INTERNATIONAL RESEARCH IN SOCIAL, HUMAN AND ADMINISTRATIVE SCIENCES - II

December 2022

<u>Editor</u> Prof. dr. İrfan yıldız Assoc. Prof. dr. salih batal



Genel Yayın Yönetmeni / Editor in Chief • C. Cansın Selin Temana Kapak & İç Tasarım / Cover & Interior Design • Serüven Yayınevi Birinci Basım / First Edition • © Aralık 2022

ISBN • 978-625-6399-19-8

© copyright

Bu kitabın yayın hakkı Serüven Yayınevi'ne aittir. Kaynak gösterilmeden alıntı yapılamaz, izin almadan hiçbir yolla çoğaltılamaz. The right to publish this book belongs to Serüven Publishing. Citation can not be shown without the source, reproduced in any way without permission.

Serüven Yayınevi / Serüven Publishing Türkiye Adres / Turkey Address: Yalı Mahallesi İstikbal Caddesi No:6 Güzelbahçe / İZMİR Telefon / Phone: 05437675765 web: www.seruvenyayinevi.com e-mail: seruvenyayinevi@gmail.com

Baskı & Cilt / Printing & Volume

Sertifika / Certificate No: 47083

International Research in Social, Human and Administrative Sciences - II

December 2022

Editors

Prof. Dr. İrfan YILDIZ Assoc. Prof. Dr. Salih BATAL

CONTENTS

Chapter 1

DOMINIUM OF THE UNBORN: REPRODUCTIVE BIOTECHNOLOGY IN HUMAN RIGHTS AND DOMINIUM DEBATES[,]

Gülsevim EVSEL1

Chapter 2

AN ECONOMIC STANDSTILL POINT IN THE HISTORY OF TURKISH CIVIL AVIATION: THE MARSHALL PLAN

Öner GÜMÜŞ, Filiz EKİCİ, Gamze ORHAN......17

Chapter 3

THE USE OF INFOGRAPHICS AS VISUAL CONTENT PRODUCTION IN DIGITAL JOURNALISM: THE CASE OF ANADOLU AGENCY

İbrahim YILDIZ......35

Chapter 4

THE PAST, PRESENT AND THE FUTURE OF HUMAN RIGHTS: THE WEST AND THE EASTS

Ertuğrul GÖKÇEKUYU......59

Chapter 5

<u>Chapter 6</u>

INNOVATIONS THAT NFT MARKETING WILL BRING TO DIGITAL MARKETS AND AN OVERVIEW OF NFT TECHNOLOGY

Kemal Gökhan NALBANT, Sevgi AYDIN......81

Chapter 7

TESTING A MARKET TIMING STRATEGY BASED ON THE HALLOWEEN EFFECT OF FINANCIAL MARKETS

Alp POLAT......93

<u>Bölüm 8</u>

CONSUMPTION RELATIONS DEVELOPED AROUND THE CONCEPTS OF BIOPOWER AND CONSUMPTION CULTURE: A QUALITATIVE STUDY ON THE PROGRAM "BÖYLE ÇOK DAHA GÜZELSİN"

Mehmet Serhan Tezgeç......105

Chapter 9

ORGANIZATIONAL CRISIS MANAGEMENT AND STRATEGIC RESPONSES

Emine KARAKAPLAN ÖZER.....123

Chapter 10

OCCUPATIONAL HEALTH AND SAFETY PRACTICES OF MIGRANT WORKERS IN DIFFERENT NATIONS: SYSTEMATIC REVIEW RESEARCH

Chapter 11

THE SOCIOLOGY OF COLLECTIVE BEHAVOIR

Suna TEKEL	17	7	1	l
------------	----	---	---	---

Chapter 12

ECONOMIC GROWTH AND TRADE OPENNESS: AN EMPIRICAL ANALYSIS

Chapter 13

CRITICAL ANALYSIS OF SOCIAL SECURITY POLICIES IN TURKEY

Nagihan	DURUSOY	ÖZTEPE.		
	Denesor	OBIDI D	• • • • • • • • • • • • • • • • • • • •	

Chapter 14

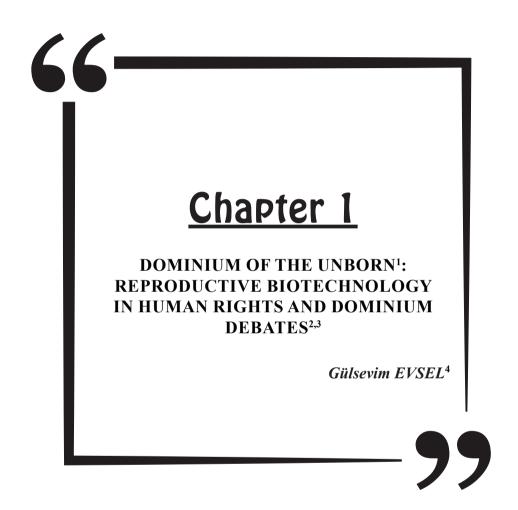
IMPACT OF THE ENERGY CRISIS ON COMMERCIAL AIRLINES STOCK PRICE

Tapdig IMANOV, Hatice İMAMOĞLU......217

Chapter 15

HOTEL SELECTION IN İZMIR AN APPLICATION WITH AHP-TOPSIS AND AHP-VIKOR METHOD

Hakan AYDOĞAN, Alper AYTEKİN, Fatma AKGÜN......229



¹ I am very appreciating to my Professor, Dr. Cem Deveci for the notion of 'Dominium of the Unborn' and for his great mentorship.

² This paper was submitted as an oral presentation at ASA Conference: "Hard Times: The Impact of Economic Inequality on Families and Individuals," 16-19 August, 2014, San Francisco.

³ The main discussion topic and argumentations in this paper were developed in the Ph.D. Thesis of the author: Evsel, G. (2018). Human Rights Domain for Reproductive Biotechnology: A Qualitative Study on Turkish Case, (Assoc. Prof. Cem Deveci, Advisor) Graduate School of Social Sciences, Middle East Technical University. URL: https://open.metu.edu.tr/handle/11511/27850

⁴ Assistant Professor. Department of Sociology Van 100.Yil University, OR-CID ID: https://orcid.org/0000-0002-1733-3966

1.Introduction

Technological developments and hence - growing - technological concern about the body especially in reproduction technologies created its reflection in the social scientific research on the non-ethical use of living body and body parts. These developments cannot reduce the indispensability to the body, conversely, they increase. Surrogate motherhood, being ovum or sperm donors, and being a marrow provider donor are some popular examples of these applications which were subjected to many scientific and ethical discussions and created different scopes of inequalities even if they were awarded or not. A concept of 'dominium of the unborn' is developed in this article in order to discuss the problems concerning decisions about the rights of those who are not yet born with an emphasis on a possible reformulation of modern natural law. In modern positive law, a social and responsible political power is not available in order to make a claim for the human right of a person who sells a part of her body to survive. Special tests, operations, and other applications are not covered and/or seriously controlled by the states, and any one claims a right at the end of a non-human application or even a non-human result of that application. Nevertheless, this article claims that governments were neglecting the dehumanizing effects of biotechnology products/services.

During and after scientific revolutions, not only people have exploited technology and the world, but technological developments have also started to exploit humanity and its world. In addition to being their beneficiaries, people suffered from or at least their bodies/ lives were exploited by these technological developments. After the Enlightenment and 'modernism' were questioned by critical theory, science reached the top point of its career by discovering gene mapping. This was another dimension of the technological developments because via playing with genes, scientists were claiming to find cures for illnesses, to solve "the problem of a man who is unable to survive his 'surname," to plant every kind of vegetable or fruits or trees in every kind of soils, to implant every kind (number, color, sex, or the healthiest) of the embryo into the womb of a woman, and so on.

However, these very expensive genetic technologies brought out certain social problems which are different from social problems created by other technologies previously. The main reason for this difference is, not using electronic cables or pesticides this time but using the 'body' and 'tissue' of the living organism. In parallel with this, the use of this technology was divided into two kinds of people: 1. Who want to sell his/her sperm/egg, who want to give birth to others (people who are infertile, fertile but gay/ lesbian, fertile but does not want to deform her body, etc.) babies as the sweated section of this new technology as the providers. 2. Who can afford and want to be implanted with a non-risky embryo with respect to some illnesses, who want to have five male babies, and who want to rent a womb, terminologically a 'surrogate mother', etc. as the consumers of it. Many inequalities are created by this new technology and hence are suggested to be discussed in the Human Rights literature in the rest of this article.

To begin with, a social and responsible state is not available in order to claim the human right of a person morality who sells a part of her body to survive. Special tests, operations, and other applications are not made, covered, and seriously controlled by the state and one's claim of a right at the end of a non-human application or even a non-human result of that application. Nevertheless, I want to argue that governments were neglecting the dehumanizing effects of biotechnology products/services. When the APA categorization of Henry Shue (1996: 51-54) is reminded; the state should be understood as the actor which has certain duties¹ such as avoidance, protection, and aid. Then it is obvious that states should be responsible for making life secure for all of its citizens and also against the violence that comes from biotechnology products/services/markets. In other words, ignorance of states should be seen as a violation of human rights when the social results of biotechnology applications were interpreted. Another possible violation of human rights via biotechnology would possibly be noticed when the language of rights is regarded to the selected or eliminated embryos and finally, future generations since they have no ability to claim their rights (Pogge, 2001: 190).

This article aims to ask the question of whether political power could use its influence to allow the developments and applications in biotechnology without any harm to human life and honor. The hypothesis of the article will be around the statements below:

- The biotechnology market grows at the expense of human rights in many ways.

- The possibility of determining the borders in the use of biotechnology products/services in a secure environment for its citizens is blurred.

- Over such clarifications, the statement of 'dominium of the unborn' is relevant concerning recent ethical discussions about the controversial decision processes in reproductive biotechnology.

Not regulations and prohibitions, but security for the citizen about biotechnology applications are not even in question for Turkey. Hence, deficiencies and problems in the use and results of biotechnology services/ products require to be moved up to the human rights agenda and need an emergent investigation. After developing adequate human rights terminology

¹ Correlative duties: I. Duties not to eliminate a person's security (Avoidance), II. Duties to protect people against deprivation of security by other people (Protection), III. Duties to provide for the security of those unable to provide their own (Aid)

to demarcate the violations in biotechnology services/products, a sociological discussion with recommendations is pursued in this work.

2.Literature snapshot

Human rights are a different category from the others because at first, their source and legitimacy are very different from the other categories. Many philosophers and political scientists emphasized the self-referential character of human rights including Donnely. He claimed that human rights were a special class of rights, the rights that one had simply because one was a human being (Donnely, 2003: 12). It is known that this characteristic implies equality among all people. As Vincent (1986: 9) underlined, the subjects of human rights are not members of this or that society, but of the community of humankind. If one has these rights only because one was a human being then what is the source of that power? It is obvious that human rights were arranged against all kinds of power. Namely, human rights should be a superpower all above others. Then, what should be the base, source, essential, or elementary factor which underlies human rights?

The origins or source of human rights were searched in the history of humanity. While Donnely (2003: 17) was showing the moral nature as the source of human rights, according to Freeman (2002: 11), the idea of the 'source' of human rights was containing an important and confusing ambiguity: it could refer to the social origins or the ethical justification of human rights. Arendt (1973: 290) brought a new dimension to the source of human rights: Man himself was their source as well as their ultimate goal.

There is a close relationship between a concept and its social origins since the concept would be fed by that origin. In Donnely (2003: 18), this interaction came into question again by claiming that there was both a constructive interaction between moral vision and political reality and a constructive interaction between the individual and society, which shape another through the practice of human rights. A self-fulfilling moral prophecy would then possibly come into existence in the body of human rights as "treat people like human beings and you will get truly human beings."

As Freeman (2002:18) puts it into the discussion there was no direct line from medieval conceptions of ius to early modern conceptions of natural rights. As the famous Dutch jurist, Hugo Grotius (quoted from Freeman, 2002: 18) expressed, 'men had natural rights, but these were transformed by society.' The first sharp distinction between right (jus) and law (lex) was made by Thomas Hobbes in seventeenth-century England (Freeman, 2002: 19). He pushed the idea of right beyond legal restraint by calling it a liberty to do or to forbear –contrasted with law, 'which bindeth to one of them- and allowing, in the form of a right of nature, anything which is necessary to an individual's self-preservation (Vincent, 1986: 25). We suggest self-preservation for whom? Of course, people who are able to use their reason and their bodies in order to live in safety and preserve themselves. Foucault (1982: 790) mentioned the recalcitrance of the will and the intransigence of freedom in order to underline the possibility of exercising power only over free subjects, and only insofar as they are free. If so one can not even talk about the freedom of the unborn and thus the right of an unborn /embryos and in parallel with this, exercising power over them. The violations of their existence are not subject to modern law. Then should we think about the possibility of natural law as an alternative?

It is known that recently, natural rights and law are not preferred to be used as concepts which, however, keep their validity, for some authors. This study suggests a reinterpretation of natural rights and thus questions these concepts if they were still working or not. From this point of view, the responsible interlocutor of some intrinsic emotions/behaviors/power such as dominium in some cases related to reproductive biotechnology is discussed if it is not included by modern law will it be discussed in the boundaries of natural law, namely a modern natural law.

This approach possibly makes us closer to Locke who was interpreted as a theorist of a strict individualist conception of natural rights; because according to Locke, each individual had fundamental obligations to God, was endowed with reason, and had a natural right to freedom, which was limited only by the obligation to respect the natural rights of others (Freeman, 2002: 21). Natural law and natural rights are known as some external, objective concepts which were derived from the nature of and found out by the faculty of reason. Natural law would save one and all others from the violations of natural rights. However, the medieval word 'dominium' can be accepted as a natural right; and giving interventionist decisions via using biotechnology about those who are not yet born can be regarded as having the 'dominium of the unborn.'

3.1. Introduction to the concept of Dominium

Dominium as a medieval word has many different meanings and areas of usage in time. One source of late medieval natural-rights theory was the dispute between the Dominicans and the Franciscans, who championed the life of poverty and thereby called into question the legitimacy of private poverty. In 1329 Pope John XXII argued against the Franciscans that God had granted to Adam dominium (lordship) over temporal things. The property was therefore sanctified by divine law (Tuck, 1979; quoted from Freeman, 2002: 18). Also for Vincent (1986: 25), the dominium of the scholastic philosophers becomes the right to property, meaning life and liberty as well as mere possession (through a property in one's person does not in Locke entail a right to enslave oneself, as some earlier writers had argued). However, by the fourteenth century, it was possible to argue that to have a right was to be the lord of one's moral world (Tuck, 1979; quoted from Freeman, 2002: 18). For classical Roman legal theorists, dominium and rights were quite distinct concepts: while dominium was implying a mastery or power over persons or things, rights check the exercise of power (Holland, 2010: 457).

In their article which examines Vitoria's political theory, Albayrak and Deveci (2005: 268) pointed out that Vitoria, through his conceptualizations especially on the right to communication, should be regarded as the originator of fundamental human rights. According to them, Vitoria suggested accepting locals as slaves who had a dominium. He added with a reference to Aristoteles that locals were not ordinary slaves, rather they were natural slaves. However, according to the same work, Vitoria admitted that Aristoteles has a right on his side about the slaves as they were the inferior/down types among the human category. By the line of this thinking, natural slaves should be directed by a civilized human. Then, can we use this way of thinking as a base for the shift of unborns' dominium to their parents because of their insufficient mental capabilities? If so, should we also accept that the concept of dominium was still valid and could be discussed under natural law because of its mismatch to modern law for the subjects related to those who were not yet born? Albayrak (2004: 27) underlines that there was a definite line between spiritual and temporal powers in Vitoria's political approach. For him, both powers are self-sufficient (perfecta) institutions, and therefore, none of them should intervene in the other's dominium, in principle. According to this view, it would not be wrong to claim that the 'dominium of the unborn' which is named in this study is spiritual power and modern law could intervene only with temporal power, not spiritual ones.

Here, the contribution of the pre-modern understanding of dominium in Vitoria's way of thinking is discussed. Victorian interpretation of dominium had an important contribution to the definition of dominium and its identification for also slaves. However, this interpretation again excludes the dominium for the 'unborn.'

Frankfurt School namely the critical view used the term domination in questioning capitalism and its existence in positivist forms. While the concept of 'reification' by Lukacs is stated as 'commodity fetishism' and 'alienation' in Marx, Marcuse and other Frankfurt School agents named it 'domination.' Marcuse claimed in his book titled *One-Dimensional Man* that there was a relationship between 'domination' and modern technology (Feenberg, 1988). According to Marcuse (1964: 7), 'under the rule of a repressive whole, liberty can be made into a powerful instrument of domination; the range of choice open to the individual is not the decisive factor in determining the degree of human freedom, but what can be chosen and what is chosen by the individual.' In this work, it is suggested that the reproductive biotechnology industry is led to this and other types of domination discussions.

3.2. Biotechnology Applications that are subjected to the Human Rights agenda

3.2.1. Asymmetrical Intervention: Emergence of 'dominium of the unborn'

As a branch of modern biotechnology, reproductive biotechnology – in other words assisted reproduction technologies (ARTs) – brings some technological solutions for people who need external and professional help in order to make them the owner of one (or more) babies, or specifically selected babies (via the techniques of Pre-implantation Genetic Diagnosis and In-Vitro Fertilization, etc.). It is still ethically blurred 'whether it is ethical to use new reproductive technologies to select the sex of one's child' (Liao, 2005: 116). Nowadays, many women apply for undergoing reproductive treatment in order to have a baby. When one or more embryos are held by the uterus and the termination of the 'redundant other/s' occurs as the new problem, the sex of the desired baby would become the matter. In underdeveloped countries such as Turkey, where the prime minister of the country confesses at every turn that each Turkish family should have at least three children, it is not difficult to predict which sex would be chosen by an ordinary family.

Originally, Pre-Implantation Genetic Diagnosis (PGD) is developed to choose embryos without a specific disease such as Mediterranean anemia, or, conditionally, to choose embryos with a specific disease such as genetic deafness in order to provide assimilation with other deaf members of the same family. Ordering a baby whose tissue would save his/her older brother/sister from an illness (leukemia) is another example of choosing embryos. However, no other selection process would be applied to this newly selected embryo than finding the tissue which would be identical to the previous sick child. That means this new brother/sister may have the same illness. Since the reality/acceptance of this technique is still under discussion, the invisible human rights violations towards this 'hero' or as Çoban's (2012: 51) terms ' savior siblings', or babies with the desired genetic sequencing are also unknown.

Although people cynically argue that sending children to private schools, teaching them by private teachers, making them having piano, ballet, or tennis courses, or feeding them with protein-rich foods are not so different from choosing their sex of them; Liao (2005: 117) underlines these daily decisions as reversible and points out that non-health related, irreversible decisions made on behalf of a child would deprive that child of

his autonomy because a life course will have been chosen for him without his being able to alter it. If we believe in the value of autonomy, then it seems that such non-health-related irreversible decisions made on behalf of another without the other's consent should not be permitted.

Here an asymmetrical intervention is subjected. One can not talk about the irreversible intervention of the unborn to its parents because it is already, and naturally, bound physically and mentally to its parents' decisions. It was mentioned in the previous sections of this study that the possibility of exercising power is in question only over free subjects, and only insofar as they are free (Foucault, 1982: 790). Then, naming this intervention is a more virgin subject so that a dominium of the unborn can be discussed here. If someone wants to eat more bananas so that she would be more likely to have a son, there would be a little ethical objection against her doing so as Liao (2005: 116) stated so; but if sex-selective technological interventions would be permitted, then we should talk about a new natural law and a dominium of the unborn. Parents presume that they have an infinite right to their unborn and keep on exercising violations against them since there will be no reaction over them. This asymmetrical intervention is the first problematic issue that is subjected to the Human Rights agenda.

3.2.2. Access to Reproductive Technologies:

New Inequality so as to control Eugenics

Affording to have access to reproductive technologies changes according to the socio-economical status of people because of the relatively high costs of technology products/ services. For many applications in reproductive biotechnology, public health insurance do not cover the costs. This inability of some sections of society in accessing technology creates another inequality. One can argue that only poor people will possibly have children with a disability if their disabilities were not obtained under current technological possibilities and circumstances which are freely available for everybody.

Out of this serious human rights problem, there is another problem again related to access to technology. Services in this industry and travels for that aim are very expensive and again create an inequality of opportunities. A question arises at this point: Is this new inequality a problem? Fukuyama (2002: 79) argues that a handful of rich people genetically modifying their children for greater height or intelligence would have no effect on species-typical height or IQ. In the case of free and broader access to technology, fears about possible new eugenics would occur through the possibility of choosing the best embryo among the others. Thus, a more sensitive approach should be chosen for the threat of equality this time. Not an inequality, but equality in access to technology may lead to more human rights violations through eugenics. The only difference from Nazi Germany would be the timing of the selections; positive eugenics before birth. That is directly related to the right to live and biopower ('making live' and 'letting die') argumentations of Foucault (1976)², which will not take place here in detail.

3.2.3. Applications at the Expense of Universality of Human Rights

The capability of bodily health would possibly be violated via technological and surgical operations which are conducted for surrogate motherhood, being egg donors, etc. Women who need immediate money, tend to rent their bodies and/or body parts for transforming the roles of others into parents, in exchange for enough money.

It is a matter of health because being egg donors for in-vitro babies might be interpreted as a matter of the incapability of bodily integrity. It is known that eggs are taken after storing the women more hormones, under anesthesia, and some operational conditions unsimilar to sperm donation. This feature makes it more valuable and unethical since female students. some housewives, and homeless people are known as the 'donors' of this organ. Some of these women may tend to give their eggs many times a year despite the adverse effects of hormones and complications of operations. In their study, Waldby and Cooper (2008: 59) argue that women's participation in the sale of eggs involves a very literal form of bodily, reproductive labor - a kind of labor that has been traditionally available to women but which has only recently been medicalized, technologized and standardized to an extent where it can be organized on a global scale. If this capability entails provisions of nondiscrimination on the basis of race, sex, ethnicity, caste, religion, and national origin, then in addition to the sex-selective feature of biotechnology techniques, there is another controversial point that could be emphasized as the desirable origins of egg donors. It is known that white-skinned or European women prefer a similar color as egg donors. However, there is no doubt that black women would also like to make money from their eggs. Then national origin and ethnicity play a big role and creates another dimension of inequality in this new industry.

As a precaution, in some countries including Turkey, some reproductive treatments such as sex-selective abortion, or sex-selective Pre-Implantation Genetic Diagnosis, etc. are forbidden. For example, in Germany, Norway, Sweden, and Japan, the use of donor eggs is illegal (Steinbock, 2004: 256).

² The 'letting die (laissez mourir), making live (faire vivre), 'namely 'biopower' conceptualization is mainly based on Foucault's bipolar diagram of biopower (in volume 1 of The History of Sexuality). While the one pole of biopower focuses on an anatamopolitics of the human body, seeking to maximize its forces and integrate it into efficient systems; the second pole is one of regulatory controls, biopolitics of the population, focusing on the species body, the body imbued with the mechanisms of life: birth, morbidity, mortality, longevity (Foucault, 1976: 139: quoted from Rabinow and Rose, 2003: 2).

These precautions are informed through some regulations in Turkey. If these regulations do not have enough enforcement power for 'insignificant' treatments such as sex selection in addition to choosing embryos against a specific genetic disease, specialists may ignore the regulation. For only sex selection, many specialists and gynecologists prefer to avoid of breaking the rules. Demands for sex selection and other problematic treatments of reproductive biotechnology are met by genetic travels to some developed countries or some backyard countries³. Outside Europe, China and India also have burgeoning stem cell industries and extensive clinical recruitment sites, owing to the widespread use of assisted reproductive technology to favor the birth of sons (Junhong, 2001; Khanna, 1997; quoted from Waldby and Cooper, 2008: 62-63). It is still a serious question if there is a human rights violation where body parts such as eggs were provided and implemented. It is ethically acceptable that egg donors should not be paid for their eggs; rather they should be compensated for the burdens of egg retrieval (Steinbock, 2004: 255). This way of earning money via selling body parts is essentially problematic with respect to both literatures on ethics/deontology and human rights.

In-vitro baby trials which tend to inseminate more than one embryo should have been emphasized here as another application at the expense of the Universality of Human Rights. In Turkey, it was unforgettable that the case of a woman over 45 got pregnant with seven babies via the technique of in-vitro fertilization. The technique increased its success chance by inseminating seven embryos but unluckily (or luckily) all of the embryos were successful! She was suggested by the professionals to undergo an abortion and continue her pregnancy with two or three babies for her and the babies' health. However such kind of abortion was contradictious with her religion and thought. Finally, she had chosen to continue her pregnancy with her seven babies and she lost all of them.

Fear and anxiety are very familiar to a pregnant woman. Despite the untrustability of technology, there are a few women who prefer to continue their pregnancy even if the pregnancy tests and screenings through ultrasound techniques were shown a defect in the genes of the baby. Many women prefer (or force to be preferred) to undergo an abortion out of the risk of having a disabled child. There are women who were told as highly risky in having a disabled child in her pregnancy and gave birth to a very healthy baby and there are women who were told as non-risky in having a disabled child in her pregnancy and gave birth to a disabled child. This technology creates unnecessary and untrustable fear and anxiety for many people.

³ http://www.kibrisyumurtanakli.com/en/yumurta-nakli-turkiyede-yapilabilinir-mi

4. Recognizing a 'Dominium' on behalf of 'Rights'

The rights debate on embryos and reproduction, was conducted by some authors with the concepts such as 'human rights to IVF' (Zegers-Hochschild, Dickens and Dughman-Manzur, 2013), 'reproductive rights' (Chan and Quigley, 2007), 'the legal status of human embryo' (Çoban, 2007 and 2012), or 'frozen life's dominion' (Gunsburg, 1996) have been continued as a subject that goes in hand in hand with embryo researches of reproductive biotechnology.

While Zegers-Hochschild, et. al. (2013) were searching for a legal base for the human rights of the embryo in the various court cases, Chan and Quigley (2007) held the question of the legal rights of frozen embryos as property. Gunsburg (1996) used the term 'dominion' for his discussion, especially on whose rights (mother or father & right to bear and beget) were paramount in a frozen embryo dispute for different courts. Çoban (2012: 46) grounded his claim of the inability about sounding legal provisions for the embryo in the test tube with three reasons: The first one is about regarding the embryo as a 'means' for realizing a purpose takes us to another deadlock. The second one is about a living thing whose fate is sealed by placing the one-week or ten-day-old embryo into the uterus and the last one is related to legal terminology. As it is seen briefly that the discussions about the right or legal status of the embryo start with the common question of 'when do we become human?' The different approaches are divided into two, as Fukuyama (2002: 174) emphasized, who believe that life begins at conception and that embryos have full moral status as human beings. In this study, the dominium of the unborn is questioned in the scope of liberty and the rights of their parents. Bioethicist John Robertson, for example, argues that individuals have a fundamental right to what he calls procreative liberty, which involves both a right to reproduce as well as a right not to reproduce (quoted in Fukuyama, 2002: 174). It is commonly accepted that prospective mothers and fathers have some rights over their unborn babies. However, these rights should not include arbitrary use and violation of such a dominium as it is seen in the previous chapters of this work. If the scope of human rights can not be enlarged to include the rights of the unborn because of some biological developmental reasons then recognizing a dominium of the unborn should be seen as a solution for the violation of the rights of the unborn on behalf of future generations. An immediate intervention from the states should take the role of controlling such a dominium is suggested in this respect.

5. Result and Recommendations

The concept of dominium of the unborn requires immediate attention to have the right to plan, change, and direct not the slave, but the child and female human body together. Of course, prospective parents or biotechnology are again tools of such kind of violation policy, the irrelevant actor is again the state (Erbaş, 2009: 1) because there is no clear legislation, restriction, or deterrence for the misuse or adverse-social effects of reproductive biotechnology. If every man is regarded as rational in that he could know the law of nature as Locke claimed, then the new question is who is the owner of the dominium of the unborn? Is the answer visible to society and its individuals or the invisible state, the power? Regardless of the answer, if the aim of public policy is public welfare then the state is directly responsible for its citizens and their human rights violations. Another question may arise from this contradictory situation if human rights were inalienable then can one claim that he/she bought or rented another individual's right? If the answer is 'no,' then the authority could be found in order to correct the way of donorship and decision makers on behalf of babies who are not yet born.

When modern law rejects being concerned with this dominium of the unborn; namely, violated rights of the living things who are not able to express themselves such as mentally retarded or very old people, embryos, and next generations, then should one search for the solution in natural law for the elimination of such violations? Rather, it should be possible to overcome the problem of the family and so arbitrary ownership of dominium of the unborn via institutional interventions, namely intervention to the intervention. Out of some controversial matters, statements mentioned below are regarded as the clear and problematic subjects included and created by reproductive biotechnology which should be overcome with:

- States should take account of public health immediately and they should create institutions for controlling, regulating, and correction of reproductive biotechnology clinics, hospitals, and even laboratories.

- States should obtain especially regular egg donors and surrogate mothers and employ them in a secure job in addition to providing them a rehabilitation service. People who have a relationship with people who want to be a parent should be accepted as donors. Donorship should not be economically awarded, namely, a survival of an industry that is based on living body parts should not be permitted.

- Some basic concepts related to human beings such as dominium and rights are blurred in some respects. However, when its reciprocity is found in modern law, one can discuss about the defense, violation, or alienability of a right/or dominium. Here the suggestion is the recognition of the dominium of the unborn in order to prevent its violation by families and technologies. Especially in underdeveloped and patriarchal countries, the lack of juridical intervention would give irreversible results with respect to people who are not yet born. - If the artificial womb, egg, and sperm are created by reproductive biotechnology, then one can talk about creativity and even the divinity of biotechnology. Such divinity makes it more difficult to discuss issues in an ethical sense.

- And when the political power as a social actor, the social state would not even intervene in these new technology violations and interventions, recently it seems so, then a collaborative violation can be in question.

In sum, there is again a contradiction between an industrial technique and humanity. This time not the laborers but the production of raw material is problematic because it takes its source from the living body. Both the human whose body parts are used as raw materials and the material itself should be questioned with respect to human rights. The modest aim of this study was to call attention to the recognizing the presence of this new dominium especially over the unborn and to the revising human rights regulations on especially female body subjected to reproductive biotechnology, states, and other people (power)/ attitudes around or inside them who promote them in being the materials of that industrial technology.

References

- ALBAYRAK, A. (2004), The Possibility of Conceiving Universal Human Rights in the Sixteenth Century Political Theory: The Views of Vitoria and Las Casas. Advisor: Ass. Prof. Dr. Cem Deveci. An Unpublished Master Thesis submitted to The Graduate School of Social Sciences, METU.
- ALBAYRAK, A. and DEVECI, C. (2005), Ortaçağ Sonunda Evrensel Hukuk Arayışı ve İnsan Hakları: Vitoria'nın Siyaset Kuramı, Doğu Batı Düşünce Dergisi, 8(33), pp. 255-287.
- ARENDT, H. (1973), 'The Perplexities of the Rights of Man' in The Origins of Totalitarianism, New York; Harcourt Brace, pp.290-302.
- CHAN, S. and QUIGLEY, M. (2007), 'Frozen Embryos, Genetic Information and Reproductive Rights,' Bioethics, 21(8), 439-448.
- COBAN, A. (2012), The Legal Status of the Human Embryo in Test-tube in Reproduction Process in Turkey,' Turkish Yearbook of Human Rights, 34, pp. 45-66.
- DONNELY, J. (2003), Universal Human Rights in Theory and Practice, Part One, Ithaca: Cornell University Press.
- ERBAS, H. (2009), The Perceptions on GMOs and GM Food with some Selected Social Indicators in an 'Irrelevant State,' Turkey. A paper submitted to the 8th IAS-STS Conference on 'Critical Issues in Science and Technology Studies' in Graz, Austria, 4 -5 May 2009.
- EVSEL, G. (2007), Genetik Analiz Testleri ve Bu Testlerin Kullanımına İlişkin Algılar.Advisor: Doç. Dr. Hayriye Erbaş. An Unpublished Master Thesis submitted to the Biotechnology Institute of Ankara University.
- EVSEL, G. (2018), Human Rights Domain for Reproductive Biotechnology: A Qualitative Study on Turkish Case. Advisor: Ass. Prof. Dr. Cem Deveci. An Unpublished Ph.D. A thesis submitted to The Graduate School of Social Sciences, METU.
- FOUCAULT, M. (1982), The Subject and Power. Critical Inquiry, 8(4), pp. 777-795, The University of Chicago Press.
- FREEMAN, M. (2002), Human Rights- An Interdisciplinary Approach, Polity Press.
- FUKUYAMA, F. (2002), Our Post-Human Future: Consequences of the Biotechnology Revolution. Farrar, Straus and Giroux, New York.
- GUNSBURG, S. A. (1996), 'Frozen Life's Dominion: Extending Reproductive Autonomy Rights to In Vitro Fertilization,' Fordham Law Review, 65 (5), pp. 2204-2239.
- HOLLAND, B. (2010), 'Sovereignty as Dominium? Reconstructing the Constructivist Roman Law Thesis,' International Studies Quarterly, 54, pp. 449-480.

- LIAO, S. M. (2005), 'The Ethics of using Genetic Engineering for sex selection,' J Med Ethics; 31:116–118.
- NUSSBAUM, M. C. (2001), "Capabilities and Human Rights," in the Philosophy of Human Rights, Patrick Hayden (ed.) Paragon House.
- RABINOW, P. and ROSE, N. (2003), Thoughts on the Concept of Biopower Today. Unpublished MS, Department of Anthropology, University of California, Berkeley, and Department of Sociology, London School of Economics and Political Science.
- STEINBOCK, B., (2004), 'Payment for Egg Donation and Surrogacy,' The Mount Sinai Journal of Medicine, 71(4). pp. 255-265.
- VINCENT, J. (1986), Human Rights and International Relations, Cambridge Univ. Press. WALDBY, C. and COOPER, M. (2008), The Biopolitics of Reproduction, Australian Feminist Studies. 23(55), 57-73.
- ZEGERS-HOCHSCHILD, F., DICKENS, B. M., and DUGHMAN-MANZUR, S. (2013), Human Rights to in Vitro Fertilization, International Journal of Gynecology and Obstetrics, 123, pp. 86-89.

16 · Gülsevim EVSEL

<u>Chapter 2</u> An economic standstill point

"

IN THE HISTORY OF TURKISH CIVIL AVIATION: THE MARSHALL PLAN

Öner GÜMÜŞ¹, Filiz EKİCİ², Gamze ORHAN³

¹ Assistant Professor Kutahya Dumlupinar University, Tavsanli Vocational School, Department of Accounting and Tax, oner.gumus@dpu.edu.tr, ORCID: 0000-0002-3231-3293.

² Lecturer, Igdir University, Igdir Vocational School, Department of Finance-Banking and Insurance, Public Finance Program, filiz.ekici@igdir.edu. tr, ORCID: 0000-0002-4904-3381.

³ Assistant Professor, Eskischir Technical University, Faculty of Aeronautics and Astronautics, Department of Aviation Management, gozsoy@eskischir. edu.tr, ORCID: 0000-0002-3966-1856.

1. INTRODUCTION

With the establishment of the Republic of Turkey, many breakthroughs have been made in the economy. In particular, the industrial movements of the founder of the country, Mustafa Kemal Ataturk, constituted a hope for the economic future. The reflections of the concrete state of this hope were the factories established, the airplanes produced and the flight schools. Therefore, detailed information about these breakthroughs is given in the first part.

With the advent of the second world war, all countries were negatively affected by this war. In other words, all countries were negatively affected by the political and economic consequences of this war. Even countries that did not enter the war experienced economic difficulties due to this war. The Marshall Plan was created by the United States to eliminate the negative political and economic consequences that have arisen. This plan was actually put forward for the economic recovery of Europe. But then Turkey was also included in this plan. For this reason, the details of the Marshall Plan are discussed in the second part.

With the Marshall Plan, Turkey preferred to specialize in agriculture instead of specializing in civil aviation and tried to maintain its economy with agricultural products with lower added value instead of the aviation industry, which is an area that includes high-value-added products. For this reason, in the last part, emphasis was placed on the fact that Turkey has lost its comparative advantage in the civil aviation industry with the Marshall plan.

2. CIVIL AVIATION DURING THE FOUNDING YEARS OF THE REPUBLIC OF TURKEY

In 1911-1912, the Ottoman Empire, which was subjected to an air attack with the use of warplanes for the first time in the history of the world in the Tripoli war, started aviation studies in the military field as a result of this event and in 1912, Ottoman Empire started the first civil aviation initiative by establishing two hangars and a square in Istanbul (Korul and Küçükönal, 2013: 25). After this initiative, civil aviation breakthroughs continued with the declaration of the republic.

2.1. The Period Between 1923-1930

Atatürk understood the importance of aviation for a modern army quite well and definitely included this topic in his opening speech to the parliament every year from 1924 to 1938 after the proclamation of the Republic. After the end of the war of Independence, flight trainings were started at Gaziemir Airport with a limited number of aircraft captured in the war. However, the existing facilities and budget for the development of the sector were not enough. For this reason, additional resources were needed. Finally, thanks to the donations collected with the voluntary participation of the public, the Turkish Aviation Society (Türk Tayyare Cemiyeti) was founded in 1925 at the request of Ataturk. The main objectives of the society were briefly as follows (Yalçın, 2013:136):

• To establish the aviation industry and to contribute to the development of the sector,

• To raise awareness on this issue by telling the public how important the aviation sector is in both the civil and military fields,

• To make the necessary initiatives for the training of qualified personnel.

In 1926, two more important initiatives were made for the development of the aviation industry. The first of these is the establishment of the Aircraft Mechanic School (Tayyare Makinist Mektebi). This institution had the aim of providing qualified personnel training necessary for the aviation sector. Within 2 years, the institution trained 172 machinists and 96 aircraft were purchased. In the following years, purchases of new aircraft continued, and in addition, the number of students sent to Europe for training reached 18. Another critical development was the establishment of Kayseri Aircraft Factory (TOMTAŞ) as a result of the cooperation with Germany and the maintenance, repair and overhaul operations were started in 1927. However, due to high costs, this partnership was terminated in 1928 and all shares of the institution were transferred to the Turkish Aviation Society (Atatürk Ansiklopedisi, 2020).

2.2. The Period Between 1930-1940

in 1931, an agreement was made with the American Curtiss-Wright company to put the Kayseri Aircraft Factory back into operation, and the factory was reopened in 1932. A one-year technical support contract was signed with the same company to modernize and develop the factory. As a result of the contract, purchasing 32 fighters, 4 passenger planes, and 6 Fledgling type training planes, producing 8 aircraft of them in Kayseri Aircraft Factory by Turkish workers, developing factory to produce aircraft engines and establishing a civil aviation firm in Turkey were decided. Within the framework of the agreement, 22 Curtiss Hawk II type aircraft and 7 Fledgling 2C1 type aircraft were produced at the factory (Nergiz, 2019:44).

Again, in 1932, there were other very important developments for the aviation sector. The first of these is Selahattin Reşit Bey's production of the MMV-1 aircraft by importing the engine and propeller from America and producing the remaining parts in Turkey. Another important development is that Vecihi Bey has produced the Vecihi-XIV aircraft and made a promotional tour (Atatürk Ansiklopedisi, 2020). April February

3, 1933, while all these important developments continue to take their place in history, the first "Turkish Air Mail" (Türk Hava Postaları) flight between Istanbul-Eskişehir-Ankara took place, and in April of the same year, passenger flights officially began. With the start of passenger flights, the State Administration of Aviation Operations was established on May 20, 1933, and following this, all the concessions that were in the hands of foreign airlines were rolled back over time (Nergiz, 2019: 114). The Young Republic had continued to make breakthroughs in the aviation sector as in other sectors. In the meantime, a delegation from the United States had been invited to Turkey for the preparatory work of the first five-year development plan which entered into force on April 17, 1934, and covered the years 1934-1938. In the evaluation report prepared by the delegation, it was stated that the flights should be developed quickly (Hines, 1936: 445-450). Again, in the same period, by 1935, the "Turkish Aviation Society" changed its name and took the name "Turkish Aeronautical Association" (Türk Hava Kurumu). In addition, to provide training on motorized aircraft, gliders and parachutes to all citizens who want, again at the request of Ataturk, the "Turkish Bird" was established in connection with the Turkish Aeronautical Association and Vecihi Hürkuş took part in this institution in the capacity of "head teacher" (Atatürk Ansiklopedisi, 2020).

During the period, private initiatives were also being carried out in addition to state initiatives. in 1935, Nuri Demirağ, one of the richest businessmen of the time, declared that he wanted to contribute more by establishing an aircraft factory directly instead of giving the donation requested from him for the aviation sector and in 1936, he established the "Aircraft Study Workshop" (Tayyare Etüt Atölyesi) in Istanbul and turned it into a large aircraft factory in a short time. In the same year, the foundations of the "Big Sky School" (Büyük Gök Okulu) were laid in Sivas and Turkish Aeronautical Association had ordered 10 aircraft and 65 gliders to Nuri Demirağ (Yalçın, 2009: 754). Nuri Demirağ's investments and initiatives in the aviation sector had started to give quite successful results, and the NU /D-38 passenger plane, a Turkish type of passenger plane that he produced together with Turkish workers and engineers, was selected first in the" European A Class" category in 1938 (Saldıraner, 1992: 33).

2.3. The Period Between 1940-1948

Although aircraft imports and maintenance support from various countries continued during this period, Nuri Demirağ continued to fill a fairly large gap in the domestic market. In accordance with the request of the Ministry of National Defence, the supply of repair and some spare parts of aircraft, engines and ground transportation vehicles belonging to the Air Force from 1942 to 1949 was covered from the facilities of Demirağ. In addition, aircraft manufacturing was also continuing at the factory

belonging to Demirağ (Dervişoğlu, 2007:95).

In these years, including the Second World War, the world had entered a bipolar (USA-USSR) period and Turkey was forced to choose sides due to the influence of its strategic position. The development of the aviation sector in Turkey, which made its choice on the side of the west, had accelerated considerably. During this period, the developments which the Truman Doctrine, the Marshall Plan and NATO membership created had increased the passenger capacity and the number of flight lines. (Nergiz, 2019: 69).

By 1945, the aviation sector had become a more institutional and framework-specific sector worldwide, and the International Civil Aviation Organization (ICAO) had been established. Turkey was also one of the founding members of this organization. Exactly two years after that, in 1947, Turkey made the first international flight and the first flight to Athens was organized by State Airlines (Yılmaz, 2020: 116). By the year 1948, the number of lines opened by foreign companies in Turkey had reached 15 (Nergiz, 2019: 72).

3. MARSHALL PLAN

By early 1947, a complex network of motivations had emerged. The decisions taken at the US State Department and the White House, as well as the commitments and decisions made by the US Secretary of State in Paris and Moscow, reflected deep and widespread currents of thought, the exact origin of which is often difficult to find. Government officials, together with foreign political and economic observers, reacted to a number of significant events and possibilities: Economic, financial and possible military destruction of Britain; Economic unrest and potential instability of Europe; the threat posed by communist political achievements; Germany's economic recession; disputes between the ministry of foreign affairs and the ministry of war; The growing deterioration of Soviet-American relations; Europe's balance of payments and dollar problems; Changing forecasts for the American economy and perceptions of those in the White House paved the way to the Marshall Plan (Jackson, 1979: 1068). In other words, the Marshall Plan helped the economies of Western Europe and excluded political concerns (Borchard, 1947: 885). Ultimately, the Marshall Plan was made public in a speech at Harvard University by the American Secretary of State (Roberts, 1994: 1372; Cox and Pipe, 2005: 108). In this plan, which gradually gained the support not only of Europe but also of the domestic public opinion (Bryan, 1991: 499) and was considered the most well-known reconstruction effort before 1990 (Williams, 2005: 548), in fact, the US approach consisted of five elements (Cromwell, 1982: 235; Healey, 2011: 254):

• The initiative on the program for assistance to the United States should come from Europe. Indeed, Washington wanted the European countries to

continue presenting their coordinated proposals for the Marshall Plan and did not want this to be delayed due to the complexities of a customs union, which would be reduced to a desired longer-term goal.

• The response to this proposal should be the common attitude of most European countries, even if not all European countries.

• The response to this programme should include an assessment of the requirements of the situation and the role to be assumed by the European countries themselves.

• The program should provide a permanent solution rather than palliative solutions.

• The role of the United States will be to offer friendly assistance in the preparation of a European program, and then to support such a program to the extent that it is practical.

Western Europe, which was in a fragmented state, was in a worse state than it was before the World War II in terms of coordination. The increasing needs of the people for food, shelter and supplies could not be met. Budget balances could not be achieved. The foreign currency that European governments had saved from the wreckage of the war was going out to be paid for American supplies. The expenditures of the United Nations Relief and Rehabilitation Administration and the American occupation armies temporarily alleviated the urgent needs for basic consumer goods such as food and clothing. But the funds available to the United Nations Relief and Rehabilitation Administration had run out without materially improving Europe's ability to solve its own problems. The usual trade goods purchases and sales between eastern and western Europe were cut on the iron curtain line. Just as there would be no peace, there would be no economic recovery (Berle Jr, 1948: 7-8). From this perspective, it is possible to suggest that America is right in its expectations from European countries regarding assistance.

However, as a result of these expectations, the speech on the Marshall Plan was an unexpected political initiative (Cromwell, 1979: 442). The reason for this is that the Marshall Plan was created with the aim of helping Europe recover, rebuild and stabilize, and also described a program that did not exclude the Soviet Union and Eastern Europe. The Marshall Plan was later adopted by Britain and France (Roberts, 1994: 1372). The proponents of the plan saw it as a bulwark against communism, an economic measure to help maintain conditions of prosperity, a means of maintaining America's thriving export trade and helping others in the American tradition of benevolence and generosity. Opponents condemned the cost of the plan, argued that the war against communism would be ineffective, criticized huge demand in the export program, saw this as another example of a foreign policy that was full of her failures, and objected this to reflect the American economic and political imperialism (Hitchens, 1968: 51). The Marshall Plan is considered one of the greatest foreign economic policy achievements of the twentieth century. Between 1948 and 1951, the United States transferred \$13 billion to the war-worn economies of Europe. It is stated that this timely and generous aid program has strengthened the leadership of the US in the Western alliance, supported moderate elements in Western European politics, improved Europe's labormanagement relations and controlled the march of communism towards the west (Eichengreen et al., 1992: 13). The Marshall Plan was primarily aimed not only at eliminating war damage, but also at balancing Europe's international accounts without receiving assistance by supporting its production and productivity (Williams, 1952: 594). The Marshall Plan was a limited investment with large payments. A situation was created in Europe that was compatible with American interests. This aid program lifted Western Europe, enabled America to challenge the Soviet Union, and supported the American economy. The situation contradicts the traditional economic understanding, which states that high public expenditures will be negative for the local economy. However, the Marshall Plan explains this contradiction. Investing to maintain prosperity in the United States led to the emergence of peace and prosperity abroad, which further raised the level of prosperity of the United States. Therefore, the logic of the Marshall Plan was based on the justification of high public expenditures on foreign aid since the vital interests of the United States were at stake (Kunz, 1997: 170). The Marshall Plan restored the paying power and selfconfidence of Western Europe and laid the foundation for a long-term political, economic, and military reconciliation with the United States. Through the Marshall Plan, the United States achieved its main goals in Europe: The reconstruction of Western Europe in an American-centered multilateral system, the harmonization of Germany with the West and the encirclement of Soviet power in Europe (Pollard, 1985: 283). If Europe had not received such a large financial assistance as Marshall aid and had not adopted a consistent recovery program, the communist parties could have won a victory in America through free elections. This was also the fear of American officials (Leffler, 1988: 280). In any case, Marshall aid also meant the reconstruction of those who consumed American goods. But under the Marshall Plan, the trans-Atlantic flow of consumer goods and culture was filled not only with American exports; in addition, European goods were also being brought to American consumers (Amerian, 2015: 46). The great thing about the Marshall Plan was that it pinned the responsibility for any division in Europe on Moscow. The Marshall Plan offered the Soviet leaders the unpleasant alternative of accepting capitalist interventions into their planned economy or giving up aid that could be useful (Maier, 2005: 172).

The US government did not give money directly to the participating countries so that they could buy everything they thought they needed. Instead, the USA forwarded the services and goods offered, mainly transatlantic shipping, to the participating countries. The participating countries sold the goods to enterprises and individuals who had to pay for the value of these goods in dollars with local currency. This situation had three advantages: US goods were supplied to Europe without dollar payouts, the dollar deficit, which required the reconstruction of Europe was reduced (as in Germany and France) or helped a state to pay its war debts (as in Great Britain) and payments for goods in local currencies helped to limit inflation by temporarily removing these funds from circulation while they were held in special accounts (Grünbacher, 2012: 698).

The beginning of the Marshall Plan transformed US post-war foreign aid from lending or social benefits into an economic support. This transformation was carried out by providing appropriate goods and services to European countries on the basis of grants or loans to accelerate recovery from the impact of the second world war and create an efficient defence program. In real terms, the GNP of Western Europe in 1951, even on a per capita basis (taking into account population growth), was on average 8 percent higher than before the war and civilian consumption has also decreased to some extent, albeit to a lesser extent than GNP. With the Marshall, the financing of European countries was effectively provided. In the period between 1948 and the Korean war, inflation was stopped in most European countries; even after the Korean War, it remained at its level in 1952 (Berolzheimer, 1953: 115). The idea of compensating for the losses of life in the rehabilitation of Europe, the destruction of cities, mines, factories and roads, as well as the destruction of all factories in the European economies (for details, see Mieder, 2017: 269) formed the basis of positive economic developments.

In fact, the Marshall Plan was based on President Woodrow Wilson's ideas of multilateralism or international cooperation in the economic and diplomatic sphere. The basic logic was based on the fact that economic prosperity would preserve world peace, and a country with a good economy would not attack other countries. Wilson suggested that lowering tariffs would facilitate peace. Multilateralism promotes prosperity around the world, as it puts all countries on an equal footing in trade. Countries with strong trade relations are unlikely to wage war against their partners, as this will harm the well-being of their citizens (Weissman, 2013: 111). The Marshall Plan is a specific set of ideas for a specific place and time. This plan was not a unified system created to overcome various problems such

as post-war reconstruction and international development (Ekbladh, 2003: 38). The most typical indicator of this situation has been experienced in the Turkish civil aviation industry.



Figure 1. A New Factory funded by Marshall Plan in Netherlands-Uden

Source: Christenson and Christenson, 2018: 353.

4. THE TURKISH CIVIL AVIATION INDUSTRY IN TERMS OF THE LAW OF COMPARATIVE ADVANTAGES: THE EFFECTS OF THE MARSHALL PLAN ON THE TURKISH ECONOMY

The assumptions of comparative advantage law created by Robert Torrens and developed by E. Hecksher, B. Ohlin and David Ricardo, Robert Torrens (Karluk, 1973: 221; Choi and Yu, 2003: 196) are as follows (Ünüvar, 2008: 12):

- Trade at home and abroad is carried out by barter procedure.
- There are two goods and two countries in trade.
- Transaction costs are zero.
- The labor theory of value is used, and fixed production costs apply.

• Production factors have full mobility within the country. On the other hand, there is no mobility of production among countries.

• Trade does not affect the use of production factors and income distribution.

According to the law of comparative advantage in an economy where there are two goods, even if one country is less active in the production of both goods than the other country, there is still a basis for mutual trade. While the first country should specialize in the production and export of goods where the comparative advantage is greater, it should import goods where the comparative advantage is less (Salvatore, 2013: 36).

	Rose (million)	Computer (thousand)
USA	-10	+100
South America	+10	-30
Total	0	+70

Table 1. Comparative Advantage

Source: Krugman and Obstfeld, 2003: 11.

In this example, South America has a comparative advantage in the production of roses, and the USA also has a comparative advantage in the production of computers. If South America produces roses for the US market and the USA produces computers for the South American market, living standards in both countries can be raised. Therefore, if each country exports goods in which it has a comparative advantage, trade between the two countries will benefit both countries (Krugman and Obstfeld, 2003: 12). In order to examine this theory from the point of view of the Turkish civil aviation industry, it is necessary to decipher the relationship between the Turkish economy and the Marshall Plan first.

Agriculture was carried out in a very primitive way in the Turkish economy before the Marshall Plan. Industrialization was progressing slowly. Transport services were inadequate. Defence costs were heavy on the budget. The national income was low, and savings were insufficient. It was necessary to use national wealth better for development. But for this, foreign investors had to come to the country (Suvla, 1949: 162). For these reasons, Turkey needed assistance such as the Marshall Plan. In other words, the assistance Turkey needed was not to get rid of the effects of the second world war like other countries; it was to solve economic problems. Table-2 shows the aids that Turkey and other countries have received.

Country	Total	%	Grants	%
Total	12992,5	100	9290,2	100
England	3165,8	24,4	1956,9	21
France	2629,8	20,2	2212,1	23,8
Italy	1434,6	11	1174,4	12,6
West Germany	1317,3	10,1	1078,7	11,6
Netherlands	1078,7	8,3	796,4	8,6
Austria	653,8	5	556,1	6
Greece	628	4,8	34,4	5,5
Belgium	546,6	4,2	217,3	0,3
Denmark	266,4	2,1	196	2,3
Norway	241,9	1,9	62,4	2,1
Turkey	184,5	1,4	18	0,7
Ireland	146,2	1,1	-	0,2
Sweden	107,1	0,8	5,5	-
Portugal	50,5	0,4	15,9	0,1
Spain	26,8	0,2	-	0,2

Table 2. Aids Granted Through the Marshall Plan (\$ Million)

Source: Erhan, 1996: 287.

Looking at Table-2, it is seen that Turkey has received 184.5 million dollars in aid under the Marshall Plan. This figure accounts for 1.4% of all benefits. 18 million dollars of this aid received was given as a grant. The amount of the grant constitutes 0.7% of all grants. Therefore, it is clear from the table that the benefits received are low compared to other countries.

Turkey was designated as an agricultural country within the framework of the Marshall Plan and was directed to meet Europe's food needs in the following years. Along with agriculture and food, Turkey has also focused on raw material products to contribute to Europe's industry (Çınar, 2018: 339-340). As a matter of fact, the issue of which areas Turkey would or would not turn to was determined by the Barker Report. According to this report, Turkey would not specialize in all kinds of luxury goods, heavy machinery and metal goods industries, heavy chemical industry and cellulose and paper (Bülbül, 2006: 132-133). Therefore, while Turkey was wanted to have a comparative advantage in food, agriculture, and raw material production, it was wanted not to enter a comparative advantage competition in the field of industrialization.

Max Weston Thornburg stated in his report that the machines that carried out the production of aircraft by US capitalists were of an inadvisable nature. In addition, this report stated that the United States would not take a good look at those who were considering and planning aircraft engine investments, and governments that supported such projects would not be able to create a safe environment for investors. In other words, it had been emphasized that the production of aircraft engines was indefensible (Bocutoğlu and Dinçaslan, 2014: 170-171). In parallel, the United States distributed the remaining aircraft to many countries, including Turkey. under the name of assistance, and thus Turkey removed the aircraft produced by itself from its inventory and closed the factory located in Etimesgut (Bengin, 2016). The closed aircraft factory was transferred to the Mechanical and Chemical Industry Corporation after a while. After this process, aircraft maintenance and modification were carried out until 1962; in addition, Sidewinder and Bullpup missiles were produced. In the following periods, this factory, where caravan manufacturing and textile production were carried out, was turned into a warehouse, and sold to a company that does not produce (Genç, 2018: 124).

In addition, the aircraft factory founded by Nuri Demirağ was closed with a law passed in 1950 ("Soyadını Atatürk'ten", 2021; Aydoğan, 2020: 79). The United States, especially with the Marshall plan, told Turkey that it could buy planes from them cheaply, that there was no need to produce, and sold the planes they had left in the war to Turkey (Mollavesioğlu, 2019). On March 17, 1948, US General Hoag stated that the first aircraft delivered to Turkey were A-26 light bombers and announced that 45 Turkish aviation officers were trained in the USA (Malkoç, 2006: 107). In the following period, the materials sent by the United States to Turkey regarding civil aviation were as follows (Çelfiş, 2010: 12):

- 241 P-47 fighters,
- 32 A-32 attack and light bombers,
- 100 AT-6 advanced training aircraft,
- 67 AT-11 training aircraft,
- 50 C-47 transport aircraft.

