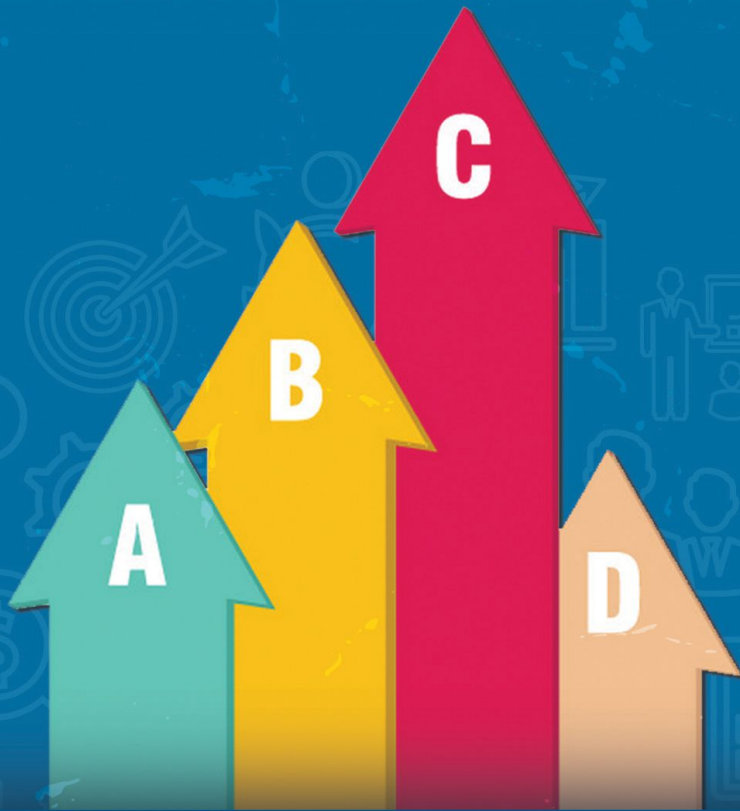


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Modern Analysis and Researches



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Ahmet Niyazi ÖZKER



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PREFACE

In the realm of contemporary economics and management science, a relentless pursuit of knowledge persists, leading to a constant influx of cutting-edge studies. These works, characterized by their distinct nature, make profound contributions to the scientific literature through their diverse analyses. Embracing a plethora of perspectives, this book, called “*Economics and Administration Sciences: Modern Analysis and Researches*” assumes a paramount role in establishing a robust framework within the scholarly discourse. Its chapters delve into a myriad of topics, presenting meaningful analyses that shed light on crucial determinants in various fields.

The remarkable aspect of these original studies lies in their ability to juxtapose analyses driven by disparate values, thereby forging an invaluable scientific infrastructure within a multidisciplinary framework. Undoubtedly, the literature encompassed in this book not only engenders significant advances in its respective subject matters but also serves as a wellspring for diverse research endeavours across different domains. The culmination of these meticulous efforts, embodied in this laborious work, exudes scholarly excellence refined through scrupulous investigation and enriched by a comprehensive array of scientific references.

In expressing our profound gratitude, we extend our sincere appreciation to all the esteemed academics and researchers who have wholeheartedly dedicated their expertise to shaping the contents of this book and book publishing house staff. Their invaluable contributions, encompassing both theoretical inquiries and empirical investigations, have truly endowed this work with a profound significance. The validation and recognition accorded to our book, owing to its inherent value and transformative contributions, will undoubtedly bring us immense joy and fulfilment.

Best Regards
Prof. Dr. Ahmet Niyazi ÖZKER

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CHAPTER I

REGIONAL DISPARITIES AND LOCAL ECONOMIC DEVELOPMENT IN TÜRKİYE*

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1. Introduction

Economic growth and development are among the primary objectives of countries. In parallel with this objective, countries make efforts to achieve economic development by managing their existing resources in the most effective and efficient way. Regional development disparity also brought up the policy of improving less developed regions closer to developed regions in terms of economic and social welfare. This process resulted in searches for an alternative policy to the regional planning and development initiatives by considering both region and development concepts together. In this context, the main objective of regional development policies is to equalize the welfare levels of regions by minimizing socioeconomic development disparities. Thus, it is aimed spread the national welfare level to all regions by increasing the level of competition both within the country and between countries (Sevinç, 2011: 36).

* This study was derived from the doctoral dissertation of the first author.

Regional inequality or disparity refers to a situation, in which per capita income, living standards, consumption status, and industrial, agricultural, and infrastructural development are not uniform in different areas of a specific region. Regional inequality is a global phenomenon. The concept of regional disparity may vary by countries' levels of development. Regional development differences can be seen in many countries around the world. It became a national issue in many regions worldwide, including Western Europe, after World War II. Furthermore, regional development disparities that develop between countries or between regions of a country cause many economic and social problems and, therefore, policies are established in order to address the regional disparities.

Economic policies changed significantly together with globalization. Production and consumption models in the global economy started to be reshaped. In the process of globalization, the region, where competitive businesses are located in, changes depending on the opportunities they have in order to integrate into local activities, as well as innovations, and economies of scale. The process of globalization also brings opportunities and threats along with it. Regions and businesses operating in many countries in the world offer various benefits at both local and global levels. However, different problems regarding competitiveness are encountered, especially with the opening of national economies to the outside world, in less developed regions.

