology development and its demands on the world market (BBC, 2020). If previously it was profitable for companies to relocate to China, they would be in a non-profit situation if China demanded an answer for hiding the pandemic and sanctions were imposed by other countries. For example, 80% of the antibiotics are produced in China and the main consumer is American (Forbes, 2020).

Impact of the COVID-19 Pandemic on US-China Relations

Tensions between the two countries have been exacerbated by the Coronavirus pandemic, both economically and politically. The virus was first reported in the province of Hubei in China in 20219. On November 17, where 9 cases of infection occurred. The disease was not recognized in the country and by the end of December, the number of patients had risen to 180. It spread from China to the United States on January 21, 2020 (Rostiashvili, 2020). In March / May of the same year, a pandemic in the United States killed as many people as Vietnam, fighting Islamic State, and 9/11 (up to 100,000). The superpower turned out to be the world leader in the number of dead citizens (ACRF, 2020). The pandemic in the world has caused great economic losses to almost all sectors. In the first half of 2020, against the backdrop of restrictions on the pandemic, economic activity in the United States fell to a record low. Unemployment has risen significantly. Private consumption and retail sales declined. Also, with the closure of firms, industrial production deteriorated. Consumer and business sentiment has fallen as a result of the closure of individual states. Added to this was a sharp drop in oil prices, which had a negative impact on the investment environment. Despite some recent improvements in economic activity, the IMF forecasts that real economic growth in the US by 2020 will be -8%, down 2.1% from the previous forecast. As for 2021, it is expected to 4.5% growth. Moreover, the inflation will be 0.6% in 2020 and 2.2% in 2021 (National Bank of Georgia, 2020). It should be noted that the pandemic has caused great damage to the Chinese economy as well. China's economy shrank by 6.8% in the first quarter of 2020, the first time since 1992, the biggest blow to China's economy. China's exports fell 13.3% in the first quarter of 2020, while imports fell 2.9%. It is noteworthy that the IMF forecasts that China's economy will grow by 1% in 2020. It is interesting to note that 80% of American companies operating in the Chinese market, while 67% of companies in the EU and other countries intend to shift their production from China to other regions, which is also facilitated by the controversy caused by the coronavirus pandemic between the West and China. China exported $ 19.5 billion worth of medical supplies (pillows, respirators, special clothing, etc.) in March-May 2020, with major importers from the United States, Germany, Japan, France, and Italy (Ministry of Foreign Affairs of Georgia, 2020). According to the BBC, the Chinese economy in 2021 despite the Covid pandemic. Reached a record high in the first quarter. Increased by 18.3% compared to last year. According to data released by the National Bureau of Statistics of China: production reached

14.1%, while retail sales increased by 32%. China is the only country in the world whose economy has grown compared to 2020 (BBC, 2021). Experts distrust this rate of economic growth because such data from the Chinese government often misses the reality. It is true the pandemic was first observed in the country and ended relatively early.

The earlier completion and subsequent restoration of Lockdown to the country manifested itself differently. In 2020, it overtook the US as the largest recipient of foreign direct investment, and the Fortune 500 list of the world's largest companies included more Chinese-based companies than the US. China is also ahead of the US as the EU's main trading partner. It plays a bigger role in the financial markets as well. According to a Boston University study, loans made by China to developing countries are already competing with the World Bank (Hancock, N.d).

The COVID-19 pandemic has had a major impact on world politics and the economy. The world has become increasingly changeable and unpredictable. The US accusation that China is the main creator of the pandemic spread relations between the two countries into the Cold War phase. It is difficult to predict how long the current situation will last.

Conclusion

According to the above-described facts, we can claim that here is the place of the trade war between the two great countries, the United State of America and the People's Republic of China. Particularly, America is trying to weaken China's competition and maintain its dominance in the world. Since such kind of virus as COVID-19 is a new one, with unprecedented scale, the world has not had the experience to cope with the economic crisis caused by the virus. The danger of escalating the trade war into the Cold War stems from the fact that social and cultural values are radically different between the two countries, That any of them would change their own political and economic interests in favor of the adversary. It is worthy to point out that the policy of Donald Trump who introduced trade tariffs to isolate the Chinese economy has damaged the business interests of both countries. The People's Republic of China is the first competitor of the United States of America in many fields and among them are security, development, and democratic values.

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THE INFLUENCE OF COVID-19 UPON SOCIAL RESPONSIBILITY OF THE HEIS IN UKRAINE

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Abstract

The present paper investigates the social impact carried out by the Ukrainian HEIs during the pandemic and lockdown in Ukraine based on a survey. The results of the survey show that the information received by the students at the university during COVID-19 under conditions of social isolation is of important character because online learning partly gives the respondents a feeling of being engaged in social activities and communication process. Moreover, for students who have got used to being online 24/7 the process of communication with their groupmates was congenial enough. To the traditional list of social functions performed by the modern HEIs, the respondents have added new ones: sharing trustful information, especially about COVID, providing deeper communication between the teachers and students and promoting personal responsibility of time management and organization of education and social life. Thus, the social responsibility of the modern HEIs goes beyond traditional educational services and under the new conditions the universities in Ukraine are closer to the traditional European model of universities - "civic universities".

Keywords: *Higher Education, Universities, Social Responsibility, Covid-19, Civic University*

Introduction

The paper highlights the social role of higher education under the influence of the pandemic caused by COVID19 and current lockdowns. In the context of a permanent and nonlinear systemic change of situation because of medical reasons the universities and their role in producing knowledge as well as in the distribution of the research results have become crucially important for the social-economic stability and future growth of the state. We are strongly convinced that modern universities providing not only a standard set of learning service and also carrying out researches, sharing their results therefore can be considered "centres where knowledge is generated, accumulated, disseminated and applied" (Towards Knowledge Societies, 2019).

The social function and social responsibility of the universities are closely connected with the theory of the welfare state, in which education is generally state-supported by the state and is to be combined with strong market incentives, as in all other parts of the public sector (Kwiek, 2003).

In 2010, the international standard ISO 26000 on social responsibility defined the principles of social responsibility to specify profitable enterprises, public organizations and other social actors. These include accountability, transparency, ethical behaviour, respect for the interests of stakeholders, recognition of the rule of law, respect for international standards of conduct, respect for human rights (ISO 26000:2010 social responsibility, 2010).

According to Ukrainian researcher, Olena Orzhel social responsibility can be specified as the social role the university plays within a local community where the university is situated and university social responsibility can be seen as a responsibility for everything that happens at the university (Orzhel, 2017).

In the present research university, the author considers social responsibility is to be considered as social functions of the university which are taken within the 2019-2020- Infodemic and post-COVID society (Tryma K., 2021).

Such view on the concept of the social responsibility of the university is close to another term used to describe the university which performs wider social functions – "civic university" that can be described as a "model to capture the mutually beneficial engagement between the community, region or wider world and the university" (Goddard &Kempton, 2016). A civic university cooperates with the local community to "provide opportunities for the society of which it is part" including individual learners, businesses, public institutions (Goddard & Vallance, 2012). Results of the research which HEIs carry out and disseminate are considered "as a key factor in urban or regional development clusters and sectors" (Goddard & Vallance, 2012). Societal changes make "universities work in new ways. Concepts such as the 'quadruple helix', social innovation and living laboratories are just some emerging tools for the new forms of multi-disciplinary and trans-partner working that will be needed to address these challenges going forward" (Goddard & Vallance, 2012).

The present article considers the changes caused by the pandemic therefore it is logical to consider the current state of the society like 'post-COVID one' which is regarded as "a new type of social activities which are carried out by social actor under the influence of limitations caused by the pandemic, e.g. medical passports, lockdowns, digital communication and social activity, etc." (Tryma K. , 2021)

To study the social responsibilities of modern Ukrainian HEIs under the conditions of infodemic, the paper examines the case of Mariupol, a city located in the East of Ukraine. While investigating the case of Mariupol, this research paper aims to examine how the social role of the universities has changed in the course of pandemic based on the opinion of student youth from Mariupol.

Mariupol was chosen as a research object for several reasons:

- There are 5 universities in the city which are deeply integrated into the local community and social life of the city and region.
- The universities of the city have long-term experience in cooperation with local authorities and local NGOs;
- The local universities have Bachelor and Master programs in the sphere of humanities, social sciences and public administration;
- Academic staff and students are engaged in local civic initiatives.

Methodology

To examine how the students understand the role of the university in local social life and how social functions have changed (or not changed) after the pandemic and in the course of lockdowns, the author conducted the survey "Social responsibility of the universities after COVID-2019". The perception of a new format of education and social functions of the HEIs within new social reality was investigated through online questionary. The total number of students who were surveyed - 100 students from Mariupol. The survey was conducted in January 2020 via Google forms. The age of respondents 17-21.

Questionary includes some standard questions: gender, age, speciality, course, university and a list of open questions: 1 how were the educational services delivered at the university during the lockdown? 2 did you like/dislike distance learning and why? 3 in your opinion what social function does the modern university perform? what social function must the modern university perform? 4 do you take part in the social initiatives of the university/city? 5 has COVID19 influence the university and how? 6 has the social role of the university changed under the influence of the pandemic?

The research hypothesis is that pandemic has become one of the factors that influence the teaching capabilities of the HEIs and contributes to the development of social responsibility of the HEIs.

Analysis of students' opinion on the social responsibility of the modern HEIs

The interviewed students shared their opinions on the social role of the university under the influence of the pandemic and lockdowns.

90% of respondents are convinced that the university should perform social functions but they have difficulties describing what does it mean in practice. The answer which more often was given is “good modern knowledge and skills which are in demand on the labour market”. 10% of students, those who are involved in civic activities and who are members of local NGOs, specified the social role of the HEI wider: local research projects necessary for the local community, for example, in ecology or public transport, first employment of the graduates, mentorship, free hubs for students and youth.

10% of the interviewees noted that the university should provide bigger social assistance to the vulnerable groups of students, including accommodation, special scholarship, medical treatment and psychological assistance. 5% of the respondents think that the social functions and responsibilities of the modern HEIs must include also research work: when student work on their thesis, the topics must be established where it is possible in cooperation with local authorities, local business and the local community to meet the real needs of the people rather than to carry out “unwanted, unappreciated theoretical research”. 4% of students think that modern Ukrainian universities are overconcentrated on the studying process and earning money through grant programs rather than the long-term development of the place where the university is located. 5% of the respondents, who are engaged in the activities of local NGOs, consider the modern Ukrainian HEIs not to be flexible and not able to work with the practical cases due to “the lack of time, wish and professional expertise”.

While collecting the data, the following inadequacy was noticed: students were much more critical when the more critical when they describe distance learning in comparison with the description of the social role of the university. In the author’s opinion, such inadequacy could be explained through the following: Mariupol is the city with close and permanent ties among local universities, NGOs and local authorities and in general university staff and students constantly demonstrate a high level of civic activism and contribute to a huge number of local initiatives, from participation in various activities (exhibitions, public lectures, festivals, etc.) to the establishment of knowledge hubs. But in student’s understanding the main social role of the university remain teaching and learning, the wider context is not so important as these areas of work.