Considering all these factors, it would be a correct approach to suggest that Turkish aviation was experiencing a severe pause. Of course, it is impossible to say that all the problems of Turkish aviation are related to the Marshall Plan. But it would not be a wrong approach to say that this plan was a stopping point for the Turkish aviation industry.

5. CONCLUSION

The Marshall Plan was a plan that resulted in negativity for Turkey. However, from the point of view of the civil aviation industry, the situation has become even worse. During the establishment stages of the Republic, rapid developments were experienced in the aircraft industry and factories were opened. Towards the years of the second world war, the specialization in this field gradually increased. Economically, Turkey was about to achieve a comparative advantage in the aviation industry. However, with the Marshall Plan, Turkey's comparative advantage has come to a standstill. With this plan, the income effect for the workforce in the Turkish aviation industry has been replaced by the substitution effect. The reason why the situation has become like this is that the United States has sold aircraft from the second world war to Turkey. As a result of this sale, the Turkish civil aviation industry did not feel the need to produce aircraft. With this plan, instead of aircraft production, Turkey has been directed to products with low added value such as food and raw material production. In other words, Turkey was transformed into a country that would meet the food and raw material needs of Europe. Undoubtedly, turning to products with relatively lower added value, such as food and raw materials, instead of a production area with a high added value, such as aviation, is a reason for the decrease in national income. The Marshall Plan is not the only reason for this negativity in the aviation industry. But the Marshall Plan can be considered as the starting point of the pause in civil aviation. The reason for this is that the level of specialization in civil aviation has started to decline with this plan. Considering how much Turkey needs foreign exchange reserves even today, it would be possible to state that this need arose with the launch of the Marshall Plan. Considering that products with high added value create a surplus of foreign exchange, and how much these reserves make the capital structures of countries resistant to economic crises, it will be possible to suggest that economic downsides have begun to take a structural form with the Marshall Plan.

REFERENCES

- Amerian, S.M. (2015). Buying European. Diplomatic History, 39 (1), 45-69, https://www.jstor.org/stable/10.2307/26376640
- Atatürk Kültür Dil ve Tarih Yüksek Kurumu- Atatürk Araştırma Merkezi Başkanlığı (2020). Atatürk Döneminde Havacılık ve Uçak Sanayii. Yayın No: 487, https://ataturkansiklopedisi.gov.tr/bilgi/ataturk-doneminde-havacilik-ve-ucak-sanayii/
- Aydoğan, A. (2020). Atatürk Dönemi Türk Havacılık Faaliyetleri ve Havacılık Faaliyetlerinin Gelişim Süreci. Uluslararası Tarih Araştırmaları Dergisi, 4 (2), 69-81, https://doi.org/10.47088/utad.785945
- Bengin, T. (2016, 31 Ekim). Marshall Freni Olmasaydı Dünya Devi Olurduk. Milliyet Gazetesi, Erişim Adresi: https://www.milliyet.com.tr/yazarlar/ tunca-bengin/marshall-freni-olmasaydi-dunya-devi-olurduk-2336515
- Berle Jr., A.A. (1948). The Marshall Plan in the European Struggle. Social Research, 15 (1), 1-21, https://www.jstor.org/stable/40982192
- Berolzhemier, J. (1953). The Impact of U.S. Foreign Aid Since the Marshall Plan on Western Europe's Gross National Product and Government Finances. FinanzArchiv/Public Finance Analysis, 14 (1), 114-140, http://www.jstor. org/stable/40910205
- Bocutoğlu, E. and Dinçaslan, M. (2014). 1925-1950 Döneminde Türk Havacılık Endüstrisi ve İkinci Dünya Savaşı Sonrası Konjonktürün Türk Havacılık Endüstrisine Etkileri. Karadeniz Teknik Üniversitesi Sosyal Bilimler Enstitüsü Sosyal Bilimler Dergisi, Bahar 2014 (7), 157-173, https://dergipark. org.tr/tr/pub/sbed/issue/20716/221383#article cite
- Borchard, E. (1947). Intervention-The Truman Doctrine and the Marshall Plan. The American Journal of International Law, 41 (4), 885-888, https://www. jstor.org/stable/2193097
- Bryan, F.J. (1991). George C. Marshall at Harvard: A Study of the Origins and Construction of the "Marshall Plan" Speech. Presidential Studies Quarterly, 21 (3), 489-502, https://www.jstor.org/stable/27550768
- Bülbül, H. (2006). Marshall Planı ve Türkiye'de Uygulanışı 1948-1957. Yayınlanmamış Yüksek Lisans Tezi. Diyarbakır: Dicle Üniversitesi Sosyal Bilimler Enstitüsü.
- Choi, J.Y. and Yu, E.S.H. (2003). External Economies in the International Trade Theory: A Survey, In E.K. Choi and J. Harrigan (Eds.), Handbook of International Trade. UK: Blackwell Publishing.
- Christenson, L. and Christenson, E. (2018). The Marshall Plan: "A Short Time to Change the World", In H. Bak, F. Mehring & M. Roza (Eds.), Politics and Cultures of Liberation: Media, Memory, and Projections of Democracy (Vol. 7, pp. 344-359). Brill. http://ww.jstor.org/stable/10.1163/j. ctvbqs8h0.20
- Cox, M. and Pipe, C.K. (2005). The Tragedy of American Diplomacy. Journal of Cold War Studies, 7 (1), 97-134, https://www.jstor.org/stable/10.2307/26925781

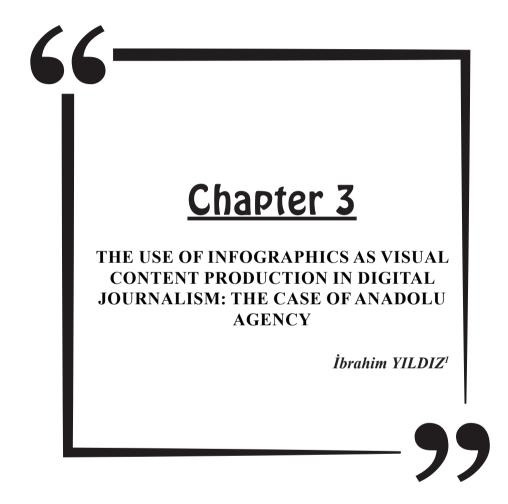
- Cromwell, W.C. (1979). The Marshall Non-Plan, Congress and the Soviet Union. The Western Political Quarterly, 32 (4), 422-443, https://www.jstor.org/ stable/447906
- Cromwell, W.C. (1982). The Marshall Plan, Britain and the Cold War. Review of International Studies, 8 (4), 233-249, https://www.jstor.org/stable/20096957
- Çelfiş, E. (2010). Soğuk Savaş Dönemi Türk Hükümetlerinin Askeri Havacılık Politikaları (1950-1991). Yayınlanmamış Yüksek Lisans Tezi. Ankara: Ankara Üniversitesi Türk İnkılap Tarihi Enstitüsü.
- Çınar, Y. (2018). Modernleşme ve Bağımlılık Teorisi Ekseninde Marshall Yardımı ve Türkiye. Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi, 16 (2), 325-350, https://dx.doi.org/10.18026/cbayarsos.439451
- Dervişoğlu, F.M. (2007). Nuri Demirağ: Türkiye'nin Havacılık Efsanesi. İstanbul: Ötüken Neşriyat.
- Eichengreen, B., Uzan, M., Crafts, N. and Hellwig, M. (1992). The Marshall Plan: Economic Effects and Implications for Eastern Europe and the Former USSR. Economic Policy, 7 (14), 13-75, https://www.jstor.org/stable/1344512
- Ekbladh, D. (2003). The Marshall Plan Mystique. World Affairs, 7 (3), 37-45, https://www.jstor.org/stable/10.2307/48505357
- Erhan, Ç. (1996). Ortaya Çıkışı ve Uygulanışıyla Marshall Planı. Ankara Üniversitesi SBF Dergisi, 51 (1), 275-287, https://doi.org/10.1501/SBFder_0000001907
- Genç, Ö. (2018). Türk Hava Kurumu (THK) Etimesgut Uçak Fabrikası. Yayınlanmamış Yüksek Lisans Tezi. Ankara: Ankara Üniversitesi Türk İnkılap Tarihi Enstitüsü.
- Grünbacher, A. (2012). Cold-War Economics: The Use of Marshall Plan Counterpart Funds in Germany, 1948-1960. Central European History, 45 (4), 697-716, https://www.jstor.org/stable/41819487
- Healey, T. (2011). Will Clayton, Negotiating the Marshall Plan, and European Economic Integration. Diplomatic History, 35 (2), 229-256, https://www. jstor.org/stable/24916478
- Hines, W.D. (1936). Türkiye'nin İktisadi Bakımdan Umumi Bir Tetkiki 1933-1934. Ankara: Mehmed İhsan Matbaası.
- Hitchens, H.L. (1968). Influences on the Congressional Decision to Pass the Marshall Plan. The Western Political Quarterly, 21 (1), 51-68, https://www. jstor.org/stable/446512
- Jackson, S. (1979). Prologue to the Marshall Plan: The Origins of the American Commitment for a European Recovery Program. The Journal of American History, 65 (4), 1043-1068, https://www.jstor.org/stable/1894559
- Karluk, S.R. (1973). Karşılaştırmalı Üstünlükler Teorisinin Gelişmekte Olan Ülkeler Yönünden Geçerliliği Üzerine Düşünceler. İstanbul Üniversitesi İktisat Fakültesi Mecmuası, 33 (1-4), 221-238, https://dergipark.org.tr/tr/ pub/iuifm/issue/847/9396
- Korul, V. and Küçükönal, H. (2003). Türk Sivil Havacılık Sisteminin Yapısal Ana-

lizi. Ege Academic Review, 3 (1), 24-38, https://dergipark.org.tr/en/pub/eab/issue/39834/472278

- Krugman, P.R. and Obstfeld, M. (2003). International Economics-Theory and Policy. 6th Edition. USA: Pearson.
- Kunz, D.B. (1997). The Marshall Plan Reconsidered: A Complex of Motives. Foreign Affairs, 76 (3), 162-170, https://www.jstor.org/stable/20048105
- Leffler, M.P. (1988). The United States and the Strategic Dimensions of the Marshall Plan. Diplomatic History, 12 (3), 277-306, https://www.jstor.org/ stable/24911804
- Maier, C.S. (2005). The Marshall Plan and the Division of Europe. Journal of Cold War Studies, 7 (1), 168-174, https://www.jstor.org/stable/10.2307/26925786
- Malkoç, E. (2006). Türk Basınında Truman Doktrini ve Türkiye'ye Amerikan Yardımları (1947-1950). Yakın Dönem Türkiye Araştırmaları, (9), 89-127, https://dergipark.org.tr/tr/pub/iuydta/issue/947/10681
- Mieder, W. (2017). "The American People Rose to the Occasion": A Proverbial Retrospective of the Marshall Plan After Seventy Years. Western Folklore, 76 (3), 261-292, https://www.jstor.org/stable/44790954
- Mollaveisoğlu, T. (2019, 13 Eylül). Neden Japonya Olamadık Diye Sorma, THK'ye Bak. Cumhuriyet Gazetesi, Erişim Adresi: https://www.cumhuriyet.com.tr/yazarlar/tuncay-mollaveisoglu/neden-japonya-olamadik-diye-sorma-thkye-bak-1708767
- Nergiz, A. (2019). Türkiye'nin Sivil Havayolu Taşımacılığının Gelişimi ve Havayolu Devlet İşletme İdaresi: 1933-1956 Dönemi. Yayınlanmamış Doktora Tezi. İstanbul: Marmara Üniversitesi Sosyal Bilimler Enstitüsü.
- Pollard, R.A. (1985). Economic Security and the Origins of the Cold War: Bretton Woods, the Marshall Plan, and American Rearmament, 1944-50. Diplomatic History, 9 (3), 271-289, https://www.jstor.org/stable/24911665
- Roberts, G. (1994). Moscow and Marshall Plan: Politics, Ideology and the onset of the Cold War, 1947. Europe-Asia Studies, 46 (8), 1371-1386, https://www. jstor.org/stable/152768
- Saldıraner, Y. (1992). Sivil Havacılık Faaliyetleri ve Türk Sivil Havacılık Otoritesi İçin Organizasyon Yapısı Önerisi. Eskişehir: Anadolu Üniversitesi SHMYO Yayınları.
- Salvatore, D. (2013). International Economics. 11th Edition. USA: Wiley.
- Soyadını Atatürk'ten, Ününü Uçaklarından Alan Türk Havacılığının Unutulmaz İsmi: Nuri Demirağ. (2021, 13 Kasım). Erişim Adresi: https://www.aa.com. tr/tr/gundem/soyadini-ataturkten-ununu-ucaklarindan-alan-turk-havaciliginin-unutulmaz-ismi-nuri-demirag/2419737#
- Suvla, R.Ş. (1949). Türkiye ve Marshall Planı. İstanbul Üniversitesi İktisat Fakültesi Mecmuası, 10 (1-4), 145-165, https://dergipark.org.tr/tr/pub/iuifm/issue/883/9789
- Ünüvar, A. (2008). Mutlak ve Karşılaştırmalı Üstünlükler Kuramı Çerçevesinde İngiltere'nin İhracatı ve Türkiye'nin İhracatının Karşılaştırılması. Yayınlanmamış Yüksek Lisans Tezi. Eskişehir: Anadolu Üniversitesi Sosyal Bil-

imler Enstitüsü.

- Weissman, A.D. (2013). Pivotal Politics- The Marshall Plan: A Turning Point in Foreign Aid and the Struggle for Democracy. The History Teacher, 47 (1), 111-129, https://www.jstor.org/stable/43264189
- Williams, A.J. (2005). "Reconstruction" Before the Marshall Plan. Review of International Studies, 31 (3), 541-558, https://www.jstor.org/stable/40072088
- Williams, J.H. (1952). End of the Marshall Plan. Foreign Affairs, 30 (4), 593-611, https://www.jstor.org/stable/20030926
- Yalçın, O. (2009). Mühürdarzade Nuri Bey'in (Demirağ) Hayatı ve Çalışmaları (1886-1957). Ankara Üniversitesi Türk İnkılap Tarihi Enstitüsü Atatürk Yolu Dergisi, Güz 2009 (44), 743-769, https://doi.org/10.1501/ Tite_0000000311
- Yalçın, O. (2013). Türk Hava Harp Sanayii. İstanbul: Türkiye İş Bankası Kültür Yayınları.
- Yılmaz, F. (2020). Türkiye'de Sivil Havacılık Sektörünün Tarihsel Gelişimi ve 2003-2018 Yılları Arasında Sektörün Değerlendirilmesi. Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi, 7 (1), 113-129, https://dergipark.org.tr/ tr/pub/asead/issue/52304/671308



¹ Dr., İstanbul University, Department of Corporate Communications, Orcid: 0000-0002-2542-389X

Introduction

The digitalization in the world and the increase in the pace of life have caused changes both in lifestyles and the way of getting news and sharing information. Depending on the developments in information technologies and the internet, the transformation experienced both in content and speed in the transfer of information has brought along new quests in terms of influencing the target audience within a number of messages. The production of content that will attract people's attention among those extensive messages that people are exposed to during the day, especially in digital areas, has gained great importance in terms of today's communication.

The digital transformation experienced as a result of technological developments is prevalent in every field as well as in the production of news content. The changing lifestyle in digital age, data and information need to be quicker and easier processed. As a matter of fact, people tend to discern the content suitable for their interests in the messages they receive. For this reason, people scan for the headlines and graphics (usually in pictures, graphs, charts) that attract their interest (Siricharoen, 2013: 169). Therefore, instead of long texts and dense information, the content in which the data is visualized is more effective in attracting attention. One of the important ways of producing interesting and effective visual content in today's communication environments is infographics.

The use of infographics, which is one of the most preferred methods of data visualization in today's digital life, has increased in many social media networks such as Facebook, Twitter, Instagram and Pinterest (Jaleniauskiene & Kasperiuniene, 2022:1). Infographics, it is a technology that expresses visual content that is easy to understand and remember, where a large number of complex data is created in a clear and interesting way by combining various graphic drawings such as infographics, icons, maps, graphics, photographs, illustrations with textual content (Afify, 2018: 204-205). Infographics offer readers understandable stories about the subject by making complex data and long texts interesting by using visual design elements. Considering the features of infographics, it is quite normal that it is one of the popular tools in terms of delivering interesting content to people in today's digital life, where the message and content density is quite high. Institutions in many different sectors such as businesses, non-governmental organizations, news agencies are using infographics more and more every day to influence their target audiences (Harrison, Reinecke & Chang, 2015: 1187). It is very easy to access information nowadays. However, the important thing is that your message stands out in an interesting way among those dense and large amount of information. Otherwise, it is not possible for the information to reach the target audience.

Data visualization methods, which are widely used and applied in many fields such as desktop publishing, websites, social networks, geographic information systems, have been the subject of various researches in the last century. In today's communication environments where there is an intense information flow, infographics are examined as a means of presenting information transfer to readers in an interesting way in the production of news content (Siricharoen, 2013: 169).

This study aims to examine infographics applications as visual content production in digital journalism. Since the study is handled within the scope of digital journalism, the grouping of infographic types according to content is evaluated within the framework of news visual content production. Information graphics are out of the scope of this study. For this purpose, the transformation of journalism and content production in digital media is discussed in the context of data visualization and infographics. From this point of view, the infographics produced by Anadolu Agency in terms of visual content production within the scope of digital journalism were examined.

Digital Journalism and Changing Spaces and Places of Content Production in Journalism

The digital transformation experienced in communication technologies has activated real-time production of messages in digital environments and innovative methods (Thussu, 2009: 4). Developments in communication technologies and the increasing use of social media have caused a transition from traditional applications to digital technologies in journalism. New communication technologies and social media have changed the way of getting news, and digital and mobile technologies have replaced traditional mass media today. People mostly follow their daily news from digital media, especially from social media. People who are exposed to a large number of messages in the media meet their need to follow the agenda and get information from sources that offer short and effective content. Digital media is very useful in meeting this need in journalism with its versatile possibilities and interactive structure.

The development of information technologies, combined with the spread of communication technologies, facilitated the production of content and the sharing of this content in digital environments. Digital media has enabled news content to circulate much faster than traditional media, and traditional news content creation methods have changed with digital technologies. News content prepared with text and photographs in the traditional method has turned into content where content such as text, photographs, graphics, video, and audio are used in digital media and a large number of data are presented in a rich and effective way (Özçağlayan

& Uyanık, 2010: 59; Taşin, 2021: 134). While reaching the news was limited to the contents presented by mass media such as newspapers, radio and television, nowadays it is realized through the internet and social media without time and place restrictions. The interactive structure of the Internet and social media, which provides easy access to content, points to the transformation of content production in terms of journalism.

Gray et al. he defined the transformation of journalism as a siege and stated that, after the printing technology, which enabled the printing and distribution of newspapers in large numbers, served as a bridge, today, news flows from many sources with developments related to communication technologies. As a matter of fact, many news are shared every day on websites, blogs, social media and other digital media. These opportunities provided by the internet and social media have brought with them the problem of being noticed and read from too much news and information. People choose and read content according to their interests from a large number of news. Creating interesting content from a large number of news that can be accessed quickly and easily has become a necessity in today's journalism understanding. Collecting, filtering and visualizing a large number of information in the creation of interesting content is gaining importance every day (Gray, Bounegru & Chambers, 2012:3).

It is getting more difficult for people to reach content and understandable information suitable for their needs among the increasing content in digital channels. Recognizing the content presented among the dense information is possible by visualizing the filtered and organized data (Can, Koz & Işık, 2018: 157). Infographics play an important role in creating understandable information. In this respect, infographics enable complex and long information to be presented holistically, in a more understandable and memorable way (Denli, 2016: 1475).

Infographics are an important tool in the transfer and understanding of information as a content with high visual power. As a matter of fact, visual content is easier to perceive and has a higher retention rate. There are some theories that support the memorability of visual content. Nelson's picture superiority theory explains that explaining long texts using visuals is more effective in perceiving the content of the human brain (Dunlap & Lowenthal, 2016: 45). Therefore, visualization of data in today's journalism understanding is one of the basic elements of making large masses of information more understandable. The use of the text as it is in traditional journalism has left its place to the processing and visualization of data in today's journalism (Can et al., 2018: 159-160). Data visualization is an important factor that gives visual power to news content. Visualization of complex and numerous data is provided by infographic designs in news content production.

Data Visualization and Infographics

One of the effective ways to convey an abstract concept, information or news text to the target audience is to produce visual content. Data visualization refers to the effort to convey the content to the reader in an understandable way by using visual elements such as icons, figures, graphics, animations and charts (Gürler, Yılmaz & Tekerek, 2018: 133). There are different definitions of data visualization. While Golombisky and Hagen defined data visualization as "the art of processing collected data in graphic form", Kirk defined it as "the visual representation and presentation of data to facilitate understanding". Data visualization has a wide variety of visual elements, from pie and bar charts to complex diagrams with semantic analysis (Golombisky & Hagen, 2010: 165; Kirk, 2019: 29).

As a data visualization tool, infographics are widely used in the production of visual news content for newspapers, magazines and social media platforms. Infographic is defined as the visualization process of data or ideas that enables the transmission of complex information in a way that the target audience can easily understand and consume quickly (Smiciklas, 2012: 3). There are two definitions for infographic in the Oxford Dictionary of Media and Communication. Accordingly, an infographic is a graphical representation of concepts or patterns contained in data or information. According to the second definition, it is the graphic content prepared to effectively reflect the content for the target audience in social media, to attract attention, to improve the ranking in search engines, to create links and interaction (Chandler & Munday, 2019: 208). According to another definition, infographic is the use of computer-assisted, interactive visual elements to strengthen cognition. The main purpose of infographics as a way of data visualization is to convey information more clearly and effectively using graphic design tools (Siricharoen, 2013: 169).

An infographic consists of two types of components: content (data, information, text, etc.) and visual elements (graphics, icons, photographs). Infographic designs have a wide variety from simple design arrangements to complex and interactive structures (Jaleniauskiene & Kasperiuniene, 2022: 2). Using text and images together gives more efficient results in perceiving and remembering a content by people. Infographics are a method of conveying a large amount of information in a way that is cognitively processed and memorable. As a method of delivering the message to the target audience, from the simplest content to the most complex, infographics have the feature of presenting complex and dense content in a simple, clear and understandable manner in a minimum of space (Dunlap & Lowenthal, 2016: 42; Shemy, 2022: 106). It provides a visual experience that will attract attention by transferring the information to the reader in the most appropriate way with an effective presentation power.

Infographics bring together the aesthetic dimension of design and the precise results of numerical data in an understandable and aesthetic way (Lester, 1997: 194). Infographics are different from other content production as a visualization method that makes abstract and complex processes understandable, and today means more than data visualization. Beyond the definition of visual representation of data, infographic has expanded to include data visualization, a broader graphic design that combines text, photographs, and illustrations into a story. It is a powerful tool that is frequently used in terms of both design and production of visual content (Jansen & Scharfe, 1999: 10; Krum, 2014: 6). As a matter of fact, as a data visualization tool used in many different fields, infographics are a key to creating powerful content in the digitalized world of journalism.

Infographics for News Content Production

Infographic, as a type of information visualization using graphic design elements, is a popular content production method used to support the dissemination of information (Lyra et al., 2016: 366). While infographics are produced for newspapers and magazines, which are defined as traditional media, it is used especially in digital journalism and social media with the increase in digital media today (Kirk, 2019: 27; Dunlap & Lowenthal, 2016: 43). Social networks, as a medium where information sharing is done quickly and easily, is one of the important news sources where the agenda is followed intensively. It has become an important need in today's journalism understanding to produce effective news content within a fast and intense agenda follow-up and to process a large amount of information and transform it into a visual content. Infographics play an important role in meeting this need.

Infographics are a popular type of data visualization designed to convey a complex and abstract set of information, making a content easier to understand and learn. There is no limitation on the usage area of infographics. The importance of infographics, which are used in many areas from the annual reports of businesses to the news contents of agencies, comes from their visual appeal, which has the ability to direct the individual (Lyra et al., 2016: 366). The visualization of the data enables the reader to draw meaningful conclusions from the large piles of information on the subjects he is curious about. Infographics make the content of the news interesting and easy to understand. In this sense, it has the function of increasing the interest and approach of the reader by creating content supported by visual design elements and graphics both in mass media such as newspapers and television and in social media platforms (Anar, 2020: 142-143).

In the world of modern life connected to digital channels, infographics

are frequently featured in the news of national and regional media. The widespread and popular use of infographics is not a coincidence. As a matter of fact, it has been claimed that content produced with infographics is watched/read up to 30 times more than other content (Dick, 2020: 2). In today's world, the problem is not about reaching the news, but about which news to reach and how much time to allocate. Therefore, it is of primary importance that the news content is attractive and that it conveys the event in an understandable way as soon as possible. As a form of design that serves this importance, infographics can be produced in different types, both technically and content.

Types of Infographics by Structure

In visual content production, it is important in which format the infographics will be prepared in order to convey the message effectively. The type of infographic to be used may vary depending on the medium to be preferred and the content of the content to be sent. Although there are different groupings in the literature, infographics are generally divided into three groups according to their structure: static, motion and interactive. However, there is no priority regarding which type of infographic is more effective (Lankow, Ritchie & Crooks, 2012: 59).

Static Infographics

Static infographics, which do not contain any moving elements and features, contain text, photographs, drawings and still visual components; it refers to the graphics prepared for use in all digital platforms such as websites, online environments, social media, and printed areas (Afify, 2018: 205). Static infographics are created using graphical forms and charts to make data simple and understandable. Static infographics are the most common type of infographic due to both its use in print and its easy distribution online. Static infographics are content that is easy to publish and control in digital environments. As a matter of fact, it can be easily and quickly spread by users on social media platforms such as Twitter, Facebook, Instagram and Pinterest (Shemy, 2002: 107; Krum, 2014: 31-33). Static infographics are very effective in delivering a content to a large number of readers due to their convenience.

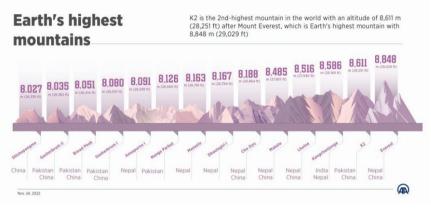


Figure 1. Static Infographics Example, Anadolu Agency, 2022

https://www.anadoluimages.com/p/earths-highest-mountains/25735259

In static infographics, interaction for users is limited to viewing and reading, but it is very functional in terms of expressing a content (Lankow et al. 2012: 59). Static infographics are an extremely practical method of conveying the message to users, with the visualization of the data, making the process understandable as a narrative, being catchy and easy to use. Static infographics are easier to produce than motion and interactive infographics. Especially on social media platforms, it provides the opportunity to present the content in a holistic, more understandable and aesthetic way instead of long texts (Fig. 1).

Apart from creating news content, static infographics are also used in content prepared in different fields. Static infographics, which are used in both digital environments and desktop publishing, have the ability to represent rich data on a visual. It can be easily used in a company's annual reports or an in-house bulletin. In this sense, static infographics are used by businesses to prepare editorial content for internal reporting, presentations, blog and PR activities (Lankow et al., 2012: 60).

Motion Infographics

Motion infographics are animated or animated data designs that include music and sound effects. It refers to the graphics prepared for use in various digital media, especially YouTube. Motion infographics are characterized by creativity in choosing motions that help make images and animations more interesting and entertaining (Shemy, 2022: 107; Afify, 2018: 205) (Fig. 2).

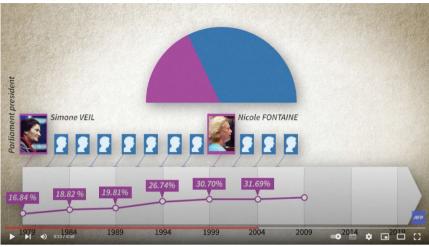


Figure 2. Motion Infographics Example, AFP News Agency, 2019

https://www.youtube.com/watch?v=lo1g dA992A

In motion infographics, image output is animated and animated; user interaction is in the form of viewing, listening and reading (Lankow et al., 2012: 59). Such infographics provide a certain amount of movement and change in the design for the readers. For example, in a content prepared with bar graphs, it is likely that the bars will grow, change their colors or contain some moving transitions (Krum, 2014: 31-33). In this respect, there are more technical possibilities to prepare content in motion infographics compared to static infographics. In the visualization of the data, instead of a fixed two-dimensional plane, a larger design area is formed, including the elements of motion and sound. However, unlike static infographics, the preparation of motion infographics requires a more challenging effort. In addition, its publication and distribution is more limited than static infographics.

Motion graphics, unlike static graphics, have more specific abilities to influence users. While the possibility of voice acting stands out as an element that enriches the presentation of motion infographics, an emotional appeal can be created with music. Again, voice acting and moving images make it possible to convey the message more powerfully and effectively (Lankow et al., 2012: 74-75). Motion infographics, both in terms of preparation process and technical dimensions, are increasing in use and prevalence depending on the development of technology. Especially the developments in internet technologies and the widespread use of mobile technologies expand the usage areas of animated infographics. The increase in videosupported platforms provides the creation of new channels for motion infographics.

Interactive Infographics

Interactive infographics are graphics that give readers a certain amount of control over published data or images (Fig. 3). These graphics, whose primary purpose is to provide information in terms of communicative function, include elements such as photographs or motion pictures, text, and sound and offer some control options for the readers (Krum, 2014: 48; Weber & Wenzel, 2013: 21). The most important feature that makes interactive infographics different from static and motion infographics is the control opportunity it offers to users. Thanks to this feature, it provides an interactive information environment.



Figure 3. Interactive Infographics Example, Reuters, 2022

https://www.reuters.com/graphics/USA-ELECTION/RESULTS/dwvkdgzdqpm/

Interactive infographics are a powerful tool for communicating complex sets of information and data in a meaningful way. It enables content production enhanced by its interactive structure, multimedia features, motion graphics and data visualization infrastructure (Zwinger, Langer & Zeiller, 2017: 176; Weber & Wenzel, 2013: 4). With its structure suitable for both fixed and dynamic data entry, interactive infographics include options for users to search on data, shape content, information access and visualization. With its control over the content and its interactive structure, it paves the way for users to make new discoveries (Lankow et al., 2012: 59).

Types of Infographics by Content

Infographics are prepared on various subjects as a visual content production method used in many different fields in information transfer. There are different groupings in the literature in the separation of infographics according to their content. In general, the commonly used types of infographics are:

Cartography (Geographic) Infographics

Cartography infographics are used to convey geographical information with the help of maps. They are infographic designs in which some visual elements such as symbols, shapes, icons, graphics and direction arrows are used. It includes easy-to-understand designs for use in touristic areas and transportation points, such as information about the place and orientation. In addition, content such as weather conditions and maps showing the scene are also included in this graphic type (Siricharoen, 2013: 171; Zwinger et al., 2017: 176).

Cartography infographics are also widely used in news content production. It plays an important role in simplifying information and enriching news content. The primary purpose of cartography infographics is to present the information or event to be conveyed on the map in an understandable way (Can et al. 2018: 166; Özkan, 2019: 61). In cases where the texts alone are insufficient, it provides short, clear and understandable information about the place, event and time for the readers. They are used to create content that readers can read and perceive in a short time, within the pace of social life and the intense information flow of digital environments. Such infographics are organized according to the fact that the complex data set can be understood in a short time and perceived by as many people as possible (Jansen & Scharfe, 1999: 142) (Fig. 4).

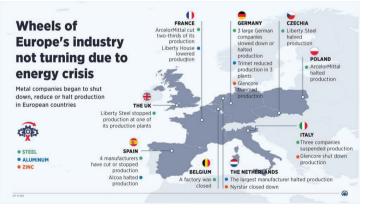


Figure 4. Cartography Infographics Example, Anadolu Agency, 2022

https://www.anadoluimages.com/p/wheels-of-europes-industry-not-turning-due-toenergy-crisis/25454221

Chronological (Timeline Based) Infographics

It is a type of infographic prepared by using a timeline to convey information to readers in a chronological order in a short time. Such infographics reflect the occurrence of events in a specific order. By dividing the timeline into certain sections, it shows the stages of the event in the chronological flow, allowing readers to perceive chronological connections easily and quickly (Özkan, 2019: 63; Siricharoen, 2013: 171) (Fig. 5). Chronological infographics are one of the most useful types of infographics for the purpose of conveying the development of an event over time (Yuvaraj, 2017: 7).

British Prime Minister Liz Truss resigns Liz Truss resigns after 6 weeks, making her shortest-serving UK premier ever Oct. 3 U-turn on 45% tax cut for high Sept. 5, 2022 earners Liz Truss wins Tory leadership race **Oct. 10** Second U-turn on publishing Sept. 6 financial strategy, economic Truss becomes Prime forecast Minister Oct. 14 Sept. 8 Chancellor Kwarteng replaced with Queen Elizabeth II dies **Jeremy Hunt** Sept. 19 Oct. 19 Truss: "I am a fighter, not a Queen's funeral held quitter" Sept. 23 **Chancellor Kwarteng** Oct. 19 Home Secretary Suella Braverman announces mini-budget resigns over misconduct Sept. 24 Oct. 20 British currency crashes Liz Truss resigns

Figure 5. Chronological Infographics Example, Anadolu Agency, 2022

https://www.anadoluimages.com/p/british-prime-minister-liz-truss-resigns/25502626

Statistics Based (Data) Infographics

Statistics-based or data infographics are used to transfer huge amounts of data, to display and compare complex data sets. Such infographics; consists

of tables, boxes, histograms, diagrams, pie and bar graphs (Zwinger et al., 2017: 177; Ru & Ming, 2014: 984) (Fig. 6). The most widely used among these are bar charts and pie charts, which facilitate the analysis of statistical data. These graphs, which can reflect multi-directional associations between data and contain many statistical features, can also be prepared interactively (Siricharoen, 2013: 171). Statistics-based infographics are one of the most widely used types of infographics. It is frequently used especially in economy and data-based news content. It provides the opportunity to present numerical data by integrating visual elements in the transfer of an information set to the reader in a collective way.

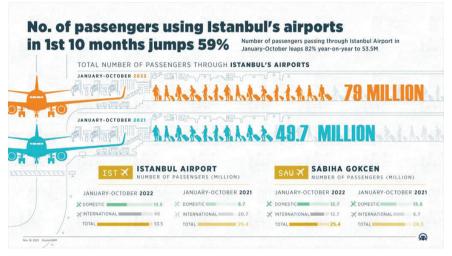


Figure 6. Statistics Based Infographics Example, Anadolu Agency, 2022

https://www.anadoluimages.com/p/no-of-passengers-using-istanbuls-airports-in-1st-10-months-jumps-59/25689139

Opinion Infographics

Özkan (2019: 64) mentioned opinion infographics as a type of infographic in his study. According to this, opinion infographics are graphics that convey the views of a multifaceted event or subject obtained through interviews or interviews with experts. In this type of graphics, the views of a person or the views of the institution can be conveyed, as well as the views of different people on a subject. It is a very useful infographic type in terms of preparing news content in conveying the views of the authorities about a topic and event on the agenda. They are designs that reflect the thoughts of different people about a current event (Fig. 7).



Figure 7. Opinion Infographics Example, Anadolu Agency, 2022

https://www.anadoluimages.com/p/eu-threatens-heavy-sanctions-on-russia-incase-of-ukraine-attack-but-content-of/23610065

Biography Infographics

Biography infographics, which are another type of infographic in terms of editorial content production, are infographics prepared by using visual design elements of the life, educational information, achievements, works and other important information of the people in fields such as art, literature, politics, business world, and sports. Such graphics are effective in conveying the information of important people who are the subject of the news to the reader in all aspects (Özkan, 2019: 67) (Fig. 8).



Figure 8. Biography Infographics Example, Anadolu Agency, 2022

https://www.anadoluimages.com/p/a-life-dedicated-to-fight-against-racismnelson-mandela/25811119

A Study on Anadolu Agency Infographics

Infographics prepared by Anadolu Agency Graphic Editor in fields such as economy, politics, sports, culture, art, life, science and technology are presented to national and international news organizations as visual news content production (Anadolu Agency, 2016). As international news content production, infographics produced in nine different languages other than Turkish are published on the Anadolu Agency website (www. aa.com.tr) and Anaolu Images (www.anadoluimages.com) portal.

Today, infographics are the subject of research as a visual content production method, the use of which is becoming more and more common in data visualization. In this study, the infographics published by Anadolu Agency in the context of agency journalism were analyzed in terms of visual news content production. In this context, the study was limited to the English infographics that Anadolu Agency presented to its subscribers between 1-31 October 2022. Anadolu Images portal was used to collect the data, and as a result of the search made on this portal, a total of 110 English infographic studies were found between the said dates (Fig. 9). The images obtained were evaluated according to their subjects, types and design elements used.



Figure 9. Anadolu Images Portal, 2022

https://www.anadoluimages.com/Search?contenttype=graphic&language=en&b egindate=2022-10-01&enddate=2022-10-31

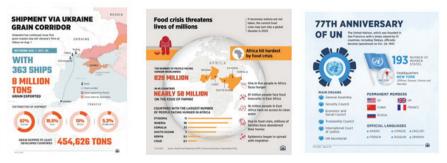
The distribution of 110 infographic studies examined within the scope of the research according to their subjects is as in Table 1.

Subject	Frequency	Percent (%)
Science and Technology	13	11,82
World / International	25	22,73
Economy	15	13,64
Culture, Art and Life	11	10,00
Policy	18	16,36
Health	4	3,63
Sports	18	16,36
Overall	6	5,46
Total	110	100,00

Table 1. Distribution of Anadolu Agency Infographics by Subject

Looking at Table 1, the most infographics were produced on "World / International" topics with a rate of 22.73%. After that, the most infographics are on "Politics" and "Sports" with 16.36%. "Economy" is 13.64%, "Science and Technology" is 11.82%, and Culture, Art and Life is 10.00%. The least infographics were produced in "General" with 5.56% and "Health" with 3.63%. According to Table 1, it is understood that the production of content for the world agenda is higher than other subjects in the said date range.

Figure 10. Examples of World / International Issues in Infographics Within the Scope of Research



In terms of English news content production, it can be considered as a situation where the most production is expected to be done on "World / International" topics. In Figure 10, it is seen that there are many news content about the world agenda, such as the news about the Russia-Ukraine war, the food crisis in the world, and the anniversary of the United Nations.

Subject	Frequency	Percent (%)
Cartography (Geographic)	25	22,73
Chronological (Timeline)	12	10,9
Statistics Based (Data)	72	65,47
Biography	1	0,9
Opinion	0	0
Total	110	100

Table 2. Distribution of Anadolu Agency Infographics by Types

Table 2 shows the distribution of infographics by types. Of the 110 infographics analyzed, 65.47% were "Statistics-Based (Data)", 22.73% were "Cartography (Geographic)", 10.9% were "Chronological (Timeline)" and 0.9% was determined to be in the "Biography" type. Accordingly, the most infographic production was realized in the "Statistics-Based (Data)" infographic type with 65.47%. In other words, two out of every three infographics were produced in this genre. In the process that is the subject of the research, an infographic in the type of "Opinion" was not produced as an English infographic.

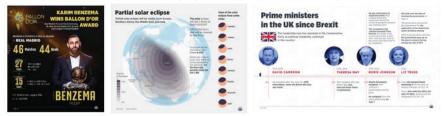


Figure 11. Examples of Infographics Types Within the Scope of Research

Statistics-Based (Data) infographics are one of the most widely used infographic types. As seen in the studies within the scope of the research, Statistics-Based (Data) infographics were produced more than other types. In Figure 11, a sports news containing many statistics and various data has been tried to be conveyed in a holistic way. Cartography (Geographic) graphics are also frequently preferred types, especially in terms of map usage and geographical location information transfer. As can be seen in Figure 11, it is seen that cartography infographics are used in the transmission of natural events. Again, as seen in Figure 11, the chronological (timeline) infographic type used to convey a process was used in the preparation of the content regarding the terms of office of the prime ministers in England.



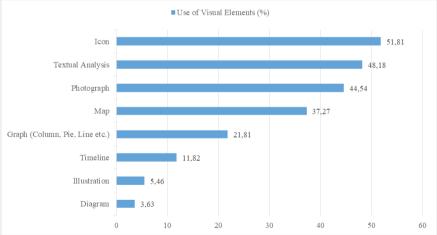


Figure 12 shows the usage rates of visual elements used in infographics. The dis tribution of visual elements used in 110 infographics examined within the scope of the research is 51,81% "Icon", 48.18% "Textual Analysis", 44.54% "Photo", 37.27% "Map", 21.81% "Graphic", 11.82% "Timeline", 5.46% "Illustration" and 3.63% "Diagram". Accordingly,

icons are the most used visual element in the analyzed infographics. It was determined that icons were used in one of the two infographic studies. It is seen that the use of textual analysis occurs at a rate close to the icons. A textual analysis was carried out in approximately one of every two studies. In the infographics examined, the use of photographs was also detected at a rate close to the textual analysis. The least preferred elements in the use of visual elements are illustrations and diagrams.

Figure 13. Examples of Visual Element Use in Infographics Within the Scope of Research



Various design elements such as icons, maps, graphs, photographs and diagrams are used in data visualization to present a news in a holistic way and to be easier to understand. There are examples of the most used visual design elements in the infographics examined in Figure 13. The use of icons stands out in the image about the General Directorate of Forestry. In the news about the European Political Community, a textual analysis was presented visually. The use of photographs is seen in the news about the ancient city of Dara.

Conclusion

The production of knowledge has reached an enormous size today. The progress in internet technologies, the increase in communication tools and digital transformation have made it possible to quickly distribute information that has reached enormous dimensions. In this respect, access to correct and necessary information has gained importance, not access to information. This necessitated the acquisition of distinctive and interesting qualities to the information to be presented to the target audience. The new situation has also affected the production of news content, news agencies and newspapers have turned to visualization methods for effective content production required by new media environments.

Today, while meeting the need for news, people tend to focus on content for shorter time instead of long texts. The use of infographics is becoming more and more common every day to produce visual content suitable for new communication environments, especially social media. Infographics are a very suitable method for creating clear, plain and understandable visual news content filtered in a dense information complexity. Using visualization methods to make sense of large amounts of data has become a necessity, as well as conveying content beautifully. As a matter of fact, infographics have a feature that makes it easier for people who are in the grip of intense information and messages to notice and make sense of the information presented. Due to this nature, infographics are starting to take place more and more in the field of journalism, as in many other fields.

Infographics used in data visualization can be prepared for different media in formats suitable for these media. It can be prepared in print media as a product of traditional journalism, as well as in the form of digital and interactive content suitable for internet and mobile technologies. Static infographics are one of the most widely used infographic types with their ease of production and usability in many media. It enables large data sets to be read and perceived quickly in new media environments where intense and fast information sharing is experienced. Infographics can be prepared on different topics such as economy, politics, art, sports, science and technology. In addition to transferring a content with geographical information, it is possible to present statistical data with graphics for comparison or to reflect the situation. Infographics can also convey the process of the event to the reader in the form of a timeline in understanding a topic.

In the study, examples of infographics used as a data visualization method in news content production were examined. Infographics prepared by Anadolu Agency, one of the news agencies that regularly produce infographics in Turkey, were evaluated in this context. It has been determined that visual content is produced in every subject, and the most production is made in the subjects of "World / International", "Politics" and "Sports". According to the types, the most content production was produced in the "Statistics Based (Data)" infographic type. Apart from this, it is seen that content is produced in the "Cartography (Geographic)" and "Chronological (Timeline)" infographic types. In the use of visual elements in infographics, it has been determined that icons, textual analyzes and photographs come to the fore.

It is a fact that with its increasing popularity in recent years, infographics will enter our lives more and more. Depending on the spread of new media applications and the shortening of the time allotted for news, the production of data and long text content will gradually increase by transforming them into meaningful visual stories. As the knowledge we have increases, activities for the simplification and perception of this knowledge will continue to take shape accordingly. The use of data visualization methods in the field of journalism is increasing in Turkey and in the world. The widespread use of social media and digital channels shows that there is a trend towards infographics in news content. Although it is seen that media organizations have made an attempt and made some investments in the production of infographics in Turkey, it is difficult to say that it is at a sufficient level yet. Considering the increasing impact of the digital world and the channels where agenda tracking is concentrated, and the time allocated to them, infographics will continue to be one of the most important tools used to meet this need.

References

- Afify, M. K. (2018). The Effect of the Difference Between Infographic Designing Types (Static vs Animated) on Developing Visual Learning Designing Skills and Recognition of its Elements and Principles, International Journal of Emerging Technologies in Learning (iJET), 13(09), 204–223. Doi: 10.3991/ijet.v13i09.8541.
- Anadolu Agency (2016) "AA'nın infografik haberleri tanıtıldı", https://www.aa. com.tr/tr/turkiye/aanin-infografik-haberleri-tanitildi/530475, 09.12.2022.
- Anar, Ü. İ. E. (2020). Infographic and Interactive News in The Processing of Data, KİLAD Kocaeli Üniversitesi İletişim Fakültesi Araştırma Dergisi, S.16, 133 - 160.
- Can, S., Koz, K. A. & Işık, U. (2018). Use of Infographics in Data Journalism, The Journal of International Civilization Studies, Volume III/ Issue II, 156-171. Doi: 10.26899/inciss.169.
- Chandler, D. & Munday, R. (2019). A Dictionary of Media and Communication (Oxford Quick Reference).
- Denli, S. (2016). Infographic At Visual Communication, The Journal of International Social Research, Volume: 9 Issue: 42, 1475-1479.
- Dick, M. (2020). The Infographic: A History of Data Graphics in News and Communications, The MIT Press.
- Dunlap, J. C. & Lowenthal, P. R. (2016) Getting Graphic About Infographics: Design Lessons Learned From Popular Infographics, Journal of Visual Literacy, 35:1, 42-59. Doi: 10.1080/1051144X.2016.1205832.
- Golombisky, K. & Hagen, R. (2010). White Space is Not Your Enemy: A Beginner's Guide to Communicating Visually through Graphic, Web and Multimedia Design, Focal Press.
- Gray, J., Bounegru, L. & Chambers, L. (2012). The Data Journalism Handbook, O'Reilly Media.
- Gürler, A., Yılmaz, A. S. & Tekerek, M. (2018). Data Visualization and Infographics, Kahramanmaras Sutcu Imam University Journal of Engineering Sciences, 21(2), 131-148. Doi: 10.17780/ksujes.391274.
- Harrison, L., Reinecke, K. & Chang. R. (2015). Infographic Aesthetics: Designing for the First Impression, CHI '15: Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems, April 2015, 1187–1190. Doi: 10.1145/2702123.2702545.
- Jaleniauskiene, E. & Kasperiuniene, J. (2022). Infographics in Higher Education: A Scoping Review, E-Learning and Digital Media, 2022, Vol. 0(0), 1–16. Doi: 10.1177/20427530221107774.

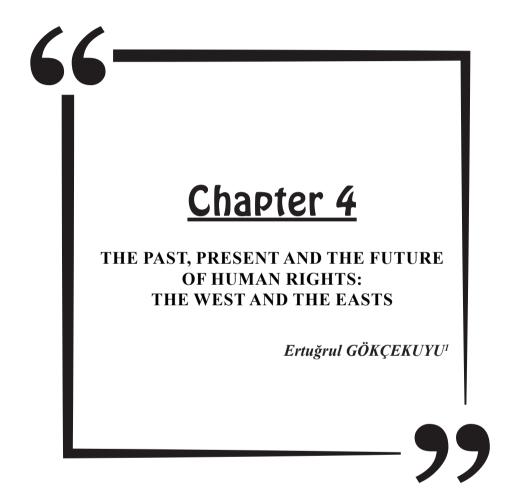
Jansen, A. & Scharfe, W. (1999). Handbuch der Infografik, Springer.

Kirk, A. (2019). Data Visualisation A Handbook for Data Driven Design, 2nd Edi-

tion, Sage Publications.

- Krum, R. (2014). Cool Infographics: Effective Communication with Data Visualization and Design, John Wiley & Sons, Inc.
- Lankow, J., Ritchie, J. & Crooks, R. (2012). Infographics: The power of Visual Storytelling, John Wiley & Sons.
- Lester, P. M. (1997). Visual Communication Images With Messages, Wadsworth, Belmont.
- Lyra, K. T. vd. (2016). Infographics or Graphics+Text: Which Material is Best for Robust Learning?, IEEE 16th International Conference on Advanced Learning Technologies, 366-370. Doi: 10.1109/ICALT.2016.83.
- Özçağlayan, M. & Uyanık, F. (2010). Social Media and Journalism, International Conference of "New Media and Interactivity", April 28-30, İstanbul, TÜR-KİYE, 59-67.
- Özkan, A. B. (2019). The Effects of The Infographics on Readers Which Are Used Agency Journalism, M.Sc. Thesis, Ankara Hacı Bayram Veli University Graduate School For Ankara Hacı Bayram Veli University, Ankara, TÜR-KİYE.
- Ru, G. & Ming, Z. Y. (2014). Infographics Applied in Design Education, IEEE Workshop on Advanced Research and Technology in Industry Applications (WARTIA), 984-986. Doi: 10.1109/WARTIA.2014.6976439.
- Shemy, N. S. (2022). Digital Infographics Design (Static vs Dynamic): Its Effects on Developing Thinking and Cognitive Load Reduction, International Journal of Learning, Teaching and Educational Research, Vol. 21, No. 5, 104-125. Doi: 10.26803/ijlter.21.5.6.
- Siricharoen, W. V. (2013). Infographics: The New Communication Tools in Digital Age, The International Conference on E-Technologies and Business on the Web (EBW2013), Bangkok, Thailand, 169-174.
- Smiciklas, M. (2012). The Power of Infographics: Using Pictures to Communicate and Connect With Your Audiences, Que Publishing.
- Taşin, Y. & Özsoy, S. (2021). Analysis of the Infographic News in Digital Newspapers from Digital Transformation to Data Journalism, Electronic Cumhuriyet Journal of Communication, Volume 3, Issue. 2, 130 - 163. Doi: 10.54089/ecider.1022724.
- Thussu, D. K. (2009) Internationalizing Media Studies, Routledge.
- Yuvaraj, M. (2017), Infographics: Tools For Designing, Visualizing Data and Storytelling in Libraries, Library Hi Tech News, Vol. 34 No. 5, 6-9. Doi: 10.1108/LHTN-01-2017-0004.
- Weber, W. & Wenzel, A. (2013). Interaktive Infografiken: Standortbestimmung und Definition, Wibke Weber, Michael Burmester, Ralph Tille (eds.), Interaktive Infografiken, Springer Vieweg.

Zwinger, S., Langer, J. & Zeiller, M. (2017). Acceptance and Usability of Interactive Infographics in Online Newspapers, 21st International Conference Information Visualisation, IEEE, London, UK, 176-181. Doi: 10.1109/ iV.2017.65.



¹ Dr. Öğr. Üyesi; Anadolu Üniversitesi İktisadi İdari ve Bilimler Fakültesi Siyaset Bilimi ve Kamu Yönetimi Bölümü. egokcekuyu@anadolu.edu.tr ORCID No: 0000-0001-5037-499X.

INTRODUCTION

When British soldiers arrived on the beaches of the Dardanelles in 1915 they witnessed to their shock thousands of dead British soldiers lined side by side on the beach (Wilkinson, 1997). Some eight-and-ahalf million soldiers had died during the first world war and an estimated seventy to eight-five million civilian and military deaths occurred during the second world war (Graham Royde-Smith, n.d.). Both world wars were among the most transformative and gripping events of the last century that lead to a renewed interest in a united Europe. Such a unification of the European countries inherently meant also the limitation of their national sovereignties (Dinan, 2004, p. 1). Even though such a limitation was an undersized measure, it was a necessary step that could lay the foundation for a united Europe. A unification was going to be based on priorities such as regional and global collective security, regional economic integration and supranational governance. Unification was a better strategic interest than years of dreadful slaughter. There was a shared and common view on the need for the global protection of human rights and freedoms that was closely related to the brutal and devastating world wars in the last century. The way to construct a new unified Europe could only be possible by the appreciation of the significance of democracy (Dinan, 2004, p. 3). The dramatic events of the last century had impacted barbaric attitudes causing a shift toward the global protection of life, health, and welfare. These new values had become ever more important as devastating events had caused challenging effects on the human existence teaching humanity to adopt new values and norms. After the second world war it was evident that notions such as equality, freedom and welfare were not only vital for the Western part of the world but there was also a need for collective security and protection of peoples in the eastern parts of the world. As the world wars were tremendously horrendous for the whole world, the idea of unification was especially relevant for those nations that were directly involved in the war and faced the horrors of the Nazi regime. Historical records show that ending the war required excessive amounts of efforts to be pursued. The United States was forced to intervene in the war, albeit reluctantly as the United States did not perceive an entanglement in European affairs as it did not suit its isolationist national interests. It was only due to the Japanese attack of a naval base called Pearl Harbor in 1941 that the United States got involved in the second world war. Probably one of the most influential and successful generals during the second world war was Dwight D. Eisenhower who became the first Supreme Allied Commander in 1943 tasked to end the war. It was only with the direct participation of the United States and the Soviet Union that it was going to be possible to end the war. Against this background, we now know that the League of Nations, the dream of president Woodrow Wilson had failed to prevent the second world war (Schild, 1995, p. 26) which can be attributed to the lack of US-domestic support and solidarity with commitments toward internationalist policies.

The successor of the League of Nations was going to be the next attempt belonging to the war time president Frank De Roosevelt, who had constructed his dream to establish a United Nations (UN) (Schild, 1995, p. 27) on the Wilsonian legacy. The big three of the allied forces during the Second World War, Frank De Roosevelt, Joseph Stalin and Winston Churchill together with China and France were going to create the backbone of the UN. These five members were going to be the five permanent member countries that could have a veto power (Butler, 2012, p. 28). Even though there were going to be other member countries, these were not going to be considered as permanent members. The immediate discussions and frictions were focused on what a veto power was going to include. Eventually it was decided that a veto power could block a deployment but not the procedural forms such as bringing resolutions to the table. The most challenging function of the Security Council during the course of years was going to be the deployment and interference issue for humanitarian reasons that would sustain global peacekeeping. At the end of the day collective security would come down to the global need to uphold human dignity (Assembly, 1948). Yet, such an international organization that did not have any military capabilities was dependent on available operational forces of the member states to preserve the global peace. So the question of the day for many member states was how such an intervention was going to be possible without effecting state interests without engendering national interests based on major dangers in upholding global collective security? When we look back one may understand the obvious reluctance of Charles De Gaulle about such global initiatives (Johnsen & Young, 1994).