From this perspective, the present study aims to theoretically evaluate the development policies identifying the current regional development disparities. For this purpose, the present study consists of 7 sections. The introduction section of the study is included in the first section, whereas the second section describes regions by their level of development. The third section examines the reasons for inter-regional development disparities, and the fourth section discusses policies for alleviating inter-regional development disparities. The relationship between inter-regional development disparities and competitiveness is explained in the fifth section explains and the sixth section discusses the regional development policies in the European Union. Finally, the seventh section analyzes the regional development policies enacted in Türkiye, while the conclusion section summarizes the study and discusses its findings.

2. Classification of Regions by Development Level

The issue of regional disparity began with the effects of the industrial revolution and increased with World War II. During this process, scientists started to be interested more closely in the issue of regional disparity due to the

state's increased intervention in the economy, and more studies were carried out on regional development and regional economy (Kuran, 2019: 4).

In the literature, the concepts of "region" and "regional development" have not been fully clarified yet. Discussions on this concept originate from the use of different types of regional scales for different purposes. The concept of region refers to either a land part having specific characteristics within itself or areas that are divided according to certain criteria within a country (Gündüz, 2006: 2).

The definition and context of the region concept may vary between periods. From a scientific perspective, the region, which originates from the Latin term "region" meaning area/surrounding, is considered as a concept that has multiple meanings, dimensions, and indeterminate boundaries. Therefore, it leads to different region definitions depending on the purposes of use. Within this context, the main indicators used in defining regions are cultural, geographical, administrative, and ethnic-urban ones (İldırar, 2004: 8).

In the early periods when the region concept was first introduced, Christaller and Losch defined the region as a hierarchical system. There are a small number of large top-level cities and many small lower-level cities in each region. The plan of a city is determined in parallel with the diversity of goods being offered. This is determined by the relative size of the market areas for different goods. It is assumed that cities import goods from higher-level cities, export goods to lower-level cities, and do not interact with other cities at the same level. Hoover and Giarratani (1985) defined the region as interconnected business centers. The labor, capital, and commodity flows in those regions are more widespread in comparison to other regions. Another characteristic of these regions is that activities are managed from a single center. As emphasized by Richardson (1979), the region is defined as a polycentric zone that offers internal functional integration. Karl Fox (1994) defined the region as a functional economic area (Dawkins, 2003: 133).

In this context, a region is not just a geographic area divided into parts according to certain characteristics. By highlighting the differences from other concepts that express dividing their areas into specific parts, a better understanding of the term region can be provided. The terms space, zone, and area have significant differences from the term region. The term area is merely a limitation in any field with no other content. The term zone refers to dividing the entire space into two parts based on a particular feature, one with and one without this feature. The difference between the term region and the term space is that the concept of a specific boundary and continuity does not exist in the term space (Sevinç, 2011: 38).

According to Brasche (2001), the concept that is central to regional development policies and referred to as a region can be defined based on different criteria. Regions can be classified based on the homogeneity factor. These are (Akpınar, 2013: 35):

- Geographical regions (shores and mountainous regions, etc.),
- Historical regions (common origins in history, previous borders, etc.),
- Cultural regions (ethnic majority, language, religion, etc.),
- Regions by residence and density (central and suburban regions, highly populated and less populated regions, etc.).

On the other hand, regions can also be classified by the new economic organization and common interest factors. These are (Ortadağ, 2010: 54);

- Regions dominated by specific sectors (tourism, industry, agriculture, ship construction, etc.),
- Regions located at border areas and affected by economic activities of a neighboring country,
- Transit regions by long-distance traffic flow (Alps etc.),
- Regions affected by the economic structure of a common settlement area (Mediterranean countries, Baltic states, etc.).

On the other hand, the concept of region can be defined from both traditional and global aspects. The social, economic, political, and technological changes that have occurred in the last decade such as globalization, regionalization (the formation of regional blocs), postmodernism, the increasing value of knowledge, and the transition to post-Fordist production led to a questioning of the traditional concept of region. From a traditional perspective, a region is a unit, the spatial integrity of which is formed by the juxtaposition of local units and is controlled by the nation-state, with its boundaries defined. From a global perspective, a region is a unit, the boundaries of which can change and is formed by non-spatial locals determined by a network of relationships that directly open up to international relations. The quality of the relationship network and the density of the relationships determine the level of development of both the local and the region (DPT, 2000: 7).

All regions, whether created by outside observers or socially constructed from within, are the results of an imposed regionalization. In both cases, regions having different scales, scopes, and sensitivities are an essential part of the nature of human life. The term regionalism indicates the general nature of modernity

and can be used in order to define the concept of region. Regionalization, like modernization and modernism, is a process of actively supporting regional perspectives and regionalism. Regions may include obtaining greater theoretical understanding, promoting faster and fairer economic development, increasing administrative efficiency, strengthening political democracy and representation, enhancing cultural identity, preserving the natural environment, and promoting creativity and innovation (Soja, 2009: 260).

3. Reasons for Regional Development Disparities

Regional imbalances in economic development can lead to economic and social disparities between regions within a country, similar to the disparities in economic development observed among different countries. The phenomenon of regional disparities began to be seen with the industrial revolution and has been discussed in the literature of economics, especially since World War II (Dinler, 2012: 97).