The respondents mention that they don't take an active part in the local social initiatives on the regular basis in their university (33%), but 67% of respondents like to participate in various activities like concerts, flash mobs, festivals and others. Also, they participate in collecting money for charity, participation in charity performances, public concerts and holidays on the territory of local orphan homes.

The respondents' answers show that students are not certain what to consider the social responsibility of the university. Normally, they consider the social responsibility of the university to be connected with the charity, entertainment as well as capabilities of the learning process and modern study environment. Nevertheless, after the pandemic and permanent lockdowns, part of the students started to reconsider the social role of the universities in which they study.

The role the HEIs played during pandemic and lockdowns according to the respondents was as important as the source of trustful information because the professionalism of the teachers and university management was key to understand how to react to the lockdowns, how to study under unpredictable circumstances and organize studying process on distance. Most respondents (69%) admitted a higher level of trust they experienced about their teachers and consequently a lower trust in the information presented in the media. The students started to reconsider the role of the university in providing trustful information and more understandable rules and regulations within the pandemic. The opinion of respondents on the role of the universities before and after the pandemic is following: establishing new knowledge and develop critical thinking; training professional skills necessary for successful employment; managing research interesting to students; holding art and sports activities for a community; performing the role of "social agents" (providing equality for all students); developing comfortable accommodation and transport infrastructure; providing social and cultural development of a community through communal projects.

According to the respondents these functions are dominant while establishing new knowledge and sharing them with the students and society. In the course of the survey interviews, the students confirmed the initial hypothesis made by Erik Porfeli and Bora Lee. According to their idea, professional socialization of young people include many indicators, among which – the location of HEIs, accommodation, the availability of the sports grounds, swimming pool, library and cafes on the territory of the campus. Ukrainian students also consider these conveniences as the social responsibility of the modern university.

According to the survey results traditional understanding of the social role of the universities as a provider of education and establisher of new knowledge remains relevant. These functions are considered the most important ones. Considering the new functions of the university caused by pandemic the students have given a wider list of social functions which potentially can be performed by the university:

- the university investigates the world beyond the campus and shares the results of research in a wider context;
- the university provides service in which a community is highly interested;
- the university creates joint enterprises with local business for the students to get the first employment;
- the HEIs can form their unique corporate identity or brand;

- the universities can provide social innovations through special local research programs and involve funding from local budgets (for example, to form a list of the themes for Master or Bachelor thesis which can be interesting and useful for local needs);

- the universities must be accountable to stakeholders like NGOs, local authorities and municipal government;

- the HEIs must perform the role of public experts while considering situations in the town/city/region via local media and provide cooperation with NGOs in the sphere of joint social projects.

Thus, the students have described their understanding of the social responsibility of the university as an integral part of the community which is referred to as the "triple-helix model of universities, business and government with semi-autonomous centres" (Etzkowitz, 2000). It means that Ukrainian students have an understanding of the social role of the HEIs within the model of "truly civic" universities responsible for the development of the territory where the HEI is located (Goddard, The civic university and the leadership of place, 2012).

The students specified what can be regarded as a new zone of university social responsibility and also admitted that local universities as well as universities of the national level partly perform social functions and are more concentrated on traditional activities teaching and learning along with this the information and forms of teaching are not so interesting for students because mainly, they are on the theoretical level. Nevertheless, students understand that each university is important for the development of the community and has the potential to societal changes and therefore in some answers they try to specify the obstacles among which partly unreadiness of the society, unavailability of real financial and organizational autonomy of the university, mental rigidity of the management to share their authorities with other social players and high level of corruption. The reasons which do not allow the university to realise its potential in performing social responsibility. According to the author's hypothesis, this list can also include the transitive mode of the Ukrainian state which case unpredictability and uncertainty which does not allow even the state to perform social functions properly.

Conclusion

Taking into consideration the fact that the pandemic has the long-term potential to affect the whole world, it is necessary to promote the role of new social intuitions which can contribute to the decision of new problems which modern society is facing now. According to Anthony Fauci, the Director of the National Institute of Allergy and Infectious Diseases "the consequences of the pandemic will be imprinted on the personality of our nation very long" ((Anthony Fauci's security is stepped up as doctor and face of U.S. coronavirus response receives threats, 2020).

The results of the study confirmed the research hypothesis: the pandemic has become the factor that influences the factors that influence teaching capabilities of the HEIs and contributes to the development of social responsibility of the HEIs.

The empirical data of the survey conducted among the students have confirmed that not every student understands what does the social responsibility of the university mean but also it has shown that students started to think about the social role of the university. Nevertheless, respondents were much more sure and provided a wider description in the answers where they described distance learning rather than the social functions of universities.

In the course of the analysis of the survey results and other investigations made by the **author**, the inadequacy was noticed that in Ukraine students, university staff and management, civil activists and representatives of NGOs are convinced that the only function of the university is only teaching and instructing, in better case – mentoring, rather than carry on any social functions. The explanation of this inadequacy can be rooted in understanding the role of the university by the local inhabitants and parents of the student: youth enter the university because it is a cultural tradition and the indicator of social welfare of the families but Ukrainian society does not university as serious knowledge hubs. The university is seen as an organization that works with researchers on a high academic or/and theoretical level which is far from the everyday reality of ordinary Ukrainian family. Therefore students can not understand how the university can cooperate with the local community and business: many respondents noticed that their university teachers were theoreticians and have never worked in the sphere about which they deliver information during the lectures. 2% of students highlighted that the university produces low-quality knowledge which is not interesting to the public, and what is much worse – the system is too slow and inflexible even when students share their ideas. Moreover, it is difficult even to change the topic of the thesis to more interesting or practical things because the bureaucratic procedure is frustrating.

Thus, the resume of students' opinions on social functions of the HEIs makes it possible to confirm that students don't consider the universities as real social actors which can perform social functions. Admitting the potential of the universities in the social sphere and providing the understanding of the European model of "truly civic" universities responsible for the development of the community, the respondents are sceptical about quick changes in this sphere. Overcoming the social scepticism of students and enhancing the university's contribution to social changes all can result in a stronger society and state.

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FORECASTING THE NUMBER OF COVID-19 PATIENT IN TURKEY USING NONLINEAR AUTOREGRESSIVE NEURAL NETWORKS

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Mehmet Dinç (Manisa Celal Bayar University)

Abstract

As it is known, the Covid-19 virus, which emerged at the end of 2019, spread rapidly all over the world and was declared a pandemic by the World Health Organization in early 2020. In this context, an intense and effective fight against the pandemic has been continuing for about 1.5 years in our country, as in the whole world. As in the whole world, the fight against the Covid-19 pandemic in our country has deeply affected and continues to affect the whole society negatively in terms of health, economy, social and psychological aspects. As in the world, the expectation of all segments in our country is that the pandemic will no longer be a risk. In this regard, besides the intense struggle, it is pleasing that the vaccine has been found and the intensive vaccination program continues. In this study, the number of Covid-19 positive patients in our country; the prediction model was established with the Non-Linear Autoregressive Neural Network (NAR) model by taking the daily positive case numbers seen in the post-vaccination period. According to the one-month estimation results obtained from the model, a promising forecasting result with a decreasing trend was obtained, albeit fluctuating.

Keywords: *Covid-19, Forecasting Covid-19 Cases, Non-Linear Autoregressive Neural Network*

Giriş

2019 yılı sonlarında ortaya çıkan Covid-19 virüsü tüm dünyada hızla yayılarak Dünya Sağlık Örgütü tarafından 11.03.2020 tarihinde pandemi olarak ilan edilmiştir. Bu kapsamda tüm dünyada olduğu gibi ülkemizde de yaklaşık 1,5 yıldır pandemiyle yoğun, etkili mücadele devam etmektedir. İnsanlık tarihinde her pandemide olduğu gibi Covid-19 pandemisinin de toplum üzerinde psikolojik, sosyal, kültürel, ekonomik etkileri olmuştur. Olumsuz etkilerin doğal sonucu olarak insanlar pandemiden olumsuz etkilenmiş son bir buçuk yılda milyonlarca insan hayatını hayatını kaybetmiştir. Ülkemizde de Covid-19 pandemisiyle mücadele tüm toplumu sağlık, ekonomi, sosyal ve psikolojik bakımdan olumsuz yönde derinden etkilemiş ve hala da etkilemeye devam etmektedir. Ekonomik ve psikolojik kayıpların yanısıra 2021 yılı mayıs ayı itibariyle toplam test sayısı yaklaşık 57.000.000'a ulaşırken pozitif vaka sayısı 5.330.000'e ulaşmış, toplam 48.721 kişi hayatını kaybetmiştir (T.C. Sağlık Bakanlığı, 2021).

Dünyada olduğu gibi ülkemizde de tüm kesimlerin beklentisi artık pandeminin risk olmaktan çıkması yönündedir. T.C. Sağlık Bakanlığı'nın belirlediği pozitif vaka sayısının toplam nüfusa oranına göre belirlenen Türkiye risk haritasına göre 100.000'de 10'nun altında kalan pozitif vaka sayıları düşük risk, 11-35 arası orta, 36-100 arası yüksek 100 üzeri ise çok yüksek risk olarak değerlendirilmektedir. Dolayısıyla pandemiyle yoğun mücadelenin yanısıra aşının bulunmuş olması ve yoğun aşılama programının sürdürülüyor olması riski minimize ederek yasaklardan ve kısıtlardan kurtulmada kuşkusuz çok sevindiricidir. Bu kapsamda ülkemiz nüfusunun 2020 yılı itibariyle 83.614.362 olduğu dikkate alınırsa kabaca pozitif vaka sayısı (83.614.362*0,00001=836,14362=837) 837~1.000 civarlarına inerse pandemi toplum için bir risk olmaktan çıkabilir (T.C. Sağlık Bakanlığı,2021).

Bu çalışmada ülkemizdeki Covid-19 pozitif hasta sayıları; aşılama sonrası dönemde görülen günlük pozitif vaka sayıları alınarak Doğrusal Olmayan Otoregresif Sinir Ağı (NAR) modeliyle tahminlenmiştir. Modelden elde edilen bir 30 veriden oluşan tahmin sonuçlarına göre iniş-çıkışlı olmakla birlikte azalan eğilimli ümit verici tahmin sonucu elde edilmiştir.