THE PAST: PROTECTION, COMMITMENT AND COOPER-ATION

While the League of Nations was unable to prevent crisis such as that of the Ethiopian crisis in 1935, Roosevelt's new initiative of policing the international order was neither successful in preventing another major event that was known under the name Cold War (Schild, 1995, p. 31). However, in the aftermath of the second world war a new world order was being constructed, and the global campaign was designed around the central theme of protecting human rights around the world by creating awareness of a thing that all humanity needed to protect. Such an initiative was virtuous in itself against the horrors of the two world wars. Hitler's war economy for example was founded on free labour also known as Zwangarbeit (forced labour) (Pohl & Sebta, 2013, p. 23) from occupied

territories that eventually mounted up to about fifteen million people throughout the whole war. These forced labourers were temporarily kept alive to build tanks, vehicles, war planes and manufacture ammunition to keep the German forces advance and occupy other nations and civilians. The Nazi regime was a well-oiled machine, and organization that was well equipped and weaponized to the teeth built on the foundations of slavery. The United States was well aware that waiting on the side-lines would eventually mean that it would have to face a Nazi Europe on its own. The answer to prevent such a realistic scenario was to cooperate with the allied forces if they wanted to end the war. However it was easier said than done as it would become evident that giant egos on the side of allied forces were very much present challenging and clouding the endeavours and judgements. The interplay of characters on the battle field played out differently prior to and after the D-Day landings. Charles De Gaulle of France who was in London during the Nazi occupation initially got along with Churchill, but the event also called the Levant incident (Mickelsen, 1976) and the armistice with the Vichy-government over Syria and Lebanon was proof for De Gaulle that Churchill was pursuing other goals in favour of the British Empire. Another setback was the retreat of the British soldiers at Dunkirk which was another betrayal of the British (Bond & Tuzo, 1982, p. 3) over the French. It was obvious that De Gaulle and Churchill inevitably needed each other for obvious reasons, yet could not trust each other due to suspicion on both sides. The distrust between the two allied forces even continued up until the formation of the European Community where De Gaulle openly refused the United Kingdom to be part of the newly established European Community (Moravcsik, 2000).

Just like De Gaulle, Eisenhower too had his problems with Churchill's insecurities, as Churchill had instigated the Gallipoli invasion against the Ottoman Empire and was brutally pushed back into the sea (Hart, 2011). Churchill had never recovered from this loss and when he had lost in Dunkirk for the second time he had become very insecure and had become almost a different man than who he used to be. It was almost as he was trying to convince Eisenhower of his conviction that the Germans were impossible to defeat. Eisenhower had proved to demonstrate that he was the superior commander and understood what he was up against. Eisenhower was a man of prudence as with the situation when Hitler made his move in the Ardennes (also known as the Bulge) General Bradly thought that it was going to be handled in a couple of days leaving the battleground (Cole, 1994). Eisenhower foresaw this massive German attack in the Ardennes as it was going to cause major blockage and secretly asked General Patton to move forces to the Ardennes. If it was for Bradly it was just a minor attack which would pass away in couple of days.

THE PRESENT: POPULISM

Local, regional and global events such as conflicts have had great impact on the global awareness to protect human rights. The attacks on the twin towers on the eleventh of September 2001 verifies how decisive the intentional factors (Scott, 2018, p. 7) can be on nations that deeply affect the social fabric. We have seen such effects on the European social fabric after the second world war and people's attitudes towards the European Union. While the Second World War has caused new attitudes that led to the birth of the European Union, events such as September eleventh 2001 demonstrate how social and liberal ideologies today are negatively affected by new populist ideologies in Europe defeating the purpose of United Nations and the protection of human rights. While the allied forces were able to construct organizations such as the United Nations, the International Court of Justice, the International Criminal Court (the predecessor of the international tribunals), the European Union and the NATO, the world today is sadly witnessing extreme right political movements such as the Partij voor de Vrijdheid (PVV) in the Netherlands, Freiheitliche Partei Österreichs (FPÖ) in Austria, Nieuwe Vlaamse Alliantie (NVA) in Belgium, National Front (NF) in France, Alternativ Für Deutschland (AFD) in Germany (Gökçekuyu, 2019) emerge. A new Europe is emerging, one wherein the list of populist and extreme right parties is getting longer by the minute. All these extreme-right parties have in common that they all are against the European Union and carry a common aversion against foreigners and minorities. It seems such movements feel the limitations on their national sovereignty and perceive a dismantling of whatever is restricting their national sovereignties, the European unification. The discourses of the populist far-right parties use minorities as the fear of others. Such views coincide with the critical international voices such as that of Bernard Lewis (Waghmar, 2003) and Samuel Huntington that were produced before the eleventh of September. Therefore, the case of eleventh of September remains to be a historical turning point that still affects the political and social lives negatively of the European nations. From a reductionist point of view, 911 may be interpreted as the surrender of liberal, secular society to a structuralist realist materialist fears in a changing world order (Noury & Roland, 2020).

The changes and hostage taking of the democratic principles take place on both sides of the Atlantic, this is especially true for the European countries, in the last twenty years. The protection of human rights as the core message of United Nations, and the backbone of democratic, liberal parliamentary discourse, has once again fallen prey to an erosion by way of nationalism. This is a Europe where not only minorities feel threatened but also the remaining democratic symbols are under massive threats. The social

fears and threats that emerged as a result of the events of 911 not only impact political system, but also greatly reduced the quality of the conventional social life. In addition, these negative developments and political attitudes, such negative developments damage identity development and social maturation of the Muslim individuals living in the West. Such practices lead to emergence and strengthening of negative and conflicting identities in the Western societies where these minority members lived (Gökcekuvu, 2021). Such a bolstering of radical identities within the European societies are alarming for democratic principles. When further thought is pursued the consequences of nationalism, populism and radicalization can be seen in the events of terror attacks in Madrid 2004, London 2005, Brussels 2016 and many numerous terror attack in Istanbul since 1999 until the very recent attacks in 2022 killing six innocent bystanders. The new Europe is undergoing a metamorphosis, where individuals and groups now respond to terror with terror. The far-right groups have become well-organized over time, of which perhaps the most vivid example was Anders Behring Breivik, who murdered 69 people in Norway in 2011. In the same order, anti-Islamic demonstrations are taking place in Malmö Sweden, where Quran burning demonstrations take place. Other countries such as the Netherlands, which attract world media attention, are the increasing racism incidents such as numerous mosque arsons, leftovers such as pig heads at mosques, graffiti writings, (Bozbayındır et al., 2017) and of course, the restrictive policies such as the tax scandals that caused the Rutte Cabinet to fall in 2019 (Dutch Childcare Benefits Scandal, n.d.). which are closely related to the daily life of Western European governments, through politics, that is, by legislative changes. Some of these policies are invasive for individual human rights such as the prohibition of veiling in France (Chakraborti & Zempi, 2013) and Belgium (Fadil, 2014), the prohibition of halal slaughter in the Netherlands, and the prohibition of the circumcision of boys practiced by Muslims and Jews (Bozbayındır et al., 2017). In addition, the rate of finding a job and internship for minorities is much lower than for indigenous peoples (Ball et al., 2022).

Perhaps a new Europe is in the making, one that is losing grip on the will to prioritize global human rights. It cannot be said that this new formation is very promising in terms of political order. In this new Europe that is transformed after the eleventh of September, loyalties (Ossewaarde, 2007) of minorities are questioned in economy, education, politics and civil life. Another paradoxical point is that minorities are demanded to prefer liberal values in social debates where liberal values are only used as a governmental political argument (Gökçekuyu, 2020). This negative image in Europe and indeed globally has been turned into a security threat and a source of fear for the liberal and civilized way of life of the European. While the social discussion before the eleventh of September focused on the category of 'ethnicity', the social debate after the eleventh of September continued on the basis of religion and especially over the category of 'Islam'. In this social debate, the Muslim has been put into an incompatible, conflicting identity.

In short, ethnic labels such as Turks, Moroccans, Pakistanis, Bangladeshis, who remained on an isolated side of the social equation before the eleventh of September, are now reflected as 'Muslim'. The identity image, has undergone a radical change, and has created a social and psychological pressures, especially on the identity formation of young minorities. Young individuals born and raised between ethnic values and Western values have are subject to severe social criticism and immature identities. These deviant identities, who do not experience true freedom are stuck between different loyalties due to confusion of ideas.

THE FUTURE: EUROPEAN UNION AND ITS BENEFITS

From an institutional perspective, the European Union is an elitist project established to prevent the occurrence of a new world in Europe. In fact, while the Maastricht negotiations in 2005 were negotiated with a European constitution and further integration in mind, referenda in the Netherlands and France were so unsuccessful that other member countries immediately needed to cancel other referenda. One of the most interesting messages Tony Judt provides in his book Postwar is that the great elite projects have a weaknesses and that is that these projects attract negative public support in situations of crisis. In short, eleven September brought the prejudices of the European Union about minorities to the surface as a weakness and recreated the monster called nationalism once again in Europe. Eleven September is also a test of European states with the liberal values they believe in. The quality of life for the minorities living in it has been hampered by the transition from ethnic-based to religionbased identities and the bad-Muslim image attributed by populist currents. Eleven September had an undeniable impact on this image change process. We can say that this reductionist, narrative and controversial image of the bad Muslim has become a self-fulfilling prophecy.

Australian Prof. Brewer (Brewer et al., 2013) who has done scientific studies on identity scientifically explains individuals' perception of themselves with more than one identity in free and comfortable environments. These intersecting mature identities share certain values from time to time, do not acknowledge certain values in awareness, but do not intervene in polyphony. And it states that the perceptions of these multiple or multi-layered identities are generally peaceful except for social crisis and pressures. However, the dominant image brought by the eleventh of September has reduced the minorities living in Europe to only one category and linked them to an image that is parasitic, confrontational, unable to participate in social institutions and unable to communicate (Marranci, 2011).

The events on the eleventh of September also represents the return of religion (Heelas et al., 2013) to the social sphere in these liberal Western societies, where 'religion' was in fact expelled from the society with the French Revolution and the famous words of Nietzsche that God was no more (Nietzsche, n.d.). Eleven September brought the debate between Islam and religion back into the secular, political and social realms. The return has created an effect of critical questioning as well as challenging inaccessible, non-assimilable islands and ghettos. The last two decades, there has been a shift from European socialist and liberal voters to nationalism that has created a rapid degeneration of the human rights values (Gökçekuyu, 2020).

It may vry well be a sound conclusion that traditional liberal and socialist blocs in Europe have been shrinking, due to new political elites adopting populist rhetoric to win the hearts and minds of fearful voters. In 2016, Alternative Für Deutschland showed a huge win against the then Chancellor Angela Merkel. The fact is that Merkel herself could predicted her own loss if she would call for new elections which was why she waited eight months to form a government. She was quite reluctant to call for new elections due to fear that this time she would be losing big time. Instead she had preferred to form a government by making big concessions to the greens which was a clear indication of the nationalist threat. The eleventh of September ostensibly highlights the visibility of "religion" in politics in Western societies, and for some scholars such as Jocelyn Cesari the Muslim identity shows an undeniable maturity in the field of politics and has gone through numerous breakthroughs in synthesizing democratic forms of representation (Cesari, 2014). While the political existence of minorities in Europe is viewed with suspicion, there are also positive developments in democratic terms as in the Netherlands. The Netherlands possesses a unique constitution where it allows minorities to establish their own political parties. The largest of the existing minority parties with three chairs would be DENK as it has achieved political maturity in the democratic sense. The other smaller of the two is called NIDA which has become a proactive minority party with a great constituency especially in local assemblies (Gökçekuyu, 2020).

Behind the scenes, the new Europe faces a great struggle between Euroscepticists (anti-European Union) and the European political-economic elites. The aim of the European Union is a comprehensive ideal, which is the protection of diverse cultures, languages, values and the freedoms of different identities. Although the European Union is an elitist project, it was implemented to establish global peace and played an important role in ending many longstanding conflicts. The European Union played an important role in deescalating the centuries old Catholic-Protestant and Catalan-Basque conflicts (Jesse, 2005). The short version of the populist dream is to end the European Union, which consists of the return to the old realist structures of a nation-state synthesis that is romantically a monocultural political nation. In this sense, the eleventh of September has aided the populist groups and brought about the weakening of liberal pluralist societies. In general, the eleventh of September has degenerated the climate of unity and undermined the liberal humanist values in Europe pushing societies into fear and scepticism. It has transformed ethnic minorities into religion-based security threats, and with this, it has started a counter-struggle that reminds of a representation of a return to Hobbes' state of nature.

These confused time go hand in hand with economic and political setbacks as the United States has been whirling through unusual economic troubles such as poverty and unemployment. According to Ian Shapiro, one of the most dangerous processes that accompany these problems were the populist narratives of people such as the former president Donald Trump who would play into 'make America great again' sentiments. Trump would frequently play into the 'migrant worker invasions', feelings of loss and ideas of 'stolen from us' that were caused by offshoring industrial production to Asian countries such as China (Graetz & Shapiro, 2020). Such populistic narratives were mainly used by the former President Donald Trump. Surprisingly according to Bernie Sanders the 2016 Democratic party presidential candidate, only 1% of the US population supposedly own 38% of the country's assets and 95% of the income. Shapiro (Graetz & Shapiro, 2020) explains that both discourses are interconnected and that the deep inequalities in income distribution and declining living standards of American citizens create great social insecurities. In fact, this is the story of the struggle of a superpower that has been losing its global power. This power loss of the United States is frequently abused by nationalists on the other side of the great pacific as such a similar situation would endanger the European citizens. European nationalists use similar rhetoric that problems have arisen within the European Union due to migrants, refugees that once were welcomed by the social liberal democratic parties that today evidently have lost their constituents and influence. In other words, while the geopolitical prestige of the United States was at the highest possible level on March 19, 2003, the United Stateshad started to lose its credibility as the country was withdrawing from the Middle East leaving a big void behind it. According to Shapiro, the decline of the global influence of the United States started with the financial crisis triggered by the Lehman Brothers bankruptcy in 2008. Although this loss of influence was gradual, the gap was felt by new actors around the globe, and the search for a new world order had started to take advantage of this existing global void. The active players in the field were Russia, China, Türkiye, France and England. Although the power wars and frictions brought about by this vacuum were carried out from afar over weak countries such as 'proxy wars' such as in Syria, Azerbaijan, Cyprus, Libya, Karabakh. On the other side, the situation for the European Union is indeed not very bright as the European Union has always depended on the military strength of the United States.

Although the European Union is still an economic bloc that maintains its influence in the global context, it makes a great effort both internally and externally to maintain this position. On the one hand, the European Union is trying to keep its domestic market open, on the other hand, it continues its search for a new foreign market. In September 2020, the EU signed a new trade agreement with the Chinese government. China is the EU's third largest trading partner to which agri-food exports. With this agreement, the EU ensured the registration of EU food brands in China and protected the brand names in the Chinese market. Thus, EU companies will have the opportunity to market their food products more comfortably in the Chinese market without experiencing bureaucracy and reproduction problems. This agreement also demonstrates European Union's weakness for trade making the prevention of human rights abuses secondary to trade privileges. The European Union together with the United Nations has fact failed to prevent China in purchasing military technologies from the European Union.

CONCLUSION

As stated above Europe's deep-rooted social democratic institutions are gradually becoming historical artifacts. It would be a correct interpretation to argue that centuries old social liberal values are becoming less significant as the European Union is struggling to genuinely criticize the oppressions in Hong Kong as well as human rights violations done to the Uyghur minorities. It is very much relevant to distinguish the major reasons for such a profound degeneration. One reason behind this erosion is realistically the loss of global influence of the United States. Another major reason is the underlying mercantilist arguments and European Union interests in the face of rising power of China. China today is the largest trading partner of the European Union. In this respect, it would be more realistic to search for the European Union's silence in the face of China as a rising star and its interest in the arguments of absolute interest in this equation. Of course, such a relationship can never be one-sided as the relationship also depended on the ideological compromises that both blocs will need to make.

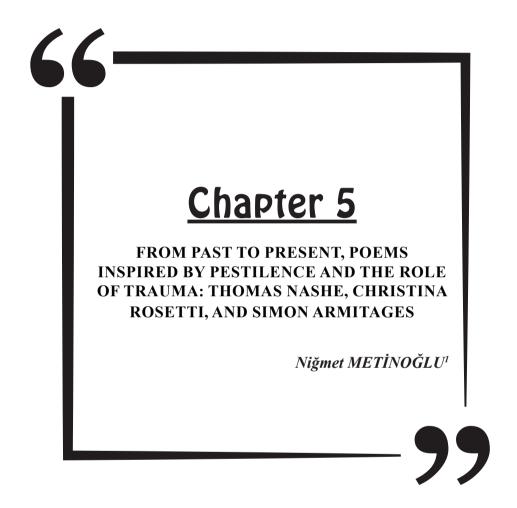
Although the United States has lost its global reputation, it still has a destructive military power and represents the military wing of the European Union. China, which the United States wants to curb its excesses with trade wars (during the Trump era), may cause a second cold war that the United States seems to be willing to trigger when one observes the issue of Taiwan (Nancy Pelosi visiting Taiwan). At this point, the European Union and the United States are in complete opposition in terms of methods employed as in trade versus military deterrence. Although the European Union's preference is to establish trade relations with China is in fact an act of the liberal elites who have been declining in influence, it will eventually be the European populists, who will dominate the relations with China and the United States. Despite everything, the European Union as a bloc remains seriously sceptical about the Chinese global agenda and its further threats to the human rights aspects. Nevertheless, there are a good number of European countries such as Italy, Czech Republic, Hungary, Romania and Slovenia think that China has established sincere policies. It wouldn't be an exaggeration to state that the European Union is facing threats from the inside forming critical fault lines among its member states as well from the outside world. Both the United States as well as the European Union face serious income inequalities, social repercussions (Black Lives Matter, Medicare, etc.), aging, and the fundamental rise of populist movements which form a conspicuous problem to the welfare of immigrants and foreigners with grave consequences to the protection of global human rights. In this context, when we add to these problems the prestige and power rivalries from the historical memory among European nations the future of the 'Union' does not look very bright. If one remembers the old suspicions one may even be able to understand why England preferred its prestigious by choosing for the BREXIT. Even the Covid-19 pandemic was trigger enough for Italy to consider the exit of Italy from the European Union. All these developments do not pose hope for the global protection of human rights.

REFERENCES

- Assembly, U. G. (1948). Universal declaration of human rights. UN General Assembly, 302(2), 14–25.
- Ball, E., Steffens, M. C., & Niedlich, C. (2022). Racism in Europe: Characteristics and intersections with other social categories. Frontiers in Psychology, 13.
- Bond, B., & Tuzo, H. (1982). Dunkirk: Myths and lessons. The RUSI Journal, 127(3), 3–8.
- Bozbayındır, A. E., Canatan, K., Bozbayındır, G., & Gökçekuyu, E. (2017). 2016 yılı Hollanda insan hakları raporu. İstanbul Sabahattin Zaim Üniversitesi.
- Brewer, M. B., Gonsalkorale, K., & van Dommelen, A. (2013). Social identity complexity: Comparing majority and minority ethnic group members in a multicultural society. Group Processes & Intergroup Relations, 16(5), Article 5. https://doi.org/10.1177/1368430212468622
- Butler, R. (2012). Reform of the United Nations Security Council. Penn St. JL & Int'l Aff., 1, ii.
- Cesari, J. (2014). The Awakening of Muslim Democracy: Religion, Modernity, and the State. Cambridge : Cambridge University Press. https://doi. org/10.1017/CBO9781107359871
- Chakraborti, N., & Zempi, I. (2013). Criminalising oppression or reinforcing oppression? The implications of veil ban laws for Muslim women in the west. N. Ir. Legal Q., 64, 63.
- Cole, H. M. (1994). The Ardennes: Battle of the Bulge (Vol. 3). Center of Military History, US Army.
- Dinan, D. (2004). Europe recast: A history of European Union (Vol. 373). Palgrave Macmillan Basingstoke.
- Dutch childcare benefits scandal. (n.d.). Retrieved 13 December 2022, from https://en.wikipedia.org/wiki/Dutch_childcare_benefits_scandal
- Fadil, N. (2014). Asserting state sovereignty. The face veil ban in Belgium. The Experiences of Face Veil Wearers in Europe and the Law, 251–262.
- Gökçekuyu, E. (2019). Compatibility of muslim identity in political institutions: From conflict to peace.
- Gökçekuyu, E. (2020). Constructivism and Muslim Identity: Political Appraisals Constructing Conflict and Peace: A Comparative Research on the Effects of Political Appraisals on Dutch and British Muslim. IUR Press, Islamic University Rotterdam of Applied Sciences.
- Gökçekuyu, E. (2021). Political Appraisals Constituting Tolerant versus Radical Identities: An Empirical Comparison between Dutch and British Muslims. Necmettin Erbakan Üniversitesi Siyasal Bilgiler Fakültesi Dergisi, 3(1), 68–81.

- Graetz, M. J., & Shapiro, I. (2020). The Wolf at the Door: The Menace of Economic Insecurity and How to Fight It. Harvard University Press.
- Graham Royde-Smith, J. (n.d.). Killed, wounded, and missing. In Britannica.
- Hart, P. (2011). Gallipoli. Oxford University Press.
- Heelas, P., Martin, D., & Woodhead, L. (2013). Peter Berger and the study of religion. Routledge.
- Jesse, N. G. (2005). Identity and Institutions. Ithaca, US: State University of New York Press.
- Johnsen, W. T., & Young, T.-D. (1994). France and NATO: The Image and the Reality. The US Army War College Quarterly: Parameters, 24(1), 37.
- Marranci, G. (2011). Jihad Beyond Islam. Berg Publishers.
- Mickelsen, M. (1976). Another Fashoda: The Anglo-Free French Conflict over the Levant, May-September, 1941. Outre-Mers. Revue d'histoire, 63(230), 75–100.
- Moravcsik, A. (2000). De Gaulle between grain and grandeur: The political economy of French EC policy, 1958–1970 (part 2). Journal of Cold War Studies, 2(3), 4–68.
- Nietzsche, F. (n.d.). Thus Spoke Zarathustra. Karbon.
- Noury, A., & Roland, G. (2020). Identity politics and populism in Europe. Annual Review of Political Science, 23, 421–439.
- Ossewaarde, M. R. R. (2007). The New Social Contract and the Struggle for Sovereignty in the Netherlands. Government and Opposition, 42(4), Article 4. JSTOR.
- Pohl, D., & Sebta, T. (2013). Zwangsarbeit in Hitlers Europa: Besatzung, Arbeit, Folgen. Metropol Berlin.
- Schild, G. (1995). The Roosevelt administration and the United Nations: Re-creation or rejection of the league experience? World Affs., 158, 26.
- Scott, J. (2018). Power. John Wiley & Sons.
- Waghmar, B. K. (2003). Book Review: Bernard Lewis, What Went Wrong? The Clash Between Islam and Modernity in the Middle East (London: Weidenfeld & Nicholson, 2002, 180 pp., £12.99, hbk.); Bernard Lewis, The Crisis of Islam: Holy War and Unholy Terror (London: Weidenfeld & Nicholson, 2003,144 pp., £12.99, hbk.). Millennium, 32(2), Article 2. https://doi.org/1 0.1177/03058298030320020603
- Wilkinson, A. (1997). Changing English Attitudes to Death in the Two World Wars. In The changing face of death (pp. 149–163). Springer.

72 · Ertuğrul GÖKÇEKUYU



¹ Öğretim Görevlisi, Kastamonu Üniversitesi, ORCID:0000-0003-0229-6338

This study explores the fact that pestilence that affects individuals and masses is inevitably reflected in the works of poets of the time who voice the absence and the loss of the individuals and the collectives and their works as the memory of people. The memory of the traumatic experience plays an important role in these poems that reflect the narrator's extreme traumatic condition and their response that changes the narrator's or other people's identity as well as their memory. Thomas Nashe's "dance-of-death poem," which first appeared in his "festive comedy" with the name Summer's Last Will and Testament, "A Litany in Time of Plague" (1600) is a poem that depicts a traumatic event (Greenblatt 1232). The Victorian poetess Christina Rosetti's "The Plague" (1896) is another poem that epitomizes narratives conveying individual responses to the trauma of plague and death shared by the collective. Simon Armitage, who is a contemporary British poet, published his poem "Lockdown" in 2020 in The Guardian and the poem describes the horrors of today's plague, COVID-19. This study aims to discuss the three poems that belong to three different periods as poems that reflect individual as well as a collective response to traumatic events in times of pestilence.

Trauma studies as literary theory developed in the 1990s based on the Freudian psychoanalytical theory about trauma. Freud describes trauma as

... any excitations from outside which are powerful enough to break through the protective shield. It seems to me that the concept of trauma necessarily implies a connection of this kind with a breach in an otherwise efficacious barrier against stimuli. Such an event as an external trauma is bound to provoke a disturbance on a large scale in the functioning of the organism's energy and to set in motion every possible defensive measure. (Freud 1928)

Aside from Freud, researchers including Joseph Breuer, Pierre Janet, Jean-Martin Charcot, Hermann Oppenheim, Abram Kardiner, and Morton Prince inquired about "shock and hysteria" in the nineteenth century and their interpretations paved the way for the "psychoanalytic theories regarding the origins and effects of trauma" (Mambrol 2018). In literature, trauma theory is applied to the works of literature that contain a certain degree of fear that cannot be expressed by those who feel it. This fear that cannot be uttered harms the individual's or community's identity as a whole: "A central claim of contemporary literary trauma theory asserts that trauma creates a speechless fright that divides and destroys identity" (Balaev 2008: 149). Literary works reflect "the interplay that occurs between language, experience, memory, and place" as well as the trauma experienced (Balaev 2008: 149). According to Nasrullah Mambrol, the initial wave of this literary criticism "popularized the concept of trauma as an unrepresentable event that revealed the inherent contradictions within language and experience" ("Trauma Studies" 2018). Trauma studies explore the role of memory in the works that tackle a traumatic event. It draws on the unspeakability of trauma because of traumatic event's result of dissociation and rupture of memory. In this case, the process of remembering and recollection and its conveyance in literary works becomes the core interest of trauma studies. Three poems from the poets of different periods will be scrutinized in the light of trauma studies to explore the effects of extreme traumatic stress on the memory of the individual and the collectives.

Written by the English playwright, pamphleteer, satirist, and poet Thomas Nashe, "A Litany in Time of Plague" made its first appearance in Nashe's play Summer's Last Will and Testament in 1600. The poem was written during an outbreak of a disease that took over England. It resonates with the feeling of helplessness and pessimism. The poem starts with the words of the narrator who bids farewell to earthly happiness: "Adieu, farewell, earth's bliss," (Nashe 2006: 1232). The extreme traumatic event in this poem, the plague, causes the narrator to lose hope. It makes the narrator believe that death is inevitable. Either s/he no longer wants to live or surrenders to death as it is inevitable no matter what humans do to escape it. One can conclude that the extreme fear of death and hopelessness breaks the "protective shield" of the mind (Freud 1961: 21). It disrupts the will to survive. This sense of helplessness in Freudian terms even at the beginning of the poem where the poet utters "Adieu, farewell earth's bliss!.../ Fond are life's lustful joys; and bids farewell to all the earthly pleasures as if he would surely die" (Nashe 2006: 1232). There is a prevailing feeling of "uncertainty" and the world itself is uncertain. All the joyful things about life prove to be futile in the face of death and constant fear of death.

Fond are life's lustful joys,

Death proves them all but toys,

None from his darts can fly;

I am sick, I must die.

Lord, have mercy on us! (Nashe 2006: 1232)

The emotional suffering caused by the pestilence is disclosed by the narrator who is a representative of the society. He prays to god in the name of humanity, not just for himself. He uses a language of loss and extreme hopelessness. Accordingly, in this poem, trauma "refers to a person's emotional response to an overwhelming event that disrupts previous ideas of an individual's sense of self and the standards by which one evaluates society" (Balaev 2008: 150). The dissociation of the narrator's sense of

self can be seen and this situation can be thought to reverberate to the whole society that suffers from the same painful event. The narrator and the society share the same emotions as well as physical suffering and his/ her individual experience of the suffering is experienced by the society as a whole. In other words, the suffering of the speaking persona is "appealing to the sentiments of the audience" (Baysal 2019: 178). In the continuation of the poem, the individual who fears and surrenders to death advises the rich people not to trust in their possessions that cannot protect them from death which is sure to come one day.

Rich men, trust not in wealth, Gold cannot buy you health; Physic himself must fade, All things to end are made. The plague full swift goes by; I am sick, I must die.

Lord, have mercy on us! (Nashe 2006: 1232)

Even medicine is helpless in the face of death. The plague is the "external stimuli" that disrdisrupt the psyche of the narrator. As the narrator observes that the plague sweeps across the lands, his fear of death heightens. To the best of knowledge, surrendering to death and accepting its inevitability is the result of the defense mechanism of the narrator's ego. The narrator's fear of death as a traumatic experience and his expression of it by giving examples from history and legends proves that this traumatic experience is a universal one.

Beauty is but a flower Which wrinkles will devour; Brightness falls from the air, Queens have died young and fair, Dust hath closed Helen's eye.

Worms feed on Hector brave,

. . .

These lines prove that the experience is "transhistorical" and "intergenerational" and it "can be transmitted across time" (Mambrol 2018). The fact that the three poems from three different periods that were chosen for this study also prove that the extreme experience which is the plague is timeless, as well. It is an "Overwhelmingly intense event that impairs normal emotional or cognitive responses and brings lasting psychological disruption" (Vickroy 2002: ix) across time and space.

"The Plague" by Christina Rossetti is another poem that conveys the horrors of a pestilence through a narrative voice. Once again, the traumatic experience that comes with the plague is the death of a multitude of people that are buried in mass graves on top of each other. There is a Madman in Rossetti's words: "LISTEN, the last stroke of death's noon has struck — The plague comes,' a gnashing Madman said," (Rossetti 20). Nothing is known about him. He may be the narrator's ego which is split off as a result of the painful event and acting as a defense mechanism, a protective shield against the external stimuli, this personality of Madman may be protecting him from the bitter facts.

Rossetti's poem belongs to the Victorian era while Nashe's poem belongs to the period of the English Renaissance. As the recurrent event in these poems, plague, reveals itself time and again, the trauma it creates surfaces repeatedly throughout history. There are almost three centuries between the two poems and the poets experience the same painful event. Although the event may be forgotten after three centuries, its reoccurrence makes it remembered. Such poems and other narratives are reflecting the memory of the traumatic event and they convey the experiences of the people at the time. This way, even when the pestilence is forgotten, such narratives carry the memories of it across generations:

The historical power of the trauma is not just that the experience is repeated after its forgetting, but that it is only in and through its inherent forgetting that it is first experienced at all. And it is this inherent latency of the event that paradoxically explains the peculiar, temporal structure, the belatedness, of the Jews' historical experience: since the murder is not experienced as it occurs, it is fully evident only in connection with another place, and in another time. (Caruth 17)

As Caruth claims, trauma has the power of persisting across history and space through collective or individual memory, especially when the traumatic event is repeated. It has the feature of latency. It shapes individual as well as collective identities and memories. Such poems as Nashe's and Rossetti's help the process of recollection of traumatic events as they survive through time. That way, they contribute to the connection of the traumatic experience lived through by individuals and collectives. They are "repetitious, timeless, unspeakable, yet, it is also a literal, contagious, and mummified event[s]" (Bailey 151). Three poets from different periods are chosen in this study to present the repetitive nature of one particular event and its effects on individuals and collectives.

While trauma is experienced by particular groups or nations in the poems of the two poets, the trauma that was created by Covid-19 the pandemic is much more universal. The trauma that still arises from Covid-19 and affects people universally is being responded to universally. The poet laureate Simon Armitage's poem "Lockdown" voices the individual concerns and responses against the traumatic event that rages across the world, yet Armitage's voice resonates the people's ideas and feelings all around the world. As in the two former poems, the tone of Armitage's poem is grim. The title itself is reminiscent of the times when people had to stay home in order not to be infected with the virus. This situation itself was one of the main sources of the trauma. The traumatic impact of lockdown measures implemented during Covid-19 is still felt. Armitage's narrator assumes the role of "everyperson" representing the whole of humanity today that experienced the same fearful experience that forced them to change their habits regarding their social life (Balaev 2008: 55). The lockdowns implemented during the pandemic "are exposed to trauma" which is this "frightening event outside of ordinary human experience, they experience 'speechless terror'." (van der Kolk 1987). However, Armitage believes in the healing and "consoling" power of art which "asks us just to focus, and think, and be contemplative" (Flood "Lockdown: Simon Armitage"). He trusts in art and its healing properties. He wrote the poem when he was on the lockdown with his family in Yorkshire and "responds to the current Coronavirus pandemic by going back in time to the plague of 1665 and the self-isolating 'plague village' of Eyam in Derbyshire, England" ("14 Classic Must-Read Poems"). He draws a parallel between the times of lockdown during Covid-19 and the one experienced during the pandemic of 1665 in Eyam which quarantined itself during the outbreak.

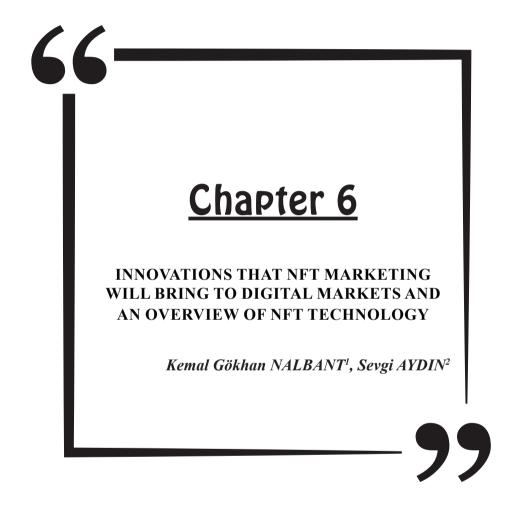
The plague was brought to Eyam through the "infected fleas/in the warp and weft of soggy cloth by the tailor's hearth" (Armitage 2020). Armitage draws on the story of two lovers, Emmott Syddall and Rowland Torre who are separated during the lockdown of 1665 in Eyam: "Which brought to mind the sorry story of Emmott Syddall and Rowland Torre, /star-crossed lovers on either side of the quarantine line" (Armitage 2020) The tragic story of the couple which ends with the death of Emmott Syddall during the lockdown. There is a long period between Covid-19 and the pestilence that swept Eyam; however, people in both periods are exposed to similar painful events and emotional suffering which is, again, the evidence of the timelessness of trauma.

The three poems that are the main focus of this study bear ample

evidence for the timeless, intergenerational, and transhistorical qualities of traumatic events. The common traumatic event in these poems is a pestilence that led to the deaths of countless people through the ages. People who suffer from the same painful event during different periods share a similar response. Through the writings of the poets, these extreme emotional events assume the role of collective memory, and the reminiscences of trauma is carried across ages. Even at the times when no such traumatic event occurs, such works of literature as Thomas Nashe's "A Litany in Time of Plague," Christina Rossetti's "The Plague," and Simon Armitage's "Lockdown" remind of the trauma that was experienced on an individual as well on a social level.

REFERENCES

- Armitage, S. (2020). Lockdown. Retrieved from https://www.theguardian.com/ books/ 2020/mar/21/ lockdown-simon-armitage-writes-poem-about-coronavirus-outbreak
- Baysal, K. (2019). "Gendered Suffering: Mrs Henry Wood's East Lynne as a Melodrama of the Nineteenth Century" The Criterion: An International Journal in English, Vol. 10, Issue-VI, pp. 175-186.
- Balaev, M. (2008). Trends in Literary Trauma Theory. Mosaic: An Interdisciplinary Critical Journal, 41 (2), 149-166.
- Breuer, J. and Sigmund F. (1983). "On The Psychical Mechanism of Hysterical Phenomena." The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume II (1893-1895), translated by and edited by James Strachey, Norton, New York, 1-18.
- Cathy, C. (1996). Unclaimed Experience: Trauma, Narrative, and History. Johns Hopkins Press, 1996.
- Freud, S. (1961). Beyond the Pleasure Principle. Translated and edited by James Strachey, Norton.
- Mambrol, N. (2018). "Trauma Studies." Literary Theory and Criticism, https://literariness.org/2018/12/19/trauma-studies/. Accessed 5 May 2022.
- Nashe, T. (2006). "A Litany in Time of Plague." The Norton Anthology of English Literature, edited by Carol T. Christ et al., 8th ed., vol. E, W.W. Norton, pp. 1232-1233.
- Rosetti, C. (1896). "The Plague." New Poems: Hitherto Unpublished or Uncollected, edited by William Michael Rosetti, Macmillan, and Co., 1896, pp. 20.
- Rubincam, C. (2009). "Plague and the Athenian Imagination. Drama, History, and the Cult of
- Asclepius by Mitchell Boyask." The Classical Review, 59, (1), 43-45.
- Thucydides. (1958). History of the Peloponnesian Wars. Harward University Press.
- Van der Kolk, B. A., & van der Hart, O. (1991). "The Intrusive Past: The Flexibility of Memory and the Engraving of Trauma." American Imago, 48 (4), 425-454.
- Vickroy, L. (2002). Trauma and Survival in Contemporary Fiction. University of Virginia Press.
- "14 Classic Must-Read Poems about Plague and Pestilence." https://interestingliterature.com /2020/04/poems -plague-pandemic-lockdown/. Accessed 7 May 2022.



¹ Assist. Prof. Dr., Beykent University, Faculty of Engineering and Architecture, Department of Software Engineering, Turkey, e-mail: kemalnalbant@beykent.edu.tr, ORCID: 0000-0002-5065-2504

² Assist. Prof. Dr., Beykent University, Faculty of Economics and Administrative Sciences, Department of Business (Turkish), Turkey, e-mail: sevgiay-din@beykent.edu.tr, ORCID: 0000-0002-9507-5448

1.INTRODUCTION

The information that users decide to share with one another may also be impacted by the technology that underpins NFT. Now, it is feasible to transform one's own social media postings, reviews, comments, and blog entries into marketable non-fungible tokens (NFTs). For instance, in the year 2021, Jack Dorsey, who at the time was acting as CEO of Twitter, sold his very first tweet as a non-fungible token for the price of \$2.9 million. These kinds of instances, which are akin to other types of prompts for user-generated content, may stimulate the higher content generation and sharing, but they also highlight the fact that consumers may be able to convert viewers into potential content buyers (Hofstetter et al., 2022).

Technology and digitalization weren't always considered natural companions for the art business. This outlook will change. Content providers, artists, and celebrities from a number of sectors are involved in nonfungible token ventures, dominating headlines in several industries. This shift from traditional business models was made possible by blockchain's powerful tools and innovative capabilities. This turnaround was successful. Innovative business concepts employing tokens and tokenization methods have been proportional to the utility of such technology. A good, service, or another type of value or utility can be represented in the form of a token as a digitized version of that value or benefit. Tokens are indicative of value in digital assets, such as a stake, a voting right, a toll, a currency, a store of value, ownership rights, or multipurpose access inside an ecosystem. The value of the token is derived from the value of the asset that it represents and does not exist independently of the token. Tokenization is the process that takes place whenever someone produces a token that represents any of the aforementioned categories of services and products. When this occurs, the corresponding need is satisfied. A non-fungible token is a representation of a one-of-a-kind digital asset that cannot be equally swapped or traded for another NFT of the same sort. The idea behind a non-fungible token is, effectively, a non-replicable digital guarantee of authenticity. NFTs are digital assets that are used to represent ownership of one-of-a-kind goods. These assets are often kept on a distributed ledger or blockchain. The record of ownership is always accessible and unchangeable, and because of the safe properties of blockchain technology, there can only ever be one owner at any given moment. This is how the technology guarantees that there can only ever be one owner. NFTs are able to represent in a digital domain everything that exists in both the digital and physical realms since they are based on the programmable architecture of blockchain. It is important to recognize that the metadata that is stored within the smart contract of the token guarantees the token's one-of-a-kind status. In addition, the transparency of the history of transactions that is provided by

the underlying technology enables the NFT to be verifiable by any of the network participants, thereby reducing the risk of counterfeiting to zero (Popescu, 2021).

2.NON-FUNGIBLE TOKEN (NFT)

NFTs are unique, non-transferable data units. NFTs pertain to easily reproducible digital files such as images, text, music, and video. Digital goods stored on a public ledger (the blockchain) and issued using smart contracts are non-fungible and simple to duplicate. A portion of the blockchain's underlying smart contract is performed when an NFTrelated event occurs (such as creation, trading, etc.). This solution enables transparency and authenticity in token tracking. It is comparable to art forgery detection but is automated and scalable (Pelechrinis et al., 2022).

The advent of non-fungible tokens, also known as NFTs, is a relatively recent development in the realm of technology that has the potential to significantly alter the ways in which individuals acquire, utilize, or, in a nutshell, "consume" the products they need in their daily lives. NFTs, also known as non-fungible tokens, is a type of cryptographic ownership certificate that may be used to represent non-fungible intangible assets such as a picture, an online functionality, or a digital item. These types of assets receive their credibility from the fact that they are part of a digital register that is founded on non-fungible intangible assets such as a picture, an online functionality, or a digital item. These types of assets receive their credibility from the fact that they are part of a digital register that is founded on "blockchain" technology. This system can list records in a safe manner and cryptographically connect them to one another. Because this registry is shared across several computers, it is possible to ensure the authenticity and inviolability of the information that is associated with it over the course of time. Nonfungible tokens, or NFTs, are items that cannot be replaced, unlike other tokens such as bitcoins. This is because, as their name suggests, they are nonfungible. At the very least, in a digital sense, each one of those items is unique. Since such information is readily viewable across the blockchain network, the owners of these assets can stake a claim to an easily verifiable property right. Some people joining an online conference using an IT platform (Teams, Zoom, Meet, etc.) will be able to have a virtual video background soon. Authentic NFTs will be purchased and displayed (if not shown) to create this setting. They may hang an NFT piece from "OpenSea" or an auction company. These sales are happening: Beeple sold an NFT collage named "Everyday" for about \$60 million. Recently, an artist named Pak sold a non-fungible token (NFT) called "The Merge" to 30,000 collectors who pooled their finances to pay 91.8 million dollars. It is not uncommon to find NFT artists' works in art galleries and museums across the world (Sestino et al., 2022).

NFTs are a recent invention in blockchain-based currency. NFTs are a current online sensation. Blockchains are online ledgers that record public transactions. Ledgers may hold cryptocurrency token trades. Most cryptocurrency tokens were fungible until recently. One unit can be swapped for a similar one. One bitcoin is identical to another, much like U.S. cash. NFTs aren't fungible; therefore, each is unique and manufactured independently. This has revolutionized digital art, real estate, collectibles, and even sneakers and socks. The topic of discussion will be non-fungible tokens (NFTs) relevant to art, with the awareness that such tokens constitute a small percentage of the overall universe of non-fungible things (NFTable items), which is undergoing fast transformation. Because the range of products for which NFTs might be employed is growing so quickly, any attempt to include them all would be obsolete before this work is published (Mackenzie & Brzi, 2022).

3.NFT MARKETS

NFTs, also known as non-fungible tokens, are one-of-a-kind certificates of authenticity that are stored on blockchains and are often issued by the developers of the underlying assets. These assets may be digital in nature, or they may exist in physical form. It is possible to swap fungible items, such as money or trade products, for other goods that fall under the same category. On the other hand, the value of non-fungible products far surpasses the worth of the materials they are made of; therefore, they cannot be traded for other goods of the same kind. Items with significant aesthetic or historical value, as well as rare trading cards, are all examples of things that may be found in the analog world. These things have a long history of being traded in auctions and other types of markets. Because it was impossible to verify their validity, nonfungible products were difficult to trade and auction in the digital world until recently. This made the process complex. NFTs are currently paving the way for the digitalization and online exchange of one-of-a-kind assets, which was previously impossible. NFT marketplaces such as OpenSea and Rarible employ cryptocurrencies, most often Ether (ETH), as a payment and trading option. This demonstrates a strong link between the cryptocurrency market and the NFT market, in addition to the shared technological infrastructure. It is plausible to suppose that the market for cryptocurrencies has an effect on the more limited market for NFTs, given that customers often need cryptocurrency in order to acquire NFTs (Ante, 2021).

The use of nonfungible tokens, often known as NFTs, has witnessed a dramatic surge in popularity in 2021, leading to a number of transactions worth billions of dollars. NFT is an abbreviation that stands for "nonfungible token." At the same time, systems for market intelligence have emerged, enabling the tracking of summary information regarding pricing and sales activities across a range of NFT collections. These systems have been developed in tandem with the emergence of systems for market intelligence. It might be difficult to compare costs across markets due to the fact that the vast majority of collections are sold only in one particular area. In addition, given that markets may differ along more than one axis, it is difficult to disentangle the effects of a single design element's role in the whole system. Because the costs of placing bids are going down, the amount of influence that listing prices have over bids is growing. Listing prices are going up across the board for all types of NFTs. As a direct consequence of this, the listing prices and sales prices of uncommon and widespread NFTs are getting closer together. As a consequence of this, collections that are provided through marketplaces that have lower bidding prices may give the appearance in market intelligence reports that they have a bigger value and are more uniform in their characteristics (Kireyev, 2022).

Internet marketplaces like SuperRare, Foundation, OpenSea, Origin, Rare, Known, and Nifty Gateway, which are responsible for the exchange of digital art that has been approved by NFT, frequently employ the auction house concept to conduct their business. Smart contracts, which are agreements between the parties to a transaction governing the formation, modification, or termination of legal obligations, are used in these markets. A computer algorithm automatically records, executes, and/or provides the terms of these agreements as part of the process of carrying out the activities of a program. Legal responsibilities can be created, modified, or ended with the assistance of a smart contract. It is now possible for us to talk about the value of a contract of this sort from the perspective of the law since cryptocurrencies are now recognized in some countries as a form of digital right that takes the shape of a fungible token. Because of this, it is legal for us to enter into a contract of this nature. On the other hand, non-fungible token (NFT) technologies, which enable transactions in relation to the cryptoart things that were discussed before, can create some fantastic products. Non-fungible tokens have value in the context of the art market if there is a particular digital item to which they are tied and if this item can be identified in a one-of-a-kind manner. In this regard, neither the legal systems of the United States nor the legal systems of the nations of Europe have any direct laws that control the relationships of subjects with regard to the circulation of digital objects certified in accordance with NFT standards. This is the case with the legal system in Russia, as well as with the legal systems in the countries of Europe and the United States (Kulakova, 2022).

4.NFT MARKETING

Marketers may be tempted to create a unique NFT to attract their target audience, but the NFT must be consistent with the brand's objectives and personality. Taco Bell launched NFT tacos so that brand-loyal customers may have a feeling of ownership. The University of California, Berkeley,

invented a Nobel Prize-winning NFT in the 1990s. As NFT transactions demand a substantial amount of energy, environmentally aware consumers may respond unfavorably to companies that represent themselves as ecofriendly or sustainable. The second phase is desire induction. Once clients become aware of an NFT, if it is sufficiently compelling, they may develop a desire to buy it. The marketer's objective is to develop an emotional connection with the NFT to transform consumers' attitudes from liking to desiring. This may be performed by showing clients how ownership of the NFT would improve their lives. In the awareness stage, consumers are likely to find the NFT's scarcity appealing, which can be supported by the fact that an NFT cannot be counterfeited due to its immutability in the want stage. This legitimacy might enhance the item's perceived scarcity and exclusivity. In addition, the security of an NFT as a decentralized application may reduce consumer concerns around the acquisition of an immaterial good. As NFTs are intangible and have an undetermined value, scarcity and content are the sole determinants of an NFT's worth for customers (e.g., images and sounds). It is the obligation of the marketer to tell the target market about the advantages of the NFT. Consumers should covet the NFT as a rare, unique, immaterial, and valuable product. Promotions with non-fungible tokens may include the sale of unique physical products or genuine services. For instance, customers of the NFT album by Kings of Leon receive access to unreleased tracks, exclusive artwork, and backstage passes. Sony promoted the release of Goosebumps 2 by providing NFTs with free movie tickets as prizes. Curio and Fremantle teamed up to produce non-fungible tokens based on the principal characters from the television series American Gods. Those who obtained every character were granted privileges like early episode access. To further appeal to consumers beyond their emotions, this unique marketing might extend to happy occasions. The British Olympic team issued non-transferable commemorative tokens. Fans were given the opportunity to connect with the British Olympic team by "owning" a section of the Olympic festivities. However, marketers must ensure that the appeal of the NFTs they promote aligns with their brand's goal. A misalignment may have detrimental effects. Consumers may be confused about the brand's NFT connection. Other consumers may be skeptical of the brand's motivations for selling the NFT, believing it is trying to profit from it. Marketers may make purchases simpler and more familiar by adding NFTs to familiar campaigns. McDonald's advertised Happy Meals with Pokemon cards. McDonald's may use NFTs in this promotion by adding a QR code to the Happy Meal that links to a digital collectible NFT. Since NFTs are intangible, some consumers may be more likely to buy them if a portion of the revenues are contributed to a cause they support. Asics marketed limited-edition digital shoes called NFTs and used the revenue to pay in-house artists (Chohan & Paschen, 2021).

5. CONSIDERATIONS REGARDING NFT'S RELEVANCE

Since NFT is a form of cryptocurrency, its functionality is based on the underlying blockchain technology. NFT is non-expendable and may be described as a "tiny contract" that cannot be swapped or reproduced. This type of contract is known as a "smart contract." An address at which to transmit the contract and, last but not least, data coding are required in order to make the procedure efficient. This form of digital cash should not be confused with cryptocurrency. The value of a cryptocurrency goes up whenever there is a greater demand for it, and the same is true when looking at it from another perspective. Because of its one-of-a-kind worth, it gives rise to an entirely new kind of digital currency: cryptocurrencies. Now, these NFTs are sold in the active digital market, of which the most well-known and frequently used is open source. Open Sea, which was born in 2018, is described as the first digital website or digital market for encrypting alternative and non-replaceable tokens. Currently, there are no plans to replace these NFTs with anything else. Digital components such as music, art, Internet domain names, collector cards, virtual worlds, sports cards, and so on are all up for sale. As a result, big businesses will be on the lookout for people who collect trading cards; appealing to Generation X and millennium bug consumers will be a priority. After that, in accordance with the concept of the collection, the goal is to acquire these digital things and, if possible, resell them at a later date. Not only is ownership of NFT an approach to the market, but it's also a method to display status and power. In addition, let's suppose that NFT is analogous to a piece of artwork, in which we can purchase anything from a well-known writer, an aspiring writer, or someone who will never be acknowledged for his work; it's similar to tossing a coin into the air. In this way, the formation of these cryptocurrencies has become an irony since, despite the fact that the first words were to generate faith in the process and stability, it has become entirely speculative. (Ruiz Mendoza & González García, 2022).

To the extent that individuals are willing to pay for it, that is how valuable it is. In a decentralized, distributed online market, the buyers and sellers are the ones who transmit signals to one another about the level of interest they have in a particular digital product. This is also true for collectibles and works of art, where large sums of money are spent to obtain actual, material items on the assumption that they are scarce. However, for NFTs, this then raises two questions: (1) Is their rarity based on their reputation or on reality? and (2) can someone who claims to "own" an NFT actually claim ownership of an object? This is the point when suspicion over NFTs continues to be prevalent. In principle, a single asset may give rise to more than one NFT, each of which may assert that it is the "real" token that should be used to represent a concept, an image, or an item.

A marketplace that is willing to accept that the tokens represent a "rare" commodity is still required for the artificial scarcity to work (Chohan, 2021).

An examination of the virtual settings in which the earliest marketplaces for completely digital personal property were developed is carried out so that the technological and sociological aspects that go into determining the value of an NFT may be comprehended. The theory goes that the worth of digital art and collectible things comes from a combination of two factors: the digital item's one-of-a-kind quality and the presence of an audience that is socially engaged and willing to admire and reward the collector's deed. A digital asset has little, if any, value if a copy of it can be made available to anyone with the click of a button. It also does not have much value if nobody knows or cares if you have it. However, the requirement for a context as well as an audience has not altered over time. NFT investors create digital exhibition venues online so that they may show off their work. NFT collecting sites are communities; the technical affordances at these sites are designed to make the collections as visible as possible in addition to facilitating collection. As a result, the characteristics that will be discussed further down are currently emerging once more in a new form as NFT art collectors strive to exhibit their collections to appreciative audiences, preserve the social value of the activity of collecting, and validate the value of the collector's individual actions and collections (Trautman, 2021).

6.ARTIFICIAL INTELLIGENCE AND NFT

Although the use of artificial intelligence and non-fungible tokens are essential to the consumer experiences of modern luxury businesses, the most significant impending development may be the firms' expansion into various metaverses. Actually, computerized product lines rapidly establish a foothold in these ultramodern settings. As a result of a worldwide increase in isolation brought on by a global pandemic, the line between what is "real" and what is "virtual" may become much blurrier for a new generation of consumers who view the online world as essential to their day-to-day lives than it might have been for older generations to have once anticipated. Concerns about public health around the world have significantly curtailed human interaction in the real world over the course of the past nearly two years and are continuing to do so. Concurrently, this has led to an explosion in the number of interactions that take place online via various social media platforms, including Facebook, Tik Tok, Snapchat, Instagram, YouTube, and Twitter. For many customers, going online daily has become an integral part of their routine, whether it consists of solitary browsing or group engagement in online games or communities. Avatars never need to be concerned with such pedestrian earthly issues as changes in appearance, and wedding dress designs can attain levels of elaborate ornamentation unattainable for most budgets in the real world. There have been instances of couples holding their weddings in virtual settings, featuring avatars for members of the wedding party and their guests (Joy et al., 2022).

7.A REVIEW OF BLOCKCHAIN AND NFT

A blockchain is an immutable distributed ledger that consists of many blocks that are linked together. Each block encodes transactions in such a way that it is impossible to edit these transactions once they have been included in the block. When it comes to decentralized and distributed apps, this represents a significant advancement. The use of blockchain technology ensures benefits in terms of transparency, quality, trustworthiness, organization, and identity. In layman's terms, decentralization means that a service or application is distributed on a network in such a manner that it does not offer complete management of data and execution to any server. This can be accomplished in several ways. Nobody inside this cluster could change or remove the prior transactions; rather, each server has a current copy of the data as well as the logic for executing the transactions. When something is said to be distributed, it means that every server and node on a network is connected to every other server and node, either directly or indirectly. A ledger is a phrase that is used in accounting; however, you can also think of it as a specific storage and retrieval system for data (Muthe et al., 2020).

Smart contracts and blockchain-based non-fungible tokens (NFTs), also known as non-fungible tokens, provide promising prospects for the creative industries. They have caused a tremendous amount of chaos in the markets, but out of the chaos, genuine value has emerged for the various businesses. Creators in the creative industries have traditionally had to rely on strong middlemen to disseminate their works and make a profit from those works. Creators now have access to content consumers and purchasers who are much more directly connected thanks to the use of NFT and smart contracts. The term "creative industries" is mostly used to refer to the economic activities that are associated with the production of knowledge, content, and information for consumption. Some examples of creative items include music, literature, works of art, fashion products, television shows, movies, and video games. The use of blockchain technology may also assist in the construction of a reputation system. For instance, actions carried out by artists who do not execute creative contracts within the allotted time frame will be recorded and kept on the blockchain indefinitely. Those purchasers or sellers who fail to make timely payments will also have a record of their poor behavior kept on file. The fact that users may establish new accounts to conceal their previous transactions is one of the drawbacks of using blockchain technology. Participants can be incentivized to keep their identities secret if they have a lengthy and positive track record, which confers reputational benefits (Malik et al., 2022).

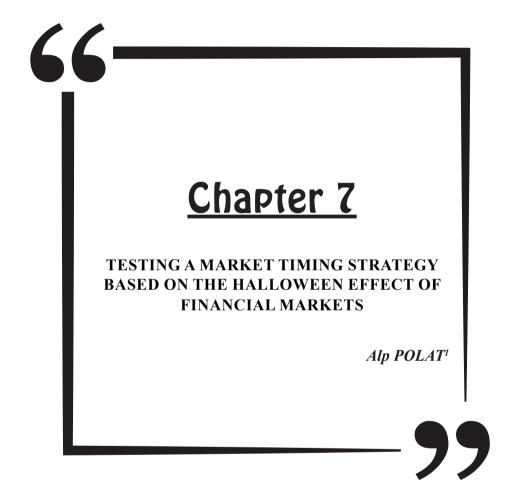
8.CONCLUSION

The commodification of digital assets in the fields of art, music, sports, and other popular entertainment now frequently makes use of NFTs. The phrase "non-fungible token" refers to a token that is incapable of being split and cannot be copied from the same source. This type of token is also ineligible for mining. The fact that NFTs are one-of-a-kind digital assets distinguishes them from fungible cryptocurrencies like Bitcoin and Ether, which are also examples of cryptocurrencies. It is anticipated that in the not-too-distant future, a range of cutting-edge business models will come into existence as a result of the vast quantity of expertise that will be gained via the utilization of NFT. This is due to the fact that the quantity of experience acquired will be the primary factor in determining the amount of experience obtained. It would appear that a number of distinct businesses will be among those to gain from this return as a direct consequence of the digitalization of physical assets. These benefits are expected to accrue in the near future. NFTs, which are beneficial in many various spheres, ranging from day-to-day life to the arts, also open the doors for humans to discover a new universe, which is an additional advantage. These advantages may be summed up as a total package of positive outcomes. As a result of the impact of the pandemic, which caused the rapid acceleration of the digital transformation of brands, some businesses have started incorporating NFT, which is a rising star in the business world at the moment, into their marketing plans. This is because the pandemic caused the rapid acceleration of the digital transformation of brands. This was due to the impact of the pandemic, which sped up the rate at which brands were undergoing their digital transformation. This measure was carried out as a direct response to the outbreak that was taking place at the time.