Regional disparities can be basically defined as the unequal distribution of economic and social welfare among people living in different geographic regions or areas within a country. Inequality arises due to the geographical diversity of resources and the different government policies applied to various regions. In other words, the economic, social, and political development process in a geographical environment requires growth in different regions at different rates (Raheem et al., 2014: 165). On the other hand, regional imbalances can affect the image, security, and stability of a nation. Remarkable differences in economic conditions between different regions of the same country can lead to capital and human migration and can exacerbate existing inequalities (Planning Commission, 2005: 6).

Even though regional disparities exist to a certain extent in developed countries, they are more frequently seen in less developed or developing countries. While regional disparities are decreasing in developed countries, they are increasing in less developed/developing countries (Gündüz, 2006: 15).

Underdevelopment is often attributed to factors such as government policies, natural resources, and social structure. The inability to develop industry, employment problems, and low per capita income in comparison to other regions can cause labor to migrate to developed regions and increase hidden and open unemployment in underdeveloped regions. As production and service increase in developed regions, demand rises and the gap between poverty and wealth widens. In addition, businesses choosing to take advantage of external

scale economies by selecting regions with abundant production factors increase regional imbalances. This situation leads governments to apply development policies within social justice theories among regions (Küçükoğlu, 2005: 29).

Although there are certain criteria for interregional imbalances in developed countries, underdeveloped or developing countries often experience these imbalances more frequently. While the phenomenon of regional imbalances is decreasing day by day in developed countries, it is increasing in less developed / developing countries (Gündüz, 2006: 15).

Underdevelopment is mostly attributed to factors such as state policy, natural resources, and social structure. The inability of the industry to develop, employment problems, and low per capita income when compared to other regions cause labor to migrate to more developed regions and increase hidden and open unemployment in underdeveloped regions. Thus, with the increase in production and service in developed regions, demand increases, and the gap between poverty and wealth widens. In addition, businesses' tendency to select production factors that they need from regions with abundant external economies increases regional imbalances. This situation leads governments to implement development and growth policies within interregional social justice theories (Küçükoğlu, 2005: 29).

Regional imbalances have many forms and can be expressed as unequal social opportunities (the existence of theaters and operas, access to qualified health services, quality education, etc.), unequal political opportunities (such as unequal election opportunities in different electoral districts), and unequal economic opportunities (suitable job opportunities and equal real wages paid for the same job in another field, etc.) (Stilwell, 1972: 7).

Economic opportunity inequality refers to the situation, in which the labor force in different regions is deprived of both suitable job opportunities and the opportunity to receive equal pay for the same job. On the other hand, social opportunity inequality can be defined as the unequal access of people in different regions to education, health services, cultural opportunities, etc. (Ersungur, 2016: 133).

Regional imbalances can be analyzed in three categories based on their qualities in both developed and developing regions. The first one is natural or geographical imbalances. These types of imbalances, which may directly result from natural resources and physical opportunities, enable the region's development and lead to the concentration of economic activities in the region. On the other hand, if the region lacks natural resources or suitable physical conditions, the region's development is restricted. The second one is economic

and functional imbalances. In countries having this characteristic, different regions gain different revenues due to the same production factors and different markets. Differences in income will also occur as a result of the shift of labor from the agricultural sector to the industrial sector. The third one is the social and cultural imbalances. This type of imbalance results from the lack of education. Individuals having high cultural levels differ from other people in terms of their social status, values, dress styles, and behaviors. Metropolitan slums and outskirts and relatively wealthy neighborhoods can be cited as examples of this type of imbalance (Gündüz, 2006: 15-16).

There are various challenges, including social, economic, and political ones, towards resolving the inter-regional imbalances. However, it has been observed that these imbalances are not decreasing when not intervened, especially in less developed countries. Considering that it is not realistic to achieve a perfect balance between regions, it is more appropriate to pursue a policy aimed at reducing or at least maintaining existing imbalances for the realization of social equality and economic development goals (DPT, 2000: 63). Before implementing policy tools adopted to reduce regional imbalances, it is necessary to identify the causes of existing imbalances well (DPT, 2000: 61).

Nowadays, state interventions are natural for reducing regional disparities, and national and international development institutions and organizations are developing various proposals and policies on regional imbalances. In this respect, there is not much difference between capitalist and socialist countries. England, France, and Italy are taking many measures to spread their growing population and industries in a more balanced way and to ease the burden of their heavily growing capitals. Socialist countries such as China, Poland, the Soviet Union, and former Yugoslavia have also taken various measures to promote development and reduce regional imbalances outside of metropolitan cities. Countries such as Venezuela, India, and Brazil, which are developing countries, are also working on this issue (Keleş, 2013: 351).

Economic, managerial, and social measures are included in state interventions for inter-regional imbalances. These measures are part of the different policies that countries implement. The main ones are taxation, credit, investment, transportation, customs, personnel policies, and public services (Keleş, 2013: 351).