Materyal ve Metod

Araştırmada Kullanılan Veri Seti

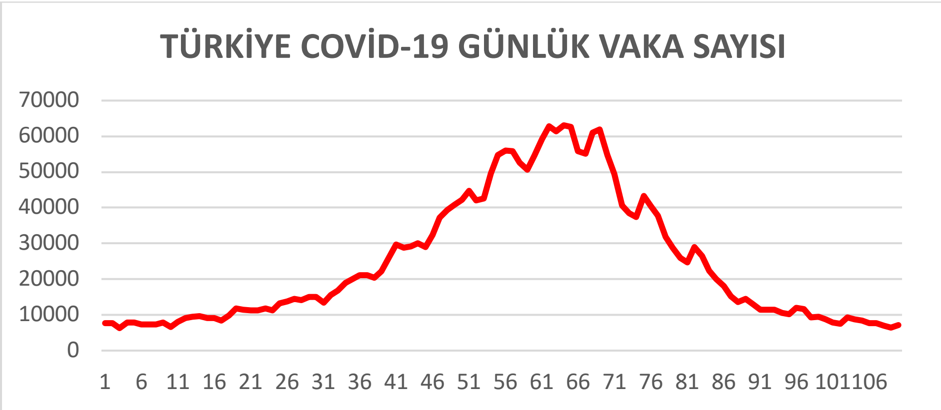
Çalışmada Türkiye'de aşılama sonrası dönemde 2021 yılına ait 12.02.2021 ve 31.05.2021 tarihleri arasında yer alan günlük vaka sayıları T.C. Sağlık Bakanlığı Covid-19 Bilgilendirme Platformu'ndan alınmıştır. Oluşturulan model gereği verilerin %70'i eğitim, %15'i doğrulama ve kalan %15'i ise test süreci için kullanılmıştır. Veri setine ilişkin tanımlayıcı istatistikler Tablo 1'de yer almaktadır.

Tablo 1: Tanımlayıcı İstatistikler

Aritmetik Ortalama	24159,57
Medyan	15136,50
Minimum Değer	6287
Maksimum Değer	63082
Standart Sapma	17866,31
Çarpıklık Katsayısı	0,857190
Basıklık Katsayısı	2,352555
Jarque-Bera	15,67198
P-Değeri	0,000395

Tablo 1'de yer alan çarpıklık katsayısı değerinin 0,857190 ve sıfırdan farklı olduğu görülmektedir. Dolayısıyla sağa çarpık bir dağılım söz konusudur. Kurtosis olarak bilinen basıklık katsayısı değerinin 2,352555 olduğu ilgili tabloda görülmektedir. Bu değere göre dağılımın sivri veya dik bir yapıda olduğu yorumu yapılabilir. Veri setine ait dağılımın normallik sınaması JB testi ile yapılmıştır. Teste ait p değerinin (0,000395) 0,05 değerinden küçük olması nedeniyle dağılımın normal olmadığı sonucuna varılmaktadır.

Çalışma kapsamında kullanılan Türkiye Covid-19 günlük vaka sayılarına ilişkin veri grafiği Şekil 1'de yer almaktadır.



Şekil 1: Türkiye Günlük Covid-19 Pozitif Vaka Sayısı

Araştırmada kullanılan verilerin günlere göre dağılımını gösteren çizgi grafiği yukarıdaki gibi elde edilmiştir. Grafikten de görülebileceği gibi, zaman içerisinde verilerin inişli-çıkışlı önce artan 60.000'ler düzeyinde maksimum noktaya ulaştıktan sonra aşılama ve uygulanan pandemiyle mücadele tam kapanma politikaları sonucunda azalan bir seyir izlediği görülmektedir.

Tahminleme Modeli: Doğrusal Olmayan Otoregresif Sinir Ağı

Doğrusal olmayan Otoregresif Sinir Ağı (NAR), elde bulunan zaman serisi verisinden hareketle gelecek dönem tahmininde kullanılan dinamik bir sinir ağı türüdür. Genellikle doğrusal yapıda olmayan zaman serisi verilerinde kullanılan bu yöntem, zaman gecikmelerine bağlı değişkenlerin eğitimi ile oluşturulmaktadır. NAR sinir ağına ait matematiksel gösterim Eşitlik 1 ve Eşitlik 2'de yer almaktadır (He ve Jin,2018 :1325):

$$y_t = f\left(y_{t-1}, y_{t-2}, \dots, y_{t-p}\right) + \varepsilon_t \tag{1}$$

$$y_t = \propto_0 + \sum_{j=1}^{k} \propto_j \emptyset\left(\sum_{i=1}^{a} \beta_{ij} y_{t-i} + \beta_{0j}\right) + \varepsilon_t \tag{2}$$

Eşitlik 1'de yer alan matematiksel gösterim t dönemine ait tahminin, geçmiş dönem verilerine bağlı olarak bulunduğu anlamına gelmektedir. Eşitlik 2'de yer alan NAR sinir ağının genel matematiksel gösteriminde ise $\propto_0$ sabit katsayı, k gizli katman sayısı, $\propto_j$ gizli birim ile çıktı birimi arasındaki ağırlık katsayı değeri, $\emptyset$ aktivasyon fonksiyonu, a katsayısı girdi sayısı, β_{ij} girdi ve gizli katman arasındaki ağırlık değerleri ve β_{0j} sabit katsayı değerine karşılık gelmektedir.

Bu çalışmada kullanılan NAR sinir ağının eğitim süreci açık döngü (open loop) modunda gerçekleştirilmiştir. Ağın eğitimi ile hataları minimum seviyede veren açık döngü ağ yapısına ait parametre değerleri, başlangıç girdi değeri olarak kullanılmak üzere kapalı döngü (closed loop) ağ yapısına dönüştürülmüştür. Bu ağ yapısından hareketle geleceğe yönelik tahmin değerleri elde edilmiştir (Benrhmach vd., 2020: 2-3; Galushkin,2007:121-122).

Tahmin Modeli Tasarımı ve Gelecek Dönem Tahmini

Bu çalışmada tahmin modeli, MATLAB'in R2020a lisanslı sürümü kullanılarak oluşturulmuştur. Tasarlanan tahmin modelleri Ortalama Karesel Hatanın Karekökü (OKHK) ölçütü ile değerlendirilmiştir. OKHK ölçütüne ait matematiksel gösterim Eşitlik 3'de yer almaktadır. İlgili eşitlikte yer alan "e" harfi gerçek değer ile tahmin değeri arasındaki farkı ifade etmektedir.

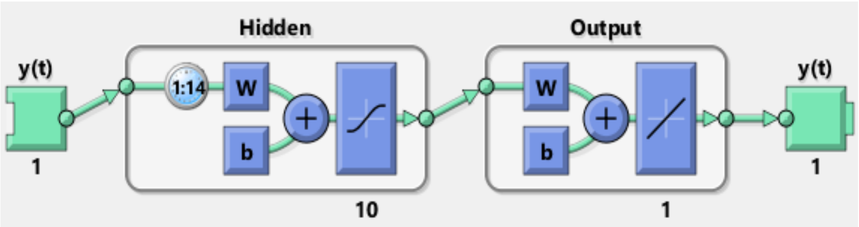
$$OKHK = \sqrt{\frac{\sum_{i=1}^{n} e_i{}^2}{n}} \qquad (3)$$

NAR sinir ağı kullanılarak deneme yanılma sonucu elde edilen tahmin modelleri ve performans değerleri Tablo 2'de yer almaktadır. İlgili tabloya göre en iyi tahmin modeli gecikme sayısı 14, gizli katman sayısı 1 ve gizli nöron sayısı 10 olan Model 13'e aittir. Model 13'e ait OKHK değeri 1291,16 olarak bulunmuştur.

Tablo 2: NAR Sinir Ağı Performans Değerleri

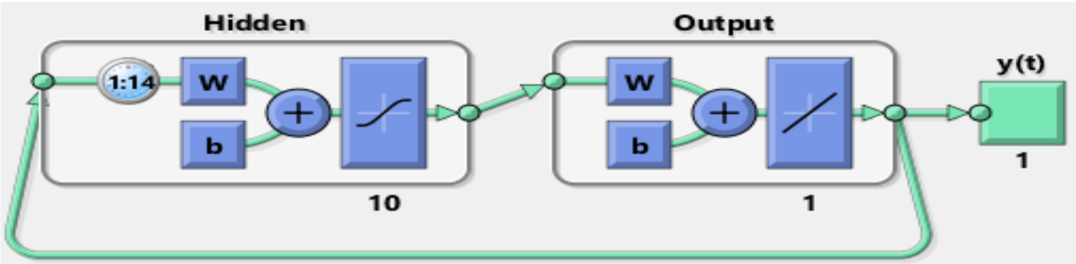
	Girdi Katmanı	Gizli Katman	Performans Kriterleri			
MODEL	Gecikme Sayısı	Gizli Nöron Sayısı	Eğitim-R	Doğruluk-R	Test-R	Ağ Performansı (OKHK)
1	2	2	0,9803	0.9449	0,9015	2332,2
2	3	4	0,9772	0,9420	0,7896	2209,5
3	4	7	0,9755	0,9579	0,8498	2360,7
4	5	8	0,9842	0,9539	0,8364	2058,3
5	6	10	0,9797	0,9626	0,8002	2208
6	7	10	0,9722	0,9520	0,9492	1692,1
7	8	7	0,9631	0,9687	0,9464	1753,2
8	9	3	0,9657	0,9657	0,9279	1502,8
9	10	10	0,9664	0,9789	0,9528	1744,4
10	11	8	0,9708	0,9864	0,9219	1347,7
11	12	4	0,9646	0,9886	0,9436	1709
12	13	8	0,9712	0,9819	0,9327	1534.1
13	**14**	**10**	**0,9986**	**0,9920**	**0,9932**	**1291,16**

Şekil 2: Açık Döngü Modlu NAR Sinir Ağı Mimarisi



NAR sinir ağının açık döngü yapısı Şekil 2'de yer almaktadır. Açık döngü ağ yapısına ait parametre değerleri başlangıç değeri olarak kullanılmak ve geleceğe yönelik tahmin değerleri elde etmek üzere döngü yapısı kapalı moda dönüştürülmüştür. Kapalı döngü ağ yapısına ait görsel Şekil 3'de yer almaktadır.

Şekil 3: Kapalı Döngü Modlu NAR Sinir Ağı Mimarisi

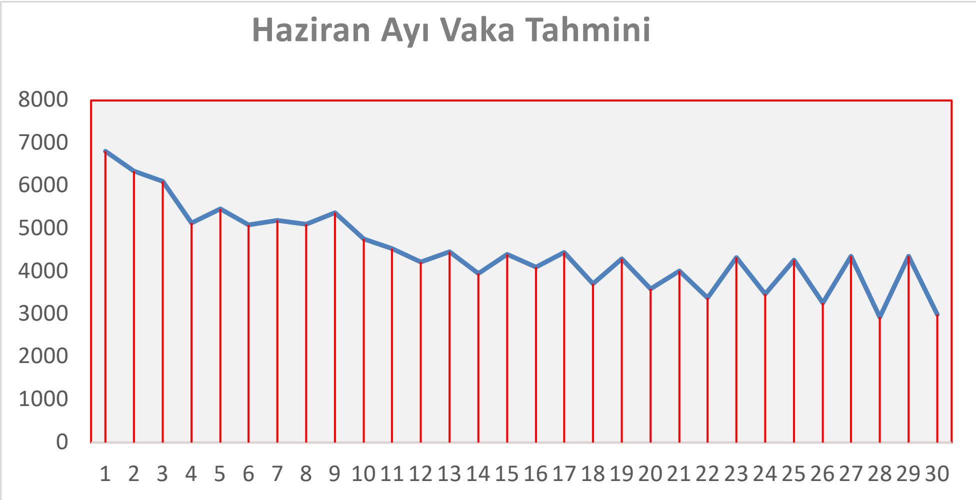


Belirlenen en iyi performans değerine sahip tahmin modelinden hareketle elde edilen 30 günlük vaka sayısı tahmin değerleri Tablo 3'te yer almaktadır. İlgili tablodan hareketle vaka sayılarına ait grafik gösterimi Şekil 4'de yer almaktadır.