REFERENCES

- Ante, L. (2021). The non-fungible token (NFT) market and its relationship with Bitcoin and Ethereum. Available at SSRN 3861106.
- Chohan, U. W. (2021). Non-fungible tokens: Blockchains, scarcity, and value. Critical Blockchain Research Initiative (CBRI) Working Papers.
- Chohan, R., & Paschen, J. (2021). What marketers need to know about non-fungible tokens (NFTs). Business Horizons.
- Hofstetter, R., de Bellis, E., Brandes, L., Clegg, M., Lamberton, C., Reibstein, D., ... & Zhang, J. Z. (2022). Crypto-marketing: How non-fungible tokens (NFTs) challenge traditional marketing. Marketing Letters, 33(4), 705-711.
- Joy, A., Zhu, Y., Peña, C., & Brouard, M. (2022). Digital future of luxury brands: Metaverse, digital fashion, and non-fungible tokens. Strategic Change, 31(3), 337-343.
- Kireyev, P. (2022). NFT Marketplace Design and Market Intelligence.
- Kulakova, O. S. (2022). Digital art in light of NFT: Market power and legal uncertainty. Digital Law Journal, 3(2), 36-50.
- Mackenzie, S., & Bērziņa, D. (2022). NFTs: Digital things and their criminal lives. Crime, Media, Culture, 18(4), 527-542.
- Malik, N., Wei, M. Y., Appel, G., & Luo, L. (2022). Blockchain Technology for Creative Industry: Current State and Research Opportunities. International Journal of Research in Marketing.
- Muthe, K. B., Sharma, K., & Sri, K. E. N. (2020, November). A blockchain based decentralized computing and NFT infrastructure for game networks. In 2020 Second International Conference on Blockchain Computing and Applications (BCCA) (pp. 73-77). IEEE.
- Pelechrinis, K., Liu, X., Krishnamurthy, P., & Babay, A. (2022). Spotting Anomalous Trades in NFT Markets: The Case of NBA Topshot. arXiv preprint arXiv:2202.04013.
- Popescu, A. D. (2021). Non-Fungible Tokens (NFT)–Innovation beyond the craze. In 5th International Conference on Innovation in Business, Economics and Marketing Research.
- Ruiz Mendoza, K. K., & González García, A. Y. (2022). Relationship between collection and NFT and metaverses in education. Metaverse, 3(1), 9.
- Sestino, A., Guido, G., & Peluso, A. M. (2022). A Review of the Marketing Literature on NFTs. Non-Fungible Tokens (NFTs), 23-41.
- Trautman, L. J. (2021). Virtual art and non-fungible tokens.

92 · Kemal Gökhan NALBANT, Sevgi AYDIN



¹ Dr. Öğr. Üyesi, Bilecik Şeyh Edebali Üniversitesi https://orcid.org/0000-0002-5472-5686 alp-polat@bilecik.edu.tr

INTRODUCTION

Fama (1998) suggests that market efficiency hypothesis imposes zero abnormal returns other than chance results. However, there can be anomalies which are different from efficient market prices. Recent finance literature evidences many long-term return anomalies. The concept of market anomaly in financial markets are widely research by academicians. Market anomalies define deviations from the Efficient Market Hypothesis. A multitude of seasonal or calendar market anomalies are documented in the literature. The January effect, the turn of the month effect, holiday effect, Monday effect, day of the week effect are well known examples. The Halloween effect which known as "sell in May and go away" strategy is notable among seasonal and calendar market anomalies owing to the fact that implementing a strategy based on Halloween effect is the least impacted by transaction costs. Market anomalies can have statistical significance and challenge the Efficient Market Hypothesis. However, a market anomaly should present exploitable trading options in order to be meaningful (Andrade et al., 2013).

Bouman and Jacobsen (2002) is the first to introduce the Halloween effect of financial markets which indicates that the rate of returns are substantially lower in the periods between May to October than the remainder of the year. Dichtl and Drobez (2014) states that the Halloween effect helps to apply simple investment strategy with using May-October seasonal anomaly and becomes unbrokenly popular. The returns which are gained by Halloween effect are documented with high statistical significance and cannot be explained by factors such as risk and crosscorrelation. The Halloween effect suggests negative expected returns during summer months for stock market. Haggard and Witte (2010) proves significance of the Halloween effect for recent data which is uncommon for other anomalies due to the fact that profit opportunity is disappears after market participants are started to exploit the anomaly. Their findings also proves that the Halloween effect is robust after considering the outliers which can be well known the January effect. It is also highlighted that the Halloween effect is easy to apply due to the fact that it requires long holding periods with small transaction costs.

This study tests a strategy which is based on Halloween effect in Turkish stock market. The implemented strategy not only focus stock market but also money market. This can be novel approach due to the fact Halloween effect postulates selling stocks in May. However, it can be meaningful to buy the instruments which generates interest rate returns until October. Thus, this study aims to investigate and compare strategies which are based on market timing of stock market and money market which is offered by the Halloween effect. The findings of the study can evidence a seasonal market anomaly and support the finance literature. Evidences of consistent strategy which provide abnormal returns can be beneficial for investor managers and individuals in their own portfolio constructions and decisions of switching between different investment funds during the year.

LITERATURE REVIEW

Carrazedo et. al. (2015) extends Halloween effect researches by investigating the European stock market in order to evidence returns owing to the November-April period at industries and super-sectors levels. November to April periods provide positive and significant returns with profitable trading strategies while May to October returns are close to zero or often negative. Halloween effect may concentrated on some sectors that cannot been explained. Almeida et. al (2021) investigate Latin American countries and suggests that a halloween effect strategy is not superior that a simple buy and hold strategy in Latin American Countries. Magnusson (2019) researches 75 stock market and states that there is strong the Halloween effects in a large majority of investigated markets. These findings show that the Halloween effect seems to have notable consistence provides both statistical and economic significance. Zhang and Jacobsen (2013) research seasonal market anomalies analyzing 300 years of UK stock market data. It is reported that the Halloween effect is robust for different subsamples in their data when comparing other seasonal calendar times. In their 300 years dataset, negative returns for summer months are persistent as suggested by the Halloween effect. It is noted that the Halloween effect presents successful trading strategy which consistently beats the market.

Tekin (2019) analyzed Turkish stock market for different seasonal anomalies. It is presented that "sell-in May and go away" strategy can generate meaningful results for Turkey. May-October period has lower returns than November-April period in the analysis for BIST 100 Turkish stock market index in 1990 and 2017 analysis period. Y1lanc1 (2013) investigates the Halloween effect on Turkish Stock market with various methods. It is highlighted that robust results of the analysis demonstrates the fact that the Halloween effect is not exist in Turkish stock market for their 1990-2010 period data. It is also suggested that possible significant results for the Halloween effect can be arises from outliers in the data. Ocal et al., (2021) analyze Turkey, Indonesia, France and Germany for "sell in may" effect and present evidence of significant Halloween effect. Their study offers certain firms which are mostly affected by the Halloween effect. Their recommendation is the closely trace SISE, SAHOL, AKSA, AKGRAT, KORDS, EREGL and ANSGR stocks for Turkey.

Jacobsen and Visaltanachoti (2009) suggest the idea that the direction of Halloween effects can vary for different sectors. It is suggested that consumer sector firms are potentially perform better on summer months while production industry shows better performance on winter months. Their study presents significance of the strategy and also support that power of the Halloween effect is still very high in order to predict financial market returns. Dumitriu et al. (2012) investigate the Halloween effect on 28 country and find that the magnitude of the effect changes according to the geographical position of the country which is stated as a major influence factor in the study. It is also explained that conditions of the financial market impact the degree of the Halloween effect. In financial turmoil times, the impact of a "sell-in May and go away" strategy become less significant. Burakov and Freidin (2018) evidence the Halloween effect in agricultural commodity market. It is noted that the Halloween effect mainly exist in financial markets. Their analysis demonstrates that prices of 20 of 27 major agricultural commodity are higher in summer time which indicate the Halloween effect.

ANALYSIS

The aim of the study is to determine whether performance of a strategy in Turkey based on Halloween effect is successful or not. The strategy is market timing between interest rate return between stock investment returns. The research hypothesis is that the period of selling stock on May to October and holding debt instruments presents better performance. Thus, portfolios are instructed in order to test this hypothesis. "Strategy 1" is based on the Halloween effect and "Strategy 0" is based on vice-versa strategy:

Strategy 1 = The portfolio that invests stocks until May and generates interest rate return until October

Strategy 0 = The portfolio that generates interest rate return until May and invests stocks until October

Sharpe Measure, Treynor Measure, Jensen's Alpha, Beta and Standard Deviation portfolio performance measures are calculated in the analysis. Market index returns which indicates simple buy and hold stock strategy is also used for benchmark. Market model regression results are estimated and documented. The period of the analysis covers between 2010-2018 Descriptive statistics of the data of the analysis is demonstrated at Table 1.

	Strategy 1	Strategy 0	Deposit Rate	Market index return	Risk free rate
Mean	0.011611	0.005934	0.008542	0.009003	0.006847
Median	0.00879	0.008153	0.008691	0.007915	0.006892
Maximum	0.126153	0.141971	0.011525	0.141971	0.010625
Minimum	-0.1065	-0.1325	0.005632	-0.1325	0.003767
Std. Dev.	0.040589	0.048975	0.001325	0.063722	0.001649
Sum	0.975315	0.498475	0.717504	0.756286	0.575142
Observations	84	84	84	84	84

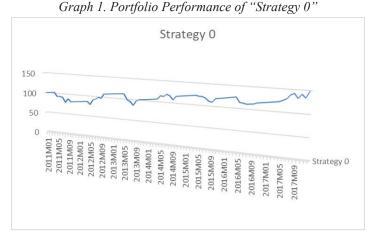
Table 1. Descriptive Statistics.

Table 2. presents average returns, average excess returns and final value of the portfolios. It can be noted that Strategy 1 has higher mean returns than other investment opportunities. Strategy 0 has less returns with negative excess returns and less final value of portfolio than other options. Market index can be seen as buy and hold strategy and performs better than Strategy 0. However cannot beat the Halloween effect Strategy 1 according the analysis. Strategy 1 achieves 246.64 index value at the end of the research period while market index becomes 179.74 and strategy 0 result in 148.87.

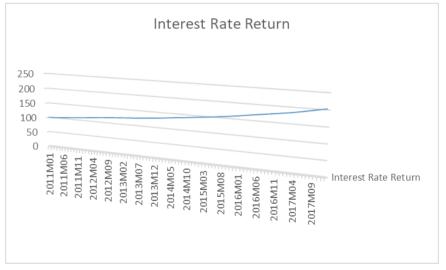
	Strategy 1	Strategy 0	Market index
Average return(monthly)	0.011610	0.005934	0.009003
Average excess return(monthly)	0.004763	-0.000912	0.002156
Final value (December 2010 = 100)	246.64	148.87	179.74

Table 2. Average Returns

Portfolios which starts from the value of 100 are constructed in order demonstrate performance of the employed strategy. Performance changes can be seen at the graphs of the analyzed portfolios.

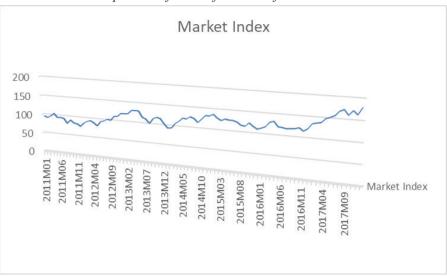


Graph 1 indicates performance of strategy 0. Strategy 0 shows maximum value of 150 portfolio performance in 7 seven years performance. The portfolio value have seen decreases at initial periods. This strategy is vice-versa of the Halloween effect. It can be stated that the performance of "strategy 0" is poor.



Graph 2. Portfolio Performance of Interest Rate Return

Graph 2 presents the performance of interest rate return in the research period. This answer the question of what are the returns of simply investing debt instruments without thinking stock market or Halloween effect. It is showed that portfolio value achieves 200 value which is higher than strategy 0 which mixes stock investments and interest rate investments. Interest rate returns are also stable comparing to "strategy 0". It can be said that debt instruments provided high returns in the research period.



Graph 3. Portfolio Performance of Market Index

Graph 3 explains the performance of investing on market index in the research period. The value of the portfolio is volatile. It is higher than "strategy 0" and lower than interest rate portfolio. This finding indicates relative poor performance of stock market in the research period of Turkey. This portfolio indicates a passive strategy which is buying and holding stocks at all times.



Graph 4. Portfolio Performance of "Strategy 1"

Graph 4 shows the performance of the "strategy 1". This strategy based on the Halloween effect which offers to invest stocks from October until May. This strategy is developed by investing on interest rate instruments from May to October. It can be noted that our approach provides highest returns. This market timing can successfully mix stock and interest rate investment during the year. The returns seem stable with no negative portfolio values after first months of the investment.

Table 3 explains portfolio performance measures. Owing to the fact that considering only returns can result in errors due to neglecting risk. These portfolio performance measures are consider risk of the portfolio which can be better approach. Findings show that "Strategy 1" generates higher Sharpe, Treynor and Jensen's Alpha measure. Thus, it can be noted that "strategy 1" which explains the halloween effect is successful strategy than "strategy 0" and buying and holding market index. Strategy 1 also have lower standard deviation and Beta which are factors of risk.

	Strategy 1	Strategy 0	Market index
Sharpe Measure	0.117681	-0.018723	0.033968
Treynor Measure	0.011582	-0.001532	0.002156
Jensen's Alpha	0.010724	0.004650	0
Beta	0.404908	0.587836	1
Standard Deviation	0.040481	0.048746	0.063485

Table 3. Portfolio Performance Measures.

Table 4 demonstrates unit root test results. Since, econometric analysis assumes stationary variables. Unit root tests are applied. These results show that all the series satisfy the condition of stationary. The hypothesis that series have unit root is rejected.

Table 4. Unit Root Test

Augmented	t-Statistic	Prob.	
Dickey-Fuller			
(ADF) Test			
Excess Return of	-7.626338	0.0000	
Strategy 1			
Excess Return of	-11.14116	0.0001	
Strategy 0			
Market Excess	-9.264051	0.0000	
Return			

In the Table 5. Regression results of the market model which testing analyzed portfolio are demonstrated. Strategy 1 has statistically significant and positive constant term which explains abnormal returns according to the efficient market hypothesis. Therefore, an investor can achieve abnormally more than market excess return by "investing strategy 1".

Return of Strat res Coefficient 0.411307	Std. Error 0.054052	t-Statistic	Prob.
			Prob.
0.411307	0.054052	7 (00202	
		7.609392	0.0000***
0.010724	0.003413	3.142017	0.0023***
Dependent Variable: Return of Strategy 0 Method: Least Squares			
Coefficient	Std. Error	t-Statistic	Prob.
0.595596	0.054142	11.00054	0.0000***
0.004650	0.003419	1.360100	0.1775
***Significant at %1 percent level			
r 0	es Coefficient 0.595596 0.004650	es Std. Error 0.595596 0.054142 0.004650 0.003419	es Std. Error t-Statistic 0.595596 0.054142 11.00054 0.004650 0.003419 1.360100

Table 5. Market Model Testing of Strategy 1 and Strategy 0

Table 5. demonstrates heteroscedasticity, serial correlation and normality tests of the researched models. Econometric models need to satisfy these assumptions It is indicated that there no problems regarding serial correlation, normality or heteroscedasticity. The findings suggest insignificance of tested hypotheses. Thus, the assumptions are validated. The results of the researched models are reliable.

Dependent Variable: Return of Strategy 1			
Test	Name	Test Statistic	Prob.
Heteroskedasticity Test	Breusch-Pagan-Godfrey	0.18	0.66
Serial Correlation Test	Breusch-Godfrey	0.05	0.95
Normality Test	Jarque-Bera	1.47	0.47
Dependent Variable: Return of Strategy 0			
Test	Name	Test Statistic	Prob.
Heteroskedasticity Test	Breusch-Pagan-Godfrey	0.09	0.76
Serial Corellation Test	Breusch-Godfrey	0.06	0.93
Normality Test	Jarque-Bera	1.51	0.46

Table 5: Diagnostic Tests

CONCLUSION

The Halloween effect is one of the most popular market anomalies in finance. There are evidences of persistent abnormal returns from many financial markets around the world using "sell in May and go away" strategy. This study aims to provide evidence from Turkish stock market. The analyzed strategy in this study based on market timing between stock investment and debt investment which is novel due to the fact that it suggests alternative for investors after "sell in May".

The findings shows that this approach generates more return than simply buying and holding stocks. The strategy which requires a switch to investing debt instruments after May to the October has higher returns than investing only stock market. This strategy also have less risk owing to the fact that the portfolio maintain fixed income half of the year.

Sharpe, Treynor and Jensen's Alpha measures are calculated in order to show portfolio performance and it is evidenced that the strategy based on Halloween effect is successful. A vice-versa strategy is also implemented in order to compare results. The findings indicates that vice-versa strategy maintains low return and higher risk which shows superiority of selling stock in May strategy. According to the efficient market hypothesis stock market investors cannot achieve abnormal returns. However, the regression analysis results demonstrate that returns from the strategy based on Halloween effect generates statistically significant abnormal returns. This fact is defined as market anomaly in finance literature. The findings support literature which investigates market anomalies. Halloween effect is tested for Turkish stock market in past periods. These researches are detected controversial results. Yılancı (2013) claims nonexistence of the Halloween effect in Turkey. However, the findings shows existence of the Halloween effect in Turkish stock market.

The findings of the study is beneficial for investors of Turkish financial markets. Successful market timing is crucial for portfolio managers and individuals who are constructing their own portfolio investment or choosing to switch between different funds like a type investment fund and b type investment fund during the year. Halloween effect can provide a right market timing for account owners of Turkish private pension system which have limited authorization for switching funds during the year.

References

- Andrade, S. C., Chhaochharia, V., & Fuerst, M. E. (2013). "Sell in may and go away" just won't go away. Financial Analysts Journal, 69(4), 94-105.
- Almeida, J. R. D., Bergmann, D. R., Ferreira Savoia, J. R., Almeida, G. R. D., & Braga, M. A. (2021). An Analysis of "Sell in May and Go Away" Strategy in Latin American Stock Markets. Latin American Business Review, 1-26.
- Bouman, S., & Jacobsen, B. (2002). The Halloween indicator," Sell in May and go away": Another puzzle. American Economic Review, 92(5), 1618-1635.
- Burakov, D., & Freidin, M. (2018). Is the Halloween effect present on the markets for agricultural commodities?. AGRIS on-line Papers in Economics and Informatics, 10(665-2018-3622), 23-32.
- Dichtl, H., & Drobetz, W. (2014). Are stock markets really so inefficient? The case of the "Halloween indicator". Finance Research Letters, 11(2), 112-121.
- Dumitriu, R., Stefanescu, R., & Nistor, C. (2012). The Halloween effect during quiet and turbulent times. Available at SSRN 2043757.
- Fama, E. F. (1998). Market efficiency, long-term returns, and behavioral finance. Journal of financial economics, 49(3), 283-306.
- Haggard, K. S., & Witte, H. D. (2010). The Halloween effect: Trick or treat?. International Review of Financial Analysis, 19(5), 379-387.
- Jacobsen, B., & Visaltanachoti, N. (2009). The Halloween effect in US sectors. Financial Review, 44(3), 437-459.
- Carrazedo, T., Curto, J. D., & Oliveira, L. (2016). The Halloween effect in European sectors. Research in International Business and Finance, 37, 489-500.
- Magnusson, G. (2019). It is not SAD if you sell in may: seasonal effects in stock markets revisited. International Economic Journal, 33(4), 585-604.
- Ocal, H., Imre, S., & Kamil, A. A. (2021). The "Sell in May" Effect: An Empirical Analysis from Turkey, Indonesia, France, and Germany. Hong Kong Journal of Social Sciences.
- Tekin, B. (2019). Borsa Istanbul'da Mayis Ayi Satış Etkisi ile Ocak Ayı Etkisinin Araştırılması: Bist 100 Örneği. Uluslararası İktisadi ve İdari İncelemeler Dergisi, (24), 287-300.
- Yılancı, V. (2013). Halloween Etkisinin İstanbul Menkul Kıymetler Borsasında Geçerliliğinin Testi. Siyaset, Ekonomi ve Yönetim Araştırmaları Dergisi, 1(1), 21-30.
- Zhang, C. Y., & Jacobsen, B. (2013). Are monthly seasonals real? A three century perspective. Review of Finance, 17(5), 1743-1785



¹ Research Assistant Dr., Marmara University of Communication Faculty Department of Public Relations ORCID ID: https://orcid.org/0000-0001-8871-0813

Introduction

Foucault's discourses on power differ from the thinkers who wrote on this issue before him at certain points. Perhaps the most important point that makes this distinction meaningful is that Foucault constructs power in accordance with a fragmented structure rather than placing it in a deterministic superstructure relation. Foucault's conception of power, instead of being monopolized by a certain group, class or phenomenon, has shown a multiple and fragmented appearance and has been continuous in a way to include many dynamics. One of the relations of domination that stood out as a deficiency in the literature existing before Foucault and whose gap was filled by him is the one concerning the body and power. Foucault preferred to use the concept of biopower to define the form of power established through the body. Lemke (2013, p.20) summarizes the managerial understanding based on biopower mentioned by Foucault as follows; the concept of biopower or biopolitics refers to the emergence of a new political knowledge based on new disciplines such as statistics, demography and biology. As a result of the knowledge obtained from these disciplines, life processes can be analyzed at the population level and power can exercise its governing capacity through punishment, exclusion, normalization, discipline and cure.

It would not be wrong to claim that the concept of biopower is gaining new meanings and increasing its sphere of influence in today's world. It is obvious that the search for meaning of the individual of our age and the area where this search is reflected is based on consumption. With the changing concept of consumption, exchange value rather than use value has come to the fore and the consumption of pleasures has become significant. The most prominent part of the human being, which is at the outermost point and perhaps the most prominent in reflecting to others about himself/herself, is his/her body. The body, like all other areas, is commoditized and gained an important place in the world of consumption. Plastic surgery methods used as a result of dissatisfaction with the existing appearance of the body, practices such as turning to sports in order to look better rather than being healthy stand out as products of the ideal body perception that develops and gains meaning within the framework of consumer culture. In this sense, it is possible to say that the idea of the ideal body has a transformative effect on the body as a kind of biopower tool within consumption relations.

When the effort to transform bodies is considered in the context of mass media, one of the important points that will stand out is the repetitive and systematic imposition of the previously mentioned ideal body typology on the viewers through the TV programs offered and advertisements that directly undertake the mission of increasing consumption. Although the influence of the theories that deal with the first period of mass media claiming that the tools have a direct effect on the behavior of the individual has weakened and the theories such as uses and gratifications, which assign an active role to the audience, have begun to gain importance, it is impossible to deny the role of mass media in popular culture and, in this context, consumption culture.

In this study, in order to address the bodies shaped around the relationship between consumption and biopower, the television program "Böyle Çok Daha Güzelsin", which was shown on television for a period, is taken as a case study. In this program, men who are dissatisfied with their wives who do not have the ideal appearance pumped by the consumer culture try to realize the changes they desire in their wives' appearance through the experts in the program. Within the format of the competition, women are not allowed to say anything about these changes and their bodies are completely reshaped according to the wishes of their husbands. The aim of this study is to analyze the flow of the program within the framework of the concept of biopower. In order to conclude this endeavor in a meaningful way, discourse analysis was preferred as a method. The main reason for choosing the perspective of biopower in this study is the possibility of a coherent analysis of the body transformations in the related program within the scope of biopolitics.

Foucault and the Concept of Biopower

Although the concept of biopower was not first conceptualized by Foucault, he was the one who made the most important contribution to this field and the name associated with the concept. There are shifts in meaning in the way Foucault uses the concept of biopower in his texts. However, it is possible to mention that he refers to the concept of biopower under three different groups within the scope of his works. According to the first one, biopower corresponds to a political thought shaped by a new expression of sovereign power. According to the second one, biopower plays a key role in narrating the rise of modern racism. According to the third, it refers to the art of governance, which has historically been characterized by the individual having a right to say something in his or her own governance and the liberal organization of the social structure (Lemke, 2013, p.54). It can be said that the reason for these differentiations is that Foucault periodically attributed different meanings to the concept of power and accordingly added other layers to the meaning world of the concept. Foucault made an effort to interpret the concept of biopower mainly through the relationship between the subject and power. From this point of view, it is useful to look at the way Foucault depicts this relationship;

To summarize, the main purpose of these struggles is to attack a technique, a form of power, rather than attacking "this or that" power in-

stitution, group, elite or class. This form of power directly intervenes in everyday life by categorizing the individual, determining him/her by his/ her individuality, binding him/her to hi0s/her identity, imposing on him/her a law of truth that both he/she and others have to recognize in him/her. This is a power that makes individuals subjects. (Foucault, 2011, p.63)

According to Foucault, the political sphere, in other words, the sphere of intervention of political actors and power, has shifted to the region between the natural and the political. The interaction and tension between the categories classified as natural and political is experienced in the capillaries rather than the main arteries of the social, and this determination inevitably leads to the penetration and influence of politics on the biological structure. In this sense, it can be said that the biological field, in other words the body, is not only defined by politics, but is also subjected to the process of reproduction by politics (Albayrak and Atalay, 2012, p.132). In this respect, it makes sense to interpret Foucault's imagination of power as a micro narrative of power. Foucault tries to make sense of and describe this micro network of relations with the ubiquity of power. According to him;

"Power is omnipresent: But this is not because it has the privilege of clustering everything under the roof of its invincible unity, but because it is reproduced at every moment at every point, or rather at every connection between one point and another. Power is everywhere, not because it encompasses everything, but because it comes from everywhere. And power, with all its continuous, repetitive, inanimate self-reproducing sides, is a general result that emerges out of all these mobilities, supports each of them and tries to stabilize them by returning to them. Of course, one must be a nominalist (the view that general concepts have no objective reality): Power is not an institution, not a structure; it is not a specific power that some people possess from the beginning, but the name given to a complex strategic situation in a given society" (Foucault, 2007, p. 72).

According to Foucault, the forms of influence of biopower are reflected in society in two ways. It is possible to say that the first of these involves a technically disciplinary approach. This technique focuses on the body, creates an individualizing effect and directs the body in the desired way in order to make it useful and obedient. (Foucault, 2004, p.246).

The second method of biopower is called by Foucault as the biopolitics of the population or the forms of regulatory control over the population. In the eighteenth century, the object that power sought to subjugate administratively ceased to be a territory or a legal subject living on it, and became a more complex composite. The control of this component, which came to be known as population, was made possible by transforming it into an object of statistical information. Factors such as death, birth, disease rates, life expectancy, labor force and welfare were recorded one by one, and bodies were organized in a way to ensure the continuity of the administrative order. To summarize today's power and administrative understanding; it is possible to talk about a community that is governed by the policies produced by an apparatus responsible for administration and execution in the light of the data obtained in the context of population, rather than a literal reflection of the policical power of an individual or collective sovereign (Oksala, 2011, p. 171).

According to Foucault's understanding of the body developed in the context of biopolitics, the relationship between body and soul has also undergone a change. According to Descartes' approach, the body functions as the prison of the soul and liberation can only be achieved by leaving the body. However, according to Foucault, this situation has been reversed in the modern period and the soul has become the prison of the body. Power constantly limits the spheres of existence by regulating norms and laws in the light of the regulatory information it obtains in the context of biopolitics and becomes the prison of bodies. (Işık, 1998, p.380). As a result of the normal created through the policies organized by the sovereign, souls are imprisoned and this is reflected in the bodies. With institutionalized racism approaches, an individual may experience problems only because of belonging to a race, or in other cases where normality is reproduced through the body, individuals cannot get the chance to live freely even though they are not actually in prison.

Another important concept that helps the metaphors of prison and life to prove their validity in Foucault's literature is the concept of "panopticon". The concept of panapticon essentially refers to individuals who are subjected to constant surveillance in prison and who are aware of this situation and organize themselves in the desired way. Today, the control society takes a slightly different form when combined with the consumer society. In this society, the individual actively and willingly contributes to the accumulation of data, uses credit cards for purchases, fills in questionnaires, prefers the latest technology products, and thus falls under the grip of the order created by the state and capitalism. It is now possible to give this phenomenon of control a new name and call it the "super-panapticon" (Poster, 2012, p. 549).

While in the previous centuries, the body was confined to the prison, that is, to the inside, in the period coinciding with the birth of biopolitics, power confines bodies to the outside with the limited areas of freedom it allows. When a path is drawn around the institutional structures that Foucault historically emphasized while forming his theory of biopower; the ways in which medicine and education determine the norms of individuals and the working principle of the mechanisms of internalizing these norms can be revealed. From the very first moment of life, the social structure, which is differentiated on the basis of mental health, physical defects or disorders, sexual preferences, ensures that the perception of self and other is established in the minds of individuals and that this is maintained as if it were a natural structure. Through this descent of power to the subjects, the mechanism of power that operates on body and identity issues becomes able to fulfill its duty perhaps more perfectly than direct intervention methods. Determining the normal brings with its ability to decide how life should be sustained. The main issue of all these reflections on the concept of biopower is about the right to life. In this context, it would also be useful to include a general definition of biopolitics that has the potential to bring all the aforementioned approaches together;

"Foucault argues that power has increasingly turned into the right to intervene in the way of living, in the how of life. What gives this power the right to get as close as the body is no longer the right to decide on death, but taking the responsibility for life. Accordingly, together with the poles of body and population, we are in a power that takes responsibility for life in general, which is called biopower" (Urhan 2010, pp. 81-85).

The Concept of Biopower and the Body Shaped Around Consumption

As discussed in the literature section on the concept of biopower, the concept of biopower is shaped around the body and handled in parallel. For this reason, it would be useful to first include Foucault's views on the body. Sullivan (2012) defines the dominant understanding of the body in Foucault as follows; the body is a product of constructive effects shaped around processes and practices that emerge through the filter of relations with others in a world that is inevitably trapped in the triangle of power, knowledge and subjectivity (p.196).

From this point of view, it would not be wrong to say that Foucault interprets the body as a design that is placed in a historical context, on the axis of power and power centers. For Foucault, the body is more than a biological entity; it is actually a mechanism at the center of power relations with power. For Foucault (1992), throughout the classical period, the body has been at the center of attention of power and has been recorded physiologically and anatomically around the human machine narrative, the foundations of which were laid by Descartes; on the other hand, in parallel with this process, it has been transformed into a form that can be controlled and obeyed (p.168).

The metamorphosis in the form of power has also led to changes in the methods of rendering the body submissive. The understanding of power

that punishes the bodies that disagree with the power using the methods (execution, torture, etc.) that it deems deserving (Urhan, 2010, pp.81-82) has been abandoned and the effort to tame the body with internal mechanisms has begun). According to Foucault, economic reasons lie behind the intense interest in body by institutionalized power and its desire to transform it in the desired way through certain methods. This does not mean that the body in the capitalist order is like an accidentally subordinated body. On the contrary, the prerequisite for being a productive body for power is to be an obedient body. In this sense, the body constitutes one of the transition points between subordination and productivity. A body that cannot yield what power utilitarianly wants is meaningless for power and a body that needs to be transformed (Butler, 2012, p. 280).

Bringing together the issues of biopower and consumption points to an ongoing process that began with the introduction of consumer culture and, moreover, neoliberal policies. According to Foucault, the way to understand the concept of biopolitics is to grasp the nature of liberalism. Even the "birth of biopolitics" is closely related to the emergence of liberalism. Foucault calls liberalism the new art of government and states that it brings with it the guarantee of a controlled freedom. This freedom is limited to consumption. Liberalism both produces and consumes consumption in order to construct the discourse of freedom it contains. Foucault states that the system produces what is necessary for individuals to feel free (Lemke, 2013, pp.67-68). In the neoliberal order, biopolitics expands its sphere of influence not by creating pressure on issues related to the body, but by creating the illusion in individuals that they have the authority to make decisions about their bodies; in a way, by liberating them.

In order to make sense of the foundations of the freedom of individuals to transform their bodies in the way they want, it is useful to include postmodern approaches in the sociology of the body. As a result of the approaches to the body in the late modernity or postmodern period, the body presented an incomplete appearance in contrast to the understanding of the natural body, and thus the responsibility of making bodies holistic was given to individuals. According to Shilling (1993), the approach to the body as a "project" that can be reshaped with the benefits of modernity has given individuals the right to control the appearance and political meaning of their bodies. This approach allows bodies to become a medium of symbolic interaction and to be used to convey determined messages about the self and identity to others and to the individual himself/herself (p.5).

As Giddens argues, in the postmodern era, rather than the body taking the form of a structure predetermined by higher institutions and social constructions, the shaping of the body contributes directly to the construction of the self (Giddens, 2010, p.134). Giddens' understanding of the body is diametrically opposed to the determinist principle of the body. Giddens (2010) defines the body's relationship with institutions in the postmodern period as follows; in today's world, called late modernity, social institutions and the self transform each other in a dialectical relationship. The self is "reflexively" reproduced within this order of changes and options. The construction and perception of the body is realized as an extension of the individual's self and identity (pp.13-19).

In this period, as a result of the body becoming so much a part of the identity issue, consuming bodies have materialized rather than producing bodies and bodies have started to be shaped under the guidance of consumption within the functioning style of the capitalist system. In order to explain that the previously mentioned discourse about the liberal system giving individuals the freedom to transform their bodies is a misconception, it is useful to first look at the concept of consumer culture. If it is necessary to list the basic characteristics of consumption culture, the first and most basic of these would be to state that the phenomenon of consumption is accepted by the whole society as a reality and covers all relationship networks. Within the culture of consumption, needs are no longer just a need and become unlimited and unsatisfied as a result of the creation of desire. One of the signs of consumer culture is that individuals evaluate themselves and others through the symbolic values they attribute to products. It is worth noting that rather than products and services being used to fulfill basic needs, products are transformed into a form with increased value and become symbolic means of consumption (Odabaşı, 2006, p. 46).

When it comes to the commodification of bodies within the culture of consumption, the most important and primary stop should be the concept of popular culture. The debates revolving around the concept of popular culture revolve around those who approach this concept critically and those who portray popular culture in an affirmative manner. Gans (2012, p.11) argues that popular culture has an aspect that challenges the hierarchical structuring of the debate between high culture and mass culture, and also claims that popular culture reflects and appeals to the value judgments of many people and that people's choices about high or popular culture are their own. The most important representatives of the critical school are the members of the Frankfurt School. According to Adorno and Horkheimer, mass culture threatens the individual's authenticity and turns him/her into a passive consumer. In this view, art and entertainment activities evolve into acts of consumption. As a result of the media's activities by observing power relations, cultural products become uniform and the differences between them remain as mere illusions. In the words of Herbert Marcuse, one-dimensional people are produced (Arık, 2004, p. 335). In

both approaches, the intricate relationship between popular culture and consumer culture cannot be overlooked. While one approach, with a liberal attitude, evaluates the reflections of popular culture in consumer culture as harmless and even beneficial as a result of the use of individuals, the other approach argues that popular culture is a malevolent structure that serves the ambitions of power. In any case, it would not be wrong to claim that the products of popular culture are one of the most important supporters of consumer culture.

David Rowe's (1996, p.22) definition of popular culture parallels the consumption of pleasures within consumer culture. According to him, popular culture should be interpreted as "a shifting set of social and cultural relations, meanings and texts that emerge as contemporary forms of pleasure, idleness and identity that are linked to personal and expressive politics, aesthetic appeal and cultural economics". Another important consequence of this symbolic consumption takes place on bodies.

The most important tool for the transmitters of popular culture to turn the body into a consumption material is the creation of the perception of the "ideal body". As stated by Featherstone (2010, p.195), within consumer culture, advertisements, popular publications, television programs and the film industry contribute to the spread of the ideal body image. In addition, popular media outlets regularly emphasize the benefits of body care. Although the effort spent to achieve an aesthetic body appearance is presented with elements such as better health and mental balance, it mainly serves the purpose of an improved appearance and a more marketable body image. As a result, in order to attain the ideal body portrayed in consumer culture, individuals make intense efforts and instead of choosing clothes that fit their bodies, they try to shape their bodies to fit into the clothes that consumer culture presents as ideal. The most important mediator of this is fashion. It would be wrong to address the concepts of fashion and consumption only through female consumers. However, considering the format of the program preferred as a case study, it is possible to make the relationship between female consumers, fashion and popular culture trilogy more visible;

"Having an "institutional status" in the adoption of new values and images, television removes social pressure in favor of fashion. Another link between television and fashion can be established by the fact that women at home are consumers of the style of women on television, since stylish, well-groomed, fashionable women are often seen on television. While contemporary women mostly produce glossy printed magazines, the image of beautiful, stylish, well-groomed women in the housewife's world is fed by soap operas and fashion programs on television." (Barbarosoğlu, 1995, p.90 as cited in Odabaşı, 2006, p. 74).

From this point of view, it is possible to make a little more sense of the mission of "Böyle Çok Daha Güzelsin" as a television program in consumer culture and popular culture. Such programs play an important role in creating the perception of the ideal female body and placing it in minds.

Method of the Study:

In order to verify the hypothesis put forward in the study, discourse analysis was preferred as the method. As stated by Çelik and Ekşi (2008, p.105), discourse analysis basically means the study of language. However, this analysis is not a simple examination of the verbal expressions, but requires going beyond the semantic boundaries of what is stated and revealing the underlying meaning and content.

The fact that the program that constitutes the subject of the study will be examined with a critical eye from the perspective of biopower places this method in a position appropriate to the nature of the study. The sample of the study consists of the first three and the last three episodes of the contest "Böyle Çok More Güzelsin". It is possible to consider the fact that these six episodes were preferred instead of all episodes as a limitation of the study.

H1: In the television program "Böyle Çok Daha Güzelsin", consumption relations shaped around the concept of biopower are reproduced and the consumer position of women is reinforced.

Findings:

The TV show called "Böyle Cok Daha Güzelsin" which constitutes the sample of the study, conceptually involves a man who is dissatisfied with his wife's appearance applying to the program and transforming her with permanent and temporary changes in the direction he wants. Transforming the body in the desired way, in other words, modifying it, is a practice that finds a place in all cultures. In this context, it is possible to state that body modifications are used in the program. Johncock (2012, p.241) states that body modifications stand for practices in which the individual actively participates in events that affect their materiality or holism. The reference to the impact on materiality and wholeness differentiates permanent body modifications from temporary ones. It would be wrong to evaluate a hair modification and a permanent modification on the body in the same direction. When we look at the body modification methods used in the competition, it is noticeable that both permanent and temporary methods are used. As stated by DeMello (2007), body decorations are temporary applications; however, the majority of body modifications are permanent and they change and transform the body in a much more permanent way. It is possible to explain the nature of practices such as make-up, etc., which fall under body adornments, not in terms of permanence, but in terms of temporariness. Permanence characterizes body modifications and their effects on their carriers (p.XVII). Within the scope of the contest, in addition to temporary decorations performed through hair etc., permanent modifications such as eyebrow lifting, nasal lip line fillings, forehead and crow's feet botox, ionic acid filling, facial thinning botox, focus ultrasound on cheeks, spider web, dental aesthetics (teeth whitening, pink aesthetics, laser disinfection of gums, scaling) are also performed.

The realization of all these decorations and modifications is based on the justification of transforming the body in a way desired by the man. The difference between the man's perception of the ideal female body and the current state of his wife is tried to be closed and the internal power mechanisms constructed by the woman over the body are replaced by the ways in which the man establishes power over the woman. It is possible to consider both forms of power-making in the context of biopolitics. It is possible to consider the changes made in the program through the body and the clothes covering the body in the context of consumer culture and biopower and to subject them to an evaluation through certain categories.

Findings on men's perception of the ideal woman and the incompatibility with the existing

"My wife never took care of herself after giving birth" (Male)

"I can no longer see the woman I fell in love with, I think a change is necessary." (Male)

"As a matter of fact, I would like my wife to look sexier." (Male)

"I honestly don't like my wife's teeth and smile." (Male)

"She had to be very thin to fit into this dress!" (Male)

"She is not very old yet, but she already has crow's feet under her eyes." (Male)

Findings that women are not satisfied with their appearance

"I wish I could be in a better shape. I would also like to be able to get into those dresses." (Female)

"I was much more beautiful when we got married. I was worn out with house work and children." (Female)

"I am not very happy with my clothes either. I have been wearing the same things for years." (Female)

"I think my expression would be more meaningful if my eyebrows

were a little more raised." (Female)

"Maybe I could use some Botox. My wrinkles are getting more pronounced." (Female)

"My hair color has gone out of fashion. There might be a change, but I don't know exactly what will happen since my husband will decide." (Female)

Findings that identity is defined through clothes and the body

"This wardrobe doesn't reflect you at all, darling. I've always told you that, but it was meant to be today." (Male)

"The change in your body and style was supposed to create a new you, but I can't say it did." (Jury Member)

"There is something missing in your outfits and this completely affects your reflection on the outside." (Jury Member)

"What is this wardrobe? You look like a woman from the 70s." (Presenter)

"You have really become a completely different woman with the changes in your face." (Jury Member)

"Your smile makes you look dull. It looks as if you are more unpretentious and unassertive than you really are." (Jury Member)

Findings on changes carried out against the woman's own will and desire

"What has my beautiful hair become? How can I go out in public like this?" (Female)

"Okay, maybe my teeth are not perfect. But I actually liked them the way they were." (Female)

"Now he can do what he wants here, let him do it. I will ask him about it at home." (Female)

"He tore the dress my mom gave me as a gift in front of my eyes!" (Female)

"The man officially turned me into something I'm not! So he didn't like the real me at all." (Female)

"I don't wear this kind of dress. It doesn't suit my taste at all. We will wear them anyway, there is nothing to do." (Female)

Findings that popular culture elements determine the perception of ideal body

"I would also like my wife look like Adriana Lima, but the material we have is limited." (Man)

"I would want my wife look like a Victoria Secret model, who wouldn't?" (Man)

"Look at yourself. Are you Brad Pitt or something?" (Female)

"I wish she was like celebrities who never show their age. But they also have aesthetics. Let's see if she can be like them." (Male)

"I wish my hair color was like Fahriye Evcen's. I think she has beautiful hair." (Female)

"I like Beren Saat in terms of style. She looks good in everything she wears!" (Female)

Conclusion

The body discourse created by biopower presents a structure that serves the purpose of power. Body forms that have undergone changes in line with the interests of the sovereign have historically differed. The body, which was used as a labor force during the birth of capitalism, was shifted to the position of consumer as a result of production exceeding supply, and the commodification of bodies was ensured in this way. As a result of supply exceeding demand, certain needs were artificially created in order to ensure the continuity of the system and the consumer was regularly reminded of what and how to consume through mass media.

TV programs, which can be considered as one of the most important weapons of the mass media in this sense, have a particular importance. With rapidly increasing number of "Reality Shows" today, the system Foucault calls the panapticon is becoming an integral part of everyday life and this way of life is almost internalized. In fashion programs, which are considered a sub-genre of these programs, the body and its transformation are directly targeted and the viewers are encouraged to consume more through the perception of the ideal body. It is obvious that within the capitalist mode of production, the consumer side of the body is tried to be brought to the forefront rather than the producer side, and any change to be realized in this direction will be defended and praised. The program "Böyle Çok Daha Güzelsin", which is the subject of the research, carries this transformation phenomenon to higher levels and allows the bodies to undergo changes directly in line with the wishes of men. If this situation is viewed from a criticall perspective, it is observed that the program tries to place women in the position of indirect consumers, like babies and children, and allows men to have an unconditional right to say something over women's consumption habits and, more importantly, directly over their bodies. At the intersection of biopower and consumption, the image of the desired body phenomenon is allowed to be handled from the male perspective and a new body is created accordingly, while women doesn't have any control over their own rights.

As a result of the research conducted in this context, the data were analyzed around certain categories using discourse analysis and it was observed that the program was constructed around the fiction of consumer bodies ordered by biopower. It has been observed that the ideal perception of the body created by consumer culture has gained a certain place in both men and women's lives and that not achieving this desired body creates a problem. The findings that identities are formed through clothes and the body constitute prove that the consumption phenomenon based on symbols and status in consumer culture is valid. The phenomenon of emphasizing the exchange value of products rather than their use value was also frequently observed in the program. It is obvious that this form of consumption is one of the most important dynamics that constitute the consumer culture and society. The fact that women and men choose their desired body perceptions from popular culture icons also confirms this situation. The fact that the examples are chosen not from a random iamge but from one of the "perfect" body images frequently shown in mass media demonstrates that these programs cultivate the consumer fiction in the minds in the way they want. The fact that women do not react sufficiently even to changes that occur against their will has reinforced the image of women as passive consumers, which is frequently used in popular culture. The portrayal of women as not participating in production, only consuming and needing a man to consume ensures the reproduction of the dominant idea about women.

Although not directly addressed by the study, it is worth noting that gender relations, which can be handled around biopower, are exhibited in the program without separating from the dominant form of domination. The subordinate position of women in the society was reinforced through the program and it was observed that the discourse of men towards women was even insulting. This structure of the program was also met with a reaction by the viewers and the online petition titled "Let the sexist program that humiliates women, "Böyle Çok Daha Güzelsin" be taken off the air" reached 25,794 signatories. ¹ Although this program was taken off the air as a result of the reactions, it is worth mentioning that many programs that will lead individuals to consumption in an almost hypnotized manner continue to broadcasted for the sustainability of the system. In Foucault's words, individuals who obey rather than rebel will continue to exist as

 $[\]label{eq:link} 1https://www.change.org/p/kad%C4%B1nlar%C4%B1-a%C5%9Fa%C4%9F%C4%B1layan-b%C3%B6yle%C3%A7ok-daha-g%C3%BCzelsin-yay%C4%B1ndan-kald%C4%B1r%C4%B1s%C4%B1s%C4%B1n-tv8$

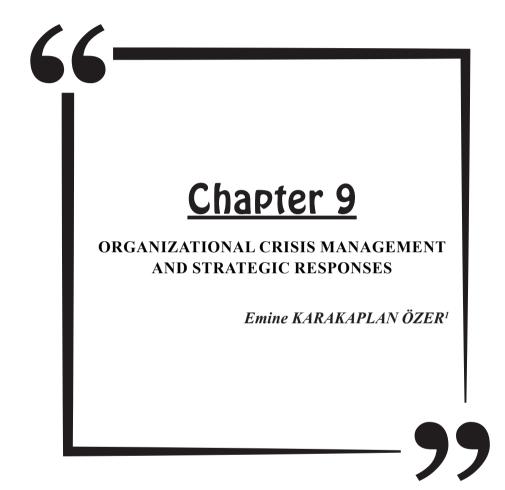
long as the prototype desired by the power exists. This encirclement of modern man and the body by power is inevitable, but it is in the hands of conscious consumers to find small air spaces between the pieces of power and transform them. For this reason, if TV viewers and consumers become conscious and begin to comprehend the link between power and consumption, it will allow for an understanding of broadcasting in which programs such as "Böyle Çok Daha Güzelsin" will not be broadcasted at all, rather than being taken off the air as a result of reactions.

References

- Arık, M. B. (2004). Popüler Kültüre Temel Yaklaşımlar. İletişim Fakültesi Dergisi, (19), 327-345.
- Atalay, K. ve Albayrak, Ö. (2012). Sözleşme Teorileri, Michel Foucault /Cogito 70-71, Yaz 2012, Yapı Kredi Yayınları, 106-139.
- Butler, J. (2012). Bedenler ve İktidar, Tekrar, Micheal Foucault / Cogito 70-71, Yaz 2012, Yapı Kredi Yayınları, 275-288.
- Çelik, H., & Ekşi, H. (2008). Söylem analizi. Marmara Üniversitesi Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi, 27, 99-117.
- DeMello, M. (2007). Encyclopedia of Body Adornment. ABC-CLIO.
- Featherstone, M. (2010). Body, image and affect in consumer culture. Body & Society, 16(1), 193-221.
- Foucault, M. (1992). Hapishanenin Doğuşu, M.A. Kılıçbay (çev.), Ankara: İmge Kitabevi.
- Foucault, M. (2004). Toplumu Savunmak Gerekir, çev. Şehsuvar Aktaş, İstanbul: YKY.
- Foucault, M. (2007). Cinselliğin Tarihi, çev. Hülya Uğur Tanrıöver, Ayrıntı Yayınları, İstanbul.
- Foucault, M. (2011). Özne ve İktidar, çev. Işık Ergüden & Osman Akınbay, Ayrıntı Yayınları, İstanbul.
- Giddens, A., (2010). Modernite ve Bireysel Kimlik: Geç Modern Çağda Benlik ve Toplum. Ü.Tatlıcan (çev.), Say Yayınları.
- Gans, H. J., & İncirlioğlu, E. O. (2007). Popüler kültür ve yüksek kültür. YKY.
- Işık, E. (1998). Beden ve Toplum Kuramı. Ankara: Bağlam Yayınları.
- Johncock, W. (2012). Modifying the Modifier: Body Modification as Social Incarnation. Journal for the Theory of Social Behaviour, 42(3), 241-259.
- Lemke, T. Biyopolitika. (2013). Çev. U. Özmakas, İstanbul: İletişim Yayınları.
- Odabaşı, Y. (2006). Tüketim kültürü. İstanbul: Sistem Yayıncılık.
- Oksala, J. (2012). Devlet Şiddetinin Yönetimi: Foucault'da Siyasi İktidarın Yönetimsellik Olarak Yeniden Ele Alınması, 163-179.
- Poster, M. (2012). Foucault, Deleuze ve Yeni Medya, Micheal Foucault / Cogito 70-71, Yaz, 2012, Yapı Kredi Yayınları, 536-551.
- Rowe, D. (1996). Çev. M. Küçük. Popüler kültürler: rock ve sporda haz politikası. Ayrıntı.
- Shilling, C. (1993). The Body and Social Theory. Sage Publications.
- Sullivan, N. (2012). Foucault's Body. B. Turner. (ed.). Routledge Handbook of Body Studies, içinde 106-116.

Urhan, V. (2010). Fikir Mimarları 24 Foucault. İstanbul: Say Yayınları.

https://www.change.org/p/kad%C4%B1nlar%C4%B1-a%C5%-9Fa%C4%9F%C4%B1layan-b%C3%B6yle-%C3%A7ok-daha-g%C3%BCzelsin-yay%C4%B1ndan-kald%C4%B1r%C4%-B1ls%C4%B1n-tv8 (accesed: 19.11.2022) 122 · Alp POLAT



¹ Asst. Prof., Adıyaman University, Orcid: 0000 0003 0710 8850

Introduction

Crises can take various forms (Luoma-aho, Moreno, & Verhoeven, 2017) but all forms are generally unpredictable, unforeseen, unknowable, and immeasurable (Oh, Agrawal, & Rao, 2013). As globalization continues, organizations are increasingly affected by technological, political, economic, sociocultural and similar changes occurring around the world. Day by day, the development of interactive technologies creates an unstable competitive environment that is independent of time and place. In this environment, organizations that are not proactive can face to crises at any time (Okkay, 2019: 308). However, investments in corporate reputations can be damaged by crises that develop suddenly and cannot be managed effectively. The unpreparedness of organizations for the crises that develop in this age when competition can cause devastating results, and the inability to be successfully manage the crisis can damage the image, employer brand value, reliability of the organization, and sometimes lead to disappearance of the organization. It is very common that the problems that occur in a certain part of the world due to the increasing interdependence with globalization can trigger crises in other parts of the world with a butterfly effect. It will make it very difficult for organizations to turn to factors only for themselves, and fail to develop strategies, as it is stated in the system approach, that failures in any area that develops in their environment can lead to disruptions at other points as well.

In today's world, even if the countries' own economies are stable, the economic crises experienced in the countries they import or export shake even the economies that are thought to be sound. The global crises experienced in the world have had great effects even in developed economies, have caused some organizations to come to the point of bankruptcy, decreased production, increased unemployment, and created deep socioeconomic scars on countries and people. Today, when the economy is so fragile, there have been some organizations that turned the crisis into an opportunity (Okkay, 2019. 309). The ability of organizations to continue their existence and thus gain a sustainable quality depends on their ability to see and evaluate these opportunities and to protect themselves against threats (Özdemir, 2020: 187).

Coping with a crisis starts with accepting it. Against the wrong decisions that can be taken in haste and panic, it is necessary to protect the current situation and to implement the crisis management strategies in the most correct way (Şimşek, 2021: 22). The strategies carried out in these processes can lead organizations to overcome the crisis sometimes without any damage, sometimes with little damage, and sometimes with profit by turning the crisis into an opportunity. The aim of this study is to compile and present the crisis response strategies put forward by different studies.

The presentation of various strategies in a single study will facilitate organizations to reach strategies suitable for their own situations in crisis management processes. In addition, it will provide an overview of the strategies for the crisis.

1.Organizational Crisis

The word crisis emerges as a concept related to medicine and war in history. Hippocrates and Thucydides used the crisis as "the turning point at which a decision is made between life and death, victory and defeat". It can be said that crisis, as a concept related to war, is similar to strategy. The turning point in question represents a critical moment when things get better or worse.

In terms of business management, a crisis is the "turning point, decisive moment, or crucial time" when things start to get better or worse. This situation is a critical phase (Örnek, 2007: 116). Organizational crises are tense situations that threaten the existing values, goals and assumptions of organizations by rendering the prevention and adaptation mechanisms inadequate and necessitate an immediate response (Pamuk, 2014: 305). According to Boin, Kofman-Bos, & Overdijk (2004: 379), "The term crisis applies to all situations that are unwanted, unexpected, unprecedented, and almost unmanageable, causing widespread disbelief and uncertainty".

Organizational crises generally occur in two ways. The first is unforeseen events that suddenly destroy the institutional structure of an industry. The events that triggered these crises are so severe that it is impossible not to intervene and reforms are inevitable. The second is crises that have a long incubation period and emerge gradually (Boin, Kofman-Bos, & Overdijk, 2004: 384). Crises can show serious effects that even endanger the existence of organizations. While it is possible in some cases to predict these situations and to prevent them by taking the necessary precautions before the crisis occurs, it may be impossible in some cases as experienced by many businesses globally with the Covid 19 pandemic very recently.

2. Types of Organizational Crises

Iftikhar, Müller, & Ahola (2021: 397) classified crises as internal, external, intentional, unintentional, abrupt, cumulative (developing gradually), conflictual (war, civil unrest, riots, terrorist attacks, and human related) and consensual (generated by technical and natural factors). They cluster crisis types according to their basic structural similarities and grouped them into similar crisis families and advanced crisis groups as presented in Table 1.

	Technical/Economic Crisis	Social Crisis	
Internal Cell 1		Cell 3	
	Product injuries	Failure to adopt/change	
	Computer tampering Organizational breakdowr		
	Bankruptcy Personal assault		
	Defective/undisclosed information Illegal activities		
	Plant defects Workplace bullying		
External	Cell 2	Cell 4	
	Industrial accidents	Executive kidnapping	
	Hostile overtakes Bribery		
	Large-scale systems failure Extortion		
	Government crisis Symbolic projection		
	International crisis Copyright infringements		

Table1. Typology of Crises (Iftikhar, Müller, & Ahola, 2021: 397)

Cell 1 involves the technical and economic failures that occurred in the internal systems and routines of the organization. Crises related to the technological and economic failures in the company's business environment were included in Cell 2. In Cell 3, failures in the internal processes and systems of the organization are discussed. Cell 4, on the other hand, presents the failures in the social environment (Iftikhar, Müller, & Ahola, 2021: 397).