3.1. Emergence of Regional Disparities

The concept of regional disparity has drawn attention since the Great Depression of 1929. After World War II, regional disparities became a fundamental

national problem in many countries, including Western Europe. In other words, the problem of regional disparities began to appear on the economic and political agendas of countries (Dinler, 2012: 96). The Industrial Revolution in the 1750s led to development disparities between countries for the next two centuries (Özel, 2009: 169). Changes occurred in economic development programs with the Industrial Revolution. Production increased significantly during this period, and the world entered a period of significant change and innovation in the economic field. However, this economic development process has only taken place in certain regions when compared to other regions in many countries. In other words, while the regions with suitable conditions for economic development have become increasingly richer, other regions have become poorer. This intense difference is greater in less developed countries compared to developed countries both in the past and present (Özdemir, 1999: 121).

From another perspective, similar to the development disparities between countries, the development disparities that occur between regions of a country are related to the international trade theory. In this case, during the initial stages of regional development, since transportation and communication networks are not sufficiently developed between developed and developing regions, trade between these regions is carried out in accordance with the principle of comparative advantage. In this prediction, if the infrastructure is not developed, qualified labor and capital tend to move towards more developed regions (Keleş, 2013: 306-307).

There is a widely accepted fact in many countries that the economic development process does not start simultaneously in all regions of a country, and development that emerges in some points with suitable conditions concentrates around these centers. This situation is the most important element that creates a regional imbalance. Regional disparities occur as economic and social activities increasingly concentrate around development poles (Dinler, 2012: 108). Development poles generally originate from industrial investments. These investments made in these regions also attract other investments that can provide production factors to themselves. As a result of this investment process, the region's development accelerates with a chain reaction. The settlement area located at the center of the pole constantly grows and eventually becomes a center of attraction (Gündüz, 2006: 16).

The emergence of development poles rescues the economic and social structure from the stagnation it is in. In these regions, increases in production and household incomes occur. In addition, technical innovations and new investments occur in the pole regions. After a certain period, the flow of labor

and capital between underdeveloped regions and developed pole regions may eliminate the economic and social differences between the two regions. In summary, development poles reduce the labor supply to be employed with the expansion of production in the industrialization process, and labor begins to flow from underdeveloped regions to these regions. Thus, the marginal productivity and welfare levels of the labor force in underdeveloped regions increase. This is one of the advantages offered by developed development poles. In addition, a disadvantage also arises. Such that, due to reasons such as large-scale production and cost reduction in pole regions, the production in handicrafts or family businesses operating in underdeveloped regions ceases, causing unemployment rates to rise (Akin, 1983: 105-107).

Within the development process of the regional imbalance concept, many different views have been put forward (Keleş, 2013: 308).

- Considering the first view, regional development differences that occur between regions are a natural consequence of the growth process. These regional imbalances decrease on their own with growth because all regions will have taken their share from this process of economic development. In this way, the development differences between developed and developing regions will disappear automatically (Keleş, 2013: 308).

- The second view is more pessimistic than the first. According to this view, if the regional development differences are left to their own devices, the gap between them will widen instead of narrowing. Researchers such as Johan Galtung, Gunnar Myrdal, Samir Amin, and Milton Santos argued that the central pole exploits the periphery. Metropolitan cities and developed regions draw all production factors to their own sphere, thus perpetuating the underdevelopment of other regions. Unless the state intervenes, underdeveloped regions will not be able to overcome their economic underdevelopment. In summary, the state should intervene using suitable policies to eliminate these imbalances (Keleş, 2013: 308-309).

- The third view approaches the issue of economic development by distinguishing between developed and developing countries. As stated in this view, regional imbalances will decrease in developed countries after a certain period, while the problem may continue in developing countries. John Friedmann, who advocates for this view, addresses the issue in his work “Polarized Development Theory” and uses the experiences of countries such as the United States, Sweden, and Germany to support this perspective (Keleş, 2013: 309).

3.2. Disadvantages of Regional Disparities

The emergence of regional imbalances is a characteristic that every developing country must reach as its first stage. Therefore, avoiding regional imbalances is almost impossible. At this point, the desired goal is to overcome this unwanted period as quickly as possible and to minimize the imbalances caused by economic development (Ersungur, 2016: 162).

Economic development does not begin simultaneously in different regions of a country. Differences in development arise between regions due to developments occurring in certain points that have certain advantages in terms of economic and natural factors, causing the development to be concentrated in certain poles. As a result of this situation, some problems arise. The increasing difference in development between regions, besides being contrary to the principle of social equality in economic development, also leads to a bottleneck after a certain process for economic development (Eraydın, 1983: 1).

4. Policies Eliminating the Interregional Development Disparities

The increasing popularity of the LED (Local Economic Development) approach played an important role in the loss of confidence in traditional development policies. There are many reasons for the failure of traditional top-down development approaches that adopt standard policies and strategies to achieve economic development (Rodriguez-Pose, 2001: 8).

State-interventionist economic policies, which emerged in response to the effects of the Great Depression that began in 1929 and lasted until 1939 and continued until the stagflation crisis of the 1970s, saw the power of government institutions increase in all areas over local authorities. As a result, regional development policies before 1970 had a centralized structure. In this context, influenced by the Keynesian economic model and the Fordist production style, external models focused on regional development from the 1930s to the late 1960s. The crises in the 1970s changed this process with internal development models and localization, so development with its own potential gained importance (Kandemir and Ergin, 2018: 2649).