Tablo 3: Tahmini Vaka Sayısı Değerleri

Gün	Tahmini Vaka Sayısı	Gün	Tahmini Vaka Sayısı	Gün	Tahmini Vaka Sayısı
1	6812	11	4542	21	4010
2	6345	12	4220	22	3384
3	6111	13	4457	23	4320
4	5131	14	3952	24	3480
5	5472	15	4406	25	4264
6	5095	16	4106	26	3259
7	5193	17	4448	27	4350
8	5102	18	3717	28	2932
9	5377	19	4294	29	4363
10	4755	20	3590	30	2988

Şekil 4: Tahmini Vaka Sayısı Grafiği



Sonuç

Dünyada, insanlık tarihinde pandemiyle mücadele hiçbir zaman kolay olmamıştır. Geçmiş zamanlarda gerçekleşen pandemi dönemlerinde olduğu gibi şimdi içinde yaşadığımız Covid-19 pandemisinde de tüm ülkeler yoğun bir mücadele içerisindedirler. Covid-19 salgını etkili olduğu 1,5 yıllık süreçte inişli-çıkışlı üç dalga halinde toplumları etkilemiş ağır, ekonomik, sosyal ve can kayıplarına neden olmuştur. Maalesef diğer ülkeler gibi ülkemiz de Covid-19 pandemisinden olumsuz etkilenmiş, etkilenmeye devam etmektedir. Tüm dünyada olduğu gibi ülkemizde de Covid-19 pandemisinin risk olmaktan çıkacağı günler sabırsızlıkla beklenmektedir.

Ülkemizde T.C. Sağlık Bakanlığı'nın hazırladığı Covid-19 risk çalışmasında, pozitif vaka sayılarının toplam nüfusa oranlanmasıyla elde edilen oranlara göre, yüzbinde 10'dan küçük oranlar düşük risk, risksiz olarak değerlendirilmektedir. Bu kapsamda ülkemizin 2020 yılı nüfusunun 83.614.362 kişi olduğu dikkate alındığında günlük pozitif vaka sayılarının yaklaşık 1000'ler civarına yaklaşacağı günler hasretle beklenmektedir. Bu mücadelede izolasyon ve hijyene dayalı kapanma-kısıtlama politikalarının yanısıra yoğun aşılama çalışmalarının sürüyor olması da çok sevindiricidir.

Bu çalışmada aşılama sonrası dönemde ülkemizde gerçekleşen günlük pozitif vaka sayıları kullanılarak, günlük pozitif vaka sayıları, doğrusal olmayan otoregresif sinir ağlarıyla modellenmiştir. Yapay zekaya dayalı sinir ağları tahmin modelleri, gerçek veriler üzerindeki örüntüyü simülasyonlarla öğrenmekte, bunu test verilerinde doğrulayarak en güvenilir modeli önermektedirler.

Burada da verilerin %70'i öğrenmede, %15'i doğrulamada, %15'i test etmede kullanılarak elde edilen model sonuçlarına göre 30 gözlemden oluşan tahmin serisi elde edilmiştir. Tahmin sonuçlarına göre inişli-çıkışlı olmak üzere azalan eğilimli bir seri elde edilmiştir. Elde edilen seride başlangıçta 7.000'ler civarındaki pozitif vaka sayıları dönem sonunda 3.000'ler civarına gerilemektedir. Her ne kadar riskin sıfır olduğu 1.000'ler civarına daha çok uzaklarda kalsak da ümit verici bir sonucun elde edildiğini belirtmeliyiz.

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COVID-19 AND WASTE PICKERS: LIVING AT THE EDGE

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Sevda Akar (Bandırma Onyedi Eylül University)

Abstract

The COVID-19 pandemic is an unprecedented global health crisis that profound impacts our societies and economies. Workers in the informal economy are particularly at risk because the majority lack social protection, lack access to quality health care and have lost access to productive assets. Poverty and hardship caused by unemployment or social discrimination force a significant proportion of the urban poor to collect and recycle waste to survive. Apparently, the current pandemic is another push factor for waste collection. Waste pickers (scavengers) work like the gears of a huge waste separation system. They usually live and work in extremely precarious conditions. Although waste collectors create a positive externality for society (lengthening of empty landfill space and availability of natural resources), they tend to be socially excluded and exposed to various vulnerabilities (e.g. work-related health risks and accidents). Especially after the pandemic, it became common for scavengers to find themselves confronted with disposable masks, gloves, clothing and disinfectants in some garbage boxes. In other words, we are talking about a sector that is in direct contact with the disease and the virus. This study examines waste collectors and highlights their positive impact on society and their socio-economic vulnerability.

Key Words: *Informal Economy, Waste Management, Waste Pickers (Scavengers), Vulnerability*

1. Introduction

The 2019 coronavirus outbreak in Wuhan, China has sparked a global pandemic and has profoundly changed our lives. It also exposed structural inequalities across every sphere. Many countries have taken partial or full lockdown measures to reduce the rate of transmission. The backlash was that many faced job loss or means to earn an income. As a result, they were unable to feed themselves and their families during lockdowns. The economic consequences of the COVID-19 pandemic required urgent policy responses to support households and firms alike. Most of the measures envisaged were macroeconomic in nature, focussing largely on the provision of emergency liquidity by central banks. Such measures were instrumental to prevent a catastrophic economic collapse that would have dire human, social, and health consequences. But they generally fell short since they could hardly solve the problems of the vulnerable and disadvantaged people who can not even access any of such support.

One such disadvantaged group of people is waste pickers. Waste picking is the act of picking reusable or recyclable waste items originally considered to be useless. Even before COVID-19 a significant proportion of the urban poor used to involve in the waste collection as a source of income in many developing countries. It appears that more people involved in this sector after COVID-19 because of rising unemployment and hardship. Medina (2008) stated that scavenging increases with particular intensity in times of war or severe economic crises. COVID-19 created such a situation.

Waste pickers or scavengers are men, women and children who rely on discarded items for their livelihoods (Garenbauer: 2021, p. 81). Waste pickers search for reusable or recyclable items that are either consumed or sold to generate funds for personal and family upkeep since alternative decent employment are not available for them in the formal employment sector (Omosimua et al., 2020).

They are an important component of recyclers, entrepreneurs and solid waste management systems in many countries. However, they are also subject to discrimination, low income, unhealthy and insecure working conditions, and the social association of dealing with garbage with filth. For waste pickers, the risk of exposure to the virus and loss of livelihoods is felt physically and financially high during the COVID-19 process (Garenbauer: 2021, p. 81).

Even though waste pickers are a common sight in the urban areas, remarkably little is known about them and scant attention is paid to them (Schenck & Blaauw, 2011). One of the purposes of this paper is to provide insights into the role and practices of informal waste pickers and the implications for waste management policy in urban contexts. Another purpose of the paper is to challenge the invisibility of waste pickers and deal with information pollution about them.

2. Covid-19, Lockdowns, and Rise in Unemployment

The World Health Organization declared COVID-19 as a pandemic on March 11, 2020. During this period, many countries implemented quarantine due to the rapidly increased number of cases. On the one hand, this implementation prevented the spread of the epidemic, but on the other hand, it caused many individuals to lose their jobs and their income.

According to (Baldwin, 2020, p. 1), the long-term damage to the economy caused by the lockdown policies implemented during the COVID-19 process will inevitably confront governments. A 'hard stop' was put on production, consumption, and investment during the lockdown process. This is damaging to the economy, making the recession longer and deeper than it should be for purely medical reasons.