Coombs (2014) classifies crisis types in ten headings and defines them as given in Table 2.

Crisis type	Definition
Natural Disasters	The damage caused by weather or "natural disasters" such as
	earthquakes, floods, hurricanes, severe storms and hurricanes.
Workplace Violence	Violence against other employees by an employee
Rumours	Disseminating misleading information deliberately about the
	organization or the products of the organization in order to give
	harm.
Malevolence	The usage of extreme tactics to attack the organization, such
	as product tampering, terrorism, hacking or kidnapping, by
	outside actors or competitors.
Challenges	The confrontation of organization with disgruntled stakeholders
	with allegations that it is operating improperly.
Technical-error	The utilization or supply of technology by the organization fails
accidents	and results in industrial accidents
Technical-error product	When technology used or provided by the organization fails
harm	and results in a defect or potentially harmful product
Human-error accidents	Accidents caused by human errors.
Human-error product	A defect or potentially harmful product caused by human error
harm	
Organizational	The deliberately decisions of management that violates the law
misdeeds	and put stakeholders at risk.

Table 2. Definitions of Crisis Typologies (Coombs, 2014)

3.Crisis Management in Organizations

Crisis management is the management and coordination of response to an event that threatens or has damaged the organization's employees, structure, ability to work, valuable assets and/or reputation (Semerciöz, Pehlivan, Sözüer, & Mert, 2015: 151). It is the process of taking and evaluating the crisis signals and taking the necessary precautions in order for the organization to overcome the crisis with the least damage (Genç, 2012: 364; Okkay, 2019: 310; Semerciöz, Pehlivan, Sözüer, & Mert, 2015).

Organizations generally choose one of two ways against crises. The first of these is the method of intervention, which is a series of responses to the disorder created by crises. This method is largely the application of existing rules as a result of qualitative measurements. The rules do not change, except for larger events that cause an adverse economic impact (Tawaha, 2021: 5). The second method is the Proactive Method and it is the work of organizations to reduce the risk factors and effects that may cause the crisis and to determine them in advance (Tawaha, 2021: 5). Organizations that make possible action plans by predicting the crisis can manage the crisis more effectively by identifying their strengths and weaknesses, possible opportunities and threats, with accurate analysis. Effective crisis management process enables organizations to take precautions without experiencing a crisis, thus turning the crisis into an opportunity by getting out of the crisis with the least damage and sometimes with profit (Okkay, 2019: 308).

There are many different ideas and theories on how to manage crisis. However, different ideas have similar suggestions. These suggestions include the need to anticipate and prepare for potential crises, the need to accurate information, the need to respond to crisis immediately, the need for a top-down response, and the need for long-term solutions (Jia, Shi, Jia, & Li, 2012: 140).

Siuta-Tokarska, (2021: 2) states that crisis management in organizations is subject to certain management rules. These rules are as follows

- setting goals,
- diagnosing the condition,
- determining the means to be used and the responsible persons,
- controlling effects.

Spillan (2000) indicates that crisis management covers five functions. He lists these functions as team building, evaluation, strategy formation, crisis response and crisis evaluation. He also states that four functions are related to these five functions in crisis management processes. Figure 1 below visualizes this relationship.

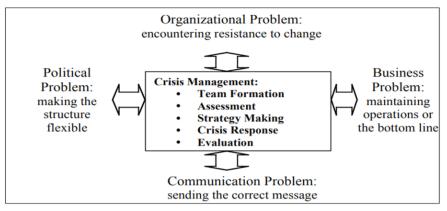


Figure 1. Organizational Problems Influencing Crisis Management: The Managerial Response (Spillan, 2000).

The models related to crisis and the stages that exist in crisis situations classified by Spillan (2000) are shown in Figure 2.

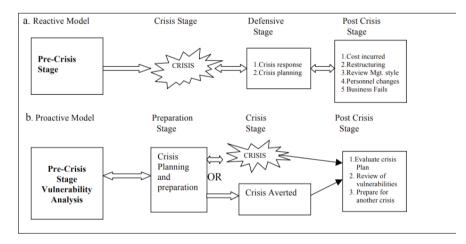


Figure 2. Crisis Management Process (Spillan, 2000)

In the reactive model, decisions about planning are made during and after the crisis. In the proactive model, managers have already foreseen some kind of crisis and have developed a plan to deal with the possible crisis. According to this scenario, managers make a plan and risk assessment to deal with crises (Spillan, 2000). Anti-crisis strategies should response the causes of the crisis and these strategies should be coherent to the extent of the crisis. Organizations can react proactively or reactively to changes in the environment. However, crises can be caused by the management or the scope and type of the action (Starosta, 2014: 257).

In order to behave proactive Starosta (2014) and Siuta-Tokarska (2021) listes the measures to be taken against the crisis as follows;

• Planning activities such as re-creating the company's mission, vision and goals, acquiring new directions on market opportunities, introducing new management practices, presenting the strategic plan and renewing the product,

• Suggesting activities for the organizational process such as cost reduction, deferral of debt repayment, acquisition of additional capital, leasing of assets, amicable settlements with creditors, downsizing, diversification, changing investments, applicating quality management systems, implementing integrated information systems, merging with a strategic partner, changing pricing policy, buying new technologies, changing organizational structure, outsourcing, changing management positions and organizational culture,

• Motivational factors can be changed, including reducing salaries, encouraging teamwork, creating recent motivation systems, renewing organization of work, decreasing employment share,

• Taking control measures, such as improving financial control and systematic control,

- Observing environment in order to detect threats early,
- Providing the cooperation of all participants within the organization

• Developing action plans and crisis prevention continuum appropriate to the changes.

4. Stages of Crisis Management

Crisis management stages have been handled by researchers with different titles. Some of them are given below.

Crisis management process is classified into three stages by Özdemir (2020: 188). These stages are pre-crisis, crisis, and post-crisis.

• Pre-crisis: In this phase, factors that cause the crisis are determined and ways of eliminating the crisis are sought by developing preventive practices.

• Crisis Time: The business fully accepts the existence of the crisis. For this reason, measures are taken and implemented to prevent or limit the damages of the crisis.

• Post-crisis: The crisis is over. This phase is a learning, a change, and a restructuring phase.

Chong (2004: 43-45) classifies the crisis process in six stages and indicates how crisis management spans the strategic crisis management process with Figure 1.

• Coping: Doing whatever necessary in order to reduce the harm caused by the crisis.

• Rethinking: Rethinking is the reflecting on and seeking answers to some questions after a crisis has been overcome.

• Initiating: It is the stage of starting the change process after the questions in the previous stage are answered.

• Sensing: It is the process of taking early signals for a potential crisis by making effective observations of both the internal and the external environment of the organization.

• Intervening: Determining strategies with the support of the necessary experts by receiving the signals of the potential crisis. The most effective of these strategies will be to prevent a crisis by taking measures before it occurs.

• Sandbagging: Just like in floods, if the flood cannot be prevented, the sandbags we put in front of our door prevent water from entering our house, and the business should activate its plans against an unavoidable crisis. If this process doesn't work either, the coping stage has to be started first.

	Process of strategic management		
Step in crisis management	Strategy formulation	Strategy implementation	Strategy evaluation/ control
1 – Coping		1	1
2 – Rethinking	1		1
3 – Initiating	1		1
4 - Sensing	1		1
5 – Intervening		\checkmark	1
6 - Sandbagging		1	1

Figure 3. Relating Crisis Management to Strategic Management (Chong, 2004: 43-45)

Pheng, Ho, & Ann (1999) addresses the stages of crisis management under the following headingS:

• Signal detection phase: Tasks such as mechanisms to detect signals of a variety of crises, creating channels to gather employee feedback for internal or external risks, losses or challenges that cannot be resolved through normal actions are determined in this phase. • Preparation/prevention phase: Preparation and prevention processes against the crisis are done in this stage.

• Damage containment phase: At this stage, it is aimed to regularly research and test damage prevention equipment and procedures to limit damages, to establish recognition and reward systems, and to establish manageability of damage control.

• Recovery phase: It is the stage of strengthening the weaknesses of organizations that cause them to be affected by the crisis, creating options for critical operations and substitutes in critical spheres for business operations.

• Learning phase: It is the stage of learning and taking lessons in order to guide future crises.

5. Crisis Management Strategies in Organizations

Strategic management activities make it easier for organizations to set targets and plan for their future activities (Özan & Gümüş, 2021: 2551). Strategic management system can be used to prevent the crisis and reduce its effects. Success in the strategic management system depends on the correct perception of the changes in the macro and micro environment, developing appropriate strategies and taking the necessary precautions in a timely manner. In this way, it can be more successful in the stages of avoiding the crisis, detecting the crisis, resolving the crisis, benefiting from the crisis (Patan, 2009: 81). Neither profit nor social benefit can be expected from a business that is unable to survive so a holistic crisis management knowledge and skill should be among the priority strategies of every business (Örnek, 2007: 118). Crisis response strategies refer to the strategic preferences of organizations to respond to the crisis. Organizations choose crisis response strategies to resolve crisis situations and restore legitimacy among audiences (Luoma-aho, Moreno, & Verhoeven, 2017: 223). Many different researchers suggest different response strategies in crisis management processes. This section covers various strategic response approaches.

Kádárová, Mihalčová, Kádár, & Vida (2015: 1122) state that the most effective response to the crisis can be achieved with an effective coordination of management, operational and communication as figured in Figure 4.

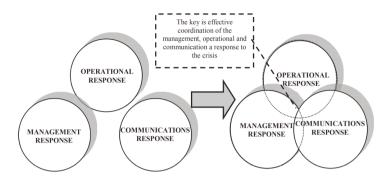


Figure 4. Elements of an Effective Crisis Response (Kádárová, Mihalčová, Kádár, & Vida, 2015)

Taking all three of the above-mentioned pillars together with a strategic perspective will offer great advantages to the organization. Some researchers ((Haupt, 2021; Kádárová, Mihalčová, Kádár, & Vida, 2015) state that communication strategies are vital in crisis management and that in these processes, it is essential not only to control the official and informal internal communication flows, but also to manage them with appropriate information. Management takes risks if informal communication flows are not noticed, especially in the early stages. The uncontrolled, distorted, emotionally driven amount of information and speculation can cause panic or mass psychosis and become an obstacle to the rational management of crisis situations. Failure to prepare for the process of managing communications will increase the damage. Weaknesses in communication flows, undermining their credibility and official communication flows.

Situational Crisis Communication Theory, a significant strategic guiding in crisis management, includes some models. The first of these is Instructive Information and three types of information is required. This information is about what happens during the crisis, what stakeholders should do to protect themselves from the crisis, and what the organization should do to protect their interests. The second is the Basic Crisis Response Options model and provides three basic options for the executives. These options are; proving that a crisis does not exist, embellishing the crisis in a way that makes it seem less detrimental to stakeholders, and collaborating with others (Tawaha, 2021: 5). Situational Crisis Communication Theory proposes four types of response strategies towards the crises. These strategies are given below in Table 2.

Strategies	Definition
Denial strategies	Strategies on removing the link between the organization and crisis and including denial, assault and passing blame to the accusers.
Diminish strategies	Strategies on decreasing the responsibility and including reasons or excuses.
Rebuilding strategies	Strategies on increasing the reputation with the indemnity and apologies.
Bolstering strategies	Strategies on striking to goodwill and intending to be the second strategy to mentioned strategies.

Table 3. Situational Crisis Communication Theory Response strategies (Haupt, 2021)

Diddi & Wei, (2022) refers to two communication strategies in coping with the crisis. These are inoculation theory and organizational contingency interactivity.

Inoculation theory: It is the process of making people resistant to future attacks in order to be prepared for the next processes as if they were vaccinated. The aim is to take a preventive approach against threats to the organization. Essentially, the goal of inoculation theory is to persuade someone not to be persuaded by others. The purpose of the organization is to take a proactive approach and to prepare in advance the stakeholders and the public to support a positive attitude towards them or to change the attitude towards them (Diddi & Wei, 2022).

Organizational contingency interactivity: Organizational interaction is effective because it produces a perception of "human voice speaking", which can help the viewer experience "psychological closeness" with the sender. In times of crisis, this situation can be turned into an advantage with the use of social media. Both partners and customers can be communicated through these channels.

The results of Lachlan, Spence, Lin, Najarian, & Greco's (2015) study support that the use of Twitter during crises and emergencies is effective in informing and motivating. Using Twitter effectively in crisis processes will be effective in influencing those affected by uncertain and stressful conditions with the right transfer strategies.

Coombs (1999) offers seven crisis communication strategies that can be used from defence to reconciliation. These are; attack on the accuser; denial; excuse; legitimation; love; corrective action; covered under the headings of full apology and embarrassment. (i) Attacking the accuser involves punishing the accuser by aggressively denying the allegations of the crisis, (ii) denial, claims that the crisis did not exist or that the organization wasn't involved in the crisis, (iii) excuse admits that there is a crisis but minimizes organizational responsibility for the crisis ; (iv) justification acknowledges that a crisis exists but downplays its seriousness, (v) appreciation seeks to create positive impressions of the organization by reminding stakeholders of past good work, associating the organization with positive attributes, or both, (vi) corrective action attempts to repair the damage of the crisis, prevent the recurrence of the crisis, or both, (vii) a full apology and shame takes responsibility for the crisis (Luoma-Aho, Moreno, & Verhoeven, 2017: 224).

Iftikhar, Müller, & Ahola, (2021: 403) address different types of crises such as technical/economic, internal social, external technical/economic and external social crises and some strategies for coping with them. Figure 2 presents specific coping strategies to certain types of crises.

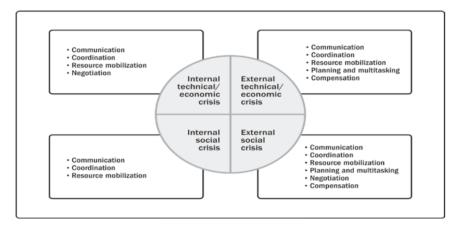


Figure 5. Crisis Management Model (Iftikhar, Müller, & Ahola, 2021: 403)

As seen from the Figure 5, communication, coordination and resource mobilization strategies are stable in all types of risk, Beside these three strategies internaltechnical/economic crisis involves negotiation, external technical/economic crisis involves planning and multitasking, compensation, externa social crisis involves planning and multitasking, negotiation and compensation strategies.

Tikici, Omay, Derin, Seçkin, & Cüreoğlu, (2011: 50) argue that in times of crisis, business turnaround strategies are effective in increasing the business' chances of ending the threat and achieving sustainable performance improvement. They list turnout strategies as cost-cutting strategy, asset reduction strategy, and revenue generating strategy. The cost reduction strategy includes cuts in discretionary spending. Asset reduction strategy specifically refers to the disposal of fixed assets. Revenue generating strategy, on the other hand, includes efforts to improve cash flows by increasing sales. Zelek (2003) put forward four types of strategies for crises. These strategies are:

• Growth strategy: The aim of this strategy is to grow in the market with the aggressive measures in order to improve or strengthen the competitive position of the organization (Starosta, 2014: 257) by investing or organization integrations. The use of this strategy requires the appropriate potential as well as the capital-asset possibilities of the business entity involved in such a process (Siuta-Tokarska, 2021: 5).

• Reconstruction strategy: The aim of this strategy is stabilizing the crisis. The core activity depends on the restructuring of the business (including debt restructuring), taking into account restructuring operations (Siuta-Tokarska, 2021: 5).

• Liquidation strategy: It is the strategy for selling the business and the purpose is to maintain its solvency (Starosta, 2014: 257). The main purpose is to get extra liquidation capital (Siuta-Tokarska, 2021:5).

• Bankruptcy: It involves liquidating the business without maintaining its solvency (Starosta, 2014: 257). The official buyer's duty is to pay all the obligations of the firm to its creditors (Siuta-Tokarska, 2021: 5).

Seventeen different strategies and their definitions classified in four different headings by Starosta (2014). They are presented with Table 4.

	<i>v</i> 1 <i>v</i>	
Classification	Name of the Strategy	Characteristics of the Strategy
Approach and ways of making changes, participation	Prescriptive	Acting on a predetermined plan, Short term changes, Wide management authority and trust is required, Extensive authority and resources are necessary for managers, Management strategy used in an acute crisis situation.
of employees in the process of introducing changes	Negotiation	Manager initiates the change, Acceptance of organization members participation in how anti-crisis measures are implemented, Execution of this strategy takes longer time than the prescriptive strategy.
	Normative	Mental change of organization members, Responsibility towards the company, implementing changes and achieving goals by the members of organization, Usage of professional help to change the behaviour of individuals and/or groups.
	Analytical	Experts and consultants are involved in management teams, Knowledge and available information are basement for the decisions, Technical aspects of the decision are focused predominantly.
	Action-orientated	Discretion of employees is greater than other strategies, There is no significant pressure by the managers, Active employee participation.

Table 4. Types of Anti-Crisis Strategies (Starosta, 2014: 258)

Dessent and	Ouconizina	Departize education to the anzing ment
Reasons and adaptation	Organizing	Reactive adaptation to the environment,
to the		Response to management-related crisis causes, Reduction of cost and employment, sale of assets, restructuring
environment		of finance, change of organizational structure.
	Investment	Proactive adaptation to the environment,
	nivestinent	Response to causes derived from management,
		Investment in new products or market segments, human
		resources,
		Presentation of new management concepts,
		Activities with other actors, mergers, strategic alliances,
		acquisitions etc
	Withdrawal	Reactive adaptation to the environment,
		Response to the causes of the crisis regarding the scope and
		type of activity
		Limitation on business scale, employment, abandonment of
		some departments, markets and limiting product ranges.
	Consolidation	Proactive adaptation to the environment,
		Business activities to reduce the causes of crisis associated
		with the scope and type of activity,
		Reconsidering the business activity, Focusing to selected markets,
		Introducing the cost strategy,
		Explaining quality issues.
Duration and	Restructuring	Stabilizing the crisis and ensuring a permanent improvement
intensity of the		in the in the long run,
crisis		Business activities are aimed at restructuring and eliminating
		the causes of the crisis.
	Liquidation	Generating maximum liquidation capital is the main purpose,
	option	Business sales and liquidation strategies.
	Growth option	Taking proactive measures to strengthen the business with
		investments or integrations
		Organization must have capital, Strategic alliances, mergers and acquisitions are strategic
		measures.
	Bankruptcy	Liquidation of organization without maintaining its solvency,
	option	The consequences of bad economic situations require this
	1	strategy.
Managerial	Unnoticing	Receiving signals that are not necessary, no action required
approach to	Underestimation	Perception of signals as a natural deviation from the norm in
crisis		which current changes of activities are introduced
	Solving problems	Identifying weaknesses, possible courses of action, and making
	in a crisis	necessary changes during a crisis.
	situation	
	Constant	The crisis seen as the development phases of the organizations,
	prevention of	Organizations should take action within the framework of
	crisis situations	crisis preparation, prevention, crisis response and evaluation
		of measures.

The results of the study conducted by Starosta (2014) on 331companies revealed that the most common strategy taken by the organizations for crises is cost reduction (88.1%). Figure 6 shows the strategies taken by the organizations and percentages of them.

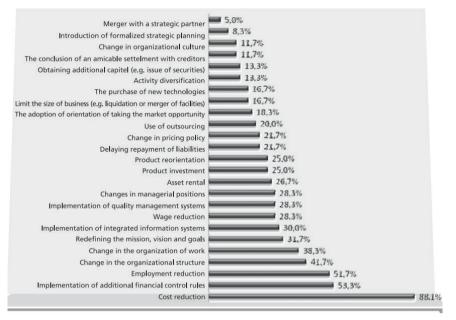


Figure 6. Analysis of Anti-Crisis Measures (Starosta, 2014)

Organizational crises are generally not accidental. Usually, they show symptoms that indicate the possibility of their occurrence. However, the recent pandemic crisis is the first such crisis in the 21st century economy (Siuta-Tokarska, 2021). Management Strategies implemented by the organizations against this sudden, unpredictable crisis period were discussed by Özdemir (2020: 191) under the following headings:

 Coronavirus Crisis Management Strategies for Internal Environment

• Changing the Working Order: Changes, such as wearing masks, distanced working order, temperature measurement at the entrances and exits, were made.

• Strategies Regarding Organizational Structures of Organizations: A flexible structure has been created in order to make quick decisions and communication was faster and easier.

• Strategies for the Management of Material Resources: In this process, curfews caused some organizations to experience serious financial losses. Shopping malls, restaurants etc. closed and travel was restricted. This has caused organizations to have difficulties and to develop different strategies.

• Strategies Related to Human Resource Management: In this process, companies that had difficulties were not allowed to dismiss their employees. Some of the employees had to run their business from home.

Coronavirus Crisis Management Strategies for the External Environment

• Strategies Related to Activity/Investment Areas: In this process, some organizations that turned the crisis into an opportunity rose, while others experienced serious problems. Organizations that attach importance to the use of technology received their feedback.

• Customer Related Strategies: It is important to retain customers during crisis periods. Without losing their trust, efforts towards them should be increased. Because getting out of the crisis will be thanks to them.

6.Conclusion

Recently, many organizations have faced crisis experiences, especially with the pandemic. Along with the pandemic, many factors such as developing technology, increasing competition due to globalization, and changing expectations pose significant challenges to organizations. Crisis management is a situation that many businesses face. The aim of this study is to reveal different crisis response strategies. In this study, many types of crises and strategic responses that can be developed for these crises are discussed in order to enable businesses that are looking for ways to cope with this situation specially to take a proactive approach. By making use of this study, businesses can identify the potential crises types or the crises they are in and benefit from the strategies suggested for them. They can choose the most suitable strategy for their own conditions and structures or the crisis they are experiencing.

The results of this research show that there is no one right strategy for every crisis or it is not always possible to easily implement a particular strategy on a business (Siuta-Tokarska, 2021: 6). Crisis strategies should be adapted to meet needs. The extent, causes, duration, time, and intensity of the crisis, and the methods of adapting to the environment or employee involvement are important points in choosing the most appropriate strategies. Sometimes it is necessary to combine selected elements from different strategies to develop a strategy according to needs and possibilities. Every crisis situation is different and therefore different actions must be taken (Siuta-Tokarska, 2021: 6).

Deaths encountered due to crises are "unexpected deaths". In order to prevent these untimely deaths in terms of management and organizations, or even to resuscitate, strategic crisis management becomes a necessity (Örnek, 2007: 115). Rather than approaching such situations unprepared or ignoring them, taking proactive measures and making strategic plans with the necessary strategic foresights will reduce the damage of businesses and may even help them to come out of the crisis with profit.

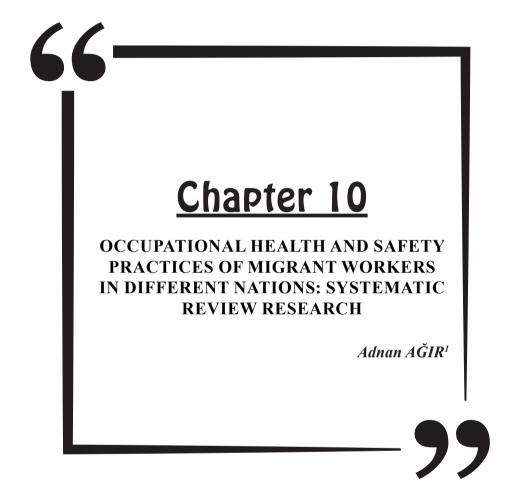
In this study, various crisis management strategies have been presented. However, one of the limitations of this study is that it does not include the results after the implementation of crisis management strategies. In particular, addressing crisis strategies and outcomes supported by concrete data would yield beneficial outcomes. Another limitation is that when referring to many strategies, each strategy is handled superficially instead of making deep evaluations on it. In future studies, new research can be done based on the limitations of this study.

References

- Boin, A., Kofman-Bos, C., & Overdijk, W. (2004). Crisis simulations: Exploring tomorrow's vulnerabilities and threats. Simulation & Gaming, 35, 378-393.
- Coombs, T. (2014). Ongoing Crisis Communication: Planning, Managing, and Responding. Newbury Park CA: Sage Publications.
- Coombs, W. T. (1999). Crisis management: Advantages of a relational perspective. S. D. Bruning, & J. A. Ledingham içinde, Relationship management: A relational approach to the study and practice of public relations (s. 75-93). Mahwah, NJ: Lawrence Erlbaum Associates.
- Diddi, P., & Wei, L. (2022). Crisis management on social media: Effect of pre-crisis inoculation strategy and midst-crisis organizational interactivity. Public Relations Review, 48(5).
- Genç, N. (2012). Yönetim ve Organizasyon Çağdaş Sistemler ve Yaklaşımlar (4 b.). Ankara: Seçkin Yayınları.
- Haşit, G. (1999). İşletmelerde kriz yönetimi ve Türkiye'nin büyük sanayi işletmeleri üzerinde yapılan araştırma çalışması. Doctorate Thesis. Eskişehir: Anadolu University Institute of Social Sciences.
- Haupt, B. (2021). The Use of Crisis Communication Strategies in Emergency Management. J Homel Secur Emerg Mgmt, 18(2), 125–150.
- Iftikhar, R., Müller, R., & Ahola, T. (2021). Crises and coping strategies in megaprojects: The case of the Islamabad–rawalpindi metro bus project in pakistan. Project Management Journal, 52(4), 394–409.
- Jia, Z., Shi, Y., Jia, Y., & Li, D. (2012). A framework of knowledge management systems for tourism crisis management. Proceedia Engineering, 29, 138 – 143.
- Kádárová, J., Mihalčová, B., Kádár, G., & Vida, M. (2015). Strategy map for the crisis communication. Procedia Economics and Finance, 23, 1119 1124.
- Lachlan, K., Spence, P. R., Lin, X., Najarian, K. M., & Greco, M. D. (2015). Social media and crisis management: CERC, search strategies, and Twitter content. Computers in Human Behavior, s. 1-6.
- Luoma-aho, V., Moreno, A., & Verhoeven, P. (2017). Crisis response strategies in Finland and Spain. J Contingencies and Crisis Management, 25, 223–231.
- Oh, O., Agrawal, M., & Rao, H. R. (2013). Community intelligence and social media services: A rumor theoretic analysis of tweets during social crises. MIS Quarterly, 37(2), 407–426.
- Okkay, İ. (2019). The importance of crisis management in the globalized world. Eurasian Journal of Researches in Social and Economics (EJRSE), 6(3), 308-317.
- Örnek, A. Ş. (2007). Kriz yönetimi stratejileri ve Türkiye bilişim sektörü örneği. Journal of Administrative Sciences, 5(1), 114-129.

- Özan, M., & Gümüş, İ. (2021). A research on the effects of strategic management practices on crisis management. Third Sector Social Economic Review, 56(4), 2550-2575.
- Özdemir, L. (2020). İşletmelerde koronavirüs kriz yönetim stratejileri. R. Aylaz, & E. Yıldız içinde, Yeni koronavirüs hastalığının toplum üzerine etkileri ve hemşirelik yaklaşımları (s. 186-193). Malatya: İnönü Üniversitesi Yayınevi.
- Pamuk, Z. (2014). Kriz yönetimi stratejiler. F. M. Harmancı, M. Gözübenli, & C. Zengin içinde, Güvenlik Sektöründe Temel Stratejiler, 305-330.
- PATAN, G. N. (2009). The importance of crisis management and strategy in organizations İ. Master Thesis. Konya: Institute of Social Sciences.
- Pheng, L. S., Ho, D. K., & Ann, Y. S. (1999). Crisis management: A survey of property development firms. Property Management, 17(3), 231-251.
- Semerciöz, F., Pehlivan, Ç., Sözüer, A., & Mert, A. (2015). Crisis management practices and strategic responses through customer loyalty and price strategy in hard times: Evidence from fine-dining restaurants. Procedia - Social and Behavioral Sciences, 207, 149 – 156.
- Siuta-Tokarska, B. (2021). SMEs during the COVID-19 pandemic crisis. The sources of problems, the effects of changes, applied tools and management strategies—The Example of Poland. Sustainability, 131(185).
- Spillan, J. E. (2000). Strategies for successful crisis management. http://www. conferencemgt.com/presseinforms/SEINFORMS%202008%20-%20Proceedings/proc/p080429001.pdf (11 28, 2022).
- Starosta, A. (2014). Anti-crisis management strategies. The case of companies in the greater poland voivodeship. Management, 18(1), 255-266.
- Şimşek, H. (2021). Crisis Management in Air Transport. Journal of Aviation Research, 3(1), 21-40.
- Tawaha, M. S. (2021). The study of the mutual effect between crisis strategies (Covid-19) and the organizational culture and organizational strategic orientation in private Jordanian universities. Cogent Business & Management, 8(1).
- Tikici, M., Omay, E., Derin, N., Seçkin, Ş. N., & Cüreoğlu, M. (2011). Operating turnaround strategies during crisis periods: A research on manufacturing firms. Procedia Social and Behavioral Sciences, 24, 49–60.
- Zelek, A. (2003). Managing the crisis in a business entity. The strategic perspective. Warszawa: Instytut Organizacji i Zarz adzania w Przemy'sle.

142 · Alp POLAT



¹ Dr., Gazi University, adnanagir@gmail.com, https://orcid.org/0000-0001-6284-5293

1. Introduction

People migrate for a variety of reasons, including keeping their independence, improving their level of life, and, most crucially, saving their lives, but they also cause significant issues in the target nations. As in the case of forced migration from Syria to Turkey and the European Union, the governments of the target countries must balance national aspirations with their human rights obligations (Ünsal, 2019).

In terms of relevance, the economic repercussions of international migration on destination nations are the most significant. At the end of the 20th century, migration academics and policy analysts tended to have a negative view of the link between economic progress and migration. Despite this, there are studies indicating that migration has good impacts on economic growth or that economic development is positively related to migration (Durand et al., 1996).

International migratory trends in the twenty-first century are of particular interest to economics and politics. Economists and politicians have discussed the social and economic impacts of labor in the target nations, particularly in relation to migration. The increase in net migration rates has major implications on the labor markets of both the destination and source nations, as well as on macroeconomic factors like unemployment and economic growth. Immigrants, driven by the impulse to survive, typically act more economically than natives, while aspiring to occupations in the labor market that are not sought after by natives. The most significant aspects of these employment are their low pay and bad working conditions. This circumstance adds to the short-term rise in productivity, entrepreneurship, and economic growth of the target nation. The presence of migrant workers can also exert pressure on wages in the destination country, resulting in a wage decline. The fact that immigrants are typically economically inactive, i.e., they do not spend the majority of their wages in Turkey and frequently labor illegally, further raises questions regarding their influence on productivity. Unpaid health and education expenditures by the state, especially for migrant workers who do not appear to be economically active yet labor illegally, produce a deficit in the state budget (Palat, 2011).

Due to its geopolitical location, Turkey is one of the nations most affected by worldwide migration flows, both as a destination country and as a station on international transit routes. Located on migratory routes, Turkey is a social, cultural, and geographical bridge between Europe, the Middle East, and Asia due to its position and historical characteristics. It is evident that the economic and social opportunities provided by Turkey, the economic and political stability in the country, the atmosphere of peace, and Turkey's practices against Syrian immigrants are among the reasons why immigrants with historical, social, and cultural ties to Turkey have chosen Turkey as their destination country. is the entrance policy (General Directorate of Migration Management, 2013). Africans who enter Turkey as irregular migrants, on a tourist visa, or unlawfully, members of certain Turkic Republics, Iraq, Afghanistan, Pakistan, Syria (excluding asylum seekers), Moldova, Palestine, Myanmar, Georgia, and Iranian immigrants are classified.

Syrian immigrants, with whom we have social, cultural, and historical links, who were forced to flee their homeland due to state-sponsored persecution in Syria, selected Turkey, which has an open-door policy, as their destination. Since 2011, migration from Syria to Turkey has continued to the present day. According to figures from the Ministry of the Interior's Migration Management, the number of Syrian immigrants increased from 14,237 in 2012 to 200,000 in 2013 and 1,500,286 in 2014. In 2019, the number of Syrian immigrants increased from 2,503,549 in 2015 to 3,576,370 (General Directorate of Migration Management, 2022).

It has been difficult to limit, regulate, and/or control migration from Syria to Turkey due to the occurrence of many migrant waves with rapid acceleration. Because of this, Syrian immigrants have favored and settled in border districts such as anlurfa, Gaziantep, Hatay, and Kilis, as well as industrialized metropolitan areas such as Istanbul, Ankara, and İzmir. The "temporary protection" status is held by 3.72% of Turkey's population, who are legal Syrian refugees. Istanbul (509,753), Gaziantep (451,324), Hatay (436,122), Sanlıurfa (421,652), İzmir (146,870), Kilis (108,718), and Ankara (98,068) are the provinces with the biggest number of Syrians (General Directorate of Migration Management, 2022).

Regarding its migrant population, Turkey has a sizeable number of both legal and illegal migrant workers. As in many other nations, migrant and migratory workers in Turkey face grave occupational health and safety issues. Insufficient studies addressing employer, immigrant/refugee, and state dimensions exist for the determination and resolution of these issues. The fact that the great majority of migrant and refugee workers in Turkey engage in economic activities via unregistered employment results in tax and insurance premium revenue loss. Another and most significant humanitarian effect of the undocumented employment of migrant workers is the growth in child labor, informality, and workplace accidents, which have been battled against for years. The unregulated integration of migrant and refugee workers into the Turkish labor market, as well as their ignorant and unprepared OHS culture, has had a negative impact on the country's burgeoning OHS culture (Bilek et al., 2019). There are few scholarly research on the position of migrant and refugee workers on the Turkish labor market and on occupational health and safety aspects. Notable is the absence of a complete field research in which migrant workers are integrated into the general population and interviews are conducted, while the perspectives of experts on the migrant worker problem are broadly examined. This research will examine the topic of migrant workers from the perspectives of the state, employers, OHS specialists, and migrant employees, and will contribute to the existing literature in this area. The purpose of this research is to evaluate the OHS variables of legal and illegal migrant workers in order to identify problems and propose solutions.

2. Background

2.1. Immigrant Worker Occupational Health Practices in Various Countries

2.1.1. Migrant Worker Practices in European Countries

Occupational Health and Safety Practices of Immigrants in European countries are advanced since they are handled at the level of human rights practices in countries and their development levels are high. Although there are problems in the countries that have recently joined the EU, the practices are quite qualified compared to the developing countries. Six countries were selected for their good practices in different fields. Along with the good OSH practices of migrant workers, Belgium approaches migrant workers with the weight of human rights. Finland has carried out successful projects to reconcile the multiculturalism of employed migrant workers with local workers. France has carried out successful projects and taken legal measures to prevent discrimination in social life and workplace. The Netherlands has provided control against employers with laws, regulations and guidelines for migrant workers and has achieved success against discrimination. Spain has successfully implemented language training activities, vocational training and social and workforce guidance projects, as well as integration work for migrant workers. In the UK, besides language training, it has had success in health policy and unionisation of migrant workers.

2.1.1.1. Belgium

As of mid-2020, approximately 2 million migrants and refugees live in Belgium (IOM, 2021). Migration policy reports report that Belgian authorities are taking initiatives to combat discrimination. The basic policy of the federal government, with the slogan "Creative and supportive Belgium", aims to combat discrimination of immigrants within the framework of employment (OECD, 2008). The informal workers organization Organisatie voor Clandestiene Arbeidsmigranten (O.R.C.A) (Organization of Unregistered Migrants) has published a guide on the rights of informal workers. A significant portion of this guide is devoted to health and safety in the workplace. It clearly states to informal workers that they are entitled to social protection if they have a work accident. The guide gives all the information about what OSH means, how the worker can get information, as well as clear and concrete recommendations for safe working (Martiniello, 2003).

2.1.1.2. Finland

As of mid-2020, approximately 386.1 thousand immigrants and refugees live in Finland (IOM, 2021). A two-year project on migrant workers, entitled Multiculturalism as a Resource in a Working Community, was carried out with the participation of 16 workplaces from the public and private sectors. The aim of the project was to study and develop models of action to help workplaces develop multinational work cultures. Among other works of the project, different types of seminars and training sessions were organized for contacts in organizations. Studies have shown that the attitudes of native workers towards their migrant colleagues have improved (Juuti, 2005).

They have done many different types of projects and good practices for migrant workers. More than 100 projects have been carried out for immigrants. In many projects, the aim has been to increase the readiness of immigrants to find a job. In particular, the MoniQ project aims to create good practices to support the employment of migrant workers. In addition, the Occupational Health and Safety Inspectorate has appointed special inspectors to monitor the conditions of migrant workers, to monitor compliance with the Non-Discrimination Law, whose main purpose is to protect equal treatment and prevent discrimination on a number of grounds (Ruhanen and Martikainen, 2006).

2.1.1.3. France

As of mid-2020, approximately 8.5 million migrants and refugees live in France (IOM, 2021). In 2006, the French government launched an action program to combat discrimination and promote equal opportunity. Its focus is employment and work, education and the fight against discrimination.

When immigrants arrive in France, they should be examined for pre-existing medical hazards. Other necessary actions relate to language education and specific vocational training that takes into account language needs (OECD, 2008). In recent years, France has taken measures to encourage learning French for immigrants who want to acquire French citizenship. In 2004 the government introduced the residency and integration agreement, which includes medical examination and language training. This individual agreement aims to emphasize the mutual responsibilities of the newcomer and the accepting nation (Boswell, 2005).

2.1.1.4. Holland

As of mid-2020, approximately 2.4 million migrants and refugees live in the Netherlands (IOM, 2021). The Ministry of Labor has published a guide for those who employ foreign workers in the construction industry. The purpose of the manual is to ensure that foreign workers understand all the instructions and risk possibilities in order to work safely. Obligations and recommendations for employers and employees in the field of OHS are presented on the site of the ARBO platform (platform of organizations working in the field of OHS). The focus is on non-discrimination practices. Working web. On the site, the factor highlighted, among others, is that language and communication issues are taken into account when providing instruction or safety training.

The exclusion of migrant apprentices is a problem in the Netherlands. For this reason, special training has been developed for apprentices to deal with discrimination in employment. This project stems from the idea that not only should managers be informed about the problems associated with racism and discrimination, but also that awareness should be raised among potential victims to learn how to deal with it (Government of the Nederlands, 2020).

2.1.1.5. Spain

As of mid-2020, approximately 6.8 million migrants and refugees live in Spain (IOM, 2021). There are many programs and projects for the integration of immigrants in Spain. Many aim to help immigrants integrate into society and especially the labor market, and to inform them of their rights (both social and employment issues). The content of the programs consists of language training activities, vocational training and social and workforce guidance, among others. Some programs also include practices that contribute to improving the working environment among employers and migrant workers (ILO, 2019).

An example of preventive actions carried out by OSH authorities can be highlighted the information campaign (posters and brochures) designed and distributed by the Murcia Institute for Safety and Health. Materials are translated into several languages (Spanish, Arabic, French, English, Ukrainian) depending on the nationality of the targeted workers, targeting sectors with a very high percentage of migrant workers such as agriculture and construction. This document was distributed through employers' and workers' organizations, professional associations, and agricultural associations (Pavlou, 2016).

2.1.1.6. United Kingdom

Around 9.4 million migrants and refugees live in the UK as of mid-2020 (IOM, 2021). Concern that migrant workers cannot benefit from important health and safety training because their employers do not provide safety handbooks in any language other than English prompted the Health and Safety (HSE) and Trade Union Congress (TUC) to produce new safety information translated in 21 different languages. These documents provide information on their rights to safety in the workplace, the level of safety training workers must receive from their employer, and whom to complain to when their safety is compromised (ILO, 2009).

The site "Working in the UK: Your rights at work" is a brochure written by the TUC and is for people from the new EU Member States to work in the UK. It gives information about the legal rights of workers. Efforts to improve the safety of migrant workers have been implemented. An article in "Building" (Broughton, 2002) warns that construction workers who do not understand English should not work in hazardous areas and that contractors should assess the safety risks in critical operations tasks that rely on effective on-site communication.

2.2.2. Applications in Asian and Pacific Countries

This section examines Occupational Safety and Health (OHS) requirements for migrant workers in five Asian and Pacific countries. Especially in the far Asian countries, economic development has developed quite rapidly in the last 30 years. However, OHS practices have progressed at the same pace. Australia, Republic of Korea, Malaysia, Singapore and Thailand. These countries have been chosen because each of the focus countries has a significant presence in the migrant workforce.

Australia does not impose a separate identity on migrant workers, but treats migrant worker rights separately from the worker's legal status. A broad system of authorized inspectorates has been established among the states. Since migrant workers have the right to receive OHS services regardless of their legal status, Korea has made all kinds of training in the workplace, including language training, compulsory. They have solved most of their migrant worker problems through bilateral agreements with their border neighbors. Malaysia recognizes that all workers, including foreign workers, have equal rights and opportunities to work in a safe and healthy workplace. Migrant workers are given the right to join a union. However, the situation is negative regarding compensation for occupational hazards and injuries. Singapore has established a strong control system on OHS practices. Unions were supported by the state for the membership of migrant workers.

2.2.2.1. Australia

As of mid-2020, approximately 7.7 million migrants and refugees live in Australia (IOM, 2021). Each Australian State and Territory OSH legislation provides protection for all workers in Australia, regardless of residence status and whether they operate in what is commonly known as the informal "cash-on-hand" economy.

Safe Work Australia was established as an independent statutory body with primary responsibility for improving occupational health and safety and workers' compensation regulations across Australia. This was agreed between the Commonwealth (Australian / Federal) Government and all State and Territory Governments at the Council of Australian Governments meeting held on 3 July 2008. Each State and Territory has formally committed with the Commonwealth that occupational health and safety laws are similar and harmonized in all jurisdictions.

The Commonwealth enacted the 2008 law (Immigration Legislation Amendment (Worker Protection)) Act specifically for temporary migrant workers. The legislation allows the Minister of Immigration and Citizenship to appoint inspectors to conduct site visits and request documents from employers. These inspectors have similar powers to the Fair Work Ombudsman (FWO) and are the officers exercising the FWO's powers under this law. These investigators observe suspicious OSH practices and refer them to relevant State and Territory agencies for investigation. The Department of Immigration and Naturalization can also impose sanctions against the employer (The Fair Work Ombudsman (FWO) The Commonwealth is also kept informed of OSH regulation and practice related to temporary migrants. Alongside increased employer obligations, the Commonwealth provides more work space where temporary migrants are present. It has implemented recommendations on information sharing among government agencies (Commonwealth, State and Territory) to ensure monitoring and compliance monitoring (The UNSW Human Rights Clinic, 2015).

2.2.2.2. South Korea

As of mid-2020, approximately 1.7 million immigrants and refugees live in Korea (IOM, 2021). The Ministry of Employment and Labor states that migrant workers, including undocumented workers, are entitled to equal treatment under the legislation on job security. The Korea Occupational Safety and Health Agency (KOSHA) is responsible for protecting and promoting the safety and health of every employee in every workplace in the Republic of Korea (Seol, 2012).

The Korean government has signed Memorandums of Understanding with 15 countries, including Bangladesh, Pakistan, Cambodia, Sri Lanka,

China, Indonesia, Kyrgyzstan, Mongolia, Myanmar, Thailand, Nepal, Philippines, East Timor, Uzbekistan and Vietnam. Workers from these countries are required to undergo 85 hours of training, which includes OHS and Korean language training. Before starting work, migrant workers are also required to undergo medical checks. When migrant workers arrive in the Republic of Korea under EPS, they must start work within 15 days. Job training for four sectors: manufacturing, construction, agriculture and fisheries is carried out by five designated institutes. All migrant workers can join a union, regardless of their status. (Kim, 2004).

2.2.2.3. Malaysia

As of mid-2020, approximately 3.5 million migrants and refugees live in Malaysia (IOM, 2021). Under Malaysia's OSH legal framework, all workers, including foreign workers, have equal rights and opportunities to work in a safe and healthy workplace. However, the situation is negative regarding compensation for occupational hazards and injuries. Migrant workers are covered by the Workers' Compensation Act of 1952, while Malaysian workers are covered by a system known as the Social Security Agency Coverage Scheme, implemented under the Employees' Social Security Act of 1969. Pursuant to the Trade Union Act (1959) and the Industrial Relations Act (1967), a foreign worker is not prohibited from being a union member and pursuant to the Employment Act; workers have the right to join a union (Devadason and Chan, 2014).

All foreign workers wishing to legally travel to and work in Malaysia are required to attend an introductory course on workplace communication skills, Malaysian culture, laws and regulations. Malaysian authorities have also developed a ten-day pre-departure training course in English or Malay for first-time immigrants on basic communication skills in Malaysian culture, laws and regulations (Anderson, 2020).

2.2.2.4. Singapore

As of mid-2020, approximately 2.5 million migrants and refugees live in Singapore (IOM, 2021). It plays an important role in the protection and management of the foreign workforce with its four departments such as the Employment Inspectorate, the Welfare Department, the Planning and Organization Development Department and the Corporate Governance Department. The Welfare Department is particularly focused on the working conditions and physical well-being of foreign human resources in Singapore. They are responsible for the welfare of foreign workers while they work in Singapore (Lee et al., 2011).

All foreign workers in the construction and maritime industries must attend the Construction Safety Orientation Course and the Shipyard Safety Training Course, respectively, before being issued a valid job pass while working in Singapore. These courses cover topics such as common safety requirements in relevant industries, health hazards, accident and disease prevention, and rights and responsibilities under labor law.

The Safety Awareness Course is a 4-hour training course that provides foreign domestic workers with a basic understanding of home safety, legal rights and obligations while working in Singapore. Education is compulsory for those who have not worked in Singapore before. Sixty-nine of the seventy-two registered unions accepted the membership of migrant workers. Factors in the welfare and safety of migrant workers have recently been of interest in the federated union, as migrant workers are able to join unions in Singapore (Lee et al., 2011).

2.3. Occupational Health and Safety of Migrant Workers and Legal Regulations in Turkish Legislation

In the Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees in Turkish legislation, training of special workers is included. Accordingly, special attention is paid to the education of women, young people, children, disabled, ex-convicts, victims of terrorism and migrant workers in the workplace (art. 7). According to the same regulation, training should be in a language that employees can easily understand (art.14).

Article of our Labor Law No. 4857. In accordance with the employer's obligation to observe the worker, in other words, the obligation to provide OHS, the obligations of employers have been kept very comprehensive. Without giving any excuse, employers are obliged to do what is necessary to ensure OHS and to take measures to prevent all kinds of occupational risks. Therefore, employers do not fulfill their obligations simply by taking the measures written in the legislation. According to the article 332 of the Code of Obligations, "they must take all kinds of OHS measures in fairness in terms of the nature of the work and the nature of the business relationship" (Akın, 2001; Baycık, 2006; Baycık, 2007; Süzek, 2020).

2.3.1. In Terms of Migrant Workers Working with Work Permit

Migrant workers with a work permit enjoy all the rights that local workers enjoy. According to the Law on Work Permits of Foreigners numbered 4817, migrant workers are granted a work permit valid for a maximum of one year (article 5). After the one-year leave expires, the work permit period of the migrant worker can be extended for three more years in the same workplace and in the same occupation. At the end of this period, the work permit can be extended for up to six years in the same profession but with the employer of his choice (Başterzi, 2006).

2.3.2. In Terms of Immigrant Workers Working Illegally

Whether or not the OHS provisions will be applied to illegal migrant workers can be determined according to whether the employment contract is valid or not. One view is that OHS training will not be given because there is no valid employment contract. For this reason, they will not have any security when they have a work accident or get an occupational disease (Keser, 2003; Kıral, 2006).

In a Supreme Court decision, the request for severance pay was rejected, as it was ruled that the illegal migrant worker did not have rights arising from the labor laws due to the nullity of his employment contract. On the other hand, the right to benefit from OHS is present in our Constitution. According to Article 17 of the Constitution, everyone's right to live, to protect and develop their material and spiritual existence is guaranteed. It has been stated that he has to ensure that he continues in his health (Süzek, 2020).

3. Systematic Review Research

Nearly 300 research on occupational health and safety (OHS) variables of migrant workers from across the world and Turkey were evaluated, and the methodology and methods of 111 studies pertinent to our issue were analyzed. Statistical analysis was performed on the keywords used, the techniques used according to the goal of the study, the methods used according to the publishing kinds, the methods used according to the application domain, and the data collecting methods used according to the methodologies.

Migration, migrant worker, and migratory labor theories; OHS procedures for migrant workers in Europe, Asia, and the Pacific, as well as OHS practices for migrant workers in Turkey. Below is information about these studies:

Through stakeholder analysis, Flocks et al. (2002) explored the housing challenges associated to the housing of agricultural laborers in Florida. The purpose of the research was to make suggestions for future housing policy for seasonal and permanent agricultural migrant workers.

Trajkovski and Loosemore (2005) explored communication issues on construction sites using often low-level migrant labor from non-English speaking nations. The misinterpretation of supervisory, managerial, and coworker orders places employees at danger. This article examines the scope of this issue and its effects on occupational health and safety issues.

Hawkes et al. (2007) explored what must be done to develop, evaluate, and distribute the treatments essential to lower the risk of occupational

injury and mortality among agricultural workers. To achieve the essential project and a functional working team; identify significant occupational health issues. These evaluations capture both the effective formation of a work team and the achievement of the team's original objectives.

Yousefi (2007) evaluated the occupational health and safety and housing difficulties of agricultural laborers in British Columbia and proposed remedies.

In the report study Audit Commission (2007), the benefits of the fast expanding labor migration to England, its effects on various parts of the nation, the steps that local governments should take, and the help that the government may provide to local studies are described.

Ruos (2008) studies the effect of industrial and occupational discrimination on the salary difference between Chinese residents and foreign employees. Consideration is given to the potential separation of resident and migrant employees by industry and profession is included.

Jayaweera and Anderson (2008) examined the conditions of migrant workers in terms of wages, working hours, occupational health and safety practices, and housing by comparing data from industrial facilities in Birmingham and West Midlands, England with data from the Labor Force Survey and Worker Registration Program.

Akpinar (2008) evaluated the OHS characteristics of illegal migrant workers in the context of why and why they moved from which countries, how they migrated, and their positions, based on a field research of unregistered employment in the construction sector, one of the most prevalent industries.

Han (2009) investigates policy policies that create racist-like situations for rural migrant laborers in Chinese cities. It examines the new naturalistic segregation and management of the rural-urban split based on "hukou," the set of regulations that regulate household records and the mobility of employees in China's developing urban industrial regime.

Barnetson (2009) describes the political opportunities and limits encountered by worker groups and agricultural workers pursuing legislative reform within the context of fundamental legal employment rights in the Canadian province of Alberta.

McKay (2009a) was to investigate the issues of processes and employment relations surrounding the use of migrant workers. The purpose of the study is to determine if HR policies and practices have an impact on the hiring of migrant workers.

Sargeant and Tucker (2009), they developed a framework for assess-

ing migrant workers' OSH vulnerabilities in high-income countries such as Canada and the United Kingdom, utilizing a layered approach that assists in identifying Risk factors in labor laws and especially occupational health and safety regulation, of migrant workers entering the labor market. determined. Framework of vulnerability

In their study, Sargeant and Tucker (2009) set a framework for assessing OSH vulnerabilities of migrant workers in high-income countries such as Canada and the United Kingdom, using a layered approach that helps identify Risk factors in labor laws and especially occupational health and safety regulation of migrant workers entering the labor market. Using the vulnerability framework layer, they compared the situation of migrant workers at risk in Canada and the United Kingdom.

McKay et al. (2009b) aimed to answer a series of questions in order to understand the legal and illegal factors underlying migration flows in seven countries comprising the seven EU Member States, Austria, Belgium, Denmark, Italy, Spain and the United Kingdom and Bulgaria. It also aimed to explore information on the labor markets of host countries along with their employment entry pathways, primarily through interviews with undocumented, but also documented, immigrants.

In his dissertation, McLaughlin (2009) evaluated how the structural vulnerability of migrant workers between Jamaica, Mexico and Canada effectively excludes them from many rights and norms in Canada. He has worked on specific focus areas in Canada, Mexico and Jamaica, including assessing workers' occupational, sexual and reproductive and mental and emotional health, as well as their access to health care and their compensation.

Gleeson (2010) examines how the status of documents shapes the legal consciousness of migrant workers through forty-one interviews with legal and illegal Latino restaurant workers in San Jose, California, and Houston, Texas. He explains that the fear of deportation prevents them from applying to the law, that the undocumented status compels the immigrants to work under difficult conditions and that they cannot access their basic rights.

In her thesis, Frambach (2011) created a bottom-up analysis of how the theory and practice of Turkish asylum policy affects the daily lives of refugees. Using social capital theory, social network analysis and capacity approach, he examined the employment elements of refugees and mentioned the obligations of Turkey in this regard during the EU accession process.

Yang et al. (2011) documented a high prevalence of probable mental disorders among Chinese male rural urban migrant workers in the cities

of Hangzhou and Guangzhou. They investigated mental health status and related characteristics in a sample of Chinese male rural-urban immigrants.

In this study, Tutt (2011) qualitatively analyzed migrant worker and manager perspectives, understandings, day-to-day work practices, and their varying roles on site, using the ethnographic research method to explore how successful communication between migrant workers and their native colleagues and managers can take place in practice.

Baş (2012) examined how migrant workers who work in domestic work perceive and evaluate their work in his diploma thesis. It has been determined that this type of employment is agreed not only by employers but also by migrant workers for their unregistered continuation.

Naing et al. (2012) aim to identify health care seeking behavior patterns of migrant workers in Thailand, highlight health care practices for suspected tuberculosis symptoms, and identify other health access factors.

Meir et al. (2012) examined the children that illegal immigrants in Israel hide from the public eye in their study. As the number of these children was much higher than expected, it was understood that serious studies should be carried out all over the world on the number of children of illegal immigrants and their living conditions, education and health.

Toksoz et al. (2012) examined the impact on the labor market, socio-economic factors and labor force participation processes, especially of the increasing number of irregular migrants coming to Turkey in search of a job.

Zhang (2012) examined the occurrence of occupational injury and related risk factors among Chinese migrant workers in 3 cities. In addition to the dependence of occupational injuries on individual, safety training and work factors among migrant workers, the effects of vocational training on the occurrence of occupational injuries were investigated.

In this thesis, Rahmatullaevich (2012) examined labor migration processes and remittance inflows in Uzbekistan after the independence period, to what extent migration can help improve the welfare of sending households and the social and economic situation in the region, and how it affects local development and economic growth in the country. It analyzed the social and economic gains and losses of communities from the out-migration of healthy populations with positive and negative effects.

In this thesis, Rahmatullaevich (2012) examined labor migration processes and remittance inflows in Uzbekistan after the independence period, to what extent migration can help improve the welfare of sending households and the social and economic situation in the region, and how it affects local development and economic growth in the country. It analyzed the social and economic gains and losses of communities from the out-migration of healthy populations with positive and negative effects.

Arcury et al. (2013) in their study, the demographic characteristics of migrant workers in the Agriculture, Forestry and Fisheries Sectors, occupational diseases, injuries and deaths or risk factors they are exposed to, occupational exposures for the sector, data limitations, characteristics of migrant workers, causes of concern of migrant workers in the sector, regulations, employment It discusses a conceptual model and guidelines for research and intervention in health and safety factors.

Svensson et al. (2013) provides a summary of current information on migrant work in agriculture from journal articles, books, reports and other relevant academic publications focusing on the political, economic, legal, social and medical aspects of migrant work in agriculture.

Srinivasan and Ilango (2013) focus on Occupational Health problems of Migrant Women Workers in this study. With this study, the researcher aims to examine the lives of migrant women workers, determines the occupational health problems and exploitation faced by women migrant workers and the expectations of migrant women workers.

In the study of Akram (2014), Occupational diseases of Migrant Construction Workers in urban areas of Western Uttar Pradesh, their treatment patterns and other public health access, Migration status, narrow and unhygienic living spaces and lack of basic health facilities, burden many occupational diseases on migrant workers. and examines its problems.