By the late 1970s, the old regional development approach began to lose prestige for several reasons. First, by the 1970s, the development policies of the 1950s and 1960s failed to reduce the income gap between developed and underdeveloped regions, which weakened the foundations of the active and planned state approach and the parallel regional planning policies, which are

the most important legs of traditional development policies. Meanwhile, the economic crisis of these years weakened the funding opportunities that were necessary for the sustainability of many countries' regional planning policies. In particular, the failure of underdeveloped regions to find what they expected from economic development and the widening gap with developed regions, as well as the elimination of the possibility of overcoming the crisis in the mid-1970s with Keynesian prescriptions, undermined the credibility of development economics and planning (Soyak, 2003: 171). The failure of traditional top-down development policies since the 1970s has raised questions about the validity of such development approaches, and more innovative bottom-up development policies and strategies have been developed and implemented (Pehlivan, 2013: 415). From the 1980s onwards, the accelerating global trends also began to undermine the confidence in traditional development practices and brought the LED approach to the forefront (Çetin, 2007: 153).

Within this context, tendencies towards the LED ideology began to increase in the 1970s. However, a strategic policy approach that encompasses the local economy for the development of entrepreneurship, business, infrastructure, and local partnerships did not emerge until the late 1990s. The inequalities in income distribution and the rapidly increasing injustice among regions due to many factors have been the factors in the diversification and development of these strategies after the 1990s. However, the globalization process and the integrated structure of economies have brought different perspectives to the LED approaches (Kılınç, 2016: 7).

One of the fundamental problems of the world nowadays that has changed its form with the end of the Cold War and especially with the globalization process is the regional development differences that exist both between countries and within different regions of the same country, particularly in developing countries. It is known that many developing and developed countries face the same problem and that policies to solve this problem vary (Hill, 1998: 19).

Considering the evolution of regional policies in the EU, three distinct periods draw attention. The first period was described as the period from the Rome Treaty until the establishment of the European Regional Development Fund (ERDF) in the year 1975. During this period, along with support from the European Investment Bank and the European Social Fund to declining sectors such as shipbuilding, textiles, iron and steel, among others, special supports provided to southern Italy were the precursor to the regional policy practices. The second period, which lasted from the establishment of the ERDF to 1988

and was described as ‘supportive’ in solving the unemployment problems of member countries. The amounts allocated were gradually increased during the period, and the fund usage procedures were developed in order to increase the effectiveness of the European Commission. In 1986, the regional policy was formalized by the European Single Act under the framework of “economic and social cohesion” (Bilen, 2005: 8).

The period, in which regional policies are attempted to be implemented, is considered to be the 1950s. Significant changes and transformations were made in regional policies until the 1990s, when reconstruction movements began after the 1950s. The common goal of all regional policies attempted to be realized was to try ensuring the regional development by reducing interregional development disparities. The Rome Treaty signed in the year 1957 and entered into force in 1958 is of great importance for EU regional policy. The Rome Treaty does not contain a comprehensive provision on how regional policies should be (Atmaca and Sağır, 2017: 70-71). However, the Treaty addressing the economic integration included important provisions for regional policy. The Treaty clearly reveals the place of EU regional policy in the Treaty with the provision that “Member States are willing to strengthen their economies by reducing differences between various regions and backwardness of the least developed regions, and to achieve harmonization” (European Commission, 2014: 4). EU regional policy is an important strategic investment policy that aims to reduce economic and social disparities between EU countries and regions, support developing countries, and improve citizens’ quality of life. (European Commission, 2014: 1).

In the year 1988, the third period of regional policy began and continues to be implemented as a modern regional policy through the regulation known as the “Structural Funds Reform”, which is the most significant one. In this period, effective solutions with clear strategies have been developed for the problems of member countries and implemented with the support of structural funds in addition to their national funds through transparent procedures. The 1988 Reform is described with the principles of “programming,” “focusing on problems,” “contributions from national funds,” and “joint communication at all levels.” Thus, the term “productivity” mentioned above became a form that refers to both a member country’s growth and competitiveness and the most efficient use of funds. In this sense, structural funds are the most important tool for the EU to achieve its ultimate goal of becoming the world’s most competitive knowledge society in 2010 (Bilen, 2005: 8).

Agenda 2000, adopted in the year 1997 and prepared by the European Union Commission, is a document that describes the enlargement of the EU and how its financial framework should be after 1999. The document named Lisbon Strategy, which was also approved at the Lisbon Summit in 2000, aimed to strengthen employment, economic reforms, and social cohesion and to make the EU the world's most competitive economic bloc in a sustainable economic system. The EU Regional Policy has been restructured in line with Agenda 2000 and Lisbon Strategy in the 2000-2006 period (İncekara and Savrul, 2011: 407).

In the 2007-2013 planning period, the regional policy was shaped around three main objectives and three main instruments. Regional policy focuses on the convergence, competitiveness, and cooperation objectives grouped under the cohesion policy. In this period, members located in Central and Eastern Europe and those with special needs were focused on. A total of €308.041 billion was allocated to regional policies for the 2007-2013 planning period. It was aimed to use 51% of the resources allocated to regional expenditures during the 2007-2013 period for the 12 members who joined after 2004 and represented less than a quarter of the total EU population (Güler et al., 2011: 42).