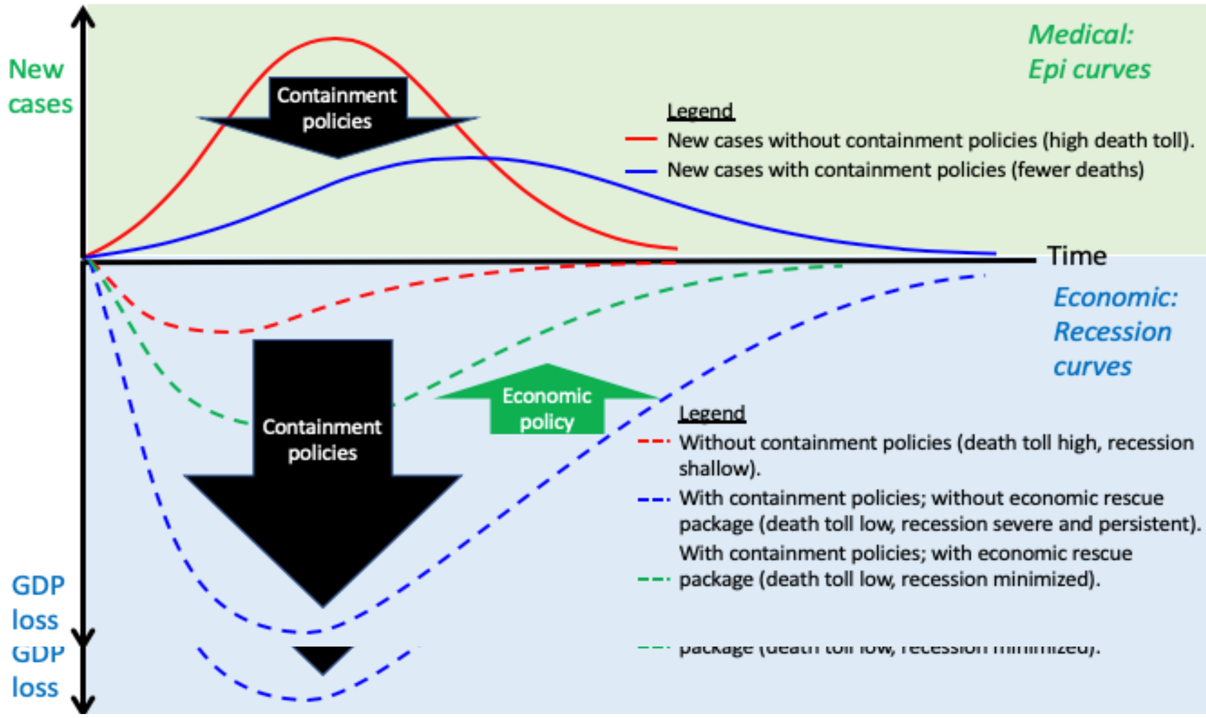


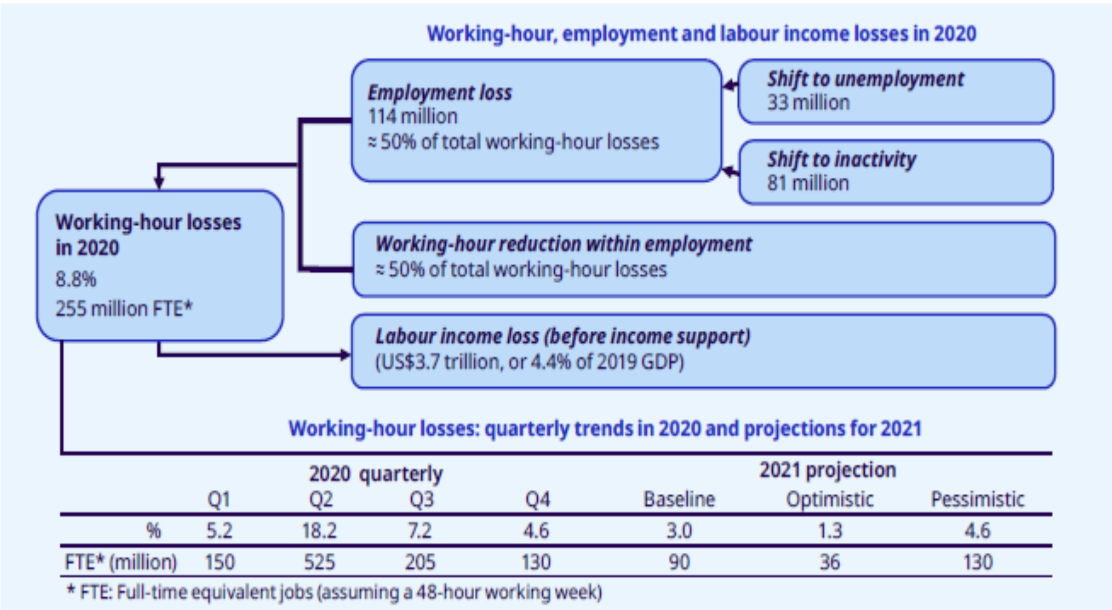
Figure 1: The Epidemic Curve and the Economic Cost Curve

***Source**: Baldwin, R. (2020). The supply side matters: Guns versus butter, COVID-style, Access Link: https://voxeu.org/article/supply-side-matters-guns-versus-butter-covid-style Access Date: 02.06.2021*

Figure 1 schematically illustrates how life-saving containment policies (top panel in the figure) also exacerbated the recession (bottom panel). However, with the effective economic policy to be applied, the recession curve can be flattened.

The COVID-19 pandemic has wreaked havoc on the global economy, impoverishing most of the world's population. Labor markets suffered a great loss in 2020 as a result of it. According to ILO, 8.8% of global working hours were lost compared to 2019Q4. This loss is about four times the loss experienced in the 2008-2009 global financial crisis. These lost working hours were due either because of those who remain employed or to "unprecedented" job losses reaching 114 million people. Importantly, 71% (81 million) of job losses were due to being out of the workforce rather than unemployment; that is, people left the labor market, perhaps because they could not work due to restrictions under the global epidemic, or they stopped looking for a job altogether. Just looking at unemployment rates makes the effects of COVID-19 on the labor market much smaller than they are. These massive losses resulted in an 8.3% decline in global labor income (excluding support measures); this equates to 4.4% of global GDP, roughly US$3.7 trillion (Figure 2). These massive labor income losses due to the epidemic can plunge households into poverty. The World Bank estimates that the global poverty rate for people living on less than $1.90 a day has raised to 9.1% in 2020 from 8.4% in 2019, rather than falling to 7.9% previously projected. This rate means that an additional 88 million people are driven into poverty. When households run out of savings, it may cause them to reduce their consumption, which may further reduce aggregate demand. The reduction in labor income is unevenly distributed among workers, so the problem of loss of income is compounded by the problem of greater inequality (ILO, 2021, p. 11). The World Bank estimates that the COVID-19 pandemic will push an additional 143-163 million people into extreme poverty in 2020 and 2021 (Barroso & Berkley, 2021, p. 5).

Figure 2: Estimates of the Working, Employment, and Labor Income Lost in 2020 and Projections for 2021



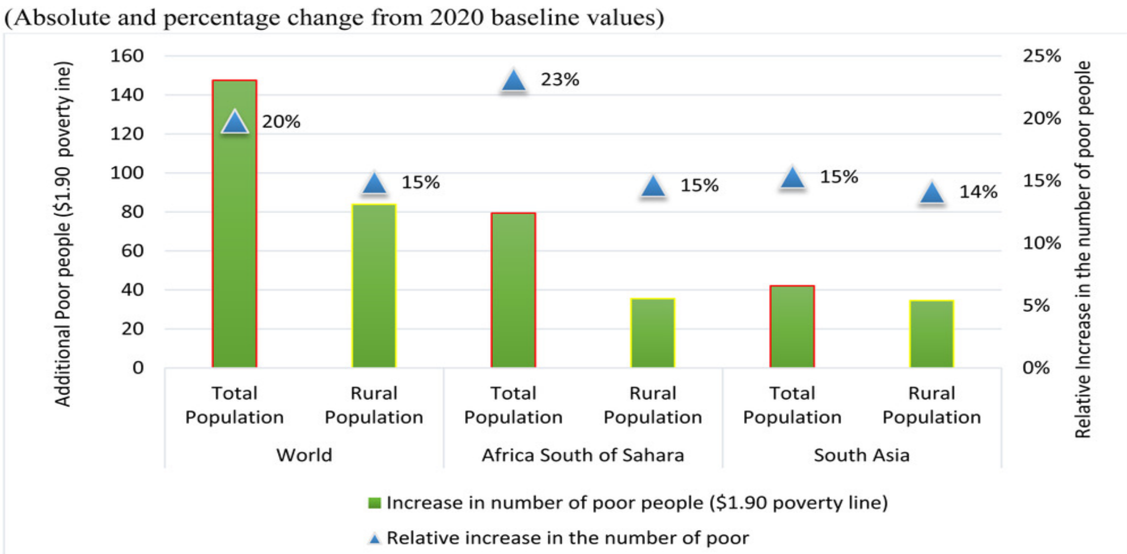
Source: *ILO (2021). ILO Monitor: Covid-19 and the World of Work. Seventh Edition Updated Estimates and Analysis, Access Link: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_767028.pdf* Access Date: 02.06.2021

The World Bank estimated that the COVID-19 pandemic to push an additional 143-163 million people into extreme poverty in 2020 and 2021 (Barroso & Berkley, 2021, p. 5). According to Molina and Ortiz-Juarez (2020, p. 3), assuming a moderate contraction in incomes, the total number of people in poverty, measured by the lowest standard of US$ 1.90 per day, could increase by 70-100 million globally as a result of the epidemic.

The lockdown period which is implemented in the epidemic brought an economic nightmare. Despite many uncertainties about the spread of the virus and the effectiveness of the measures which are taken, it is predicted that the COVID-19 pandemic will cost more than 10 trillion dollars and every 1% decrease in the global economy will impoverish more than 10 million people (Kocabaş, 2020, p. 15).

According to Laborde, Martin, and Vos (2021, p. 8), the global recession caused by COVID-19 will be much deeper than the 2008-2009 financial crises. Increases in poverty are greater in South Asia and sub-Saharan Africa, and poverty is more experienced in urban areas than in rural areas. It is estimated that around 150 million people will fall into extreme poverty. As illustrated in Figure 3, without social and economic mitigation measures such as fiscal stimulus and broadening social safety nets in the Global South, the impact on extreme poverty (measured at $1.90 per person per day based on the international poverty line) would be devastating.

Figure 3: Global and Regional Poverty Impacts of Covid-19



***Source:** Laborde, D., Martin, W., Vos, R. (2021). Impacts of Covid-19 on Global Poverty, Food Security, and Diets: Insights from Global Model Scenario Analysis, Agricultural Economics, 8.*

3. Relationship between Unemployment, Poverty, Exclusion, and Informal Economy

High levels of unemployment are a permanent feature in the urban areas of many developing countries (Schenck & Blaauw, 2011). Informal Economy is a matter of survival amongst the urban vulnerable. For the urban poor in developing countries, informal waste recycling is a common way to earn income (Medina, 2008). In both developed and developing countries, population growth, as well as production and consumption patterns, have increased rates of solid waste production, creating constraints on the improvement of human environmental and health conditions. These constraints are aggravated in the developing world by a lack of environmental controls on industrial processes, and inadequate or insufficient facilities for waste management and treatment (Ojeda-Benitez et al., 2002).

Poverty and hardship caused by unemployment or social discrimination force a significant proportion of the urban poor in developing countries to venture into waste collection and recycling to survive (Schenck & Blaauw, 2011). Social discrimination is a factor that obliges informal waste workers to work under completely unhygienic conditions as waste collectors or sweepers. Besides social marginalization, waste workers and their families are subject to economic insecurity, health risks, lack of access to normal social services such as health care and schooling for children, and the absence of any form of social security (Moreno-Sanchez & Maldonado, 2006).

4. Scavengers and Positive Externality Creation for Society

In many developing countries, a significant proportion of the urban poor is involved in waste collection and recycling as a source of income (Moreno-Sanchez & Maldonado, 2006). Scavengers play an indispensable role by helping to control municipal solid waste (Chen et al., 2018). As Navarrete-Hernandez and Navarrete-Hernandez (2018, January) suggest, waste-picking provides a sustainable solution for solving the waste management crisis that affects 3 billion people lacking access to waste services.

Waste collection and recycling activity of scavengers in developing countries generate a positive externality to society as production costs in some sectors are reduced and landfills' lifetime is lengthened. In addition, virgin materials are less intensively used, increasing the availability of natural resources. Therefore, their activity must be encouraged through economic incentives that lead them to increase the amount of solid waste recovery up to economically efficient levels (Moreno-Sanchez & Maldonado, 2006). Studies suggest that when organized and supported, waste picking can spur grassroots investment by poor people, create jobs, reduce poverty, save municipalities money, improve industrial competitiveness, conserve natural resources, and protect the environment (Medina, 2008).

5. Precarious Life and Work Conditions of Scavengers

The existence of scavenging is based on the presence of markets for recovered materials; waste in sufficient quantity and quality to meet industrial demand, and people willing or compelled to do work that is poorly paid, hazardous, and of low status (Hogland & Marques, 2000).

5. 1 The Work and Lives of Scavengers

Living conditions of the individuals who make their living by collecting waste are quite inadequate in meeting the needs (Yazgan, 2019, p. 66). Informal waste workers usually live and work under extremely precarious conditions; scavenging, in particular, requires very long working hours and is often associated with homelessness (Moreno-Sanchez & Maldonado, 2006). Many of these waste pickers are young, work without the necessary health and safety apparatus, and expose themselves to injury and various health hazards (Omosimua et al., 2020). Besides social marginalization, waste workers and their families are subject to economic insecurity, health risks, lack of access to normal social services such as health care and schooling for children, and the absence of any form of social security (Moreno-Sanchez & Maldonado, 2006).