In his thesis, Urzi (2014) examines the migrant experience in the agricultural informal economy of Sicily (Italy), mainly the reasons behind the migration decision of Tunisian and Romanian workers and the expectations for the immigration experience. The thesis also explores the strategies used by Tunisian and Romanian immigrants to enter Italian territory and be recruited in the agricultural sector.

In his thesis, Adhikary (2014) investigated the health status and health risks of male Nepali migrant construction and factory workers in the Middle East and Malaysia. It focused on the differences in health status and health risks associated with the type of workplace, demographic, so-cio-economic and health characteristics of Nepali workers.

In his study, Akalın (2014) examined the arrival processes of domestic workers from the former Soviet Union countries, their participation in the labor market and financial activities related to the domestic work sector in Turkey.

Zelaya (2014) provides information on perceived health care needs, health care needs and work-related injuries of undocumented Latino daily

workers living in Las Vegas, Nevada.

Kaplan (2014) examined the Vocational Education practices in EU member countries and investigated how effective these practices are in the adaptation of migrant workers, including immigrants of Turkish origin.

In his thesis, Apondi (2015) investigated the expectations and experiences of migrant workers in order to reveal the expectations and experiences of migrant workers regarding occupational health services in Finland.

In their study, Erdoğan and Ünver (2015) aimed to evaluate the views of business circles and make recommendations by examining the social and economic factors related to asylum seekers from Syria.

In this thesis, Al-Haik (2015) examined the gender inequality experiences of female farmers in small farm practices in Turkey, starting from the feminist perspective theory. Gender-based roles and responsibilities and women's invisible work in agricultural production, providing care to family members or in the extended family structure are discussed.

In their study, Harrigan and Koh (2015) focused on a large group such as low/semi-skilled migrant workers in the Singaporean working life. They identified the health, safety and welfare issues faced by this community of South Asian migrant workers, mostly in low-paying jobs in the construction and shipyard industries.

In this thesis, Alrasheed (2015) aims to investigate the factors affecting the psychological health of foreign workers in the construction industry in Saudi Arabia and to develop an intervention framework for them.

In his thesis, Salih (2015) aims to focus on the impact of law and legal institutions on the problems of migrant workers, without ignoring the socio-economic and political dimensions of migrant workers and the personal factors that increase their vulnerability in the labor market. The researcher examined the factors that predispose migrant workers to vulnerability in the labor market, the legal significance of domestic worker visas, the availability and effectiveness of protection for trafficked persons, the socioeconomic impact on the British economy, the use of legal mechanism to resolve their problems.

Hilado et al. (2016) provides an overview of the links between social support, economic pursuit and economic stability among migrant populations. A comprehensive discussion of the theories of cultural cohesion and economic adaptation, as well as social support structures that both promote and hinder cohesion and economic stability among the migrant population, is presented.

In his thesis, Johannes (2016) determined the health status of migrant

and seasonal agricultural workers, the behavior of receiving health care focused on reducing the risk of injury and disease, and their knowledge and interest in health education.

Poppe et al. (2016) aims to investigate the factors affecting the return intentions of sub-Saharan African health workers who migrated to Austria and Belgium and to learn more about the potential for circular migration.

Santha et al. (2016) examines the vulnerabilities of migrant workers in the informal sector in three Indian cities (Kochi, Surat and Mumbai), the progression of population vulnerability from a political economy perspective, specifically how livelihoods interact with climate variability, related hazard events and social inequalities.

Hartono et al. (2016) analyzed the health insurance policy implementation for migrant workers to be applied in their country while working abroad.

In his study, Dedeoğlu (2016) examined the situation of migrant workers working in seasonal agricultural production in Turkey. He discussed the subject under two headings, the position of the migrant workforce in seasonal agricultural production in Turkey and how the participation of foreign migrant workers in agricultural production, including child labor, affects production and agricultural work.

In his thesis, Almutairi (2017) examined the employment conditions of low-skilled temporary foreign workers in the labor market in general, and in the construction sector in particular, in the socio-legal context within the framework of human rights.

In his study, Bener (2017) examined the health status, lifestyle conditions, work-related problems, accidents and access to health facilities experienced by Indian subcontinental immigrants in Qatar. This study revealed that there is insufficient information about immigrants' legal working conditions and health care-related lifestyles, medical conditions, health risks, injuries and vulnerabilities.

Busque et al. (2017) identified population surveys that can help to portray the migrant workforce, document the working conditions and health or safety risks of migrants, using studies based on statistical data. This report aims to provide an overview of the migrant workforce using studies with statistical data-based analysis in Québec or Canada as a whole.

Harrigan et al. (2017) investigated the threat of deportation as one of the most important social determinants of possible mental illness and the impact of workplace conflict on mental health. They documented that migrant workers believed that employer threats were used as a negotiation strategy during workplace conflicts because immigration status was used by employers as a threat of expulsion.

The UN Women (2017) research report sheds new light on the labor mobility trends of migrant women working in Asia, their access to labor markets and their consequences, their contribution to Asian economies, and the challenges of social and economic activities. The report also reviews existing migrant governance frameworks at the national and regional levels, and provides actionable evidence-based policy recommendations to ensure fair and equal migration opportunities for women and enhance regional social and economic development.

In his thesis study, Ramos (2017) examined the demographic, occupational, health and social characteristics of migrant farm workers in Nebraska, the occupational safety climate and personal protective equipment (PPE) use, the Social Ecological Model of Migrant Farm Worker Health and the effects of the identified risk and protective factors on health outcomes. explored the possibility of testing the Demand-Control Model of work-related stress among migrant farm workers in Nebraska.

Yanar et al. (2018) investigated the factors that contribute to the occupational health and safety vulnerability of immigrants and refugees by focusing on modifiable factors such as exposure to hazards and access to OSH services in the workplace, knowledge of workers' rights and the ability to act in accordance with these rights.

Cedillo et al. (2019) present a study of occupational safety and health (OSH) challenges for Temporary Foreign Workers in low- and high-skilled occupations in the Construction, meat processing, hospitality, and fast-food industries, based on 22 cases compiled from studies in three Canadian provinces. The increased workload and noncompliance with OHS and contract standards without monitoring, lack of access to social assistance, and processes that undermine the efficacy of corrective action were highlighted and recommendations were provided.

Yang et al. (2019) investigated three types of immigrant enclaves in Shenzhen to examine social integration from the standpoint of geographical difference and disciplines such as sociology and demography. To comprehend difference, they investigated social integration from a community viewpoint and initiated inter-disciplinary conversations about the social integration of migrant workers.

Mucci et al. (2019) conducted a systematic review to identify the primary occupational dangers and occupational illnesses in high-risk industries such as construction, heavy industry, and agricultural, which are unclean, hazardous, monotonous, and challenging. They presented recommendations for multi-level interventions that might be intended to reduce work-related accidents and illnesses and promote healthier workplace conditions.

Hargreaves et al. (2019) examined several physical and psychological illnesses of migrant workers in their study; They have conducted substantial research on occupational accidents and injuries, occupational risk factors, and health practice aspects. Ensuring the protection and care of migrant workers has yielded significant new insights into contemporary job circumstances and their health consequences.

Arici et al. (2019) presented a case series from a research done at a public occupational health service in Northern Italy and revealed pertinent findings for public health practitioners. Intervention areas and perspectives of occupational physicians and occupational safety professionals for risk assessment and health surveillance of migrant workers, primarily from Morocco, Senegal, Albania, Romania, and Pakistan, to ensure their access to occupational health services and prevent occupational health disparities. They outlined the guidelines for calculating their angles.

The ILO (2019) review examines the evolution of the notions of worker and labor over the past century and their impact on the growth of the ILO since its establishment in 1919. In addition to establishing the future of workplace safety and health, it is essential that they assess the advancements of the previous century. In the last century, it has been said that occupational accidents, work-related diseases, and fatalities must be increasingly acknowledged as a key international concern for addressing social fairness and attaining sustainable development. It is stressed that considerable advances in occupational health and safety may be attained by creating and sharing information and experience regarding the breadth, causes, and prevention of work-related injury, as well as how to better support worker health and well-being.

The European Union Agency for Fundamental Rights (FRA) (2019) study on exploited workers in the EU covers an essential information vacuum. It demonstrates that exploitation frequently begins with deception and false promises, describes the severe conditions faced by exploited employees, and identifies elements that favor exploitation. In addition, it describes what may be done to assist exploited employees in accessing justice.

In their research, Caxaj and Cohen (2019) sought to get a deeper knowledge of the working conditions of migrant farm laborers in the Okanagan Valley, an important site for migrant agricultural workers in British Columbia. Examining how the work environment influences the health of migrant agricultural workers, workplace experiences and what these experiences reveal about worker health are investigated.

Conclusion

According to the United Nations, in 2019, 271 million people, constituting 3.5% of the world's population, lived outside their country of origin (ILO, 2020). However, if internal migration is included, the total global migrant population approaches 1 billion. The biggest drivers of this total are war, turmoil, economic inequality and job search. The International Labor Organization (ILO) estimates that around half of these are migrant workers, often fleeing their country of origin from climate change, turmoil and civil wars, or in another more developed country. They leave to seek economic opportunities in the country.

International migration is an important part of global social and economic development. Migrant workers contribute to their country's economy by sending remittances and developing new skills that they can potentially use on their return. In addition, immigrants provide the host countries with the necessary workforce and therefore economic development. However, migration is a complex issue, particularly with regard to OSH, with challenges in ensuring migrant workers are protected on an equal basis with local workers. This thesis presents the findings regarding the Occupational Health and Safety of migrant workers and highlights the reasons for the negativities. Finally, it offers recommendations for improving the health and safety of international migrant workers.

Migrant workers are considered among the most vulnerable members of society. They work in dirty, dangerous, and demanding (sometimes humiliating or degrading) jobs, often known as 3D jobs, and these workers are often hidden from the public eye and public policy, invisible (Mucci et al., 2019). They work for less pay, longer hours and in worse conditions than non-immigrants, and are often subject to human rights violations, abuse, human trafficking and violence (Palat, 2011). Most importantly, these precarious workers have to take great risks on the job, without adequate training or protective equipment, and in unsafe working conditions without complaint. This is a situation that must be endured for migrant workers who do not have a work permit and are at risk of losing their jobs or even being deported. These conditions reduce migrant workers to local residents doing the same job in the same sector.

puts them at greater risk of occupational death and injury compared to workers. In other words, the rate of fatal and non-fatal workplace injuries among migrant workers increases as the most dangerous jobs are outsourced to the migrant workforce. Higher occupational mortality rates among migrant workers can be attributed to several factors, including the risks inherent in the jobs and the lack of education and protection for migrant workers. Exposure of migrant workers to high temperatures, loud noise, strong vibrations and high working speeds and long standing work is much greater than that of local workers. Migrant workers often work without contracts and without security under these conditions (Gleeson, 2010).

The situation in Turkey is not different from the cases in the literature, even the situation is a little more negative. Because the concept of OHS is both very new and far behind in terms of infrastructure and applications compared to developed countries such as European Union Countries, England, United States of America, Canada, Australia and Japan. There are serious problems in OSH practices for local workers, and the situation is much worse for migrant workers and especially illegal migrant workers. In this study, it is explained that there are more problems with migrant workers beyond what is known, and that if the existence of these people is not handled appropriately and realistically, the risk of human rights and social cohesion will increase. Despite the lack of work permits, especially illegal migrant workers have taken a significant burden on the Turkish economy. Because the jobs they do are mostly legal migrant workers and jobs that local workers don't want to do.

References

- Adhikary, P. (2014). Health status of and health risks to male nepalese migrants in the Middle East And Malaysia (Unpublished phD Thesis). Bournemouth Üniversitesi, Bournemouth.
- Akalın, A.E. (2014). Türkiye'de ev hizmetlerinde çalışan göçmen kadınların toplumsal ve iktisadi varoluş stratejileri üzerine sosyolojik bir analiz (Yayınlanmamış Doktora Tezi). Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Akpınar, T. (2008). Türkiye'ye yönelik düzensiz göçler ve göçmenlerin inşaat sektöründe enformel istihdamı (Yayınlanmamış Doktora Tezi). Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- Akram, M. (2014). Occupational disease and public health concerns of migrant construction workers: A social epidemiological study in western uttar pradesh. Social Change Journal, 44(1), 97-117.
- Al-Haik, H.S. (2015). Exploring women farmers' experiences: A case study of gender inequality on small Turkish farms (Unpublished phD Thesis). Virginia Polytechnic Institute and State University, Virginia.
- Almutairi, A.M.S. (2017). Protecting the Rights of Temporary Foreign Low-Skilled Workers in the Saudi Construction Industry: A Case for Legal Reform. (Unpublished phD Thesis). Brunel Üniversitesi, Londra.
- Alrasheed, H. (2015). A Socio-ecological Framework for İImproving The Psychological Health of Foreign Workers In Developing Countries: The Case of Saudi construction industry (Unpublished phD Thesis). New South Wales Üniversitesi, Sidney.
- Anderson, J.T. (2020). Managing labour migration in Malaysia: foreign workers and the challenges of 'control' beyond liberal democracies. https://www. tandfonline.com/doi/full/10.1080/01436597.2020.1784003
- Apondi, L.O., 2015. Migrant Workers' Perceptions, Expectations and Experiences of Occupational Health Services in Finland (Unpublished Master Thesis). Tampere University, Tampere.
- Arcury, T., Grzywacz, J.G., Sidebottom, J., Wiggins, M.F. (2013). Overview of Immigrant Worker Occupational Health and Safety for the Agriculture, Forestry, and Fishing (AgFF) Sector in the Southeastern United States. *American Journal of Industrial Medicine*, 56(8), 11-24.
- Arici, C., Tamhid, T., Porru, S. (2019). Migration, work, and health: Lessons learned from a clinical case series in a Northern Italy Public Hospital.*International Journal of Environmental Research and Public Health*, 16(17), 3007.
- Arslan, A. (2010). Katılımlı yönetim tekniği arama konferansı uygulamalarının kurumsal performansa etkisi. Sakarya Üniversitesi Fen Edebiyat Dergisi, 12(1), 117-142.

- Audit Commission (2007). Responding to The Local Challenges of Migrant Workers. https://dera.ioe.ac.uk/6380/ 7/CrossingBorders_Redacte d.pdf
- Barnetson, B. (2009). The regulatory exclusion of agricultural workers in Alberta. A Canadian Journal of Work and Society, 14.
- Baş, T. (2012). Irreguläre Migrantinnen als live-in Haushaltsarbeiterinnen in der Türkei (Graduation Thesis). Viyana Üniversitesi, Viyana.
- Başterzi, S. (2006). Avrupa Birliği Konseyinin 99/70 Sayılı Yönergesi Işiğında Belirli Süreli İş Sözleşmesi Yapma Koşulları ve 4857 Sayılı İş Kanunu'nun Öngördüğü Sistem. İş Hukuku ve Sosyal Güvenlik Hukuku Türk Milli Komitesi 30. Yıl Armağanı, (119-190). Ankara: Plaka Matbaacılık A.Ş.
- Baycık, G. (2006). *İş ve sosyal güvenlik hukuku açısından maden işçileri*. Ankara: Yetkin Yayınları.
- Baycık, G. (2007). İnşaat işyerlerinde işverenin iş sağlığı ve güvenliği yükümlülükleri ve sorumluluğu. Ankara: Kardelen Ofset Ltd. Şti.
- Bener, A. (2017). Health status and working condition of migrant workers: Major public health problems.*National Library of Medicine*, *8*, 68.
- Bilek, Ö., Sandal, A., & Yıldız, A. N. (2019). Göçmenlerin İş Sağlığı ve Güvenliği Konuları. Türkiye İşçi Sendikaları Konfederasyonu 23. Olağan Genel Kurul, Ankara.
- Boswell, C. (2005). Migration in Europe. http://citeseerx.ist.psu.edu/viewdoc/ download?doi=10.1.1.612.3249&rep=rep 1&type=pdf
- Broughton, T. (2002). Contractors warned over use of non-English speakers. Building, 8238(267), 13.
- Busque, M.A., Duguay, P., & Cote, D. (2017). Immigrant Workers and OHS in Québec: State of Knowledge from Published Statistical Surveys and Available Data Sources. Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST), Rapor no: 147.
- Caxaj, C.S., & Cohen, A. (2019). I Will Not Leave My Body Here: Migrant Farmworkers' Health and Safety Amidst a Climate of Coercion. *International Journal of Environmental Research and Public Health*, 16(15).
- Cedillo, L., Lippel, K., & Nakache, D. (2019). Factors influencing the health and safety of temporary foreign workers in skilled and low-skilled occupations in Canada. *A Journal of Environmental and Occupational Health Policy*, 29(3), 422-458.
- Dedeoğlu, S. (2016). Yoksulluk Nöbetinden Yosulların Rekabetine Kalkınma Atölyesi, 208.
- Devadason, E., & Chan, W.M. (2014). Policies and laws regulating migrant workers in Malaysia: A critical appraisal. *Journal of Contemporary Asia*, 44(1).
- Durand, J., Kandel, W., Parrado, E.A., Massey, D. S. (1996). International migration and development in mexican communities. *Demography*, 33(2) 2,

249-264.

- Erdoğan, M., & Ünver, C. (2015). Türkiye İşveren Sendikaları Konfederasyonu 2015. Türk İş Dünyasının Türkiye'deki Suriyeliler K o n usundaki Görüş, Beklenti ve Önerileri. https://www.tisk.org.tr/yayi n/46661-turk- is-dunyasininturkiyede-suriyelilerkonusunda-gorus-beklentive-onerileri--- 2010.pdf
- Flocks, J., Theis, R., Bagby, D., & Burns, A. (2002). Stakeholder analysis of farmworker housing in Florida. *Journal of Agromedicine*, *11*(1), 59-67.
- Frambach, N. (2011). Refugees in Istanbul, Lost between Policy and Practice (Unpublished Master Thesis). Utrecht Üniversitesi, Utrecht.
- Gleeson, S. (2010). Labor Rights for All? The Role of Undocumented Immigrant Status for Worker Claims Making. *Law & Social Inquiry Journal*, *35*(3), 561-602.
- Government of the Nederlands (2020). Foreign nationals working in the Netherlands. https://www.government.nl/topics/foreign-nationals-work-ing-in-the-netherlands
- Göç İdaresi Genel Müdürlüğü İstatistikler (Rapor) (2022). 2022 yılı Göç Raporu. https://www.goc.gov.tr/
- Göç İdaresi Genel Müdürlüğü İstatistikler (2021). İkamet İzni ile Ülkemizde Olan Yabancıların Yıllara Göre Dağılımı. https://www.goc.gov.tr/
- Han, D. (2009). Policing and racialization of rural migrant workers in Chinese methodcities. *Ethnic and Racial Studies*, *33*(4), 593-610.
- Hargreaves, S., Rustage, K., Nellums, L.B., McAlpine, A., & Pocock, N. (2019). Occupational health outcomes among international migrant workers: A systematic review and meta-analysis. *Lancet Global Health*, 7(7), 872-882.
- Harrigan, N.M., & Koh, C.Y. (2015). Vital yet vulnerable: Mental and Emotional Health of South Asian Migrant Workers in Singapore. http://scholar. google.com.tr/scholar_url?url=https://ink.library.smu.edu.sg/cgi/viewcontent.cgi%3Farticle%3D3021%26context%3Dsoss_research&hl=tr&sa=X-&ei=YI_7X8XhLb2Dy9YPhuiNOA&scisig=AAGBfm3XK3PagJRH98 3Wi3Qn_Y4eZVDH0w&nossl=1&oi=scholarr
- Harrigan, N.M., Koh, C.Y., & Amirrudin, A. (2017). Threat of Deportation as Proximal Social Determinant of Mental Health Amongst Migrant Workers. *Journal of Immigrant and Minority Health*, 19(3), 511-522.
- Hartono, R.K., Hidayat, B., Pujiyanto, P. (2016). Policy Implementation of Health Coverage for Indonesian Migrant Workers. *Journal of Indonesian Health Policy And Administration*, 1(2), 14-20.
- Hawkes, L., May, J., Richardson, G.E., Paap, K., Santiago, B., & Ginley, B. (2007). Identifying the Occupational Health Needs of Migrant Workers. *Journal of Community Practice*, 15(3), 57-76.
- Hilado, A., Young, P., Haymes, M.V., & Lundy, M. (2016). Social Support, Ac-

culturation, and Financial Stability Among Mexican Economic Migrants.

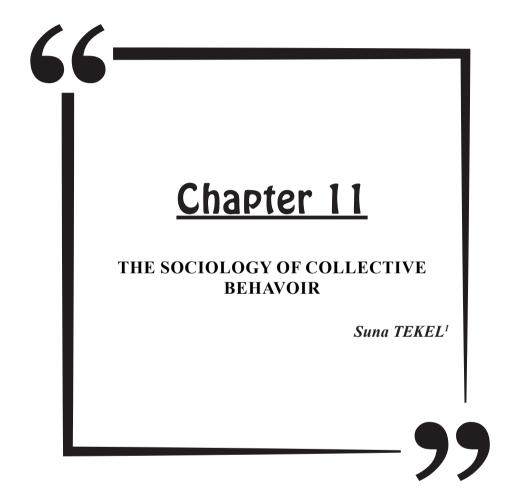
- ILO Türkiye (2020). Türkiye'nin Onayladığı ILO Sözleşmeleri. http://www.ilo. org/ankara/news/WCMS 731583/langtr/index.htm?shared fro m=shrtls
- International Labour Organization (ILO), 2019. Lessons Learned of ILO's Refugee Response Programme in Turkey: Supporting Livelihood Opportunities for Refugees and Host Communities, 68.
- IOM (2021). Total Numbers of International Migrants at Mid-Year 2020. http:// migrationdataportal.org/
- Jayaweera, H., & Anderson, B. (2008). Migrant Workers and Vulnerable Employment: A Review of Existing Data. Centre on Migration-policy & society. http://www.vulnerableworkers.org.uk/wpcontent/uploads/2008/08/analysis-of migrant-workerdata-final.pdf
- Johannes, A. (2016). Health of Migrant and Seasonal Farmworkers in Iowa (Unpublished Master Thesis). Iowa Üniversitesi, Iowa.
- Juuti, P. (2005). Monikultuurisuus Voimavaraksi: Valtaväestö ja Maahanmuuttajat Työyhteisössä. Kiljavan Opisto, Helsinki.
- Kaplan, N.A. (2014) AB Ülkelerinde Mesleki Eğitim Uygulamaları ve Göçmenlerin Entegrasyonuna Etkileri (Uzmanlık Tezi). T.C. Aile, Çalışma ve Sosyal Hizmetler Bakanlığı, Ankara.
- Keser, H. (2003). Yabancıların çalışma izinleri hakkında kanun tasarısı işiğinda Türkiye'de yabancıların çalışma hakkı ve yabancı kaçak işçilik. Kamu-İş, 7 (2), 323-369.
- Kıral, H. (2006). Yabancıların Türkiye'de Çalışma Esasları. Türkiye İşveren Sendikaları Konfederasyonu, Ankara.
- Kim, W.B. (2004). Migration of foreign workers into South Korea: From periphery to semi-periphery in the global labor market. *Asian Survey*, 44 (2), 316–335.
- Lee, K., McGuinness, C., Kawakami, C. (2011). Research on occupational safety and health for migrant workers in five Asia and the Pacific countries: Australia, Republic of Korea, Malaysia, Singapore and Thailand. https://www. ilo.org/asia/publications/WCMS_170518/lang-- en/index.htm
- Martiniello, M. (2003). Belgium's Immigration Policy. *The Int. Mig. Review*, 37(8), 225-232.
- McKay, S. (2009a). Employer Use of Migrant Labour Motivations, Experiences and HR Responses. https://archive.acas.org.uk/media/2621/Employer-useof-migrant-labour-motivations-experiencesand HRresponses/ pdf/0309_Employer_use_of_migrant_labour.pdf
- McKay, S., Markova, E., Paraskevopoulou, A., Wright, T. (2009b). The Relationship Between Migration Status And Employment Outcomes, 2009. https://

ec.europa.eu/migrantintegration/?action=media.download&uuid=2AA B5A8 0-E35E-C3D3-2A53DEDC1341A742

- McLaughlin, J. (2009). Trouble in our Fields: Health and Human Rights among Mexican and Caribbean Migrant Farm Workers in Canada (Unpublished pHD Thesis). Toronto Üniversitesi, Toronto.
- Mucci, N., Traversini, V., Giorgi, G., Garzaro, G., Perez, J.F., Campagna, M., Tommasi, E., Montalti, M., & Arcangeli, G. (2019). Migrant Workers and Physical Health: An Umbrella Review. *Sustainability*, 11(1), 232.
- Naing, T., Geater, A., Pungrassami, P., 2012. Migrant workers' occupation and healthcare-seeking preferences for tb-suspicious symptoms and other health problems: A survey among immigrant workers in songkhla province, Southern Thailand, https://bmcinthealthhumrights.biomedcentral. com/articles/10.1186/1472- 698X-12-22
- OECD (2008). Jobs for Immigrants (Vol. 2): Labour Market Integration in Belgium, France, the Netherlands and Portugal. https://www.oecd.org/belgium/41707374.pdf
- Palat, M., 2011, Economic Causes and Consequences of International Migration of Labour, Discussions on Estonian Economic Policy. https://papers.ssrn. com/sol3/papers.cfm?abstract_id=1998852
- Pavlou, V. (2016). Migrant domestic workers, vulnerability and the law: Immigration and employment laws in Cyprus and Spain. *Investigaciones Feministas*, 7(1), 149-168
- Poppe, P., Wojczewski, S., Taylor, K., Kutalek, R., 2016. The views of migrant health workers living in Austria and Belgium on return migration to sub-Saharan Africa. *Human Resources for Health*, *14*(1), 125-133.
- Rahmatullaevich, A.J. (2012). Labor Migration from Uzbekistan: Social and Economic Impacts on Local Development (Unpublished pHD Thesis). Trento Üniversitesi, Trento.
- Ramos, A.K. (2017). Precarious Work, İnvisible People, Unjust Livelihoods: A Social Ecological Model of Migrant Farmworker Health in the Midwest (Unpublished pHD Thesis). Clemson Üniversitesi, Güney Carolina.
- Ruhanen, M., & Martikainen, T. (2006). Maahanmuuttajaprojektit: Hankkeet ja hyvät käytännöt, 77.
- Salih, İ.İ. (2015). The Plights of Migrant Domestic Workers in The UK: A Legal Perspective. (Unpublished pHD Thesis). Middlesex University, Londra.
- Santha, S.D., Jaswal, S., & Sasidevan, D. (2016). Climate variability, livelihoods and social inequities: The Vulnerability of Migrant Workers in Indian cities. International Area Studies Review, 19(1), 76-89.
- Sargeant, M., & Tucker, E. (2009). Layers of Vulnerability in Occupational Health and Saftey for Migrant Workers: Case Studies from Canada and the United Kingdom. *Comparative Research in Law&Political Economy*, 5(2), 28.

- Seol, D.H., 2012. The citizenship of foreign workers in South Korea. *Citizenship Studies*, *16*(1), 119-133.
- Srinivasan, S., & Ilango, P. (2013). Occupational Health Problems of Women Migrant Workers in Thogamalai, Karur District, Tamil Nadu, India. International Research Journal of Social Sciences, 2(2), 1-7.
- Svensson, M., Urinboyev, R., Svensson, A.W., Lundqvist, P., Littorin, M., Albin, M., "Migrant Agricultural Workers and Their Socio--economic, Occupational and Health Conditions– A Literature Review, https://portal.research. lu.se/ws/files/5719404/3954709.Pdf
- The UNSW Human Rights Clinic (2015). Temporary Migrant Workers in Australia. https://www.law.unsw.edu.au/sites/default/files/imce/files/UNSW-Lawmigrant_workers_paper.pdf
- Trajkovski, S., & Loosemore, M. (2005). Safety implications of low-English proficiency among migrant construction site operatives.
- Tutt, D., Dainty, A., Gibb, A., & Pink, S. (2011). Migrant Construction Workers and Health & Safety Communication, https://www.citb.co.uk/documents/research/migrantconstructionworkershealt hsafetycommunication_ tcm1725018.pdf
- Urzi, D. (2014). Migrant Workers, Temporary Labour and Employment In Southern Europe: A Case Study On Migrants Working In The Agricultural Informal Economy of Sicily (Unpublished pHD Thesis). Nottingham Üniversitesi, Nottingham.
- Ünsal, A., 2019. Uluslararası Göç Kavramı ve Uluslararası Göçün Ülke Ekonomileri Üzerinde Muhtemel Etkileri. Selçuk Üniversitesi Sosyal ve Teknik Araştırmalar Dergisi, Sayı: 18, 50-61.
- Wayne, W. (2019). LaMorte. Boston University School of Public Health
- Yanar, B., Kosny, A., Smith, P. (2018). Occupational Health and Safety Vulnerability of Recent Immigrants and Refugees. https://doi.org/10.3390/ ijerph15092004
- Yang, T., Xu, X., Li, M., Rockett, I., Zhu, W., & Barnes, A.E. (2011). Mental Health Status and Related Characteristics of Chinese Male Rural–Urban Migrant Workers. *Community Mental Health Journal*, 48, 342-351.
- Yousefi, S. (2007). Improving Health, Safety and Housing Conditions of Mexican Workers in Bc: A Farmer's Perspective (Unpublished pHD Thesis). Simon Fraser Üniversitesi, Burnaby.
- Zelaya, S. (2014). A qualitative study of the perceived health care needs of undocumented latino day laborers living in las vegas, Nevada (Unpublished pHD Thesis). Nevada Üniversitesi, Nevada.
- Zhang, Q. (2012). Occupational Injury Occurrence and Related Risk Factors among Chinese Migrant Workers. *Procedia Engineering*, 43, 76-81.

170 · Adnan AĞIR



¹ İnönü Üniversitesi, Fen-Edebiyat Fakültesi, Sosyoloji Bölümü, 0000-0002-5153-4585

INTRODUCTION

Giddens defines the late modern world of today, which has roots dating back to 17th Century Europe, as a juggernaut. Modernity, dubbed as a juggernaut, is extremely dynamic, with an intensively changing pace, all-inclusive and deeply influential. It does not follow an orbit and is not uniform, hence it has several elements that contradict with each other. It moves within time and beyond the physical space (Ritzer 2008: 417-424).

The main principles of Giddens' own structuration theory; deviance, displacement and reflexivity, are the sources of the dynamism of modernity. The time-space relationship that existed pre-modern era is today disconnected and today the space is shaped by quite distant social factors. Dislocation is removal of social relations from the context of interaction and their restructuring in ambiguous time-space intervals. For instance, one of the symbolic signs, money is no longer within the context of time and space, another one is the expertise systems that attempt to regulate our social lives at a great extend. Not only subjects such as law and health, but we are inclined to arrange almost all dimensions of our lives based on expert knowledge. For example, how we will raise our children, how we will eat or how we will exercise? Reflexivity refers to the idea that everything in the world, including reflection itself, is open to reflection.

Today, we are in the process of rethinking and reevaluating everything we conventionally accept, which leaves individuals in uncertainty and directs them towards anxiety. The well-known environment we learned and trusted since our childhood is replaced by insecurity.

Ulrich Beck defines today's society based on the risk factor. Modern era is the industry and today is the risk society. Risks are created by the industries and their adverse effects and as a result of globalization, they affect the whole world and societies at a dangerous degree. The main issue in classical modernity was to provide wealth and its fair distribution, however the main problem in risk societies is how to minimize the risk. Previously individuals were troubled about equality, but now their main problem is to ensure security due to the danger caused by the apparent risks.

Today's society lives in crowds like never experienced before. As a result of increasing effectiveness and prevalence of mass communication tools and increasing content and speed of information technologies, to protect themselves from the negative effects of possible risks while living in that intense interactive network, individuals show an increasing interest in the social events and have the tendency to follow the news.

Diversity, abundance and prevalence of information that increased

due to mass communication tools, and presentation and sharing of almost all possible views on the Internet forces the individual of today into an inability to determine what is right and what is not in the individual's endeavor to maintain her or his physical existence. Individuals obtain enormous amount of diverse information, however they lack a benchmark to assess and question this information. In this environment, I consider it necessary to analyze collective behavior. In fact, this subject is one of the main interests of humanities and specifically sociology.

The main objective of the present article is to increase awareness about and stress the actuality of collective behavior that became increasingly significant in today's society.

Gustave Le Bon (2005: 16) wrote: "Modern men lives in a sensitive and depressive period where ideas constantly change. This is due to two factors: First is the destruction of religious, political and social beliefs that were the source of all principles of our civilization. And second is the novel ways of though and living created by the scientific and technological innovations." Le Bon continues to explain that the ideas of the past are still powerful and there is a state of confusion since the ideas that would replace the old ones are still in the process of formation.

Collective actions are divided into two categories of collective behavior and social behavior based on whether the individuals participated in the action rationally; individuals participate in collective behavior due to psychological reasons, not because of rational ones, while individuals participate in social behavior rationally and thinking that their reasons of participation could be analyzed at a social level.

The common elements of collective behavior theories are social tension, psychological unrest and political apathy (Deniz 2015: 2-3). Collective behavior is a type of action that includes a large number of individuals, unplanned, and without consensus or including individuals that banded together based on debatable issues and sometimes with a potential to create dangerous consequences (Macionis 2012: 600).

Despite this general definition, it seems rather difficult to analyze collective behavior due to its complexity. Because collective behavior is versatile, variable and includes a wide spectrum and usually transient. That is, it includes a wide variety of human action, it could spread rapidly among individuals and it could be very spontaneous.

At one end of the range is the analysis of coordinated and organized social movements and at the other end, there is spontaneous events. Also, collective behavior is a concept related to the actions of a group of individuals, however, it differs from group actions in certain levels; there are less interaction between individuals compared to groups, its boundaries are uncertain and individuals tend to form unusual and non-cohesive norms among themselves.

Generally collective behavior is observed as crowds, uprisings, panic, mass hysteria, rumor, gossip, fashion and fads.

TYPES OF COLLECTIVE BEHAVIOR

One of the basic forms of collective behavior, the crowd is defined as a community with a common center of attention or focus of interest and in which the members could influence each other temporarily.

Crowds are a common collective behavior type that we encounter frequently in our daily lives. For example; concerts, sports events, political rallies, celebrations. Herbert Blumer defined four crowd types: A casual crowd is a community where there is limited or no interaction between members since there is a weak bond between them. People gathering around a traffic accident could be an example of this kind of crowd.

Conventional crowd is a community where the gathering is planned on a specific subject and the behavior of the individuals follow a series of norms (e.g. conference participants). Expressive crowd is a community where emotional motives are prevalent and being a member of the community excites the members (e.g. new year's eve celebrations). Acting crowd is a group of people that are motivated by a single objective, which is felt quite strongly by the members.

The existence of powerful emotions could trigger violent tendencies by this type of crowds (e.g. people charging towards the exits after a fire alarm or a firearm shot). Instable character of collective behavior has the potential of the transformation of a crowd from one type to another quite easily. For instance, the conventional crowd in an airplane could turn into an acting crowd following an emergency landing announcement. Thus, the length of the violent or destructive behavior of an aggressive crowd could be or could not be controlled depending on the existing conditions in the particular environment.

Insurrection is an almost unmanageable social explosion without a particular goal, where the participants are loaded with high level of emotional dimension and violent tendencies. Insurrections are considered as manifestation of long lasting anger or discontent. They usually start with small events, but could reach dimensions that could harm property or other individuals.

Panic is a collective behavior initiated by the perception of a threat by individuals and where irrational and frantic and mostly self-destructive behavior are expressed. Similar to Blumer's acting crowd, people stampeding out of a space almost crushing each other in case of a fire or an earthquake could be given as an example for this type of behavior.

Closely related with panic, mass hysteria or moral panic is a collective behavior where individuals exhibit illogical and frantic behavior as a result of imaginary or real event or events. Although the situation or event that causes the hysteria is not real, it is conceived as a serious or factual event by the protagonists.

Today, excessive productions on mass communication tools about illnesses, disasters and deadly crimes to attract ratings and prioritization of such subjects on media could be a factor for this kind of behavior. Mass movements on occasion could reach chaotic extremes and individuals deepen their fear when they observe the fear of others and increasingly the hysteria feeds itself to reach a massive level.

Within the context of dispersed collectivities, rumor is information that travels unofficially as a word of mouth and validity of which is impossible to confirm. Although face to face communication always existed between individuals, today rumors could spread quite rapidly thanks to mass communication technologies (phone, mass communication tools, e-mail, etc.).

Rumors spread more extensively especially when people do not have clear information on issues. Also, since individuals communicate information to others after changing them through their semantic codes or their interests, the rumor travels in constant transformation. Thus, it is difficult to stop spreading the rumors. However, it is possible to control the rumors via providing information through reliable sources that could convince the community.

However, it is known that, despite all efforts, certain rumors could spread through generations among people. Thus, rumors are important since they have the potential to trigger the formation of crowds and other collective behavior.

Gossip is a more personal type of rumor specifically about personal relations of individuals. While rumors could spread extensively, gossips are limited to a small group related to an individual and could stay locally.

Public opinions are attitudes on controversial issues that disperse within the society. The individuals that could be considered within the context of public opinion could differ based on the subject matter. Individuals might not possess information on certain issues based on their knowledge and interests. Also, rhetoric of certain individuals could leave a strong influence on other people due to their education level, wealth or connections. Thus, interest groups or political leaders could engage in propaganda using the information they present to shape public opinion.

Fashion could be defined as a social pattern that is preferred by numerous individuals. Individuals' views on several subjects such as clothing or music could change and become fashionable or unfashionable. George Simmel argued that the wealthy were the initiators of fashion since they could pay for luxuries, while

Thorstein Veblen stressed the vanity culture where individuals make purchases, not because they need the merchandise, but to show off their wealth. Individuals who desire to look wealthy tend to buy cheaper copies of the commodities that the wealthy made fashionable, and as the fashion goes down the income scale, the wealthy start buying different novelties.

Fads are the unusual social patterns that individuals follow for a limited period of time. Sometimes fads are also called crazes.

Disasters are generally unexpected events that could cause great harm to people. There are three types of disasters: The first type is natural disasters such as floods, hurricanes, earthquakes and forest fires. The second type is technological disasters caused by a failure to control technology. The final type of disasters occurs when a group or several groups of individuals deliberately harm others such as wars or terrorist attacks. Disasters are social events due to the consequences they produce.

EXPLANATION OF COLLECTIVE BEHAVIOR

Initial definitions for collective behavior could be observed in crowd psychology field literature. In the work by Gustave Le Bon titled "The Crowd: A Study of the Populer Mind" and published in 1895, it was proposed that a crowd is an idiosyncratic (sui generis) reality. Thus, the crowd behaves like a single being and do not operate based on individual mind, but on the law of mental unity of crowds (Le Bon 2005: 23-30).

That is, individual reactions fade in the crowd and individual acts, not based on personal roots (racial, national, etc.), but within the collective mind. Within this collective conscious, individuals feel and think of themselves completely different from personal dispositions and act accordingly. Which way the crowd would evolve depends on random events, symbols and the resonance of the proposed suggestions. Le Bon also suggested a historical theory and argued that crowds could also aim to disrupt or destroy the now obsolete applications of the past.

The periods where crowds are most observed could determine the beginnings or the ends of historical ages. Le Bon stated that crowds appear within the perception of anonymity that reduces personal responsibilities and as a result of spread of ideas (contamination) within the community and a condition where individuals are susceptible to external influences due to the prioritization of unconscious mind.

Le Bon christened these ideas as the contamination theory. Individuals, who perceive that they are equipped with an invisible shield in the crowd, neglect their personal responsibilities and surrender to the contagious emotions of the crowd.

In the United States, collective behavior as a specialization of sociology began with the work of Robert E. Park. His doctoral dissertation was entitled The Crowd and the Public. According to Park, when institutions fail to meet people's needs, people affected by these failures become dissatisfied. Thus, there is first a stage of individual unrest, which is the basis for social unrest, which in turn provides the basis of grievance for the possible emergence of collective behavior, providing both reasons to change institutions and ideas and resources for the direction of the change sought. Gradually collective behavior becomes the mechanism of change and social adaptation of institutions. Park's optimistic and pragmatic view differs from LeBon's (Aguirre 2006).

The conception that contamination theory included irrational emotions was criticized with the premise that certain crowds could endure fear as well. For instance, convergence theory claims that collective behavior is a consequence of the participants, not the crowd itself. Because, the crowd includes individuals that come together with a common idea or a desire to act in a certain manner.

According to Gabriel Tarde, social events have a psychic character since individual conscience is shaped with the interaction between the beliefs and desires of individuals. The impact of this interaction is observed in three forms: imitation, conflict and conformity (Kösemihal 1989:135). According to Tarde, collective behavior includes individuals who interact spiritually and mentally and are aware of each other, sharing relatively new or previously unexplained views and having similar goals and beliefs and act in unison.

Tarde argued that collective behavior and social behavior are similar in that respect. In the beginning of the interaction, imitation behavior that extends externally is of fundamental significance. Crowds are just before the public in social evolution; while in crowds imitation is related to physical proximity and face to face interaction, in public, interaction is replaced with newspapers, so the number and location of participants are unlimited. Furthermore, the members of the public could also be members of several public communities. According to Tarde, the main characteristics of individuals in collective behavior are: they are aware of each other, they have similar beliefs and goals, they share a relatively new or previously unexpressed belief and passion for what they believe in. For Tarde, collective behavior, like all other forms of social behavior, was the result of imitative behavior. Imitation emerged through contagion. People often imitate new ideas developed by people more prestigious than themselves (Aguirre 2006)

R Turner and L. Killians' emergent norm theory was based on symbolic interaction that stresses the importance of social relations and norms. According to this theorem, collective behavior is the result of a normative crisis triggered by an event. And there is a situation or an event that previously existing norms could not guide individuals who encounter that event to interpret or perceive it collectively.

Crisis creates a perception of uncertainty and participants are forced to create a new norm. Initially individuals attempt to define the situation, make propositions and the most excessive proposal, which is conjured during the process of producing alternative solutions, reorganizes the group and social relations.

According to the theory, the most effective factor on the outcome is the fact that the individuals that participate in the collective behavior have different backgrounds, abilities and motivations about what is happening and how to react to the crisis. That is, individuals that participate in the collective behavior have a heterogeneous structure in many aspects, not a homogeneous one. Finally the theorem defines the collective behavior as a social and normative behavior, not as an irrational behavior. Because, it reflects the desires of the participants, but it is guided by the norms created as the collective behavior develops.

The theory is increasingly concentrated on the social interaction among the participants. On the other hand, Goffman claimed that the crisis disrupts a necessity that was culturally defined for physical conditions. Here, there is a necessity and a group of people gathered to put this necessity into action. This gathering entails individuals or small groups. The crisis, acting as the motivator, initiates the interaction and mobilizes the collective behavior.

According to Goffman, this interaction has a face to face character, contains intense mutual dependency and facilitates the spread of information among the individuals. Goffman argues that collectivity creates two types of norms that maintain continuity and order: irrelevance and transformation. The first promotes the gathering of individuals to understand what is the interests of the group, and the second to include previously protected external elements in their group.

Neil Smelser's value added theory explains collective behavior from a totally different perspective. According to Smelser, who was influenced by Talcott Parsons' structural functionalism, collective behavior is an attempt by individuals to resolve a situation, which causes tension based on generalized beliefs. Thus, a short-circuit effect is created and sources of components are misused or misapplied.

According to Smelser, collective behavior is an outcome of several consequential factors; triggering factors such as structural tendency towards tolerance that legitimizes collective behavior, tension due to a concrete situation like economic poverty, further expansion of a generalized belief, occurrence of specific events that confirm a previous popular belief, and mobilization of participants with a rumor or by an active leader, functioning of a social control that defines a counter power, which desires to stop previous determinants.

Smelser stipulated that this last factor was significant for the duration and severity of collective behavior is determined by social control elements.

According to Buechler, collective behavior contrasts extremely with rhythm and behavior patterns of the normal routine of the life, hence it is not institutional. That is, it is not predictable. It could cause an anomaly. Individual discontent and anxiety are among its direct causes. It is rather psychological instead of being political (Deniz 205: 3-4).

When the aim is to analyze collective behavior based on individual action, we need to explain action psychologically. Analytically, "to behave" is different from "to act" (Eckensberger, 45-46). The differences between the action and behavior are as follows:

Intentionality indicates the words, symbols that are often used by the individual, the individual's mood and certain things related to the external world. Individuals, act as they experience the external world by thinking, feeling, perceiving and dreaming or speak while they express these. Intentionality includes a certain situation or a psychological mode. For instance, the individual might think that it is raining, or could want it to rain, or could claim that it is raining.

Here, while rain is a subject, to think, to want and to claim are modes. Intent to act is the intentionality of the action. Intended outcome or the goal is the subject. This determination also includes the future orientation of the action as well. To let things to happen or to avoid them is also an action. Intention should not be considered as the reason of the action, because action is not always visible, thus, action could only be explained by its reasons.

Another characteristic is the control of the action; action is accepted

as a situation where there is free choice of free will to do things. However, the dimension of control sometimes contains the intended outcomes of the action as well. However, these two should be differentiated. Because, while the outcome/effect of an action could be beyond the control of the individual, the decision to take action is under the control of the individual.

Another characteristic is the structure of the action; analytically, to take an action rationally follows the intent. It was preferred by an individual to attain a goal. When the action is taken, the outcome might change and these outcomes of the action could cause other results as well. Intentional results were intended, while others were not intended. For example, in the action of opening the window for fresh air, inflow of fresh air is the intended purpose, opening the window is the action, and an open window is the outcome, and inflow of clean air is the intended, the cold air entering the room is the unintended result.

Thus, we could argue that actions are conscious activities of individuals; the individual considers the action, and at the same time considers herself or himself as an active object. This is a distinctive feature of humans. Thus, different types of actions are formed; if an action is taken to obtain an outcome or to prevent an outcome, it is an instrumental action, if the action is directed towards another individual, it could be conceived as not a causal effect for that other individual, but to understand the action of the other individual.

This type of action is called a communicative action. If that action only affects the intentions of the other individual, then it is a moral action. If the intention of the other individual is used for self-benefit, it is a strategic action. And finally, action is not arbitrary; it follows rules. For instance, social, cultural norms or expectations. This situation creates a tension between the individual's behavior true to self and the individual's autonomous behavior within existing norms. As a result, while explaining the action, the individual and its environment, and the cultural features are conceived as the intentional world.

Collective behavior is part of the process of institutionalization that occurs in society. Usually institutions are objective, repeatable and external, are defined in similar ways by many people and consist of actions that form part of social life. They are both objective and external to social actors. In this context, the term Institutionalization describes the process that brings about these structured behaviors. Institutionalized actions are more able to resist change and are easier to transfer. Collective behavior is not small group behavior, but rather the behavior of large groups of people. Collective behavior in the context of institutionalization means behavior that emerges both in terms of culture and social relations(Aguiree 200). Blumer generally defines group activities in which individuals act together as collective behavior. However, he distinguishes between routine behavior by teachers and students in a classroom setting and basic collective behavior in a crowd. This is because their foundations and mechanisms are different. According to Blumer, routine behaviors usually develop within the framework of people's shared understandings and expectations. These understandings form the basis of interpretive interactions between participants. In other words, each participant reacts to the other's behavior according to his or her own interpretation instead of reacting directly. Ultimately, this results in individuals reacting differently to each other.

According to Blumer, the disruption of routine activities prevents the fulfillment of routine individual impulses and action tendencies, or may develop new impulses and tendencies that the existing social order cannot accommodate. In both cases, individuals begin to experience restlessness. Their behavior becomes erratic, random and uncoordinated. Blumer defined this as "restlessness". A state of restlessness has a reciprocal character, that is, when some individuals engage in this behavior, there is a tendency for those who follow to do the same. He called this reciprocal process a circular response. The circular response results in people behaving in a similar way and is a natural mechanism underlying all basic collective behavior. When individual unrest is mobilized by the circular reaction, social unrest results. This occurs more easily among people who have experienced a disruption in their life routine or who have been sensitized to each other.

Blumer argued that people in a state of social unrest are looking for something but do not know what it is. They are aimless, engage in random and erratic behavior, have preconceptions about their future, get excited for no reason, and are sensitive to rumors. As a result, social unrest creates a context in which both routine behavior is disrupted and new forms of collective behavior emerge.

In this context, collective behavior emerges in 5 steps;

1. Initially, an exciting event related to social unrest attracts the attention of a number of people, individuals who are preoccupied with this exciting event relinquish control over their behavior to this event and the potential for the development of a pretend crowd emerges. The mechanisms underlying the development of the next 3 stages (grinding, common object, common impulse) are the circular response and its two more advanced forms.

2. Then there is the grinding phase. In this phase people respond directly to each other's behavior and reproduce it. Blumer described this behavior as a circular response. Örneğin insanlar etrafta dolaşır, eski olaylar hakkında konuşur. For example, people walk around, talking about old events. In this phase people respond directly to each other's behavior and reproduce it. Blumer described this behavior as a circular response. Örneğin insanlar etrafta dolaşır, eski olaylar hakkında konuşur.For example, people walk around, talking about old events.

For example, people walk around, talking about old events. Blumer associated this with hypnosis. In this context, participants tend to respond to each other quickly, directly and without realizing it.

This supports the development of a common spirit.

3. In this phase a common object of attention related to the exciting event emerges. This is important in two ways: first, it gives people a common orientation, so that their activities have a common purpose. Secondly, they come under the control of the excitement of the common object.

These developments correspond to the mechanism underlying collective excitement. This removes the capacity of the individual to formulate alternative explanations for what is the object of attention. Thus, the individual becomes more and more erratic, irresponsible and more likely to engage in behaviors that he or she would not have thought ahead or dared to undertake.

4.When members of a crowd have a common drive towards a fixed image, supported by an intense collective feeling, the activist is prepared to act in an aggressive manner typical of the crowd. The mechanism underlying this stage is social contagion. People who are caught up in the excitement, who are increasingly less self-conscious and less capable of interpretation, and who are preoccupied with a common object and its related behaviors, are more likely to be exposed to the impulses of others.

Blumer states that it is human nature to behave in a certain way in common with other people. For example, to pursue one's own gain, to run away from danger. When such behaviors arise out of collective excitement, their impulses are unleashed and spread like wildfire(McPhail 1989:401-419).

CONCLUSION

The definitive characteristic of today's societies is the significance of knowledge. However, knowledge is not independent from the environment of the individual who considers herself of himself knowledgeable. Although intellectuals claim that their thoughts and ideas are objective and unbiased, according to Bourdieu, all our knowledge is shaped by the context, environmental conditions and our personal experiences. In that context, knowledge is not objective. Then, what could be done to prevent the adverse outcomes of collective behavior? First, individuals who live in today's society need to internalize the reality that knowledge is biased. We need to develop the habit of investigating an information using several channels and finally conducting a personal inquiry to have an opinion about that particular information. Because, since individuals spend their daily lives in a daily rush between their jobs and chores, they experience difficulties in assessing the developments in areas of expertise such as politics and economy due to the lack of time and background information, and finally they tend to accept short, core and simplified determinations. This results in easy manipulation of behavior and thoughts.

Jürgen Habermas argued that the problem in today's world was not rationalization, but rationalization of the goal-oriented rational action. The cure for this situation is the rationalization of communicational action. That is, the actualization of communication free of domination and free and open rhetoric. Here, rationalization is the liberation that destroys the limits on communication. It means the destruction of the obstacles that disrupt communications. For example, ideologies or legitimacies. Thus, in a discussion within a system where ideas are openly presented defended against criticism, unrestricted consensus develops. In other words, an ideal communications environment where the winner is not determined by the power or the government is required. In such an milieu of discussion, the weight of presented evidence would determine what is accurate and what is valid.

As a result of advancement and prevalence of information technologies, modern individual is shelled by contradicting, numerous and sometimes manipulated rounds of information. Individuals have a really restricted time in the daily rush to access accurate and objective information by inquiring all available sources.

Thus, many individuals could experience panic as a result of the information they receive via mass communication tools, social media or various communication groups. As mentioned in the introduction section of the present article, modern individual tends to guide her or his life practices base don expert opinion instead of her or his personal experiences and queries. That is, the reference groups of individuals who are in need of reflexivity, in other words in need of continuous reflection and questioning of their own behavior, decisions, choices or the results of these, are the social media, mass communication tools or expert opinion. This turns individuals' behavior and thoughts dependent on others and affects their behavior.

The solution is to adapt a frame of mind based on reason while communicating or receiving information, guarding the common interests of humanity, and which is conscious, questioning and open to reading and researching more.

REFERENCES

- Aguirre, B.E. (2006). The Sociology Of Collective Behavior. 21. Century Sociology. Sage Publications.
- Deniz, Ç.A.(2015). Toplumsal Hareket Teorileri ve Ortadoğu İsyanları. Ankara: Orion Kitabevi.
- Freud, S.(2000). Kitle Psikolojisi. İstanbul: Cem Yayınevi.
- Giddens, A.(2001). Siyaset Sosyoloji ve Toplumsal Teori. İstanbul:Metis Yayınları.
- Giddens, A.(2008). Sosyoloji. İstanbul: Kırmızı Yayınları.

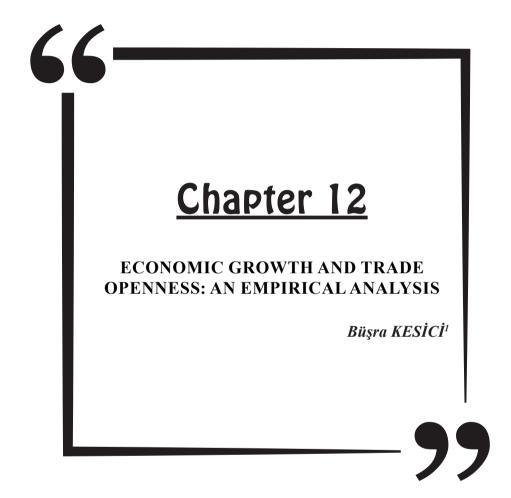
Gorsky, P.S.(2015). Bourdieu ve Tarihsel Analiz. Ankara:Heretik Basın Yayın.

Habermas, J.(2001). Iletişimsel Eylem Kuramı. İstanbul:Kabalcı Yayınevi.

Kösemihal, N.Ş.(1989). Sosyoloji Tarihi. İstanbul:Remzi Kitabevi.

Le Bon, G. (2005). Kitleler Psikolojisi. İstanbul: Yağmur Yayınevi.

- Marshall, Gordon (1999) Sosyoloji Sözlüğü, Bilim ve Sanat Yayınları, Ankara
- Macionis, J.J.(2012). Sociology. Ankara: Nobel Akademik Yayıncılık.
- McPhail, Clark (1989) "Blumer's Theory of Collective Behavior: The Development of a Non-Symbolic Interaction Explanation, Sociological Quarterly, 30:3(1989 Fall).
- Ritzer, G.(2013). Modern Sosyoloji Kuramları. Ankara: De Ki Basım Yayım Ltd. Şti.
- Ritzer, G.(2013). Introduction to Sociology. Canada: Sage Publication.



¹ Res. Asst, Istanbul University, Faculty of Economics, Department of Economics, ORCID: 0000-0002-0731-0920

1. Introduction

After the end of the 20th century, there have been a considerable amount of flow of commodities, services, and capital across countries. These international flows have influenced all parts of the world. Whether it is a big or small economy, every country depends upon other countries for access to trade. Open economies let the developed international trade and integration with international markets plays an important role in these economies. After the global trade liberalization process, many countries have loosened their trade barriers. Complex technologies have been developed with globalization, and this has caused a decrease in transportation costs, which have an important place in trade and the outward-oriented growth policies are especially followed by developing countries.