In Türkiye, efforts to achieve regional development are divided into two categories: policies implemented before the planned period and policies implemented during the planned period. However, considering the widely accepted view in Türkiye, regional planning began after 1960. Nevertheless, it is indicated that there were some regional policies, albeit implicitly, in the previous period. Furthermore, it is known that there was a regional report prepared by Celal Bayar in 1934-1935 and that the 1932 First Industrial Plan included regional concerns. Indeed, it is possible to say that many public institutions had some regional concerns in their location choices. However, regional policies entered texts overtly in the planned period after 1960 (TÜSİAD, 2008: 94).

Industrial and development policies implemented in the 1960s were carried out within certain plans and programs. The success of industrial plans implemented in previous periods, the necessity of coordinating macroeconomic policies, and the desire of these institutions to plan investment policies in accordance with a program in the country to obtain funding from international organizations have played an effective role in the implementation of these policies. With Article 41 of the 1961 Constitution, the main task of the State was to implement development policies and eliminate imbalances between regions, and this task was given to State Planning Organization (SPO) (Kutlutürk and Orhan, 2021: 220).

Together with the establishment of SPO, the functioning of general development policies, including import substitution practices, was transferred to this institution. The main reason for giving importance to import substitution policies in the face of internal and external developments was the occurrence of payment crises as a result of liberal practices and the unsustainability of these practices. Especially, the import substitution development models have created the desired conditions in the domestic market for protecting developing industrial branches in the country and providing various rents to these branches. Thus, the development plans to be carried out by SPO aimed to provide capital exports and increase the competitiveness of local industries in the international market (Yıldırım, 1998: 15-16).

Since the 1960s, a balanced regional development policy has been implemented in Türkiye. The primary tools of regional development policies implemented include Five-Year Development Plans, Integrated Regional Development Plans, Rural Development Projects, Investment Incentives, Development Priority Regions, Organized Industrial Zones, and Small Industrial Sites. Within the framework of development plan goals and strategies, there are also provincial development plans prepared for various provinces to integrate sectoral priorities with spatial dimensions, and regional plans prepared to reduce development disparities between regions. The most widely used tool among these instruments is the incentive system, which varies according to sectors and regions (Yellice and Türko, 2023: 127). The incentive system is applied at different rates in accordance with the development level of the provinces. Another widely used tool, besides incentives, is the public investments. It can be said that investments made in public services and infrastructure are an effective tool for economic development. However, it has been observed that public investments have decreased and lost their effectiveness in recent years. Therefore, this practice, which was initially used as an effective tool, has been abandoned as an instrument for regional development, and leadership in industrialization has been given to private investments. As a result of the regulations made in line with the EU candidacy process, Regional Development Agencies (RDA) have also been added to these instruments (Keskin and Sungur, 2010: 282; Kadiroğlu and Türko, 2018: 37).

Türkiye is now faced with the necessity of revising its regional development policies and policies aimed at eliminating regional disparities with the planned period. The main reason for this necessity is the integration of regional development policies into the EU accession process. Türkiye has

entered a period of restructuring, leaving behind approximately 40 years of regional development models, policies, and instruments, and the main body of this new structure is made up of units called RDAs (Berber and Çelepçi, 2005: 146).

The 2000s are considered to be the first step of Türkiye's regional policy transformation. Starting from the 2000s, Türkiye took responsibility for regional policies as a result of the start of the pre-accession process with the EU. The nomenclature of units for territorial statistics (NUTS) is one of the primary implementations. In 2002, NUTS was defined throughout the country to collect and develop regional statistics, conduct socioeconomic analyses of regions, determine the framework of regional policies, and gather comparable statistical data in line with the European Union Regional Statistical System. Accordingly, 12 regions at Level-1, 26 regions by combining neighboring provinces at Level-2, and 81 region classifications were made for each province at Level-3. In addition to these practices, the National Program and Pre-National Development Plan documents were prepared in 2001 and 2003, respectively, as part of the EU accession process. It can be said that more modern tools such as Technology Development are also used. Industrial Zones and RDAs have recently been seen in regional development policies. Industrial Zones were established to ensure the development of the country's economy, technology transfer, increase production and employment, promote investment, and attract foreign capital. RDAs are legal structures established on the basis of a legal provision to try to ensure the economic development of a region by providing cooperation between all private and public companies, local governments, and NGOs within a specific geographical area of a country (İncekara and Savrul, 2011: 99-100; Türko and Kadiroğlu, 2017: 82-83).

5. Interregional Development Disparities and Local Economic Development

Interregional imbalance is a significant problem for both developed and developing countries, particularly in developing countries. Considering the social economic development level, there are relatively developed and underdeveloped countries, as well as relatively developed and underdeveloped regions within countries. These developmental disparities within countries create numerous social and economic problems and, therefore, new approaches to reducing interregional disparities have emerged to achieve socio-economic integration across the country (Akiş, 2011: 238).

The differentiation that occurs in form of developed or emerging economies created these disparities in each region. However, the differentiation between developed regions is less than that between developing regions. To achieve economic development in selected regions and sectors and increase investment levels and potential, the economic capacity of the region must be determined (Alsaç, 2010: 55). Developed regions have minimized the differences in development due to certain historical, economic, and social advantages they have. In underdeveloped regions, the opposite is true (Öcal et al., 2011: 57).