Waste pickers are exposed to adverse health effects resulting from hazards at work. The inadequate management of solid waste impacts populations' health and quality of life and disproportionately affects developing countries. This prevalence of chronic and communicable and non-communicable diseases in waste pickers, and the occupational and environmental risk factors to which these are exposed. After the Covit outbreak, it is usual to see some disposable masks, gloves, clothes and disinfectant bins that bear the status of medical waste in some of the boxes containing the waste that street collectors try to collect. In other words, we are talking about a sector that is in direct contact with the disease and the virus.

5. 2 Perceptions of Scavengers and Social Exclusion

Although waste pickers play an indispensable role by helping to control municipal solid waste, their economically disadvantaged position excludes them from the formal labour market. They constitute the entry-level workforce of the waste recycling industry and receive little attention from the general public (Chen et al., 2018).

Waste pickers exposed to economic and psychosocial difficulties and exclusion mainly due to their deprivation which is caused by poverty and they were perceived as individuals who were suspected, feared and were considered as avoided people in the same environment. Moreover, due to the climatic and economic difficulties, it makes their lives almost impossible to meet the right of housing and standardized living conditions. Scavengers are also deprived of the representation right. As a reflection of all these negativities, it has been determined that recycling employees' perseverance and efforts in working life are diminished and they feel stigmatized in social relations, and they suffer from psychosocial collapse and despair (Moreno-Sanchez & Maldonado, 2006).

5. 3 Barriers Preventing Scavengers From Improving Their Socioeconomic Conditions

It is almost a rule that people who are exposed to social exclusion also experience other forms of exclusion. Scavengers experience social inequalities in all areas of life. As a result of their learned helplessness, they start to lost hope that these inequalities can be eliminated. Yazgan (2019, p. 67) points out that because of attitudes of those who see themselves as potential criminals, scavengers stay out of spatial, economic, educational and social life.

Low levels of schooling, limited language proficiency, uncertain and low levels of income as well as limited access to basic social needs make it difficult for scavengers to move upwards in the hierarchy of the informal economy (Viljoen, Blaauw, & Schenck, 2015). The level of continuing education of individuals who earn their living by collecting waste is quite low and most of them are completely out of education life. According to research carried out by Yazgan (2019, p. 66) income status is a very serious determinant of participation and attendance in education. This situation does not progress independently of the socio-cultural and socio-economic status of the students' families. Their education is directly related to the educational background of other members of the family and parents. Poor housing conditions, insufficient cultural environment, oppression and violence are among the important causes of school dropouts.

Despite all the difficulties, Almeida, Figueiredo, and Dantas (2017) have a promising proposal for scavengers to move upwards in the hierarchy of the informal economy. They propose to create a processing and selling facility for recycled waste that will be managed by a second-degree cooperative. According to their estimation, the implementation of this proposal could increase the average income of waste pickers by 67.44% in Brazil.

6. Concluding Remarks

What needs to be recognized is that waste pickers are integral to the waste management systems and waste picking activity is not only a source of income for many people facing precarious economic conditions but also generates positive externalities to the society and make cities more sustainable.

This paper revealed a situation of extreme poverty, exclusion, and neglect of waste pickers, while they are generating positive externalities to the society and making the cities more sustainable. Waste pickers benefit society since they reduce production costs in some sectors and lengthen landfills' lifetime. Both citizens and local authorities should recognize the important role of waste pickers in the solid waste management system and their positive externality generation. Accordingly, they need to be compensated adequately. For that, solid waste management officials should be encouraged to invest in occupational training of the waste pickers to enhance their skills and provide them with the opportunity to improve their working and living conditions. Moreover, their activity should be encouraged through economic incentives that lead them to increase the amount of solid waste recovery up to economically efficient levels.

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THE INFLUENCE OF COVID-19 ON STOCK MARKET RETURNS: EVIDENCE FROM OECD COUNTRIES

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Özcan Işık (Sivas Cumhuriyet University)[2]

Abstract

The aim of this study is to examine the influence of COVID-19 on stock market returns for OECD countries. Panel data analysis techniques are preferred in estimating the coefficients of the regression models determined for empirical analysis. Our dependent variable is stock market returns as measured by the by the daily change in major stock market index of the countries. Also, the COVID-19, our independent variable, is measured using four alternative variables: (i) the daily growth in the number of COVID-19 patients died, (ii) the daily growth in COVID-19 confirmed cases, (iii) the daily growth in the number of confirmed cases per million, and (iv) the daily growth in the number of deaths per million. In addition to dependent and independent variables, we also use several control variables.The econometric analysis of the regression model consists of the following steps: Firstly, Spearman correlation analysis and variance inflation factor analysis are performed. Secondly, the stationarity of our series is checked, and lastly, panel regression analysis employing the Driscoll-Kray procedure is carried out to estimate the linkage between stock market returns and thee COVID-19. As a result, a general evaluation is made by comparing the results obtained from our study with those of previous studies in the literature.

***Keywords**: COVID-19, Stock Market Returns, OECD Countries*

1. Giriş

COVID-19 salgınının 11 Mart 2020 tarihinde Dünya Sağlık Örgütü tarafından küresel bir salgın olarak ilan edilmesinden bu yana 179 milyon doğrulanmış vaka ve 3,9 milyon ölüm gerçekleşmiştir (WHO, 2021). Salgının finansal piyasaların küreselleştiği bir ortamda ortaya çıkması, ülkelerin finans piyasalarını derinden etkilemiş ve borsa getirilerinde ciddi değişimlere neden olmuştur. Nitekim ABD Borsalarında yaşanan %7 üzerindeki düşüşler 1. seviye devre kesicileri harekete geçirmiş ve daha büyük çöküşleri önlemek üzere 9, 12, 16 ve 18 Mart 2020'de devre kesiciler dört kez tetiklenmiştir (WEF, 2020). Bu mekanizmanın 1988'de uygulanmasından bu yana yalnızca 1997 yılında harekete geçmesi salgının finans piyasası üzerindeki yıkıcı etkisini göstermesi bakımından oldukça önemlidir. Ayrıca Birleşik Krallık FTSE100 endeksi, %24,80 düşüş kaydederek 1987'den bu yana en kötü çeyreği yaşamıştır. Küresel sermaye piyasalarında 9 Mart 2020'de yaşanan %10'un üzerindeki değer kaybı ise 11 Eylül 2001 tarihinden bu yana en yüksek günlük düşüş olmuştur (Daube, 2020: 2).

Borsada işlem gören varlıkların getirilerinde yaşanan dalgalanmalarda ekonomideki risk ve belirsizliğin yanı sıra yatırımcının korku ve endişesinin büyük rolü bulunmaktadır. Bu endişe finansal varlığın içsel faktörlerinden, diğer finansal araçlardan, faaliyette bulunulan piyasadan ya da küresel piyasalardan kaynaklanabilir. Bununla birlikte oynaklık yalnızca içsel faktörler tarafından belirlenmez. Büyüme, faiz, kur,

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enflasyon, dış ticaret ve para politikası gibi dışsal faktörler de firmaların finansal performansını doğrudan etkilediğinden, bu etki firmanın hisse senedi getirilerine yansıyarak oynaklığın artmasına neden olmaktadır. Nitekim piyasalar arası ekonomik ilişkilerin yoğun olduğu günümüz piyasalarında, bir ülkede ortaya çıkan oynaklığın diğer ülkeleri ve finans piyasalarını da etkilemesi uzun sürmeyecektir.

Geçmiş yıllarda yaşanan finansal kriz deneyimlerine bakıldığında bu etki daha net görülmekte ve ülkelerdeki hisse senedi getirilerinin değişken olması krizlerin ortak özelliğini oluşturmaktadır (Gamba-Santamaria vd., 2017: 207). Bu açıklamalardan yola çıkıldığında hisse senedi getirilerindeki değişimin ölçülmesine yönelik analizlerin sistematik risklerin başarıyla yönetilmesine ve finansal istikrarın sağlanmasına katkı sağlayacağı söylenebilir (Zhang vd., 2020: 2).

Bununla birlikte son yaşanan küresel salgın geçmişteki krizler ile karşılaştırılamayacak ölçüde reel piyasalarda ve finans piyasasında değişime yol açmıştır. Diğer yandan bulaşı riskinin oldukça yüksek olması hükümetlerin salgın sürecinde daha önce eşine az rastlanan politikaları hayata geçirmesine neden olmuştur. Nitekim Dünya Sağlık Örgütünce 2020 mart ayında COVID-19'un küresel bir salgın olduğu ilan edildiğinde, dünya çapında 100'den fazla ülke kısmi veya tam sokağa çıkma yasağı uygulamış ve salgını önlemeye yönelik bu tür politikalar havayolu ile şehirlerarası seyahatlerde 2019 mart ayına göre %70-90 arası düşüşe neden olmuştur (Dunford vd., 2020). Hükümetlerce para ve maliye politikaları çerçevesinde ekonomideki durgunluğu önlemeye ve reel sektör kayıplarını telafi etmeye yönelik kapsayıcı teşvikler sağlansa da salgının neden olduğu yüksek oranlı ölüm vakası, otoritelerin daha sert önlemler almasına yol açmış ve piyasalarda yaşanan belirsizlik, ekonominin ve sektörel faaliyetlerin daha derin bir durgunluğa sürüklenmesine neden olmuştur.

Reel sektörde yaşanan bu tür olumsuzluklar aktarım mekanizmaları yardımıyla finans sektörünü de etkilemiştir. Nitekim salgının açıklandığı tarihi takip eden dönemde borsaları, bankacılık ve sigorta sektörünü içeren finansal sektördeki kayıplar, artış göstermeye başlamıştır. Bu çalışmanın da amacı 4 Ocak - 28 Mayıs 2021 dönemi için OECD üyesi 37 ülkenin, önemli borsa endekslerine ait günlük getiriler ile salgını temsil eden günlük frekanstaki değişkenler arasındaki ilişkiyi panel veri analizi ile tahmin etmektir. Çalışma kapsadığı dönem ve ülke grubu açısından literatürdeki önceki çalışmalardan ayrılmaktadır.

Çalışmadan elde edilen sonuçlara göre COVID-19 pandemisini temsil eden değişkenlerle borsa getirileri arasında negatif ve istatistiksel olarak anlamlı sonuçlar bulunmaktadır. Diğer bir deyişle COVID-19 pandemisinin OECD üyesi 37 ülkenin ana borsalarına ilişkin getirileri azalttığı ifade edilebilir. Bu sonuca ilaveten, İnsani gelişmişlik endeksinin borsa getirileri üzerinde anlamlı bir etkisi tespit edilemezken, VIX korku endeksi ve ekonomik büyüme değişkenlerinin borsa getirileri üzerinde pozitif yönde bir etkiye neden olduğu tespit edilmiştir.

2. Literatür Araştırması

Gerek ulusal gerekse uluslararası literatürde COVID-19 salgınının borsa endeks getirileri ya da firma getirileri üzerindeki etkisini araştırmaya yönelik çok sayıda çalışma vardır. Bu çalışmalardan bazıları Tablo 1'de gösterilmiştir.