International trade improves economic development by encouraging the exchange of information and promoting technological innovation, thereby enabling countries via their comparative advantages, to achieve economies of scale and scope. Thus, it facilitates stronger competitiveness in both domestic and foreign markets and helps the production process reach its optimum level (Ghazouani et al., 2020). By integration of their markets and technology that increase their output levels and exports, countries are improving their economic growth (EG) after opening their economies to foreign trade. From international trade, countries gain competitiveness and productivity advantages that balance the fragilities brought to their economies by negative imports (Mbogela, 2019).

Absolute advantage theory developed by Adam Smith states that, foreign trade offers entry to large global markets and, by labor specialization, increases production. Especially in developing countries, the size of the domestic market is small, and without international trade this situation hinders EG. With open economies, domestic producers can participate in the competition in larger markets. The Ricardian theory of comparative advantage states that foreign trade is advantageous and enables traders to profit from both production and consumption (Tahir & Khan, 2014). Also, the Ricardian theory assumes that foreign trade allows more effective use of the resources of a country by importing products and services that would otherwise be costly to manufacture inside the country, hence promoting a country's overall EG (Mbogela, 2019).

In today's foreign trade literature, one of the central concerns is trade openness (TO). Many studies seem to use TO as an explanatory variable of macroeconomic variables such as GDP growth, GDP per capita, productivity and inflation. Moreover, TO commonly refers to an economic policy measurement unit of a country, also it is calculated to be the amount of goods and services exported and imported, divided by the gross domestic product. In addition, TO is identified not as trade intensity, but instead as a reduction of political barriers to foreign trade. Countries with higher levels of TO experience faster EG as a result of their easier taking advantage of technological innovations (Pilinkienė, 2016).

Most of the studies use the ratio of trade volume in GDP as an indicator of TO that is the measure of how open a country is to world trade (Mbogela, 2019). In literature, the total of exports and imports as a share of GDP is a commonly used indicator of TO (Guttmann & Richards, 2006).

Higher TP encourages higher foreign investment into the countries; these investments and such investments create further employment opportunities for the domestic labor force. Moreover, high TO allows easier transition to new technologies, which positively affects production levels and encourages entrepreneurship and innovation on the grounds that in the international market producers will need efficient production and competitiveness power (Mbogela, 2019). Consequently, increased levels of TO are related to higher per capita incomes and faster economic development (Gwartney et al., 2001).

Endogenous growth theory states that technological changes are endogenous. Thus, TO, R&D spending, and human capital, that have a positive effect on technological change, can increase EG (Tahir & Khan, 2014).

The degree of openness of countries to international trade, that has been found to have a positive impact on EG in several experimental studies, has recently gained scientific interest. On the other hand, the literature on the factors determining TO is not exhaustive and inadequate (Osei et al., 2019). Dollar & Kraay, (2003), Gries & Redlin, (2012), Tahir & Azid, (2015), Musila & Yiheyis, (2015) can be cited as some examples of studies that find positive relationships between TO and EG.

Although in some studies, the existence of a bidirectional relationship has been proven between EG and TO, there is a great lack of studies in the literature using EG as an exogenous variable, as mentioned frequently above. In this chapter, TO is used as the response variable to contribute to this deficiency in the literature, and the effect of EG on TO is tested using the OLS estimator in 2013 for 213 countries.

This chapter is organized as following. In the section 2 the data and the methodology of the paper is reported. Results of the analysis and diagnostic tests are shown in section 3. In the last section, the conclusions are drawn.

2. Data and Methodology

2.1. Data

In this chapter, the effect of EG on TO for 213 countries in 2013 as a specific year is investigated. The countries included in the analysis are given in Appendix 1. All the data used in this analysis are annual. TO is calculated as the sum of imports and exports of goods and services divided by GDP. In this chapter, the sum of imports and exports of goods and services as a percentage share of GDP per capita is used as a proxy of TO. In this study, GDP per capita (constant 2010 US\$) is used as an indication of EG, and it is the interest variable. The total population and the total unemployment rate, which is the rate of the labor force who do not have a job but are seeking one, are included to the model as control variables. The data of the variables are obtained from World Development Indicators. Table 1 depicts descriptive statistics of the variables.

Variable	Obs	Mean	Std. Dev.	Min	Max
trade	188	97.0301	59.40452	23.7285	442.62
gdppc	200	15670.07	22859.25	242.846	172289.9
pop	215	3.31e+07	1.32e+08	10821	1.36e+09
unemp	186	8.231548	6.154471	.28	28.996

Fable	1.	Descriptive	Statistics
-------	----	-------------	-------------------

To find the true functional forms of the variables, we check the histogram graphs of various transformations of the data which are given in Appendix 2. After looking the histogram graphs and box cox transformation results, it is decided to use the natural logarithm form of the variables apart from the inflation variable that have negative values. The scatterplots of the variables are given in the Figure 1. With the help of this figure, we can see the two-way relationship between the variables separately.

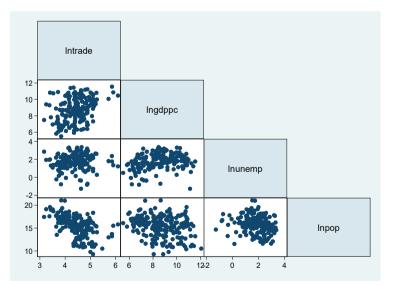


Figure 1. Scatter Plot Graphs Matrix of the Variables

2.2. Methodology

Regression models that include only one independent variable is called simple regression models. The basic notation of simple linear regression population model is as follows:

$$y = \beta_0 + \beta_1 x + u \tag{1}$$

If the regression models include more than one independent variables, they are called multiple regression models. These models used to solve problems that cannot be solved by simple regression also allow us to control many other factors affecting the dependent variable are so these models reduces the risk of falling into the error of being an omitted variable that causes estimators to be biased. The basic notation of multiple linear regression population model with k parameters is shown in (2):

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k + u$$
(2)

In this chapter, two models are used to explain the effects of EG on TO. Firstly, a simple regression model that is the base model is formed. The base model of the study is shown as follows:

$$\ln trade = \beta_0 + \beta_1 \ln gdppc + u \tag{3}$$

where lntrade that is natural logarithm of the ratio of total imports and exports of goods and services in GDP as the indicator of TP, lngdppc is the natural logarithm form of GDP per capita constant 2010 US\$ as the indicator of EG, u is the disturbance term.

In the second model, the control variables thought to be a relationship with dependent variable are added to the model. The model with control variables has the following form:

$$\ln trade = \beta_0 + \beta_1 \ln gdppc + \beta_2 \inf + \beta_3 \ln unemp + \beta_4 \ln pop + u \quad (4)$$

where, lnunemp is the natural logarithm of the unemployment rate, lnpop is the natural logarithm of the total population.

In the OLS analysis, our aim is to make inferences regarding the population parameters. To check whether the results of the OLS estimators are not misleading and to trust the coefficients and test statistics, estimators have to be BLUE (best linear unbiased estimator). For estimators to be BLUE, OLS assumptions must be met. These assumptions include linearity in parameters, no heteroscedasticity, no autocorrelation, no exact collinearity between independent variables and the model should be specified correctly. As working with cross section data, we do not test the autocorrelation because there is no time dimension in these types of data. In this chapter, the assumptions of OLS are checked after the regression analysis in the diagnostic tests part (Gujarati & Porter, 2009; Wooldridge, 2010, 2016; Greene, 2002).

3. Econometric Results

3.1. Results of the OLS Analysis

This study has two model that are base model and model with control variables. Firstly, we perform an OLS analysis with our base model. Table 2 indicates the OLS estimation results of the base model.

	(1)
Variables	Intrade
lngdppc	0.117***
	(0.0240)
Constant	3.399***
	(0.211)
Observations	183
R-squared	0.117

 Table 2. OLS estimation findings with base model

Standard errors in parentheses *** p < 0.01, ** p < 0.05, * p < 0.1

According to the OLS results, the parameter of GDP per capita is positive and statistically significant. Also, the constant term is statistically significant. This model can explain the TO by 12%. OLS estimation results of the second model is given in Table 3. After adding the control variables to the model, it is seen that significance and sign of the GDP per capita that is interest variable do not change. GDP per capita is positively and significantly related to TO. Also, no relation is found between unemployment rate and TO, the coefficient of unemployment rate is not statistically significant. The coefficient of the total population is found statistically significant and negatively related with TP. Constant is statistically significant. R-squared value increases, and it becomes 0.332. R-squared value refers the ratio of variance in TP variable that can be explained by GDP per capita, unemployment rate and population rate. In other words, our second model can explain the TP by 33%.

	(1)
Variables	Intrade
	0.000***
Ingdppc	0.0999***
	(0.0225)
Inunemp	-0.0498
	(0.0379)
Inpop	-0.132***
	(0.0183)
Constant	5.720***
	(0.375)
Observations	168
R-squared	0.332

Table 3. OLS estimation results of the model with control variables

Standard errors in parentheses *** p < 0.01, ** p < 0.05, * p < 0.1

3.2. Diagnostic Tests

In this section the necessary diagnostic tests of OLS estimation are performed to see whether we can trust our results and the OLS assumptions are met or not. The main diagnostic tests for cross-sectional data are multicollinearity, heteroscedasticity, linearity, model specification and normality test. For checking the multicollinearity, we check both correlation matrix of independent variables and the variance inflation factor (VIF) results. Results of multicollinearity tests are presented in Appendix 3. According to the test results, it is seen that there is no exact linear relationship between the independent variables.

Another assumption we have to check is whether there is no heteroscedasticity which means the variability of disturbances are equal. To check this assumption, we perform Breusch-Pagan / Cook-Weisberg test. The null hypothesis of this test is the disturbance variances are equal. Test results are given in the Appendix 4. According to the result we do not reject the null hypothesis so there is no heteroscedasticity.

Another assumption that is the linearity in parameters are tested with Augmented Component Plus Residual plots that are presented in the Appendix 5 for all independent variables, respectively. Looking at the graphs formed for lngdppc and lnunemp, it can be seen that the smoothed line is almost coincident with the ordinary regression line. The plot for lnpop is a bit more problematic but overall, we do not have to be worried about the non-linearities.

Another assumption that needs to be investigated is the normal distribution of errors. However, it should be noted that the normal distribution

of error terms is not a necessary assumption for the unbiased estimation of the regression coefficients. When determining the model, by looking at the histogram graphs of the various forms of the variables, the forms in which the distribution of the variables were closest to the normal distribution had been chosen. To test the normality, kernel density plot is formed with the normal density plot. Also, iqr test created by Lawrence C. Hamilton and Shapiro-Wilk W (Swilk) test are used to detect normality. All of them are represented in Appendix 6. As it can be seen in Appendix 6, Kernel density estimate plot of model is found to be close to the normal density plot. In iqr test, the existence of any severe outliers can be an adequate reason to reject the assumption of normality. According to results, there found no severe outliers. Swilk test results support the same findings. We cannot reject the null hypothesis that is the residuals are normally distributed. As a result, residuals are approximately normally distributed.

When performing regression analysis, model specification should be tested whether a significant variable that should be in the model is omitted or whether an unrelated variable is added to the model. If these problems exist, model specification error that affects the estimation of regression coefficients can occur. Ramsey Reset test is used to examine whether there is an omitted variable. It is performed both for base model and the model with control variables and the results is given in the Appendix 7. Both for the base model and the model with control variables, since null hypothesis that is the model has no omitted variables cannot be rejected, it can be seen that the model is formed correctly.

4. Conclusion

The aim of this book chapter is to investigate the effects of EG on TO. Two models are proposed to analyze the relationship between EG and TO. First model is the base model including only the EG indicator as explanatory variable. On the second model, unemployment rate and population size of the countries are added to the base model as control variables to check the robustness. After all necessary diagnostic tests are implemented, it has been found that the model satisfies all the OLS assumptions. According to this result, we can trust the OLS regression results, its coefficients and test statistics. The result of the base model shows that there is a statistically significant and positive relationship between EG and TO. 1% increase in the GDP per capita used as proxy for EG leads to 0.12% increase in TO. The R-squared value of the model is found to be 0.12, thus this model can explain 12% of the change in TO. Considering the results of the second formed after adding the control variables, it is seen that the result in the base model do not change. It is explored that there is also a statistically significant and positive relationship between EG and TO. 1% increase in the EG causes 0.1% increase in TO. Value of the R-squared increases to 0.33 hence the second model can explain 33% of the change in TO. In the second model, it is explored that the coefficient of unemployment rate is not statistically significant and there is a negative and significant relationship between population size of the countries and TO.

References

- Dollar, D., & Kraay, A. (2003). Institutions, Trade, and Growth. *Journal of Monetary Economics*, 50(1), 133–162.
- Ghazouani, T., Boukhatem, J., & Yan Sam, C. (2020). Causal interactions between trade openness, renewable electricity consumption, and EG in Asia-Pacific countries: Fresh evidence from a bootstrap ARDL approach. *Renewable* and Sustainable Energy Reviews, 133.
- Greene, W. H. (2002). Econometric Analysis. New Jersey: Prentice Hall.
- Gries, T., & Redlin, M. (2012). Trade openness and EG: A panel causality analysis (Working Paper Series No. 2011-06). Canberra: Centre for International Economics
- Gujarati, D. N., & Porter, D. C. (2009). Basic Econometrics. New York: McGraw-Hill/Irwin.
- Guttmann, S., & Richards, A. (2006). Trade Openness: An Australian Perspective. *Australian Economic Papers*, 45(3), 188–203.
- Gwartney, J., Skipton, C. and Lawson, R., (2001). Trade Openness, Income Levels and Economic Growth, 1980-1998. Economic Freedom of the World Annual Report, 2001 (Chapter 3).
- Mbogela, C. S. (2019). An Empirical study on the determinants of trade openness in the African economies. *Advances in Management and Applied Economics*, 9(3), 9-42.
- Musila, J. W., & Yiheyis, Z. (2015). The Impact of Trade Openness on Growth: The Case of Kenya. *Journal of Policy Modeling*, *37*(2), 342–354.
- Osei, D. B., Sare, Y. A., & Ibrahim, M. (2019). On the determinants of trade openness in low- and lower–middle-income countries in Africa: how important is EG? *Future Business Journal*, 5(1),
- Pilinkienė, V. (2016). Trade openness, EG and competitiveness. The case of the Central and Eastern European Countries. *Engineering Economics*, 27(2), 185–194.
- Tahir, M., & Azid, T. (2015). The Relationship Between International Trade Openness and EG in the Developing Economies. Journal of Chinese Economic and Foreign *Trade Studies*, 8(2), 123–139.
- Tahir, M., & Khan, I. (2014). Trade openness and EG in the Asian region. Journal of Chinese *Economic and Foreign Trade Studies*, 7(3), 136–152.
- Wooldridge, J. M. (2010). Econometric Analysis of Cross Section and Panel Data. MIT Press.
- Wooldridge, J. M. (2016). Introductory Econometrics. Cengage.

Appendix 1. Countries

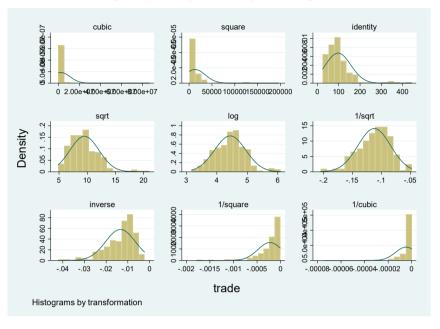
List of Countries		
Afghanistan	Burundi	Faroe Islands
Albania	Cabo Verde	Fiji
Algeria	Cambodia	Finland
American Samoa	Cameroon	France
Andorra	Canada	French Polynesia
Angola	Cayman Islands	Gabon
Antigua and Barbuda	Chile	Gambia
Argentina	China	Georgia
Armenia	Colombia	Germany
Aruba	Comoros	Gibraltar
Australia	Congo, Dem. Rep.	Greece
Austria	Congo, Rep	Greenland
Azerbaijan	Costa Rica	Grenada
Bahamas	Cote d'Ivoire	Guam
Bahrain	Croatia	Guatemala
Bangladesh	Cuba	Guinea
Barbados	Curacao	Guinea-Bissau
Belarus	Cyprus	Guyana
Belgium	Czech Republic	Haiti
Belize	Denmark	Honduras
Benin	Djibouti	Hong Kong SAR, China
Bermuda	Dominica	Hungary
Bhutan	Dominician Republic	Iceland
Bolivia	Ecuador	India
Bosnia and Herzegovina	Egypt, Arab Rep.	Indonesia
Botswana	El Salvador	Iran
Brazil	Equatorial Guinea	Iraq
British Virgin Islands	Eritrea	Ireland
Brunei Darussalam	Estonia	Isle of Man
Bulgaria	Eswatini	Israel
Burkina Faso	Ethiopia	Italy

List of Countries

Jamaica	Monaco	Samoa
Japan	Mongolia	Saudi Arabia
Jordan	Montenegro	Senegal
Kazakhstan	-	Serbia
	Morocco	
Kenya	Mozambique	Seychelles
Kiribati	Myanmar	Sierra Leone
Korea, Dem. People's Rep.	Namibia	Singapore
Korea, Rep.	Nauru	Sint Maarten (Dutch part)
Kosovo	Nepal	Slovak Rep.
Kuwait	Netherlands	Slovenia
Kyrgyz Rep.	New Caledonia	Solomon Islands
Lao PDR	New Zealand	Somalia
Latvia	Nicaragua	South Africa
Lebanon	Niger	South Sudan
Lesotho	Nigeria	Spain
Liberia	North Macedonia	Sri Lanka
Libya	Northern Mariana Islands	St. Kitts and Nevis
Liechtenstein	Norway	St. Lucia
Lithuania	Oman	St. Martin (French part)
Luxembourg	Pakistan	St. Vincent and Grenadines
Macao SAR, China	Palau	Sudan
Madagascar	Panama	Suriname
Malawi	Papua New Guinea	Sweden
Malaysia	Paraguay	Switzerland
Maldives	Peru	Syrian Arab Republic
Mali	Philippines	Tajikistan
Malta	Poland	Tanzania
Marshall Islands	Portugal	Thailand
Mauritania	Puerto Rico	Timor-Leste
Mauritius	Qatar	Togo
Mexico	Romania	Tonga
Micronesia, Fed. Sts.	Russian Fed.	Turkey
Moldova	Rwanda	Turkmenistan
Trinidad and Tobago	San Marino	Turks and Caicos Islands
Tunusia	Sao Tome and Principe	Tuvalu
	1 -	

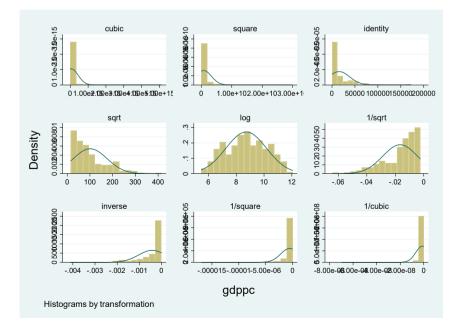
Uganda Ukraine United Arab Emirates United Kingdom United Kingdom Uruguay Uruguay Uzbekistan Vanuatu Vanuatu Venezuela Vietnam Virgin Islands (U.S.) West Bank and Gaza Yemen Zambia

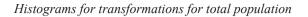
Appendix 2: Histograms

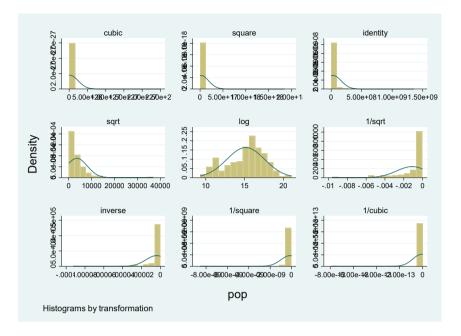


Histogram for transformations for trade openness

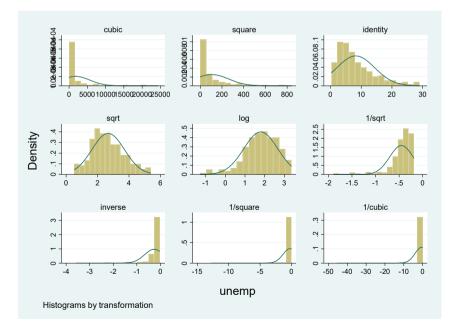
Histogram for transformations for gdp per capita







Histograms for transformations for total unemployment rate



Appendix 3: Correlation Matrix Results

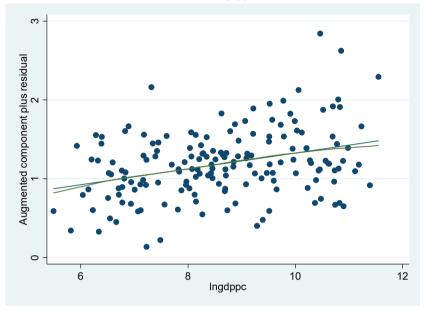
		lngdppc	lnunemp	lnpop
lngdppc lnunemp lnpop	-+- 	1.0000 0.2491 -0.1487	1.0000 -0.1677	1.0000
VIF Results				
Variable		VIF	1/	VIF
lngdppc lnunemp lnpop	 	1.09 1.09 1.04	0.913 0.919 0.966	292
Mean VIF		1.07		

Appendix 4: Heteroskedasticity Test Results

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity Ho: Constant variance Variables: fitted values of lntrade

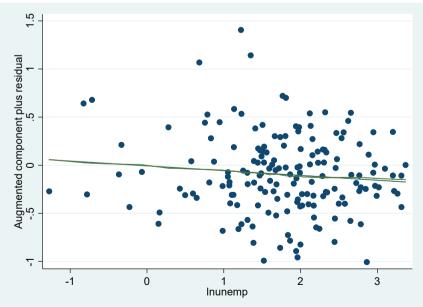
chi2(1) = 1.97 Prob > chi2 = 0.1602

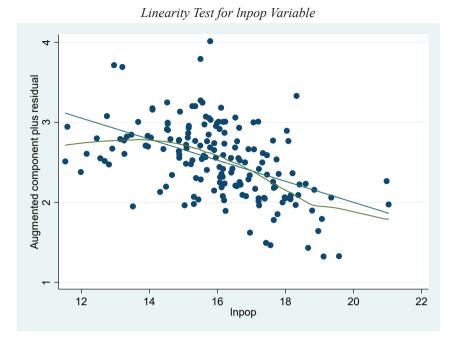
Appendix 5: Linearity Tests



Linearity Test for Ingdppc Variable

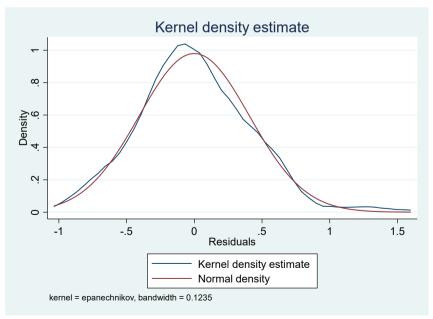
Linearity Test for Inunemp Variable





Appendix 6: Normality and Outliers Test Results

Kernel Density Plot of the Residuals



Shapiro-Wilk W Test

Shapiro-Wilk W test for normal

data

7	Variable	Obs	W	V
Z	Prob>z			
1.33	r 6 0.09083	168	0.98600	1.796

Test for outliers (iqr test)

mean= -2 (n= 168)	.7e-10		std.dev.=	.4071	
median= (IQR= .515 10 trim=	9)	pseudo	std.dev.=	.3824	
low	high				
			inne	r fences	
-1.035	1.028		# mild out	Hiors	0
3				LITEIP	0
			% mild out	tliers	
0.00%	1.79%				
			011+01	r fences	
-1.809	1.802		Outer	LIENCES	
			# severe d	outliers	0
0					
0.00%	0.00%		% severe (outliers	
0.000	0.00%				

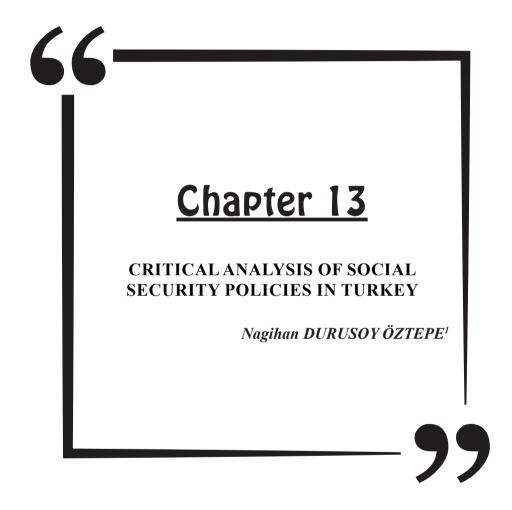
Appendix 7: Ramsey Test Results

Ramsey Test Results for Base Model

```
Ramsey RESET test using powers of the fitted
values of lntrade
Ho: model has no omitted variables
F(3, 178) = 0.19
Prob > F = 0.9060
```

Ramsey Test Results for the Model with Control Variables

```
Ramsey RESET test using powers of the fitted
values of lntrade
Ho: model has no omitted variables
F(3, 161) = 2.21
Prob > F = 0.0895
```



¹ Dr. Lecturer, Pamukkale University, Faculty of Economics and Administrative Sciences, Department of Labour Economics and Industrial Relations, ndurusoy@pau.edu.tr,

INTRODUCTION

The issue of social security has a unique position in social policy studies. Social security, which aims to provide and maintain the health and well-being of individuals and their families, is at the top of every moment of human life and on the agenda of policymakers. In this sense, the concept of social security has a multidimensional structure. The multidimensional character of the concept is due to both the diversity of the risks it covers and its close relationship with economic, sociological and demographic structures.

Social security policies and systems of a country are a common product of economic, social, political (Güzel et al., 2018: 22) and even historical structures and conditions. In this sense, reaching social security policies in Turkey has taken place in different ways in different dates and periods. Throughout this process, it has been possible with public policies to meet and increase the social security needs of the society, to determine the form, standard, institutional and legal framework of the services to be provided. In this sense, social security practices are a fundamental duty that the State cannot transfer to other elements (Alper, 2005: 101 as cited in Yazgan, 1981). Despite all the adversities, economic and political pressures, the State is expected to fulfil this duty.

The main objective of this study is to critically analyse the different and controversial nature of social security policies in Turkey. This analysis will only be carried out in terms of the social insurance system and will be carried out at three different levels. Firstly, the transformation phases and characteristics of social security policies will be explained in Turkey since the Republic. Secondly, the characteristics of social security policies in Turkey will be analysed through the "pension system", and finally, the transformation in the basic institutions that are decisive in the implementation of Social Security Policy will be explained.

1. THE CONCEPT OF SOCIAL SECURITY, RISKS AND COMPENSATION METHODS

The primary purpose of social security is to meet the living needs of individuals who have lost their income or earnings continuously or temporarily due to occupational, physiological or socio-economic risks (Talas, 1983: 323). Therefore, the basic function of social security is to compensate for the loss of income and earnings caused by the dangers and to prevent individuals from being dependent on others (Alper, 2006: 9). In this sense, there are risks and dangers where social security exists, and these risks constitute the reason for the existence of social security. Social security systems, which only provide security against limited risks, have become obliged to secure different risks with the demographic ageing of the population, changes in the family structure, economic globalisation and the increase of informal work¹.

Undoubtedly, social security has more social and economic functions than just income security. First of all, social security is one of the critical investments in human capital and increases the productivity of the labour force (Durusoy Öztepe, 2017: 177). Also, it contributes to the redistribution of income among individuals and the development of social justice and the principle of the social state by saving what individuals cannot make alone (Güzel et al., 2018; Tuncay & Ekmekçi, 2017; Alper, 2006). In this sense, the importance of social security systems for society and its effectiveness in economic development are widely accepted.

Social security measures in the modern sense have been implemented since the last quarter of the 19th century, but the need for social security has a long and lasting history. "Security" is an essential requirement that has existed since the existence of humanity. The need to protect against risks such as illness, disability, old age and death has forced people to take measures, either alone or collectively. This requirement, as old as the history of humanity, increased with the transition to industrial society; this situation strengthened the view that traditional social security techniques cannot be effective alone in combating social risks and played an essential role in the emergence and development of more institutional social security systems created by the state.

Today, it is possible to say that social security systems are designed in three different ways in the world. These are the universal model, the social insurance model and the social assistance model (SSA, 2018). The Universal programs, which are based on the Beveridge Report published in 1942, refer to social security benefits provided solely by citizenship status and a certain period of residence, regardless of income, wealth or working status. Although some universal programs benefit partly from employee and employer contributions, taxes are the primary source of funding for these programs. Supporting social security with the "national health system" and "full employment target" are other features of these programs.

The main feature of employment-related social security programs, commonly known as the "social insurance" system and which form the basis of the social security system of many countries today, is that they are based on the "working basis". Unemployment, sickness, maternity, work accident, disability or pension payments to be provided from these programs are directly linked to the duration of employment and earnings from employment (SSA, 2018). In this sense, the concept of social security, which is financed by the general budget and constitutes the basic logic

¹ https://www.issa.int/en/topics/understanding/introduction

of the universal model, does not correspond to the social security models connected to the work. The financing of the system is largely financed by the premiums paid by the employer and the insured. However, the state also has direct and indirect contributions to the system².

Social security programs linked to social assistance are called income testing or polling programs. In this model, the type, amount and beneficiaries of the social security benefits to be made are determined according to an income test based on the livelihoods and needs of individuals and households (SSA, 2018). In this sense, the target group of income-linked programs is people and households who are not employed and cannot benefit from employment-related social security programs and cannot meet their specific needs with their individual or family income. Although this system is financed entirely from the State budget and is seen as a national model, this model is mostly implemented regionally (SSA, 2018).

In Turkey, Social Security is carried out mainly through the social insurance system and social assistance programs. While Social Insurance requires the financial contribution of the beneficiary, social assistance and services are carried out by the State free of charge without the contribution of the beneficiary (Tuncay & Ekmekçi, 2017: 7). In this sense, the social insurance system is called "premium" or "participatory", while social assistance systems are called "non-premium" or "non-contributory" social security systems. Within the Turkish social security system, social assistance programs cover both the needy persons and households who are not included in the social insurance system, and they provide an additional guarantee for higher welfare of some social security groups (Alper, 2018: 19-20).

2. SOCIAL SECURITY POLICIES IN TURKEY SINCE THE REPUBLIC: CHANGING NEEDS AND AGENDAS

The social security practices, which generally operated on the basis of professional aid funds and social aids during the Ottoman period, have witnessed limited regulations in order to protect the soldiers and civil servants against certain risks in the post-compensation period (Güzel et al., 2018: 24). After the proclamation of the Republic, the first systematic and modern regulation in the field of social security in Turkey was made by the Labour Law No. 3008 dated 1936 (Güzel et al., 2018: 26; Kuruca & Özdamar, 2013: 45). Until this period, although it does not directly constitute the core of social security, the Code of Obligations entered into force in 1926 and some articles of the General Hygiene Law dated 1930

² The state's participation in the financing of the social security system predominantly arises from covering the deficits of the system or covering part of the total expenses of the institutions.

contained provisions governing employee and employer relations. In the Code of Obligations, employers are given various obligations in the field of occupational accidents and workers' health, and the provision that they can insure the worker against the occupational accident is resolved. On the other hand, the General Hygiene Law obliges employers who employ a certain number of workers to provide health assistance to their workers in case of illness, accident and maternity. However, these regulations have not functioned in the sense that they do not foresee the compulsory insurance relationship and do not have any supervision mechanism (Fişek et al., 1997:12). In this sense, the period before 1936 was a period in which it was impossible for workers to organise and protect their interests, the State's interference in labour relations was limited, and the workers' rights were left to the employer's initiative (Güzel, 1986: 173).

The Labour Law No. 3008 of 1936 constitutes the turning point of Turkey's social security policies in terms of adopting the principles of social insurance. However, the law only applied to workplaces employing 10 or more workers, which was inadequate because it did not cover all workers (Fişek, 1977: 12). The Law stipulated the establishment of a "Labour Insurance Administration" for the insurance branches to be established and for the execution of these branches with the regulations provided for in Articles 100 to 107. However, the economic effects of World War II affected Turkey as well as many countries disrupted many social policy practices and did not allow the establishment of the social security system at once. (Talas, 1983: 379; Güzel et al., 2018: 27-28).

The Social Insurance Institution in Turkey first came into existence in 1945 as the "workers' insurance institution" and came into force in 1946. With the establishment of an institution responsible for social security, the first insurance branches started to be established in the same year. Firstly, in 1946, Occupational Accidents and Diseases and Maternity insurance branches were established; in 1949, the old-age insurance law was adopted. In 1950, Sickness and Maternity insurance were arranged together; in 1957, in addition to the old-age insurance, disability and death insurance branches were established. In 1964, the Social Insurance Law No. 506 adopted and the insurance branches that were scattered until that period were improved and merged under a single legislation.

In Turkey, social insurance regulations in the modern sense have been introduced for the first time for the working class. Undoubtedly, the needs

However, the State may also contribute to certain insurance branches by paying premiums, just like the employer and the insured. The indirect participation of the state in the financing of the social security system arises mainly from meeting the initial establishment costs of social security institutions, undertaking the expenses of the personnel to be employed there, and exempting social security institutions from certain costs such as taxes, fees and the like (Alper, 2006: 62-63).

of society and employees are very effective in shaping this. However, those in the status of civil servants were already able to provide social security guarantees under various professional funds, although not comprehensive and sophisticated in the present sense. It has been observed that there are different practices in these funds, however, it has been determined that pensions attached to these funds are deprived of support from the central budget and the level of pensions is very low (Karahasanoğlu, 1973: 53). By Law No. 5434 on the Pension Fund of the Republic of Turkey adopted in 1949, the scattered civil servant chests were combined, and all civil servants working in the public sector were covered by this law (Alper, 2018: 17). The Pension Fund Law guaranteed only retirement, disability and death risks of civil servants, and the health expenditures of the civil servants have been met by their institutions for a long time within the framework of Law No. 657 dated 1965. (İstanbulluoğlu et al., 2010: 95).

In Turkey, the Social Security Regulations of workers and civil servants have greatly improved until the 1960s, and the institutional and legal infrastructure of social insurance has been established. Undoubtedly, the concern for adapting to social security developments in the international arena has been decisive in the development of this situation. In particular, the recognition of social security as a human right by the 1948 Universal Declaration of Human Rights has directly or indirectly influenced the social security policy of many countries along with Turkey (Güzel et al., 2018: 32). These developments in the international arena have been reflected in the national legislation.

The years following the 1961 constitution were the years when different groups were included in the social insurance system. With the 1961 Constitution, the right to social security gained a constitutional character; the state is obliged to provide this right. In this sense, the period between 1960 and 1980 can be expressed as the period in which the social security system has matured and modernised in Turkey (Arıcı, 2015: 83). One of the most important developments of this period is the adoption of the Social Insurance Institution Law No. 1479 on Tradesmen and Artisans and Other Independent Employees in 1971. This law provided independent employees with assurances against long-term insurance arms in the first place. BAG-KUR insured gradually gained health insurance with Law No. 3235, adopted in 1985 (İstanbulluoğlu et al., 2010: 95). In 1979, voluntary social insurance program was created for those who are not subject to any compulsory social insurance program, and BAĞ-KUR was held responsible for its management.

In the post-1980 period, there have been significant developments in the field of Social Security in Turkey. The 1982 Constitution further expanded and strengthened social security in the constitutional sense (Arici, 2015: 90). The most significant development of this period is the inclusion of social security in the agricultural sector. With Law No. 2825, which was adopted in 1983, agricultural workers were brought under the social security umbrella, and with the Law No. 2926, those working independently in agriculture were brought under it. A new institution has not been established to carry out the social security procedures of the employees in the agricultural sector; social security arrangements of these groups were transferred to SSK and BAĞ-KUR (Arici, 2015: 92). Thus, social insurance practices have been established in Turkey in different norms and standards for civil servants, private sector employees and independent employees.

3. NIGHTMARES OF SOCIAL SECURITY IN TURKEY: PO-LITICAL INTERVENTION AND EARLY RETIREMENT APPLI-CATIONS

The role of early retirement practices in the deterioration of the financial balance of the social security system in Turkey is too much to be underestimated. Legal arrangements for the pension system in Turkey are carried out within the framework of old age insurance. Old age insurance is an insurance branch established to compensate the income loss of the insured who lost his working power due to ageing and withdrew from working life. The fundamental right provided by this insurance branch is the annexation of the pension. In order for a person to receive a pension, he/she must fulfil the conditions such as age, insurance and number of premium payment days. It is possible to see all or different combinations of these conditions in all of the regulations on old age insurance in Turkey at different dates.

The first regulation on pensions in Turkey was made in 1949 with the Old Age Insurance Law No. 5417. With this law, the age requirement for entitlement to a pension is determined as 60 years for women and men. However, this regulation did not last long, and after the 1969 general elections, the retirement age was reduced to 50 for women and 55 for men. However, an additional option has been added to the pension conditions, and a different application has opened the way for early retirement in Turkey, removing the age requirement³. These regulations, which eliminated the age requirement for retirement, made it possible for a woman who started working as insured at the age of 18 to retire at the age of 38 (18+20) and for a man to retire at the age of 43 (18+25), revealing a retirement age well below the previous regulations (Güzel et sl., 2018: 494).

In 1986, the age requirement for retirement was introduced for

³ For more information, see: Durusoy Öztepe, N. (2018), Retired People in Working Life, Gazi Publications: Ankara.

men and women, but this practice did not last long. The True Path Party (Dogru Yol Partisi), which gained a majority in the T.B.M.M. in the 1991 general elections, has lifted the age requirement again in order to qualify for pension with the coalition partner Social Democratic People's Party (Sosyal Demokrat Halkci Parti). As can be seen, all regulations related to lowering or abolishing the age requirement in order to get an old age pension in Turkey came into force after the elections. This is a testament to the extent to which the Turkish social insurance system can be open to political interference. The early retirement policies implemented by ignoring the autonomy of Social Insurance Institutions have left the Turkish Social Insurance System facing financial crises since the mid-1990s (Alper, 2018: 29).

This crisis in the Turkish social insurance system was not missing from the agenda of the subsequent political powers, and various ways were sought to overcome this crisis. The most comprehensive of these studies was the work commissioned by ILO experts by the 50th Government (Alper, 2018: 32-33). Based on the results of this research, the first steps to reform the social security system in Turkey have been taken. With the Unemployment Insurance Law No. 4447 adopted in 1999, unemployment insurance was established for the first time in Turkey, and changes were made to the conditions of entitlement to retirement. With this arrangement, DSP, MHP, ANAP coalition government introduced again the "age" requirement in retirement abolished by Süleyman Demirel government, and the retirement age was arranged as 58 years for women and 60 years for men.

The regulations regarding retirement age in Turkey have been amended again with the Social Insurance and General Health Insurance Law No. 5510 which came into force in 2008, and the pension age set for women and men is gradually increased every year and it is arranged for both female and male insured to be 65 years of age from 2048. With this arrangement, early retirement practices in Turkey have been terminated, and the retirement age has been gradually increased. However, due to the existence of the insurance status from the past and the conditions of the transition period, it is quite possible to encounter the young pensioner phenomenon of Turkey for the next two decades.

4. TRANSFORMATION IN CORPORATE STRUCTURE: FROM MULTI-HEAD STRUCTURE TO UNIQUENESS IN MAN-AGEMENT

The establishment of the social insurance system in Turkey and the taking of people with different insurance status under the umbrella of Social Security is spreading over a long period. The expansion of the scope of social insurance over time revealed the state of regulation of the rights and obligations of employees in Turkey, subject to different social security laws. Until recently, this has resulted in the disruption of the norm and standard unity among social security practices. In order to achieve such norm unity, Turkey was forced to reconsider its social security policies when it reached the threshold of the 2000s.

Turkey's three main social security institutions, the SSK, BAĞ-KUR and the Pension Fund, were responsible for the implementation of the country's social security policies until the 2000s. All three institutions were organised according to the specific requirements and conditions of their associates and were directed to include as much registered employment as possible. Although they are said to be administratively and financially autonomous, social security institutions in Turkey have always been the subject of political interventions (Fişek, 1997: 18). In addition to the lack of premium collections, almost habitually imposed premium pardons and early retirement practices by governments have led to irrevocable losses in the income-and-expense balance of institutions (Alper, 2018: 30-31). However, the lack of norm and standard unity among social security institutions has prepared the environment for several comparative advantages for some insured groups.

Another change to the restructuring of the social security system after 1999 has been the arrangements for the restructuring of social security institutions (Alper, 2018: 34-39). With some arrangements made in 2000 and 2003, some changes were made in the management and organisational structure of SSK and BAĞ-KUR. The most significant development of this period is the establishment of the Social Security Institution with Decree-Law No. 618. The Social Security Institution, created at that time, was established as a higher council in order to ensure coordination between the SSK, BAĞ-KUR and the Turkish Employment Agency and to direct the social security policy of the country. With the law No. 5502 which came into force in 2006, the SSK, BAG-KUR and Pension Fund have ended; the Social Security Institution has ceased to be a coordination institution and become the only Social Security Institution in Turkey.

CONCLUSION

The social insurance system of Turkey has been shaped by the construction of institutional structures and the coverage of different insured groups in a gradual way, starting from about 75 years ago. This institutionalisation effort, which coincided with more late periods than industrialised countries, proved to be the cornerstone of the social security system by showing great success in a short time. Turkey's social security policy has expanded to include new policy-making areas, both institutional and legal. However, at this point, the Turkish social security system has

undergone a severe restructuring process due to the effects of many economic, financial, managerial and demographic problems (Gümüş, 2010: 8). Given the magnitude of the problems experienced, it is thought that the reconstruction process will be continuous.

Considering the size of the population, there was not enough increase in the population covered by social insurance. According to 2017 data, 85.5% of the population appears to be covered by social insurance, but a significant proportion of them are dependent and passive populations⁴. The proportion of active insured paying premiums, which is the primary source of funding for the social insurance system, is only 28% of the total population. It is possible for the system to function healthily, with the reduction of unemployment and informality and with the increase of premium collection rates for some insured groups. Today, as the population grows older and the rates of dependence on the elderly increase, increasing the active policyholders is essential for the continuity of the system.

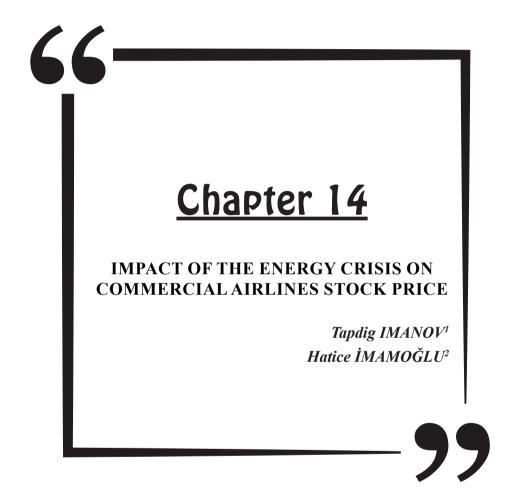
Certainly, social security as a policy issue includes several problems, not only in financial but also in managerial terms. The social security system in Turkey has been open to different political and ideological discourses in different periods of its history. This has damaged the administrative and financial autonomy of social insurance systems. Early retirement practices, particularly those put forward as election promises, have severely impacted the income and expense balance of the social insurance system. Although the right of social security has been secured on the constitutional level, not enough progress has been made in getting involved in this system and making fair use of rights.

In this sense, while social security policies in Turkey are dealt with by employment and labour market policies, the contribution of the state in terms of the adoption and dissemination of the system should not be ignored. However, a social security policy should not be separated from the goal of covering all segments of society, and the level of rights provided should be equal to human dignity. It is also crucial that the Constitution be adhered to the principle of equality when it comes to granting rights. A social security policy that will be created by taking these considerations into account will be able to contribute to individual welfare and social development.

⁴ SGK, Workplace and Insured Statistics, http://www.sgk.gov.tr/wps/portal/sgk/tr/kurumsal/istatistik/sgk_istatistik_yilliklari

REFERENCES

- Alper, Y. (2011), Sosyal Güvenlik Teorisi Ders Notları, Bursa: Uludağ Üniversitesi, İktisadi İdari Bilimler Fakültesi.
- Alper, Y. (2018), Türk Sosyal Güvenlik Sistemi ve Sosyal Sigortalar Hukuku, Bursa: Dora Yayıncılık.
- Arıcı K. (2015), Türk Sosyal Güvenlik Hukuku, Ankara: Gazi Kitapevi.
- Durusoy Öztepe, N. (2017). Denizli İşgücü Piyasasının Genel Görünümü ve Sosyal Güvenlik, In Ö. Uzun, N. Yayla, A. Çağlar (Eds), *Denizli Kent Ekonomi*si, pp. 165-186, Denizli: Pamukkale Üniversitesi Yayınları.
- Fişek, G., Türcan Özsuca, Ş., Şuğle, M.A. (1997), *Sosyal Sigortalar Kurumu Tarihi*, İstanbul: Türkiye, Ekonomik ve Toplumsal Tarih Vakfı Yayınları.
- Gümüş, E. (2010). *Türkiye'de Sosyal Güvenlik Sistemi: Mevcut Durum, Sorunlar ve Öneriler*, Siyaset Ekonomi ve Toplum Araştırmaları (SETA) Vakfı.
- Güzel, A. (2012). 3008 Sayılı İş Yasasının Önemi ve Başlıca Hükümleri. *Journal* of Social Policy Conferences, 0 (35-36), 169-222.
- Güzel, A., Okur, A. R., Caniklioğlu, N. (2018), *Sosyal Güvenlik Hukuku*, İstanbul: Beta Yayıncılık.
- İstanbulluoğlu, H., Güleç, M., Oğur, R. (2010). Sağlık Hizmetierinin Finansman Yöntemleri, *Dirim Tıp Dergisi*, 85(2), 86-99.
- Karahasanoğlu, T. (1973). *Türkiye'de Sosyal Güvenlik Çıkmazı*, İstanbul: Şamil Yayınevi.
- Kuruca M., Özdamar, M. (2013). *Tüm Yönleriyle Emeklilik*, Ankara: Yaklaşım Yayıncılık.
- SGK, İşyeri ve Sigortalı İstatistikleri (2017). http://www.sgk.gov.tr/wps/portal/ sgk/tr/kurumsal/istatistik/sgk_istatistik_yilliklari
- SSA (2018), *Social Security Programs Throughout the World: Europe*, Retrieved April 15, 2019, from https://www.ssa.gov/policy/docs/progdesc/ssptw/.
- Talas, C. (1983). Sosyal Ekonomi, Ankara: , S Yayıncılık.
- Tuncay, C.A. Ekmekçi, Ö. (2017). Sosyal Güvenlik Hukuku Dersleri, İstanbul: Beta Yayıncılık.



¹ PhD candidate, Department of Business Administration, Faculty of Economics, Administrative, and Social Sciences, Cyprus Science University, Dr Fazıl Küçük Caddesi, Ozanköy, 99320, Kyrenia / TRNC Mersin 10 – Turkey, Orcid No: 0000-0002-56675678, e-mail: tveyranimanov@csu.edu.tr 2 Assistant Professor Doctor, Department of Banking and Finance, Faculty of Economics, Administrative, and Social Sciences, Cyprus Science University, Dr Fazıl Küçük Caddesi, Ozanköy, 99320, Kyrenia / TRNC Mersin 10 – Turkey, Orcid No: 0000-0002-3299-499, e-mail: haticeimamoglu@csu.edu.tr

1. ENERGY CRISIS

The theory set by the efficient market hypothesis refers that stock price depends on available information provided by all open exchange organizations and private sectors (Kathiravan et al, 2019), which mainly responds to the declaration of monetary variables (Hardouvelis, 1987). The stock price is one of the reliable calls to upcoming changes in the financial sector, and thus may have a direct impact on economic activity (Pearce, 1983). Taking into account that the aviation industry, particularly airline activity, is a substantial part of the economy, their stock prices move with economic cycles (Whiteman, 2022). The entire transportation sector, including the airlines, are a high consumer of fossil energy (e.g., crude oil or fossil fuel), therefore rise of usable oil and fuel prices in the energy crisis are negatively affecting real cash flow and decreasing the profit of airlines. In these circumstances, the rise of aircraft-related energy prices will have a direct impact on consumer demand, meanwhile increasing service costs and indirect expenses (Phan et al., 2015). Hence, the implication of price increment will challenge a lowering in demand for use of air transportation by potential clients, a reduction of designated destinations, a fall in financial profitability, and finally a drop in the stock price of airlines (Yun and Yoon, 2018). The response to the energy crisis, depending on the price ratio, reflects the overall fall in demand for general aviation, and users prefer seeking alternative ways (Archibald and Reece, 1977), while airline operators choose more fuel-efficient transportation modes in terms of fuel consumption and aircraft with new technologies (IHLG, 2019).

In the situation conditioned by the energy crisis occurs interruption of energy supplies, particularly crude oil or fossil fuels accompanied by a rapid rise in energy prices, hereby declining economic growth, and loss of investment efficiency, therefore increasing inflation and unemployment which contributes to population suffer and country economy treatment (Williams and Alhajji, 2003).

Over the past 60 years, fossil fuel remains a highly demandable source of energy consumption, while usage of coal, natural gas, and oil experienced a growth share gradually. The impact of the energy crisis in the 1970s, the rate of energy consumption has declined per capita, taking fuel economy initiatives, and remained stable between 1980 to 2020 in developing countries (Ritchie et al., 2022), see Figure 1.

The transportation system has a significant energy demand and has an important correlation with the rate of economic development, meanwhile transportation accounts for about 25% of energy consumption (Khalili et al., 2019). However, in the 21st-century fossil fuel reached a transition level, such as petroleum, dominant over coal and natural gas.

The air transportation industry is a high user of fuels which consist of about 40% of the airline operating cost with minimum rates of profit margins. Due to most direct expenses being fixed, any variation in fuel prices and energy crisis occurring immediately influences the ticket prices and services of airlines. In the long-term period the increase in energy prices, concerning jet fuel, has a negative implication on the stock price of airlines (Rodrique, 2020).

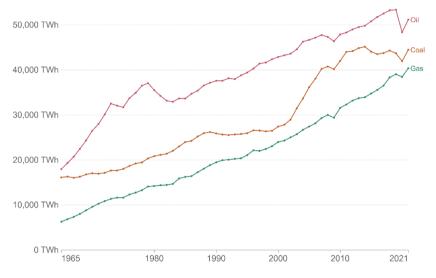


Figure 1. Fossil Fuel Consumption, World (Source: https://ourworldindata.org)

Referring to the two energy crises in 1973 and 1979, the first has caused in October 1973, against an oil embargo on the USA applied by the Organization of Arab petroleum exporting countries (OAPEC) due to Yom Kippur War (Reich 1995), despite the embargo was officially terminated of in March 1974 the high oil price remained at level 11.65 USD/Barrel (Merrill 2007). The second oil shock was associated with the Iranian Revolution began in early 1978 and ended in 1979, accompanied by revolution and Iranian oil production has declined to 4.8 million barrels per day, which equates to 7% of world output (Graefe, 2013), followed by the outbreak of Iran-Iraq war in September 1980 reducing the oil supply output for 4 million barrel per day, pushed the price above 41 USD/Barrel. The result of the terrorist attacks on September 11, 2001, and the subsequent intrusion into Afghanistan and Iraq contributed to a rise in oil prices beyond the target defined by the Organization of Petroleum Exporting Countries (OPEC) officials. Upcoming sustainable price surge appears in the period from 2004 to 2008 (Amuzegar, 2009) and nowadays continues inversion Ukraine territory acting by the Russian army beginning of February 2022, which, has sparked a global energy crisis in the 21st century (IEA, 2022).

Russia's invasion of Ukraine forced the German government to decide to interlock Nord Stream 2 and to respond Russia challenged blocking the flow stream via Nord Stream 1, thus Europe is turning to Liquefied Natural Gas (LNG) and other fossil fuels sources for surviving upcoming winter season (Magellan, 2022). Table 1 presents oil prices by crisis year from 1974 to 2022.

Despite the global energy crisis which periodically threatens world industry (see Figure 2) including the aviation sector, the leading component, and system design enterprises in cooperation with aircraft manufacturers make an effort to develop aircraft performance to increase the useful load capacity of next-generation aircraft models. Use of modern approach and applying new technologies concept, reached to employ new design of low emission engine types as well as applying fuel-saving systems.

Year	Average	Low	High	Causes
1974	\$12.52	\$9.59	\$13.06	The OPEC oil embargo ended
1979	\$21.57	\$15.50	\$28.91	Iran-Iraq War, fed rate 20%
1990	\$21.73	\$15.15	\$32.88	Gulf War
1999	\$17.27	\$10.16	\$24.35	Prices doubled
2001	\$21.99	\$15.95	\$24.97	Recession and 9/11
2002	\$23.71	\$17.04	\$27.14	Afghanistan War
2007	\$67.19	\$49.57	\$85.53	Banking crisis
2008	\$92.57	\$35.59	\$127.77	Financial crisis
2009	\$59.04	\$36.84	\$74.40	Great Recession
2014	\$89.63	\$57.36	\$100.26	The dollar rose 15%
2020	\$37.22	\$16.74	\$53.87	Pandemic reduced demand
2022(Q1)	\$94.68	\$77.46	\$106.00	The Russian invasion of Ukraine

 Table 1. Oil prices by crisis years between 1974-2022

Airlines are still forced to keep their competitiveness and, in this context, joining global alliances is becoming necessary, making bi/multilateral agreements. There is an expectation that airlines will return the passenger flow to the pre-pandemic level and significantly grow air travel capability substantially over the next two years and subsequently increase the passenger numbers an average at an annual rate of 3.3% rising to 7.8 billion until 2040. Cargo transportation airlines share in total revenue significantly and consist of more than three times between 2016 and 2021, going to be 11.4% and 40.3% respectively. Aircraft deliveries to airlines are recovered and scheduled to deliver about 1622 new aircraft in 2022 to the owed purchaser (Figure 2) which are more fuel efficient and low operating cost, presenting financial gains for airlines and advantages environment in terms of less emission (IATA, 2022).

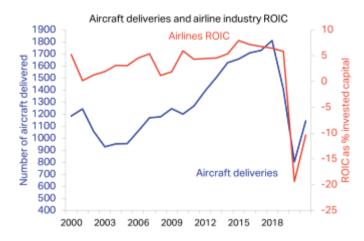
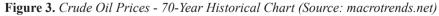


Figure 2. Aircraft delivery and airline industry ROIC (Source: IATA, 2021)

The inflation and rise in the price of jet fuel deliver a major problem for airlines, while this cost is usually equal to 20-25% of the total airline operating expenses. Russian-Ukrainian war soaring crude oil prices caused an unprecedented increase of around 30%, reaching the peak in May 2022, for a 117 USD/Barrel, Figure 3.





The high fuel prices are expected to remain unchanged in 2023, therefore airlines will face difficulties to manage the high jet fuel price, which might impact on passenger load factor, thus loss of stock price for airline operators (IATA, 2021).

The present study aims to investigate the impact of the energy crisis challenged by the rise of crude oil prices and its future implication on airline stock prices serving passenger transport at the global level. Investigation of the relationship between oil price variation risk and airline companies' stock prices is necessary as it attracts the attention of a prospective trade investor in stock value evaluation. There is an objective, to find out the impact of oil price changes and their implication on the stock price of global airlines, and the main reason for energy crisis occurrences and to define their correlations. Thus, conducted empirical analysis has significant evidence that the crisis and its negative impact declines airline stock prices.

2. ENERGY CRISIS IMPLICATION ON AIRLINE STOCK PRICE

The current study is based on systematic analysis to reveal the degree of influence of global volatility of crude oil prices and the subsequent impact on airline stock prices upon energy crisis occurrences. Symptoms of a previously existing energy crisis have been today and might be worse than others, which evidence the current situation. The outbreak Russian invasion of Ukraine creates a comprehensive worldwide threat once again, which concerns energy industries at the same level. Although the character of the energy crisis is varied by the different motives. Today's crisis looks like 1973 and 1980 the reason for two wars, others dictated by the terrorist attack in 2001 and the financial crisis in 2008. Another global energy crisis has been accompanied by the COVID-19 pandemic restrictions. In all cases of various energy crisis airlines industry suffered, losing its stock capital and financial sustainability, Table 2.