The agriculture-based economy or weakened industrial structure of underdeveloped regions yields low-income levels, unemployment, and inadequate infrastructure, creating a vicious cycle that can rarely be broken without exceptional circumstances or external intervention. This situation has made it necessary to reduce inequality and take measures at various levels (Aydoğdu, 2010: 3).

Incentives aiming to reduce the costs of investments in underdeveloped regions or increase the profitability of businesses make underdeveloped regions attractive to the private sector. Incentives are also used to promote economic development in developing countries. Supporting the private sector in certain sectors and activities essential to the country's economic development can accelerate economic growth (Dinler, 2008: 281). The creation of local job opportunities and their direction towards production in underdeveloped regions will contribute to the country's economic development (İnanöz and Narin, 2017: 52).

Policymakers make interventions by using various policy tools to eliminate regional disparities. Policies aiming this goal include physical and social infrastructure investments, financial incentives to attract private investment to underdeveloped regions, bank loans for commercial investments, and free zones established specifically to attract foreign investments and increase exports in underdeveloped regions. When formulating local development policies, short, medium, and long-term policy tools should be consistently created and implemented by analyzing local resources and considering the current situation (Özker and Biniş, 2010: 494).

Reducing regional disparities and imbalances among regions requires a serious social and economic organization. Reducing social inequalities is possible with state support and infrastructure-based activities. To accelerate the regional development, a higher level of focus should be placed on economic dimensions. In this respect, regional development has parallel characteristics in

terms of the development problems and solutions of a lagging region. Priority solutions for local development include increasing income levels, increasing savings, and ensuring capital accumulation (Erol, 2012: 88).

The globalization process is changing the rules of the economy for most of the post-war period, opening even the most remote regions of the world to competition and forcing businesses, cities, regions, and towns to respond to new economic conditions. The world's social and economic actors are restructuring their production and consumption patterns. In such an environment, competition varies depending on businesses' expenditures, the environment in which they operate, their opportunities to integrate into local activities, innovations, learning, and economies of scale. This process also brings new opportunities and threats. Many businesses and regions worldwide benefit from the local and global environment. However, in most underdeveloped regions, the opening of the national economy to the outside world forces local economic structures to compete globally and weakens their competitive power (ILO, 2003: 2).

In order for underdeveloped regions to be able to develop, a new administrative structure beyond traditional management must be established at the regional level, and on the other hand, some of the central authorities must be delegated to these new administrative units. Two necessities are taken into account in the organization of public administration in a country. The first is to ensure a minimum uniformity and unity in the conduct of administrative activities in the country, while the second is to reflect the differences in the country's different geographic regions in governance and to adapt the management to the diversity of the governed. The "centralized management" method meets the need for unity and homogeneity, while the "decentralized management" method responds to the demand for diversity. The concept of local governance defines autonomous democratic institutions with their own organs, independent personality, personnel, elected organs, and providing services that concern those living in a particular local area outside of the central government and its organs within the country's borders. Localization is often confused with the breadth of authority, but these two concepts and the transfer of authority are independent of each other and are organs of transfer of authority. The breadth of authority involves the transfer of some powers from the center to local officials to eliminate some of the negative aspects of central management (Köse, 2003: 4-5).

Approaches based on general social capital argue that underdeveloped regions should be made more attractive and turned into "centers of attraction" in order to ensure their own development. Therefore, public investments have

an important place in this theory, and it is accepted that the capacity adequacy of regional development in general social capital called public investments is related to the “attractive” effect of bottlenecks or the “push” effect in investment (Arslan, 2005: 283).

Local/regional policies are created to eliminate the imbalance caused by regional differences for the purpose of growth, stability, and balancing. The aim is to increase the growth and development rates of the lagging regions compared to the developed ones by taking measures to effectively coordinate private and public investments and to ensure the optimum distribution of production factors. In regional stability policy, by ensuring the necessary policy coherence in terms of regional and sectoral structure, efforts are made to distribute the economic structures of regions in a balanced way. Another aim of local/regional development policies is to provide as equal infrastructure as possible to the regions, to bring sectoral concentrations to a balanced level, to ensure a rational distribution of the population within the country, and to ensure social justice between regions (Ildirar, 2004: 22).

A well-established transportation and communication network between developed and underdeveloped regions can ensure the development of underdeveloped regions. It is difficult to keep capital and other production factors owned by the private sector in regions where transportation, infrastructure, and communication systems are poor. In such cases, the LED indicator works in favor of developed regions and against underdeveloped regions (Kayan, 2012: 106).

In general, one of the main objectives for developed regions is to increase the region’s production capacity and form the field of growth theories. The basic aim for underdeveloped regions is to improve the socio-economic and cultural structure of the region, which falls under the scope of development theories, in addition to reaching the national income level achieved by developed regions (Dinler, 2008: 38).