Tablo 1. Literatür Özeti

Yazar(lar)	Örneklem	Dönem	Yöntem	Sonuç
Bahrini ve Filfilan (2020)	Bahreyn, Umman, Suudi Arabistan ve Katar	1 Nisan-26 Haziran 2020	Sabit etkiler	Çalışmada günlük endeks getirileri ile salgın göstergeleri arasında negatif bir ilişki olduğu rapor edilmiştir.
Topçu ve Gülal (2020)	26 gelişmekte olan ülke	10 Mart-30 Nisan 2020	Driscoll-Kraay EKK	Çalışmada salgın vaka sayısı ile endeks getirileri arasında negatif yönlü bir ilişki rapor edilmiştir.
Liu, Wang ve Lee (2020)	ABD	21 Ocak- 6 Mayıs 2020	TVP-VAR model	COVID-19 salgını ile S&P500 getirileri arasında pozitif yönlü ilişki rapor edilmiştir.
Erdem (2020)	75 ülke	Ocak-Nisan 2020	Sabit Etkiler	Çalışmada milyon başına vaka ve ölüm sayıları ile hisse senedi getirileri arasında negatif yönlü ilişki tespit edilmiştir.
Ashraf (2020)	64 ülke	22 Ocak-17Nisan 2020	Panel EKK	Çalışmada vaka ve ölüm sayılarındaki büyüme ile endeks getirileri arasında negatif yönde bir bağlantı olduğu rapor edilmiştir.
Babarinde vd. (2020)	Nijerya	2 Mart- 25 Ekim 2020	Panel EKK	Pozitif vaka sayısı ile banka sektörü endeks getirileri arasında ters yönlü bir ilişki tespit edilmiştir.
Al-Awadhi vd. (2020)	Çin	10 Ocak-16 Mart 2020	Panel EKK	Çalışmada firma düzeyinde hesaplanan pay senedi getirisi ile vaka ve ölüm sayısı arasında negatif bir ilişki olduğu rapor edilmiştir.
Chaouachi ve Chaouachi (2020)	Sudi Arabistan	02 Mart-20 Mayıs 2020	ARDL ve Toda-Yamamoto Nedensellik	Çalışmada, COVID-19'un sadece uzun dönemde borsa üzerinde olumsuz bir etkisi olduğu tespit edilmiştir. Ayrıca nedensellik analizi COVID-19'dan borsaya tek yönlü bir nedensellik olduğunu göstermektedir.
Sansa (2020)	Çin ve ABD	1 Mart-25 Mart 2020	Regresyon analizi	Çalışmada COVID-19 salgını ile Shanghai ve New York Dow Jones borsa endeksi arasında pozitif bir ilişki bulunmuştur.
Contuk (2021)	Türkiye	11 Mart-16 Haziran 2020	ARDL	Çalışmanın sonuçlarına göre BIST işlem hacmi ile pozitif vaka sayısı arasında kısa dönemde negatif, uzun dönemde ise pozitif bir ilişki bulunmuştur.
Öner ve Aybars (2021)	Türkiye	20 Mart-31 Aralık 2020	Tesadüfi Etkiler	Sonuçlar Türkiye ile dünyadaki COVID-19 vaka ve ölüm sayılarındaki haftalık büyüme oranlarının endeks getirileri üzerindeki etkisinin negatif olduğunu göstermektedir.
Topaloğlu, Ege ve Koycu (2021)	Türkiye, Belçika, Almanya, Fransa, İtalya, İspanya, İngiltere, ABD, Çin ve Hollanda	17 Mart-14 Nisan 2020	Panel EKK	Bulgular toplam vaka sayısı ile borsa getirileri arasında negatif bir ilişki olduğuna ve toplam vefat sayısı ile borsa getirileri arasında ise pozitif bir ilişki olduğuna işaret etmektedir.
Utomo ve Hanggraenı (2021)	Endonezya	2 Mart-27 Kasım 2020	Sabit Etkiler	272 firmanın hisse senedi getirileri ile salgın göstergeleri arasında ters yönlü bir ilişki tespit edilmiştir.

Tablo 1'de görüldüğü üzere salgın döneminde borsa getirileri ve endeks oynaklıkları ciddi değişiklikler göstermektedir. Literatürde çalışmanın konusunu oluşturan borsa getirileri ile salgın arasındaki ilişkiyi ölçen çok sayıda çalışma olmasına rağmen bu çalışma yöntem ve ülke örneklemi açısından diğer çalışmalardan ayrılmaktadır.

3. Çalışmanın Veri Seti

Çalışma kapsamında incelenen 37 OECD ülkesinin günlük getiri verileri Thomsen Reuters Eikon veri tabanından temin edilmiştir. COVID-19'u temsil etmek için kullanılan milyon kişi başına günlük toplam teyit edilen vakalardaki büyüme ile milyon kişi başına günlük ölen hastalarda büyüme değişkenleri Worldometer web sayfasından elde edilmiştir. Çalışmada kontrol değişkeni olarak kullanılan korku endeksi (Chicago Board Options Exchange Volatility Index) ile ülkelere ilişkin insani gelişmişlik endeksi (İGE) ve logaritmik kişi başına gayri safi yurt içi hasıla (KB_GSYİH) serisi ise sırasıyla investing.com web sayfasından, Birleşmiş Milletler Kalkınma Programı (UNDP) ve Dünya Bankası veri tabanından derlenmiştir.

4. Çalışmanın Modeli

Çalışmada, COVID-19'un borsa endeks getirileri üzerindeki etkisinin belirlenmesi amacıyla Topçu ve Gülal (2020), Erdem (2020), Ashraf (2020) ve Bahrini ve Filfilan (2020) tarafından yapılan çalışmalar takip edilerek aşağıdaki model oluşturulmuştur:

$$EG_{it} = \beta_0 + \beta_1 Covid - 19_{it} + \beta_2 Kontrol\ Değişkenleri_{it} + \varepsilon_{it} \quad (1)$$

Yukarıdaki 1'nolu denklemde ε_{it} modeldeki diğer tüm değişkenlerle ilişkisiz olduğunu varsaydığımız hata terimini ifade etmektedir. β_0 sabit terimdir. β_0, β_1 ve β_2 ise tahmin edilecek katsayılardır.

Borsa endeks getirileri (EG_{it}) ise şu şekilde hesaplanmıştır:

$$EG_{it} = \ln\left(\frac{Endeks_{it}}{Endeks_{it-1}}\right)$$

Burada "Endeks", i ülkesinde t zamanında dolar cinsinden bir ana borsa endeksinin düzeyidir. COVID-19 ile ilgili verilerdeki büyüme ise aşağıdaki şekilde hesaplanmıştır:

$$VB_{it} = \ln\left(\frac{Vaka_{it}}{Vaka_{it-1}}\right)$$

$$ÖB_{it} = \ln\left(\frac{Ölüm_{it}}{Ölüm_{it-1}}\right)$$

Burada $Vaka_{it}$ t zamanında i ülkesindeki doğrulanmış COVID-19 vaka sayısıdır. Benzer şekilde $Ölüm_{it}$ ise t zamanında i ülkesinde ölen COVID-19 hasta sayısıdır. OECD Üyesi Ülkelere İlişkin Borsa Endeksleri Tablo 2'de sunulmuştur. Tablo 2'de görüldüğü üzere analize dahil edilen borsa endeks sayısı 37'dir.

Tablo 2. OECD Üyesi Ülkelere İlişkin Borsa Endeksleri

	Ülke	**Borsa Endeksi**		**Ülke**	**Borsa Endeksi**
1	Avusturya	AUSTRIAN TRADED (ATX)	20	Güney Kore	KOREA SE COMPOSITE (KOSPI)
2	Avusturalya	S&P/ASX 200	21	Letonya	OMX RIGA (OMXR)
3	Belçika	BEL 20	22	Litvanya	OMX VILNIUS (OMXV)
4	Kanada	S&P/TSX COMPOSITE	23	Lüksemburg	DJGL LUXEMBOURG
5	Şili	S&P/CLX IGPA CLP INDEX	24	Meksika	DJGL MEXICO
6	Kolombiya	MSCI COLOMBIA	25	Hollanda	S&P NETHERLANDS
7	Çek Cum.	PRAGUE SE PX	26	Yeni Zelanda	S&P NEW ZEALAND
8	Danimarka	OMX COPENHAGEN	27	Norveç	S&P NORWAY
9	Estonya	OMX TALLINN (OMXT)	28	Polonya	DJGL POLAND
10	Finlandiya	OMX HELSINKI (OMXH)	29	Portekiz	PORTUGAL PSI-20
11	Fransa	FRANCE CAC 40	30	Slovakya	SLOVAKIA SAX 16
12	Almanya	DAX-30 PERFORMANCE	31	Slovenya	SLOVENIAN BLUE CHIP
13	Yunanistan	ATHEX COMPOSITE	32	İspanya	IBEX 35 - PRICE INDEX
14	Macaristan	BUDAPEST (BUX)	33	İsveç	OMX STOCKHOLM 30 (OMXS30)
15	İzlanda	OMX ICELAND	34	İsviçre	SWISS MARKET (SMI)
16	İrlanda	ISEQ ALL SHARE INDEX	35	Türkiye	BIST NATIONAL 100
17	İsrail	ISRAEL TA 125	36	İngiltere	FTSE 100
18	İtalya	FTSE MIB INDEX	37	ABD	S&P 500 COMPOSITE
19	Japonya	NIKKEI 225			

Çalışmada kullanılan tüm değişkenlere ilişkin özet istatistikler ise Tablo 3'te verilmiştir. Özet istatistikler incelendiğinde analiz döneminde OECD ülkelerinin borsa getirilerinin ortalama olarak negatif olduğu (-0.0004) görülmektedir. Buna ilaveten salgına bağlı vaka ve ölümlerdeki büyümenin ortalama değerleri ise sırasıyla 0.0038 ve 0.0064'dür. Çalışmada kontrol değişkeni olarak kullanılan VIX, İGE ve KB_GSYİH değişkenlerinin ortalama değerleri ise sırasıyla -.0047, 0.7970 ve 10.5876'dır.

Tablo 3. Özet İstatistikler

Değişken	N	Ortalama	SS	Minimum Değer	Maksimum Değer
EG	3811	-0.0004	0.0225	-0.0646	0.0551
VB	3811	0.0038	0.0026	0.0038	0.0026
ÖB	3811	0.0064	0.0089	0.0064	0.0089
VIX	3811	-0.0047	0.0449	-0.0623	0.0012
İGE	3811	0.7970	0.0721	0.6500	0.9440
KB_GSYİH	3811	10.5876	0.4188	9.1318	11.0241

5. Analiz sonuçları

Çoklu doğrusal bağlantının araştırılması için gerçekleştirilen korelasyon analizi sonuçları Tablo 4'te verilmiştir. Değişken çiftleri için hesaplanan korelasyon katsayıları incelendiğinde borsa getirileri ile hem vakalardaki büyüme hem de ölümlerdeki büyüme arasında negatif ve anlamlı korelasyonlar dikkat çekmektedir. Buna ilaveten kontrol değişkenleri olarak modellere dahil edilen VIX, İGE ve KB_GSYİH değişkenleri ile borsa getirileri arasında pozitif korelasyonlar tespit edilmiştir. Ancak bu korelasyonlar herhangi bir önem düzeyinde anlamlı bulunmamıştır. Korelasyon matrisinden elde edilen bir diğer önemli sonuç ise İGE ve KB_GSYİH değişkenleri arasında hesaplanan yüksek korelasyon katsayısıdır. Bu iki değişken çifti arasında hesaplanan korelasyon katsayısının 0.7839 olması söz konusu değişkenlerin çoklu doğrusal bağlantı probleminden dolayı aynı modelde kullanılamayacağına işaret etmektedir. Çalışmada ayrıca çoklu doğrusal bağlantının varlığını sınamak için yapılan VIF analizleri de İGE ve KB_GSYİH değişkenlerinin aynı anda aynı modellere dahil edilmemesi gerektiğini ortaya koymaktadır.