	Stock p	rice/ Yea	r (Billion	ı)	Annual change/Year (%)			
Airlines								
	2008	2011	2020	2022	2008	2011	2020	2022
American Airlines	7.29	7.03	15.27	10.54	-47.45	-49.35	-44.82	-24.12
Alaska Airlines	4.82	14.20	42.24	47.96	16.95	32.46	-22.81	-15.12
Delta Airlines	8.41	8.25	34.92	23.25	-23.04	-35.79	-30.77	-9.44
Southwest Airlines	11.74	9.68	39.97	40.26	-29.24	-33.93	-13.31	-12.98
United Airlines	15.96	21.59	42.65	13.49	-66.82	-20.78	-50.90	-5.76
China Eastern Airlines	17.08	6.19	20.67	18.00	-84.33	-20.37	-19.93	14.59
China Southern Airlines	14.78	22.30	43.05	26.47	-80.54	-16.58	-40.56	-11.76
Ryanair	21.77	25.97	79.53	82.08	-26.27	-9.43	25.53	-24.38
Boeing Corp.	33.99	49.09	224.5	165.3	-40.43	-50.03	-33.90	-8.26

 Table 2. Energy crisis impacts airline stock value. (Source: macrotrends.net)

The performed analyses aim to validate interdependency oil price increment and airline stock price, referring to historical statistical data of energy crisis for the last 50 years, in the period from 1974 to 2022, and randomly select 9 airlines and 1 aircraft manufacturer.

The results show that the correlation between airline stock price and volatility of crude oil prices has a long-term and unerupted, regardless of an energy crisis, albeit the aviation industry permanently depends on oil and fuel products. The analysis discovered that Alaska airlines avoided the global energy crisis in 2008 and 2011 and were able to keep company stock prices, thus gradually increasing its liquidity. In the same years, 6 airlines and Boeing-aircraft manufacturers suffered the greatest losses (see Table 2), thereby losing nearly 50 % and more of their stock price availability. Ryanair has been one of the most sustained airlines during the pandemic period adding to stock about 25%. In the current situation, China Eastern Airlines confidently keeps its stock price at the positive level of 15.59% accordingly. The causes for the emergence of the energy crisis depends on imports as most countries are importer of crude oil and fossil fuels conditioned by the reduction of oil production limited by OPEC, the ever-increasing demand for transportation fuels. The substantial negative impact of oil price variability on the airlines' stock value exposes a risk to collapse not only to the airlines themselves but to relevant structures and partners involved in airlines' activities. In summary, this paper provides useful information on oil price uncertainty during the energy crisis and jet fuel price escalation, which predict future jet fuel purchases by managing proper strategies to avoid the fuel price risk.

3. LITERATURE REVIEW

Pisarski and Terra (1975), investigated the situation during 1st energy crisis caused by the 1973-1974 oil embargo against the USA, studying the fact of American and European transportation organizational readiness to the energetic crisis, and found busted in planning the whole transportation system, thus forced to reconsider their implications entirely in a new context.

Upon study of the financial market, it is important to undertake the best components which interact with their base stock price (Sorescu, 2000). There are numerous studies to find the relationship between financial factors and stock prices in various sectors, however, few studies are examining the nexus between internal financial factors and stock prices concerning airline activities. In this context, Alici and Sevil (2021) conducted a panel data analysis of 28 airlines in the period between 2005 and 2018. The finding shows that the total assets variables such as a country's GDP, proper forecasting, and the overall performance of the company had a positive effect on stock prices.

Airlines with high credit financing liabilities are having a risk for their stock values, and fuel price is one of the main reasons. Focused on fuel consumption optimization strategies Southwest airlines had about 70% of

fuel demand maintained at 51 USD per barrel in 2008, while the average fuel cost fluctuated around 100 USD/Barrel, herewith avoiding crisis and loss of profitability (Pyke and Sibdari, 2018). The same approach was stated by Archibald and Reece (1977) long earlier, that efficient use of fuel consumption mitigates the demand and restricts fuel consumption.

Sharif et al, (2011) in their study, analyzing the Malaysian aviation sector, concludes that, jet fuel price consists of the largest proportion of airline operating cost, which might impact financial profitability, as a result, future implications of the share price in the stock market can be declined.

The study by Hsu, (2017) examines how airline stock prices are reacting to the oil boom in the participation of six airlines operated in the USA and referring to empirical results a fuel price shock has experienced a statistically significant negative relationship between airline stock returns during the period, when the fuel prices remain high. Kathiravan et al, (2019) studied the stock price stability of six airlines based in India concerning three crude oil markets, in the period from 2007 to 2018 and found similar results as Hsu (2017).

Yun and Yoon (2018) selecting three major stock exchange organizations (WTI, Brent, Dubai) conducted research, analyzing the crude oil price inequality effect on the stock price of four airlines (Korean Air, Asiana Airlines, Air China, and China Eastern Airlines), and found a negative relationship between given variables.

Once again referring to analysis, an empirical point of view, by Sadorsky (1999), and Park and Ratti (2008) discovered the negative correlation between oil prices and summation stock returns, hereby study fulfilled by Aggarwal et al. (2012) confirmed the hypothesis on the negative relationship among transport companies' stock stability by the increasing of oil prices.

The assessment of Morrison et al., (2010) finds several negative implications affecting USA airlines' activity such as a reduction of scheduled flights, a rise in the ticket price, and a lowering of aircraft fleet productivity as a result of high fuel costs as well as volatility stock price. Thorbecke (2019) introduced a whole package of industries that falls under the impact of high oil prices in the Asian economy. Hereafter, Killins (2020) investigated the nexus between oil price variation and the stock price of Canadian and US rail and airline sectors where the outcome tends to have a negative effect.

Horobet et al., (2022) in their investigation focused on the long and short-term performance of the airline industry's vulnerability to energy crisis risk in a macroeconomic environment, applying a panel ARDL model, defining the significance of risk conditioned by high oil prices, hence providing robust evidence of negative reflection on airlines stock price.

The overall literature review contributes to the belief that any option of either, an energy crisis or unexpected oil/fuel increment having not, depending on the reason, have a significant negative impact on complex airlines operation and activities. Apart from the destabilization of the functionality of airlines, the effective reduction in stock prices leads to potential loss of financial income and threatens bankruptcy of the active organization. Energy crisis particularly based on influencing factors refers to political decisions depending on the disagreement between country leaders and strategy policy approach.

CONCLUSION

Despite world instability demand for air transportation going to be expanding because of globalization, economic growth, and overall population rise. Commercial passenger air carriage is forecasted to increase at an annual average rate of 3.3% by 2040, with nearly eight billion travelers (IATA, 2022). The airlines providing services eighter, cargo and passengers consumer of crude oil and fossil fuel, and the changes in their price lead to increases in airline service and operating costs. The energy crisis is the inadmissible event of unexpected changes in oil prices which impact airlines activities, reducing income availability, consequently affecting to stock price rate, somehow significant degradation financial stability.

This study analyzed the past energy crisis events associated with the related effect of crude oil prices on the value stock prices of the airlines for given periods estimating 9 leading airlines and 1 aircraft manufacturer. The energy crisis implication contributed by the rising crude oil price harmed the stock prices of American Airlines, United Airlines, and Boeing by almost 50 % of market value, most suffered two China airlines lost about 80 % of their stock price. Comparing the air transportation industry's sensitivity to stock prices, large airlines and small/medium-sized airlines, possess relatively the same level of ability to resist the international crude oil price risk arising as a result of the energy crisis.

This study mainly focused on the statistical database and real energy crisis occurrences in different periods to determine the interrelation of airlines' stock market contravention and discuss the impact of the crude oil prices. This will contribute to industry management to understanding the oil price risk on the airline operations properly and to improve the ability of risk management policy.

REFERENCES

- Aggarwal, R., Akhigbe, A., & Mohanty, S. K. (2012). Oil price shocks and transportation firm asset prices. Energy Economics, 34(5), 1370–1379. https:// doi.org/10.1016/j.eneco.2012.05.001
- Alici, A., Sevil, G. (2021). Analysis of Internal Financial Factors Affecting Stock Price in Airline Businesses, *The Journal of International Scientific Re*searches, 5(AI), 28-46.
- Amuzegar, J. (2009). Middle East Institute Viewpoints: The 1979 "Oil Shock:" Legacy, Lessons, and Lasting Reverberations, www.mei.edu,
- Archibald, R. B., & Reece, W. S. (1977). The impact of the energy crisis on the demand for fuel efficiency: The case of general aviation. Transportation Research, 11(3), 161–165. doi:10.1016/0041-1647(77)90014-4
- Graefe, L. (2013). Oil Shock of 1978–79, Federal Reserve Bank of Atlanta, Available at: https://www.federalreservehistory.org/essays/oil-shock-of-1978-79, Accessed 17.12.2022
- Hardouvelis, G. A. (1987). Macroeconomic information and stock prices. Journal of Economics and Business, 39(2), 131–140. doi:10.1016/0148-6195(87)90012-9
- Horobet, A., Zlatea, E., Belascu, L., Dumitrescu, D. G. (2022). Oil price volatility and airlines' stock returns: Evidence from the global aviation industry, Journal of Business Economics and Management 23(2):284-304, DOI: 10.3846/jbem.2022.16094
- Hsu, C. C. (2017). How Fuel Price Shocks Affect Airline Stock Returns: An Empirical Study of Major US Carriers, *The International Journal of Business* and Finance Research, Vol. 11, No. 2, 2017, pp. 51-59
- https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html (Figure 1).
- https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html (Figure 1).
- IATA. (2021). Economic Performance of the Airline Industry, Available at: www. iata.org/economics, 2021 End-year report
- IATA. (2022). Global Outlook for Air Transport Times of Turbulence, Available at: www.iata.org/economics, Accessed, 15.12.2022
- IEA. (2022). World Energy Outlook-2022, Executive Summary, www.iea.org/weo
- Industry High Level Group (IHLG), (2019). Aviation Benefits Report-2019. Available at: https://www.icao.int/sustainability/Documents/AVIATION-BEN-EFITS-2019-web.pdf, Accessed 16.12.2022
- Kathiravan, C., Selvam, M., Maniam, B., & Venkateswar, S. (2019). RELA-TIONSHIP BETWEEN CRUDE OIL PRICE CHANGES AND AIR-

LINES STOCK PRICE: THE CASE OF INDIAN AVIATION INDUS-TRY. International Journal of Energy Economics and Policy, 9(5), 7–13. doi:10.32479/ijeep.7963

- Khalili, S., Rantanen, E., Bogdanov, D., & Breyer. C. (2019). Global Transportation Demand Development with Impacts on the Energy Demand and Greenhouse Gas Emissions in a Climate-Constrained World. Energies, 12(20), 3870. doi:10.3390/en12203870
- Killins, R. N. (2020). The impact of oil on equity returns of Canadian and U.S. railways and airlines. The North American Journal of Economics and Finance, 52, 101178. https://doi.org/10.1016/j.najef.2020.101178
- Macrotrends. (2022). Available at: https://www.macrotrends.net/stocks/research, Accessed 18.12.2022
- Macrotrends. (2022). Crude Oil Prices 70 Year Historical Chart, Available at: https://www.macrotrends.net/1369/crude-oil-price-history-chart, Accessed 17.12.2022
- Magellan. (2022). The energy crisis is likely to last years: An overreliance on vanishing Russian fossil fuels will torment Europe, Available at: https://www. magellangroup.com.au/insights/the-energy-crisis-is-likely-to-last-years, Accessed 16.12.2022
- Merrill, and Karen (2007). The Oil Crisis of 1973-1974: A Brief History with Documents. Boston: Bedford/St. Martin's, 2007.
- Morrison, J., Bonnefoy, P., Hansman, J., & Sgouridis, S. (2010). Investigation of the impacts of the effective fuel cost increase on the US Air transportation network and fleet. In 10th AIAA Aviation Technology, Integration, and Operations Conference. https://core.ac.uk/download/pdf/4427413.pdf
- Park, J., & Ratti, R. A. (2008). Oil price shocks stock markets in the US and 13 European countries. Energy Economics, 30(5), 2587–2608. https://doi. org/10.1016/j.eneco.2008.04.003
- Pearce, D. K. (1983). Stock prices and the economy. Journal of Economic Review, Available at: https://core.ac.uk/download/pdf/6592873.pdf.
- Phan, D. H. B., Sharma, S. S., & Narayan, P. K. (2015). Oil price and stock returns of consumers and producers of crude oil. Journal of International Financial Markets, Institutions and Money, 34, 245–262. doi: 10.1016/j. intfin.2014.11.010
- Pisarski, A. E., Terra, N. (1975). American and European Transportation Responses to the 1973-74 Oil Embargo, Elsevier Scientific Publishing Company, Transportation 4, pp. 291-312
- Pyke, D., Sibdari, S. (2018). Finance and Risk Management for International Logistics and the Supply Chain, Chapter 13-Risk Management in the Airline Industry, pp. 293-315, https://doi.org/10.1016/B978-0-12-813830-4.00012-5

- Reich, B. (1995). Securing the Covenant: United States-Israel Relations after the Cold War. Westport, CT: Greenwood Publishing Group, Inc, 1995.
- Ritchie, H., Roser, M., and Rosado, P. (2022) "Energy". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/energy', Accessed 17.12.2022
- Rodrique, J-P. (2020). The Geography of Transport Systems, Chapter 4.1 Transportation and Energy, 5th Edition, New York: Routledge, doi. org/10.4324/9780429346323, ISBN 978-0-367-36463-2
- Sadorsky, P. (1999). Oil price shocks and stock market activity. Energy Economics, 21(5), 449–469. https://doi.org/10.1016/S0140-9883(99)00020-1
- Sharif, S. P., Ranjbar, A., Arumugam, V. C. (2011). The Impact of Higher Oil Prices on Airlines Share Price: The Case of Malaysian Airlines, researchgate. net/publication/228119298
- Sorescu, S. M. (2000). The Effect of Options on Stock Prices: 1973 to 1995, The Journal of Finance, Vol. LV, NO. 1
- Thorbecke, W. (2019). Oil prices and the U.S. economy: Evidence from the stock market. Journal of Macroeconomics, 61, 103137. https://doi.org/10.1016/j. jmacro.2019.103137
- Whiteman, L. (2022). Investing in Airline Stocks, Available at: https://www.fool. com/investing/stock-market/market-sectors/industrials/airline-stocks/, Accessed 16.12.2022
- Williams. J. L and Alhajji, A. F. (2003). The Coming Energy Crisis? Available at: https://www.wtrg.com/EnergyCrisis/EnergyCrisis.pdf, Accessed 16.12.2022
- Yun, X., & Yoon, S.-M. (2018). Impact of oil Price change on Airline's stock Price and volatility: Evidence from China and South Korea. Energy Economics. doi: 10.1016/j.eneco.2018.09.015



¹ Arş. Gör. Hakan AYDOĞAN, Bartın Üniversitesi, İktisadi ve İdari Bilimler Fakültesi/Yönetim Bilişim Sistemleri ABD, haydogan@bartin.edu.tr, OrcID: 0000-0002-0571-8535

² Prof. Dr. Alper AYTEKİN, Bartın Üniversitesi, İktisadi ve İdari Bilimler Fakültesi/Yönetim Bilişim Sistemleri ABD, aytekin@bartin.edu.tr, OrcID: 0000-0002-2756-7870

³ Arş. Gör. Fatma AKGÜN, Bartın Üniversitesi, İktisadi ve İdari Bilimler Fakültesi/Yönetim Bilişim Sistemleri ABD, fakgun@bartin.edu.tr, OrcID: 0000-0002-7380-9463

1. Introduction

The decision-making procedure is explicated as the selection of one or more of the available alternatives in accordance with the objectives in terms of the determined criteria. Correct and timely decision making is very important for businesses as well as individuals (Doğan and Gencan, 2013, 71).

The needs and alternatives of the thriving and changing world create difficulties in decision making. Decision-making is a broad phenomenon, from businesses and industries to personal needs. The rapidly changing and developing communication technologies have affected the travel sector as well as the whole world. Thanks to these technologies that change in parallel, customer needs and expectations are constantly changing. All businesses that want to gain competitive advantage in this rapid change environment are successful by adapting to the processes (Çaylak, 2019, 68). In particular, the hotel industry is a sector that offers different alternative services and where there is an intense competitive environment. In this increasingly competitive environment, travel agencies have to choose the right hotel business and ensure customer satisfaction (Doğan and Gencan, 2013, 71). Since the hotel selection problem necessitates the evaluation of many alternatives under many criterions, MCDM techniques can be used to resolve such problems (Sarıçalı and Kundakçı, 2016, 48).

In this paper, it focused to choose among 10 5-star hotels in İzmir, taking into account the criteria of Cleanliness, Price Balance, Service, Location, Rooms, Comfort, Breakfast and Food, Building. Also, in this article, it intends to bring out the similarities and differences of the outcomes of different MCDM methods. For this reason, while choosing was made according to the TOPSIS technique and then the VIKOR technique in ordering the alternatives. Thus, the crosschecking of this methods is discussed.

2. Literature Review

In this article, AHP-TOPSIS and AHP-VIKOR techniques were used for hotel ranking. Some of the studies conducted with these methods, including the studies on hotel selection in the literature, are given in Table 1 below:

Year	Author(s)	Method	Subject
2000	Chu and	Importance	According to some criteria, they determined the hotel
	Choi	Performanc	selection for tourists traveling for business and leisure
		e Analysis	according to the Importance Performance Analysis method.
2001	Tam and	AHP	In their study, they debated that the telecommunications
	Tummala		system vendor selection is a MCDM question. In this study,
			they made an application that determines the vendor
			selection of a telecommunication company using the AHP
2004	Opricovic	TOPSIS	method.
2004	and Tzeng	and VIKOR	In their studies, they included a systematic comparison of TOPSIS and VIKOR techniques, which are MCDM
	and Tzeng		methods. In this case, they examined the syllogism of two
			methods with each other and explained with a numerical
			example.
2005	Slow and	Factor	In their studies, they determined the hotel selection criteria
	Owl	Analysis	by making factor analysis on the guest groups traveling for
		-	business and leisure.
2007	Murat and	AHP	In their studies, they established a decision-making model
	Steel		with the AHP method for hotel selection in the tourism
			sector where competition is intense. Within the content of
			the study, three-star hotels in the province of Bartin were
2008	Wei and	VIKOR	evaluated as an alternative. In this case, they provisioned an overview of the VIKOR
2008	Lin Lin	VIKOK	method, one of the MCDM methods, and explained it
	LIII		through a numerical application.
2008	Yang et al.	AHP and	In this study, they made an application that determines the
	U	ANP	facility location selection according to AHP and ANP
			methods.
2009	Ertuğrul	VIKOR	They talked about the prominence of the banking sector in
	and		their studies. In their studies, they made an application
	Karakaşoğl		evaluating the efficiency and effectiveness of banks with
2010	u Chang	VIKOR	the VIKOR method. In his study, he claimed that the consensus for the VIKOR
2010	Chang	VIKOK	method is effective on conflicting issues, but it has
			deficiencies. In this study, he developed the VIKOR
			method and explained the modified VIKOR method.
2010	Emir and	Statistical	In their study, they determined the criteria that families
	Pekyaman	Analysis	with children in the 5-6 age group consider when choosing
			a hotel. The data for the study were acquired from 14
			different schools in Afyonkarahisar province by survey
			method. Data from 514 valid questionnaires were analyzed
			using mathematical methods. As a result of the application, significant criteria were revealed.
2013	Doğan and	AHP	In their study, they chose among four five-star facilities in
2015	Gencan	1111	the Cappadocia. The data of the study, which they used
	Selleuli		AHP as a method, were obtained from the subjective
			judgments of travel agency managers.
2013	Jiang and	AHP and	In their studies, they focused on supplier election. In this
	Yao	IF-VIKOR	application, fuzzy AHP and VIKOR method created with
			heuristic fuzzy numbers were used for supplier selection.
2012	Sum at -1	ALID	In the size standing, the sympactic and the second structure to the second str
2013	Sun et al.	AHP	In their studies, they mentioned the rapidly developing web applications and the difficulties of users in choosing cloud
			computing services. They made an application that shows
			the user's choice of cloud computing service with the AHP
			method.

Table 1: Literature Review

2014	Akincilar	AHP and	In their study, they proposed an AHP-PROMETHEE
2017	and	PROMETH	hybrid model to evaluate the quality of accommodation and
	Dagdeviren	EE	hotel web pages. They weighted the criteria with AHP and
	C		ranked the alternatives using the PROMETHEE method.
2014	Uygurturk	AHP and	In their study, they brought out that the hotel choosing
	and	VIKOR	process is a MCDM question. They determined the criteria
	Uygurturk		and alternatives to choose among the 5-star hotels in
			Kemer, Antalya. They weighted the criteria with AHP and
			selected the best alternative with the VIKOR method. In
			their study, they indicated that the integrated AHP-VIKOR
_	_		technique is a decision-making tool that gives good results.
2015	Lee	AHP and B-	In his study, he mentioned that there are not many papers
		AHP	on the crosschecking of the AHP technique and the fuzzy
			AHP technique. In his study, he compared the advantages
2016	Aydogan	SMAA and	and weaknesses of these methods against each other. In their studies, they aimed to develop the VIKOR method
2010	and Ozmen	VIKOR	to be able to choose with uncertain data. In this study, they
		VIKOK	used the SMAA-VIKOR method for the reverse logistic
			option choosing problem.
2016	Saricali and	AHP and	In their study, they brought out that choosing a hotel,
2010	the Arsonist	COPRAS	especially in summer, is a difficult decision. They used the
			AHP technique for weighting the criterion in hotel ranking
			and the COPRAS technique for the selection of
			alternatives.
2016	Time et al.	AHP	weighed the criteria with the AHP method for the guests
			who will stay at the hotel. The data used in the study
			acquired from 250 tourists in Paris.
2018	Ecemiş and	TOPSIS	In their studies, they made hotel selection using the
	Yaykaşlı		TOPSIS method, using the evaluations on the websites of
2019	Dama at al	Statistical	140 hotels in Antalya.
2018	Peng et al.	Analysis	In their study, they have been statistically summarized with probabilistic linguistic term clusters in order to facilitate
		milarysis	hotel selections, which are quite difficult for tourists. They
			established a decision support model for hotel selection and
			tested its validity with sensitivity analysis.
2019	Noob	TOPSIS	In his study, he established a selection model for 11 luxury
			hotels in Antalya. The data used in the case was gained by
			scoring on the internet and the decision-making process
			was actualized with the TOPSIS method.
2019	Kwok et al.	TOPSIS	In their studies, they created a decision model with the
			fuzzy TOPSIS technique to facilitate the hotel selection of
			tourists. The data of the created decision model were
1			gained from the websites used by the tourists to select the
			hotel. The results were validated with mathematical proofs
			and computer aided simulation outputs.

3. Method

In this application, three different MCDM methods are discussed. These methods are AHP, TOPSIS and VIKOR methods.

3.1. Analytical Hierarchy Process (AHP) Method

The AHP theory was first presented by Saaty (Sun et al., 2013, 2). AHP is a widely used analytical tool for choosing the answer of complex multicriteria problems involving qualitative decisions (Saaty, 1980). It was originally designed to rank limited alternatives according to limited features (Sun et al., 2013, 2). In fact, it supplies an effective way to elect the error-prone for a given decision criterion (Sun et al., 2013, 3). The AHP method is particularly proper for modeling qualitative criteria and can be used for election, evaluation, planning and development, decision making prediction, etc (Pan and Tian, 2011, 25). AHP layers are given in Figure 1 downside (Saaty, 1980).

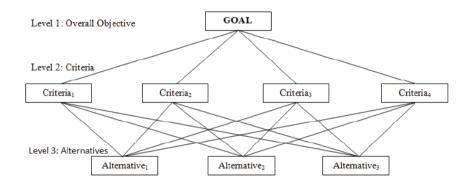


Figure 1: AHP Hierarchy

Saaty's 1-9 point scale and its explanation are given in Table 2.

Explanation	Importance level
Equally Important	1
Moderately Important	3
Quite Important	5
Very important	7
Extremely Important	9
Intermediate Values	2,4,6,8

Table 2: 1-9 point scale and explanation

The steps of the AHP are given downside (Saaty, 1980):

Step 1: Decision matrices are created (1).

$$\min = \begin{bmatrix} x_{11} & \cdots & x_{1n} \\ \vdots & \ddots & \vdots \\ x_{m1} & \cdots & x_{mn} \end{bmatrix}$$
(1)

Step 2: Finding the geometric mean of decision matrices (2).

$$X_{ij} = \sqrt[k]{X_{ij}^{(1)} * X_{ij}^{(2)} * \dots * X_{ij}^{(k)}}$$
(2)

Step 3: Initial decision matrix is created (3).

$$\mathbf{D} = \begin{bmatrix} x_{11} & \cdots & x_{1j} \\ \vdots & \ddots & \vdots \\ x_{i1} & \cdots & x_{ij} \end{bmatrix}$$
(3)

Step 4: The normalized matrix is calculated (4).

$$r_{ij} = \frac{x_{ij}}{\sqrt{\sum_{m=1}^{n} x_{mj}^2}} \tag{4}$$

Step 5: Weights are calculated by taking the average of each row (5).

$$X_m = (X_1 + X_2 + \dots + X_n)/n$$
(5)

Step 6: For the consistency test, firstly, the primary decision matrix and the weight scores are multiplied (6) and the result is divided by the weight values (7).

$$D = \begin{bmatrix} x_{11} & \cdots & x_{1n} \\ \vdots & \ddots & \vdots \\ x_{m1} & \cdots & x_{mn} \end{bmatrix} * \begin{bmatrix} W_1 \\ \cdots \\ W_m \end{bmatrix} = \begin{bmatrix} Z_1 \\ \cdots \\ Z_m \end{bmatrix}$$
(6)

$$T_{\rm m} = Z_{\rm m}/W_{\rm m} \tag{7}$$

Step 7: Calculate λmax (8). The CI value is calculated (9). The RI value is found from the table, Table 3 shows the RI values. The CR value is calculated (10). If CR < 0,1 it is considered consistent (Saaty, 1980).

$$\lambda_{\text{maks}} = (Z_1 + Z_2 + \dots + Z_m)/m \tag{8}$$

$$CI = (\lambda_{maks} - m)/m - 1 \tag{9}$$

$$CR = CI/RI \tag{10}$$

 Table 3: RI Values

	DI 1/1
Number of	RI Value
Criteria	
1	0
2	0
3	0.52
4	0.89
5	1.11
6	1.25

7	1.35
8	1.40
9	1.45
10	1.49

3.2. Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) Method

Decision problems are the operation of discovering the best selection from all possible alternatives. That is, the decision maker tries to decide on the best among the alternatives by evaluating with many criteria (Chen, 2001, 70).

TOPSIS was first introduced in 1981 by Hwang and Yoon. The primary doctrine of the TOPSIS farthest from the negative ideal solution (Rajput et al., 2022, 2372). In an another saying, when all criteria are considered, the alternative that is at the best level is called the ideal alternative, and the alternative that is at the worst level is called the negative ideal alternative (Çaylak, 2019, 70). It can be said that the ELECTRE method adopts the basic approaches (Ecemiş and Yaykaşlı, 2018, 331).

The steps of the TOPSIS are given below (Hwang and Yoon, 1981):

Step 1: Decision matrices are created (11).

$$\min = \begin{bmatrix} x_{11} & \cdots & x_{1n} \\ \vdots & \ddots & \vdots \\ x_{m1} & \cdots & x_{mn} \end{bmatrix}$$
(11)

Step 2: Finding the geometric mean of decision matrices (12).

$$X_{ij} = \sqrt[k]{X_{ij}^{(1)} * X_{ij}^{(2)} * \dots * X_{ij}^{(k)}}$$
(12)

Step 3: Initial decision matrix is created (13).

$$\mathbf{A} = \begin{bmatrix} x_{11} & \cdots & x_{1j} \\ \vdots & \ddots & \vdots \\ x_{i1} & \cdots & x_{ij} \end{bmatrix}$$
(13)

Step 4: The normalized matrix is calculated (14).

$$r_{ij} = \frac{x_{ij}}{\sum_{m=1}^{n} x_{mj}^2}$$
(14)

(xij; i: 1,2, ..., n; number of criteria j: 1,2, ..., m; number of alternatives)

Step 5: The weighted decision matrix is created by multiplying the normalized decision matrix with the weight values as shown in the equation (15).

$$W_{mn} = w_m * N_{mn} \tag{15}$$

Step 6: In the weighted decision matrix, the positive ideal solution and the negative ideal solution are found with the equations (16) and (17).

$$A^{+} = \{ (maxv_{ij} \mid j \in J), (minv_{ij} \mid j \in J') \}$$
(16)

$$A^{-} = \left\{ \left(\min v_{ij} \mid j \in J \right), \ \left(\max v_{ij} \mid j \in J' \right) \right\}$$
(17)

Step 7: The distance to the positive and negative ideal solutions is found by equation (18) and (19).

$$S_j^+ = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^+)^2}$$
(18)

$$S_j^- = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^-)^2}$$
(19)

Step 8: For each alternative, the relative closeness is calculated with the equation (20) and the alternatives are ranked.

$$C_i^* = \frac{s_j^-}{s_j^- + s_j^+} \qquad 0 \le C_i^* \le 1$$
(20)

3.3. Multi-Criteria Optimization and Compromise Solution (VIKOR) Method

The foundations of the compromise solution were laid by Yu (1973) (Ertuğrul and Karakaşoğlu, 2009, 22). The VIKOR technique was introduced by Opricovic in 1998 as a multi-criteria optimization technique (Aydoğan and Özmen, 2017, 382). Multi-criteria optimization is the operation of determining the best possible resolution based on specified criteria. However, applied issues are often distinguished by several immeasurable and disaccording criteria, and there may not be a solution that satisfies all criteria at once. The consensus sequencing method VIKOR is a viable technique for MCDM. It has been enlarged for multi-criteria optimization in complicated systems. The VIKOR method focuses on arrangement and ordering among alternatives with conflicting criteria (Chang, 2010, 342). The VIKOR technique was evolved for multi-criteria optimization of complicated systems (Oricovic and Tzeng, 2004, 449).

The steps of the VIKOR method are given below (Oricovic, 1998):

Step 1: Decision matrices are created (21).

$$\min = \begin{bmatrix} x_{11} & \cdots & x_{1n} \\ \vdots & \ddots & \vdots \\ x_{m1} & \cdots & x_{mn} \end{bmatrix}$$
(21)

Step 2: In the decision matrix, the positive ideal solution and the negative ideal solution are found with the equation (22) and (23).

$$F_i^+ = \{ (maxx_{ij} \mid j \in J), (minx_{ij} \mid j \in J') \}$$
(22)

$$F_{i}^{-} = \{ (minx_{ij} | j \in J), (maxx_{ij} | j \in J') \}$$
(23)

Step 3: The decision matrix is normalized with the equation (24) and reconstructed.

$$n_{ij} = \left\{ \frac{F_i^+ - x_{ij}}{F_i^+ - F_i^-} \right\} * W_i \tag{24}$$

Step 4: Si values are created with the equation (25) for each row of the normalized matrix.

$$S_i = \sum_{i=1}^j n_{ij} \tag{25}$$

Step 5: For each row of the normalized matrix, Ri values are created with the equation (26).

$$R_{i} = \max\left[\left\{\frac{F_{i}^{+} - x_{ij}}{F_{i}^{+} - F_{i}^{-}}\right\} * W_{i}\right]$$
(26)

Step 6: Si +, Si-, Ri + and Ri - values are found by applying the equation (27) and (28) to the Si and Ri values.

$$S_{i}^{+} = \min\left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \max\left(\sum_{i=1}^{j} n_{ij}\right)$$

$$(27)$$

$$P_{i}^{+} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \max\left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^{j} \left(\sum_{i=1}^{j} n_{ij}\right) || S_{i}^{-} = \sum_{i=1}^$$

$$R_{i}^{+} = \min\left(\max\left[\left\{\frac{F_{i}^{-} - x_{ij}}{F_{i}^{+} - F_{i}^{-}}\right\} * W_{i}\right]\right) \mid R_{i}^{-} = \max\left(\max\left[\left\{\frac{F_{i}^{-} - x_{ij}}{F_{i}^{+} - F_{i}^{-}}\right\} * W_{i}\right]\right)$$
(28)

Step 7: Qi values are found by equation (29) to create the final ranking.

$$Q_{i} = \left[\left\{ \frac{(s_{i} - s_{i}^{+})}{(s_{i}^{+} - s_{i}^{-})} \right\} * 0,5 + \left\{ \frac{(R_{i} - R_{i}^{+})}{R_{i}^{+} - R_{i}^{-}} \right\} * 0,5 \right]$$
(29)

Step 8: In the ranking, the first choice is created with the equality number (30) and the other elements are ranked in order by the same equality.

 $C_i = \min Q$

4. Application

In this study, 10 5-star hotels in İzmir were evaluated with AHP-TOPSIS and AHP-VIKOR methods under 9 different criteria.

4.1. Scope of the Study

The study covers 10 hotels in the province of İzmir, which are considered the most luxurious by the masses. The alternatives of the case are H1, H2, ..., 10 hotels up to H10.

While evaluating the alternatives, 9 criteria were used. While determining the criteria, objectivity, accessibility to data and scope of the study were taken into consideration. These criteria are defined as below CR1, CR2, ..., up to CR10: CR1: Position; CR2: Rooms; CR3: Service; CR4: Cleaning; CR5: Price Equilibrium; CR6: Comfort; CR7: Building; CR8: Breakfast; CR9: Food.

4.2. Evaluation of Research Findings

In this case, 3 different MCDM methods were used together. After the criteria weights were specified with the AHP method, the alternatives were evaluated separately with the TOPSIS and VIKOR methods and the conclusions were compared.

4.2.1. Weighting of Criteria with AHP Method

Step 1: In the first step of this case, the AHP technique is used to identify the criterion weights. The weights of the criterions are specified because of pairwise comparisons within themselves. The criteria specified by decision makers are evaluated according to 1-9 scale, and the decision matrix in equation (1) is formed. Then, to collect the evaluation results and reduce them to a single matrix, the geometric mean of the pairwise comparison values were taken with the help of equation (2), and the matrix in the equation (3) was formed. The generated comparison matrix is given in Table 4 below.

	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9
CR1	1,000	3,420	1,260	0.184	0.322	0.382	3,271	3,302	3,420
CR2	0.292	1,000	2,621	0.368	0.464	1,000	4,160	2,289	2,289
CR3	0.794	0.382	1,000	0.347	0.347	0.794	4,610	1,587	2,289
CR4	5,429	2,714	2,884	1,000	1,817	2,884	6,542	3,420	3,420

(30)

CR5	3,107	2,154	2,884	0.550	1,000	1,587	5,429	2,289	3,915
CR6	2,621	1,000	1,260	0.347	0.630	1,000	3,634	1,260	2,154
CR7	0.306	0.240	0.217	0.153	0.184	0.275	1,000	0.275	0.315
CR8	0.303	0.437	0.630	0.292	0.437	0.794	3,634	1,000	1,442
CR9	0.292	0.437	0.437	0.292	0.255	0.464	3,175	0.693	1,000

Step 2: To evaluate the criteria, the normalized decision matrix is created with the equation (4). Normalized criteria comparisons matrix is given in Table 5.

	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9
CR1	0.071	0.290	0.095	0.052	0.059	0.042	0.092	0.205	0.169
CR2	0.021	0.085	0.199	0.104	0.085	0.109	0.117	0.142	0.113
CR3	0.056	0.032	0.076	0.098	0.064	0.086	0.130	0.098	0.113
CR4	0.384	0.230	0.219	0.283	0.333	0.314	0.185	0.212	0.169
CR5	0.220	0.183	0.219	0.156	0.183	0.173	0.153	0.142	0.193
CR6	0.185	0.085	0.095	0.098	0.115	0.109	0.103	0.078	0.106
CR7	0.022	0.020	0.016	0.043	0.034	0.030	0.028	0.017	0.016
CR8	0.021	0.037	0.048	0.083	0.080	0.086	0.103	0.062	0.071
CR9	0.021	0.037	0.033	0.083	0.047	0.051	0.090	0.043	0.049

Table 5: Normalized Criteria Comparisons

Step 3: The weight values of the criteria are found by the equation (5) from the normalized criterion comparisons. The weights of the criterions are shown in Table 6.

Table 6: Weight Values of Criteria

Criteria	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9
Weights	0.119	0.108	0.084	0.259	0.180	0.108	0.025	0.066	0.050

Step 4: Since there are 9 criteria in this model, the RI value was found from Table 2 and taken as 1.45. The CI value is found in equation (9). The CR value of the model is calculated with the equation (10). According to the calculation result, it is consistent as 0.066 < 0.1. The consistency test of the model is shown in Table 7.

Table 7	ג :7	, CI,	RI	and	CR	Values
---------	------	-------	----	-----	----	--------

ړ	CI	RI	CR
9,765	0.096	1,450	0.066

4.2.2. Evaluation of Alternatives with TOPSIS Method

Step 1: The TOPSIS technique is used to evaluate and rank the alternatives. The matrix in the equation (11) was created with the information obtained from the website. The decision matrix created is shown in Table 8 below.

	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9
H1	9.1	9.0	9.4	9.6	8.8	9.3	8.9	7.9	7.9
H2	8.8	8.4	8.5	8.8	7.2	8.6	8.2	7.3	8.3
H3	8.5	8.1	8.8	8.8	8.3	8.9	8.5	7.4	7.4
H4	7.8	7.3	7.5	7.6	7.1	6.2	5.6	7.4	7.7
H5	9.1	8.8	8.9	9.3	8.8	9.0	8.6	8.0	8.0
H6	8.8	8.8	8.9	9.2	7.5	9.0	8.9	7.5	8.5
H7	9.1	8.0	8.2	8.5	7.0	8.0	8.3	7.7	8.5
H8	8.2	8.8	8.6	9.1	7.7	8.7	8.6	7.6	8.3
H9	8.9	9.0	9.5	9.6	7.5	9.1	9.1	8.3	8.3
H10	8.2	8.8	8.5	8.8	8.3	8.5	7.3	7.8	8.2

Table 8: Decision Matrix

Step 2: The normalized decision matrix was found by equation (14) and formed as in equation (15). The normalized decision matrix is shown in Table 9.

	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9
H1	0.332	0.334	0.342	0.339	0.355	0.343	0.341	0.325	0.308
H2	0.321	0.312	0.309	0.311	0.290	0.317	0.314	0.300	0.323
H3	0.310	0.301	0.320	0.311	0.334	0.328	0.325	0.304	0.288
H4	0.285	0.271	0.273	0.269	0.286	0.229	0.214	0.304	0.300
Н5	0.332	0.327	0.324	0.329	0.355	0.332	0.329	0.329	0.312
H6	0.321	0.327	0.324	0.325	0.302	0.332	0.341	0.308	0.331
H7	0.332	0.297	0.298	0.300	0.282	0.295	0.318	0.316	0.331
H8	0.299	0.327	0.313	0.322	0.310	0.321	0.329	0.312	0.323
H9	0.325	0.334	0.345	0.339	0.302	0.336	0.348	0.341	0.323
H10	0.299	0.327	0.309	0.311	0.334	0.314	0.279	0.321	0.319

Table 9: Normalized Decision Matrix (TOPSIS)

Step 3: The weighted decision matrix is made by equation (15). The weighted decision matrix is given in Table 10.

	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9
			-			-		-	-
H1	0.040	0.036	0.037	0.088	0.064	0.037	0.009	0.021	0.015
H2	0.038	0.034	0.033	0.080	0.052	0.034	0.008	0.020	0.016
H3	0.037	0.033	0.035	0.080	0.060	0.036	0.008	0.020	0.015
H4	0.034	0.029	0.030	0.069	0.052	0.025	0.005	0.020	0.015
H5	0.040	0.035	0.035	0.085	0.064	0.036	0.008	0.022	0.016
H6	0.038	0.035	0.035	0.084	0.054	0.036	0.009	0.020	0.017
H7	0.040	0.032	0.032	0.078	0.051	0.032	0.008	0.021	0.017
H8	0.036	0.035	0.034	0.083	0.056	0.035	0.008	0.021	0.016
H9	0.039	0.036	0.037	0.088	0.054	0.036	0.009	0.022	0.016
H10	0.036	0.035	0.033	0.080	0.060	0.034	0.007	0.021	0.016

Table 10: Weighted Decision Matrix

Step 4: Positive ideal (A^+) and negative ideal (A^-) solutions are formed by equations (16) and (17), respectively, are given in Table 11.

Table 11: Positive and Negative Ideal Solutions

	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9
(A^+)	0.040	0.036	0.037	0.088	0.064	0.037	0.009	0.022	0.017
(A ⁻)	0.034	0.029	0.030	0.069	0.051	0.025	0.005	0.020	0.015

Step 5: Positive ideal solutions (S⁺) and the negative ideal solutions (S⁻) were calculated by the equations (18) and (19). The results are given in Table 12.

	S+	S-
H1	0.002	0.028
H2	0.015	0.017
H3	0.010	0.019
H4	0.028	0.001
Н5	0.004	0.025
Н6	0.011	0.021
H7	0.019	0.013
H8	0.011	0.020
Н9	0.010	0.025
H10	0.011	0.019

Table 12: Discrimination Measurements

Step 6: Ideal solution (C^*) was found with the equation (20) and sorted. The ranking is given in Table 13.

Rank	Hotels	Result (C*)
1	H1	0.9449
2	Н5	0.8606
3	Н9	0.7259
4	H6	0.6635
5	Н3	0.6525
6	H10	0.6389
7	H8	0.6386
8	H2	0.5250
9	H7	0.4194
10	H4	0.0332

Table 13: Hotel Ranking (TOPSIS)

4.2.3. Evaluation of Alternatives with the VIKOR Method

Step 1: The VIKOR technique is used to evaluate and rank the alternatives. The matrix in the equation (21) was created with the information obtained from the website. After the decision matrix is formed, the positive ideal (F_i^+) and negative ideal (F_i^-) solution values are found with the equation (22) and (23), respectively, and shown in Table 14.

Table 14: Decision Matrix and Positive Ideal (Fi+) and
Negative Ideal (Fi-) Solution Values

	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9
H1	9.1	9.0	9.4	9.6	8.8	9.3	8.9	7.9	7.9
H2	8.8	8.4	8.5	8.8	7.2	8.6	8.2	7.3	8.3
H3	8.5	8.1	8.8	8.8	8.3	8.9	8.5	7.4	7.4
H4	7.8	7.3	7.5	7.6	7.1	6.2	5.6	7.4	7.7
H5	9.1	8.8	8.9	9.3	8.8	9.0	8.6	8.0	8.0
H6	8.8	8.8	8.9	9.2	7.5	9.0	8.9	7.5	8.5
H7	9.1	8.0	8.2	8.5	7.0	8.0	8.3	7.7	8.5
H8	8.2	8.8	8.6	9.1	7.7	8.7	8.6	7.6	8.3
H9	8.9	9.0	9.5	9.6	7.5	9.1	9.1	8.3	8.3
H10	8.2	8.8	8.5	8.8	8.3	8.5	7.3	7.8	8.2
F_i^+	9.1	9.0	9.5	9.6	8.8	9.3	9.1	8.3	8.5
Fi ⁻	7.8	7.3	7.5	7.6	7.0	6.2	5.6	7.3	7.4

Step 2: The normalized decision matrix was found and reconstructed with the equation (24). The normalized decision matrix is given in Table 15.

	CR1	CR2	CR3	CR4	CR5	CR6	CR7	CR8	CR9
H1	0,000	0,000	0.004	0,000	0,000	0,000	0.001	0.026	0.027
H2	0.028	0.038	0.042	0.103	0.160	0.024	0.006	0.066	0.009
H3	0.055	0.057	0.029	0.103	0.050	0.014	0.004	0.059	0.050
H4	0.119	0.108	0.084	0.259	0.170	0.108	0.025	0.059	0.037
Н5	0,000	0.013	0.025	0.039	0,000	0.010	0.004	0.020	0.023
H6	0.028	0.013	0.025	0.052	0.130	0.010	0.001	0.053	0,000
H7	0,000	0.064	0.054	0.142	0.180	0.045	0.006	0.039	0,000
H8	0.083	0.013	0.038	0.065	0.110	0.021	0.004	0.046	0.009
H9	0.018	0,000	0,000	0,000	0.130	0.007	0,000	0,000	0.009
H10	0.083	0.013	0.042	0.103	0.050	0.028	0.013	0.033	0.014

Table 15: Normalized Decision Matrix (VIKOR)

 S_i and R_i values of the alternatives were found with the equation (25) and (26), respectively. The values found are given in Table 16.

Alternatives	S_i	Ri
H1	0.059	0.027
H2	0.477	0.160
H3	0.423	0.103
H4	0.970	0.259
Н5	0.133	0.039
H6	0.312	0.130
H7	0.531	0.180
H8	0.388	0.110
H9	0.165	0.130
H10	0.378	0.103

Table 16: S_i and R_i Values

Step 4: Among the values in Table 17, the S_i^+ and S_i^- values were found with the equation (27) and the R_i^+ and R_i^- values were found with the equation (28). The values found are given in Table 17.

Table 17.	S.+ S	D.+ and	D Voluos
Table 1/:	Di, Di	, K _i and	R _i ⁻ Values

S_i^+	Si-	R_i^+	Ri ⁻
0.059	0.970	0.027	0.259

Step 5: The Q_i values of the alternatives were found with the equation (29). The values found are given in Table 18.

Alternatives	Qi
H1	0,000
H2	0.016
H3	0.424
H4	1,059
H5	0.125
H6	0.420
H7	0.649
H8	0.418
Н9	0.339
H10	0.399

Table 18: Q_i Values

Step 6: The Compromise Solution (C^*) was calculated with the equation (30) and sorted. Ranking is given in Table 19.

Ranking	Hotels	Result (C*)
1	H1	0.0000
2	H2	0.0163
3	Н5	0.1245
4	H9	0.3391
5	H10	0.3989
6	H8	0.4183
7	H6	0.4200
8	H3	0.4235
9	H7	0.6487
10	H4	1.0593

Table 19: Hotel Ranking (VIKOR)

5. Conclusion

In this case, it focused to bring out the application steps, similarities and differences of MCDM techniques. AHP, TOPSIS and VIKOR techniques, which are the most used methods in the literature, form the basis of this study. MCDM allows both selection and ranking. For this reason, as an application, the best of 10 5-star hotels operating in İzmir were chosen under certain criteria and the hotels were ranked.

First of all, 9 criteria were determined for hotel selection and these criteria were rated by 3 different expert decision makers with pairwise comparisons. The information gained with the answers from the experts was calculated according to the AHP technique. AHP is one of the MCDM techniques that outputs the superiority of pairwise comparisons over each other in a hierarchical order. In this application, 9 criteria were handled, and the weights of the criterions were specified according to the conclusion

of the AHP technique. It has been demonstrated that AHP is a superior method in determining criterion weight due to its steps. The weights of the 9 criterions determined in this case are shown in Figure 2 below.

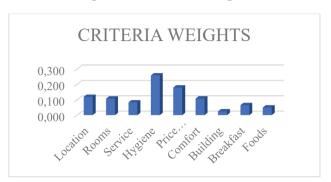


Figure 2: Criterion Weights

As can be seen from Figure 2, it is seen that the most important criterion is Cleanliness, followed by Price Balance and Location criteria. It is seen that the least significant criterion is the building.

The main purpose of this case is to rank the alternative preferences according to different methods. First, the alternatives whose criterion weights were determined according to the AHP method were ranked according to the TOPSIS method. TOPSIS method has been one of the first methods that come to mind for MCDM. In the application, 10 hotels were ordered according to the TOPSIS technique as a result of the data received over the internet. The ranking result is shown in Figure 3 below.

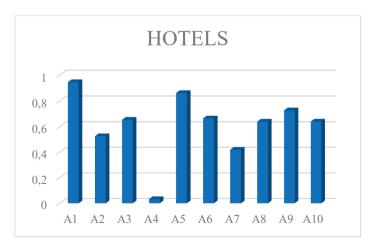


Figure 3: Ranking of Alternatives (TOPSIS)

As can be seen from Figure 3, A1 is the best hotel, followed by A2 and A9. It is seen that the worst choice is A4.

At the last step of the case, the ranking conclusion which reordered with VIKOR is shown in Figure 4 below.

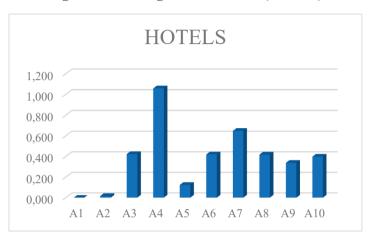


Figure 4: Ranking of Alternatives (VIKOR)

It is known that the lowest value in the VIKOR technique is the highest result in the ranking. As can be seen from Figure 4, A1 is the best hotel, followed by A2 and A5. It is seen that the worst choice is A4.

Thus, it is seen that there are similarities and differences between each good method. Even if the order of some alternative's changes, the difference is small, but there are radical changes in some of them. In Table 20 below, the ranking of the alternatives according to both methods is given together.

Ranking / Methods	TOPSIS Ranking	VIKOR Ranking
1	H1	H1
2	H5	H2
3	Н9	Н5
4	H6	Н9
5	Н3	H10
6	H10	H8
7	H8	H6
8	H2	Н3
9	H7	H7
10	H4	H4

Table 20: Ranking Comparison of Methods

Table 21 clearly shows the similarities and differences in the results of the two methods. Accordingly, while the A1, A7 and A4 hotels have the same ranking; The A5, A9, A10 and A8 hotels have close rankings. As a result, it is quite hard to say which technique is superior to which. However, according to both methods, it can be said that the values with the same or similar order are reliable results. To make the conclusion of this case more reliable, examining the results in different methods can be considered as an advanced study.

References

- Akincilar, A., & Dagdeviren, M. (2014). A hybrid multi-criteria decision making model to evaluate hotel websites. *International Journal of Hospitality Management*, 36, 263-271.
- Aydogan, E. K., & Ozmen, M. (2017). The stochastic vikor method and its use in reverse logistic option selection problem. *RAIRO-Operations Research*, 51(2), 375-389.
- Chang, C. L. (2010). A modified VIKOR method for multiple criteria analysis. *Environmental monitoring and assessment*, *168*(1), 339-344.
- Chen, C. T. (2001). A fuzzy approach to select the location of the distribution center. *Fuzzy sets and systems*, *118*(1), 65-73.
- Chu, R. K., & Choi, T. (2000). An importance-performance analysis of hotel selection factors in the Hong Kong hotel industry: a comparison of business and leisure travellers. *Tourism management*, 21(4), 363-377.
- ÇAYLAK, M. (2019). Topsis yöntemi ile en uygun otel seçimi. *Oğuzhan Sosyal Bilimler Dergisi*, 1(2), 65-76.
- Doğan, N., & Gencan, S. (2013). SEYAHAT ACENTASI YÖNETİCİLERİNİN BAKIŞ AÇISIYLA EN UYGUN OTEL SEÇİMİ: BİR ANALİTİK HİYERARŞİ PROSESİ (AHP) UYGULAMASI. Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, (41), 69-88.
- ECEMİŞ, O., & YAYKAŞLI, Ö. G. M. TOPSİS YÖNTEMİYLE OTEL SEÇİMİNE YÖNELİK BİR KARAR DESTEK SİSTEMİ1 Öz.
- Fatih, E. C. E. R., AÇIKGÖZOĞLU, S., & Yaman, F. (2009). Analitik Ağ Süreci (AAS) ve web sitelerinden yararlanarak otel seçimi. *Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 27(1), 187-207.
- Emir, O., & Pekyaman, A. (2010). Çocuklu Ailelerin Otel İşletmesi Seçiminde Etkili Olan Faktörler: Afyonkarahisar'da Bir Uygulama. *Journal of Management & Economics*, 17(2).
- Ertuğrul, İ., & Karakaşaoğlu, N. (2009). BANKA ŞUBE PERFORMANSLARININ VIKOR YÖNTEMİ İLE DEĞERLENDİRİLMESİ. Journal of Industrial Engineering (Turkish Chamber of Mechanical Engineers), 20(1).
- Hwang, C, Yoon, K. (1981). Multiple Attributes Decision Making Methods and Applications. *Springer, Berlin, Heidelberg*. 186.
- Jiang, H. L., & Yao, H. X. (2013). Supplier selection based on FAHP-VIKOR-IVIFs. In *Applied Mechanics and Materials* (Vol. 357, pp. 2703-2707). Trans Tech Publications Ltd.
- Kwok, P. K., & Lau, H. Y. (2019). Hotel selection using a modified TOPSIS-based decision support algorithm. *Decision Support Systems*, 120, 95-105.

- Lee, S. (2015). Determination of priority weights under multiattribute decisionmaking situations: AHP versus fuzzy AHP. *Journal of construction engineering and management*, 141(2), 05014015.
- Murat, G., & Çelik, N. (2007). Analitik hiyerarşi süreci yöntemi ile otel işletmelerinde hizmet kalitesini değerlendirme: Bartin örneği. *Uluslararası Yönetim İktisat ve İşletme Dergisi*, *3*(6), 1-20.
- Opricovic, S. (1998). Visekriterijumska optimizacija u građevinarstvu-multicriteria optimization of civil engineering systems. Faculty of Civil Engineering, Belgrade.
- Opricovic, S., & Tzeng, G. H. (2004). Compromise solution by MCDM methods: A comparative analysis of VIKOR and TOPSIS. *European journal of operational research*, 156(2), 445-455.
- Pan, X. L., & Tian, Y. (2011). Supplier selection in B2B manufacturing commerce using AHP-DEA. In Advanced Materials Research (Vol. 323, pp. 23-27). Trans Tech Publications Ltd.
- Peng, H. G., Zhang, H. Y., & Wang, J. Q. (2018). Cloud decision support model for selecting hotels on TripAdvisor. com with probabilistic linguistic information. *International Journal of Hospitality Management*, 68, 124-138.
- Rajput, V., Sahu, N. K., & Agrawal, A. (2022). Integrated AHP-TOPSIS methods for optimization of epoxy composite filled with Kota stone dust. *Materials Today: Proceedings*, 50, 2371-2375.
- Saaty, T. (1980). Multicriteria Decision Making: The Analytic Hierarchy Process. McGraw-Hill, New York.
- SARIÇALI, G., & KUNDAKCI, N. (2016). AHP ve COPRAS yöntemleri ile otel alternatiflerinin değerlendirilmesi. *International Review of Economics and Management*, 4(1), 45-66.
- Sun, M., Zang, T., Xu, X., & Wang, R. (2013, April). Consumer-centered cloud services selection using AHP. In 2013 International conference on service sciences (ICSS) (pp. 1-6). IEEE.
- Tam, M. C., & Tummala, V. R. (2001). An application of the AHP in vendor selection of a telecommunications system. *Omega*, 29(2), 171-182.
- Uygurtürk, H., & Uygurtürk, H. (2014). Bütünleşik AHS-VIKOR yöntemi ile otel seçimi. *Ekonomik ve Sosyal Araştırmalar Dergisi*, 103-117.
- Wei, J., & Lin, X. (2008, October). The multiple attribute decision-making VIKOR method and its application. In 2008 4th international conference on wireless communications, networking and mobile computing (pp. 1-4). IEEE.
- Yang, C. L., Chuang, S. P., Huang, R. H., & Tai, C. C. (2008, December). Location selection based on AHP/ANP approach. In 2008 IEEE International

Conference on Industrial Engineering and Engineering Management (pp. 1148-1153). IEEE.

- Yavas, U., & Babakus, E. (2005). Dimensions of hotel choice criteria: congruence between business and leisure travelers. *International Journal of Hospitality Management*, 24(3), 359-367.
- Yu, P. L. (1973). A class of solutions for group decision problems. *Management science*, 19(8), 936-946.
- Zaman, M., Botti, L., & Vo-Thanh, T. (2016). Weight of criteria in hotel selection: An empirical illustration based on TripAdvisor criteria. *European journal* of tourism research, 13, 132-138.