Tablo 4. Korelasyon Matrisi

Değişken	EG	MB_VB	MB_ÖB	VIX	İGE	KB_GSYİH
EG	1					
VB	-0.3755*	1				
ÖB	-0.1313*	0.6143*	1			
VIX	0.0430	-0.0017	0.0025	1		
İGE	0.0114	-0.0809	-0.0999	0.0027	1	
KB_GSYİH	0.0135	-0.1340*	-0.1068*	-0.0020	0.7839*	1

Not: * korelasyon katsayısının 0.01 düzeyde anlamlı olduğunu göstermektedir.

Çalışmada tahmin sonuçlarının raporlanmasına geçilmeden önce sonuçların güvenilirliği için değişkenlere ait zaman serilerinin durağanlık sınamalarının yapılması gerekmektedir. Bu amaçla çalışmada değişkenlerin durağanlık kontrolü IPS (Im-Pesaran-Shin, 2003) testi ile yapılmıştır. IPS panel birim kök analiz sonuçlarına göre, EG_{it}, VB_{it} ve $ÖB_{it}$ değişkenleri için hem sabitli hem de sabitli ve trendli modellerde sıfır hipotezi %1 önem düzeyinde reddedilerek bu serilerin durağan olduğuna karar verilmiştir.

Tablo 5. IPS Panel Birim Kök Analizi Sonuçları

Değişken	Model	Düzey	Karar
EG_{it}	Sabit	-38.0284***	I(0)
	Sabit ve Trend	-37.9500***	I(0)
VB_{it}	Sabit	-12.4629***	I(0)
	Sabit ve Trend	-14.6313***	I(0)
$ÖB_{it}$	Sabit	-9.8231***	I(0)
	Sabit ve Trend	-10.9888***	I(0)

Not: IPS testinde Ho: tüm panel birim kök içerir iken H1 ise bazı paneller durağandır şeklindedir.

(1) nolu denklemde belirlenen "borsa endeksi getiri modeli"ne ait tahmin sonuçları Tablo 6'da sunulmuştur. Tüm modellerde bir bütün olarak modelin anlamlılığını sınayan F testine ilişkin olasılık değerleri anlamlıdır. Bu da kurgulanan modellerin bir bütün olarak anlamlı olduğunu ortaya koymaktadır. Ayrıca R^2 değerleri dikkate alındığında, modelin bağımsız değişkenlerinin bağımlı değişkendeki değişimin en az %12'sini açıkladığı tespit edilmiştir.

Tablo 6'da ilk üç model vaka sayılarındaki büyüme ile borsa getirileri arasındaki ilişkiyi, bununla beraber son üç model ise ölüm rakamlarındaki büyüme ile borsa getirileri arasındaki ilişkiyi incelemektedir. Tablo 6'daki ilk üç modele ilişkin tahin sonuçları incelendiğinde vaka sayılarındaki büyümenin borsa getirileri üzerinde negatif bir etkiye sahip olduğu görülmektedir. Her üç modelde de bu etki %1 önem düzeyinde anlamlıdır. Buna göre vaka sayılarındaki büyüme borsa getirilerini olumsuz yönde etkilemektedir. Ayrıca, Tablo 6'daki son üç modele ilişkin tahin sonuçları da ölüm rakamlarındaki büyüme ile borsa getirileri arasında ters yönlü bir ilişki olduğunu ortaya koymaktadır. Bu bulgu da ölüm sayılarındaki büyümenin borsa getirilerini azalttığına işaret etmektedir. Sonuç olarak bulgular COVID-19 pandemisini temsil eden bu iki değişkene ilişkin artışların azalan borsa getirileri ile ilişkili olduğunu göstermektedir. Daha açık bir ifadeyle bulgular piyasa yatırımcılarının COVID-19 vaka ve ölüm sayılarını yakından takip ettiğini ve açıklanan vaka ve ölüm sayılarının borsa yatırımlarını önemli derecede etkilediğini ortaya koymaktadır. Bu sonuçlar Erdem (2020), Ashraf (2020), Topçu ve Gülal (2020), Babarinde vd. (2020) ve Bahrini ve Filfilan (2020)'ın çalışmalarında ulaşılan sonuçlarla benzerlik göstermektedir.

Kontrol değişkenlerine ait tahmin edilmiş katsayılar incelendiğinde korku endeksinin beklenenin aksine borsa getirilerine pozitif yönde etki ettiği tespit edilmiştir. Buna ilaveten ekonomik büyümeyi temsil eden değişken model 1'de borsa getirilerine zayıf da olsa pozitif yönde etki etmektedir. Çalışmanın son kontrol değişkeni olan İGE değişkeni ile borsa getirileri arasında istatistiksel olarak anlamlı bir ilişki tespit edilememiştir.

Tablo 6. Regresyon Tahmin Sonuçları

	(1)	(2)	(3)	(4)	(5)	(6)
MB_VB	-0.0311*** (0.0091)	-0.0304*** (0.0096)	-0.0302*** (0.0098)			
MB_ÖB				-0.0305*** (0.0099)	-0.0302*** (0.0112)	-0.0306*** (0.0097)
VIX		0.0119** (0.0044)	0.0118** (0.0057)		0.0120* (0.0057)	0.0131** (0.0060)
İGE			0.0613 (0.0442)			0.0424 (0.0358)
KB_GSYİH		0.0840* (0.0450)			0.0619 (0.0681)	
Intercept		-0.1558 (0.1690)	-0.1854 (0.1921)		-0.1805 (0.2208)	-0.2662 (0.2996)
R^2	0.1319	0.1645	0.1533	0.1248	0.1458	0.1477
F-istatistiği	71.42***	89.36***	81.44***	67.74***	79.56***	90.22***
Gözlem Sayısı	3811	3811	3811	3811	3811	3811
Tahminci	DK-EKK	DK-EKK	DK-EKK	DK-EKK	DK-EKK	DK-EKK

Not: ***, ** ve * sırasıyla 0.01, 0.05 ve 0.10 önem düzeyinde anlamlılığı ifade etmektedir. Parantez içindeki değerler ilgili katsayının standart hatasıdır.

6. SONUÇ

Bu çalışmada COVID-19'un 37 OECD ülkesine ait endeks getirileri üzerindeki etkisi ampirik olarak incelenmiştir. Çalışmanın verileri günlük frekansta olup 4 Ocak - 28 Mayıs 2021 dönemini kapsamaktadır. Çalışmada belirlenen modellere ait katsayı tahminlerinde olası otokorelasyon, değişen varyans ve yatay kesit bağımlılığı sorunlarına karşı sağlam standart hatalar üreten Driscoll-Kray EKK tahmincisi kullanılmıştır.

Driscoll-Kraay prosedürü kullanılarak gerçekleştirilen analiz sonucunda COVID-19'u temsil eden vaka ve ölüm sayılarındaki büyüme ile OECD ülkelerinin önemli endekslerinin getirileri arasında istatistiksel olarak negatif ve anlamlı sonuçlar elde edilmiştir. Dolayısıyla salgın nedeniyle artan vaka ve ölümlerin analiz dönemi itibariyle borsa getirilerini olumsuz yönde etkilediği ifade edilebilir. Dolayısıyla bu sonuç OECD ülkelerine ilişkin piyasalarda yatırımcıların vaka ve ölüm sayılarını yakından takip ettiğini ve açıklanan rakamların bu piyasalardaki yatımcı kararlarını önemli derecede etkilediğini ortaya koymaktadır.

Kontrol değişkenlerine ait sonuçlar incelendiğinde; bulgular endeks getirilerinin hem ekonomik büyümeyi temsil eden değişkenden hem de Korku Endeksi olarak bilinen Chicago Opsiyon Borsası Oynaklık Endeksi (VIX) değişkeninden pozitif ve anlamlı bir şekilde etkilendiğine işaret etmektedir. Bununla beraber insani gelişmişlik endeksi ile borsa getirileri arasında istatistiki olarak anlamlı bir ilişki tespit edilememiştir.

Çalışma kapsamında elde edilen sonuçların sağlamlığı için bazı sağlamlık testleri yapılmıştır. İlk olarak incelenen modeller havuzlanmış EKK ve tesadüfi etkiler gibi alternatif tahminciler kullanılarak tekrar tahmin edilmiştir. Alternatif tahmincilerin kullanılması ile elde edilen ve rapor edilmeyen sonuçların Tablo 6'da sunulan Driscoll-Kraay EKK sonuçlarına benzer olduğu gözlemlenmiştir. İkinci olarak önceki literatür doğrultusunda regresyon modellerinde yer alan vakalardaki ve ölümlerdeki büyüme değişkenleri yerine milyon başına vaka ve milyon başına ölüm sayılarındaki büyüme değişkenleri kullanılmıştır. Alternatif COVID-19 değişkenlerinden elde edilen ve rapor edilmeyen tahmin sonuçlarının Tablo 6'daki sonuçlarla örtüştüğü gözlemlenmiştir.

Bu çalışmadan elde edilen sonuçların incelenen dönem ve ülke grubu için geçerli olduğu unutulmamalıdır. Buna ilaveten ileriki çalışmalarda incelenen örneklem alt örneklemlere ayrılarak COVID-19'un endeks getirileri üzerindeki etkisi aylık ya da haftalık olarak incelenebilir.

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Impacts of COVID-19 on Societies and Economies

The ongoing COVID-19 pandemic became a profound shock to our societies and economies as a black swan event. It is an unprecedented global health crisis that has resulted in over 111 million confirmed cases and over 2,5 million deaths globally. The COVID-19 pandemic is not only a public health threat. It is affecting societies and economies at their core and on all facets of life. Social distancing, self-isolation, and travel restrictions have to lead to a reduced workforce across multiple sectors. Millions of enterprises face an existential threat. Nearly half of the world's 3.3 billion global workforces are at risk of losing their livelihoods. Tens of millions of people are at risk of falling into extreme poverty and many may die from hunger. The COVID-19 simultaneously exposes structural inequalities across every sphere. Informal economy workers are particularly vulnerable because the majority lack social protection and access to quality health care and have lost access to productive assets. Without the means to earn an income during lockdowns, many are unable to feed themselves and their families.

This conference aims to identify how the COVID-19 experience will change many economic and social dynamics and what can be done for a better World.

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