6. New Localism Practices

Since the second half of the 20th century, when globalization processes began to intensify, the nation-state, which is the dominant power in modern countries, started to lose some of its power and its sovereignty began to decrease. Transnational institutions that operate within the nation-state’s jurisdiction are organizations such as the UN, OECD, NAFTA, NATO, IMF, and international capital organizations. These organizations make regulations in the political,

economic, legal, military, and social fields, limiting the nation-state's judicial power and compelling nation-states to comply with these regulations. In general, compliance with these regulations is not mandatory but optional for nation-states. However, refusing to accept the regulations accepted by transnational powers can mean taking the risk of severe sanctions. In the process of a nation-state losing its sovereignty, the global capital that is effective at the international level is one of the most profitable elements. The nation-state is expected to make regulations that do not restrict the international capital's area of activity at the global level, thereby enabling the capital to gain freedom of movement. The political outcome of globalization is not the withdrawal or extinction of states as envisaged, but rather the reduction of the state to a tool of international monopolies and global capital (Karakurt, 2004: 1).

Another institution that undermines the sovereignty of a nation-state is local governance organizations referred to as NGOs and sub-national organizations. Localism, which opposes the impositions of the nation-state for a more democratic and participatory governance, has become a rising phenomenon in a period when local governments are increasingly effective. While countries that guide the local governance movement are introducing new extensions to the term "local" and redefining the concept, the position of localism is being scrutinized in the process of overcoming representative democracy, and new "local" elements within localism are being discovered. At the same time, while emphasizing the function of actors, "local" is also being conceptualized as an "actor" in itself (Cited in Emrealp, 2001; Karakurt, 2004: 1).

New localism proposes the transformation of local governments into units that provide facilitation services by marketing their resources and attracting global capital in a competitive manner within the free market by creating competitive localities (Taylan and Topçu, 2015: 34). In parallel with the trends of localization in the world, the weight of central governments has decreased in many European countries and the transfer of authority and resources to local governments has been realized. The strengthening of local governments and the increasing importance of service provision and management of resources in the country's governance, especially in federal and unitary states that are members of the EU, reveal the realization of localization tendencies. However, for less developed countries and developing countries in particular, localization tendencies may lead to some negative consequences due to institutionalization inadequacy, resource shortages, and infrastructure deficiencies in the administrative and financial fields. Therefore, increasing the level of development of countries

should be a priority goal. Thus, parallel to localization, which has become a part of the globalization process that has affected the world in recent years, significant progress can be observed in service provision by public units closest to the people (Demircan, 2008: 122).

With the new localization process, new regional units were created in the EU using the statistical regional method, and RDAs began to be used as the institutional aspect of local/regional development. Global capital chose local governments commonly in the 1980s due to localization policies, while in the 1990s, it began to choose RDAs at the local state level. This change is defined as a transition from the understanding of “new localism” to the understanding of “new regionalism” in the development discourse (Taylan and Topçu, 2015: 36).

Localization has been addressed in four different categories in the resources of the United Nations and the World Bank. Firstly, localization is a type of localization expressed as the transfer of authority from the center to the periphery, which is expressed as the breadth of authority. Secondly, it is a type of localization that involves the transfer of authority from the center and periphery organizations to local governments. Thirdly, it is a localization step taken towards civil society, where authorities are transferred from the center, periphery, and local governments to NGOs, i.e., towards civilianization. It is the transfer of public services to communities and social solidarity. The fourth and final type of localization is the transfer of authority to the private sector from all levels, i.e., the localization process known as privatization, which involves the merger of the center, periphery, and local governments and transfers to domestic and foreign capital (Olgun, 2007: 114).

7. Conclusion

In this study, the definition of regions by their level of development, the causes of interregional development disparities, policies to eliminate interregional development disparities, the theoretical dimension and scope of interregional development disparities, local economic development, and new localization practices have been examined.

It is necessary to implement more projects led by the private sector to increase the investment level and potential in selected regions and sectors to reduce regional disparities. On the other hand, project activities suitable for the economic capacity of the region should be carried out within the scope of public-private partnerships for the economic development of the regions. Addressing

the regional disparities in underdeveloped regions and reducing interregional disparities require serious social and economic restructuring. More roads and other physical infrastructures should be built to connect the regions in the country. This will help localize socio-economic facilities and ease the increasing pressure on capital. The ultimate goal of public investments is to reduce both infrastructure and poverty deficits, especially in infrastructure sectors such as roads, ports, bridges, and energy.

The agriculture-based economy or weakening industrial structure of underdeveloped regions brings along low income levels, unemployment, and insufficient infrastructure, and this vicious cycle rarely breaks without exceptional circumstances or external intervention. In this regard, policymakers should give more importance to the development of subsidiary facilities and their localization, especially in the country's backward regions, to accelerate industrialization. Creating more employment and improving the socio-economic situation of remote regions will lead to macroeconomic changes. Steps should be taken to develop human capital and create social awareness by establishing more educational institutions.

Incentive policies should be created to reduce investment costs in underdeveloped regions to attract private sector investments. Additionally, increasing local job opportunities and concentrating production activities in underdeveloped regions will have positive impacts on both the country's and the regions' economic development. When creating locally-specific development policies to be implemented in regions where regional disparities are observed, the local resources should be well analyzed, and short, medium, and long-term policy tools should be created considering the existing resources.

References

- Akın, İ. (1983). *Kalkınma ve Sanayi Ekonomisi*. İstanbul: Gür-ay Yayınevi.
- Akiş, E. (2011). Küreselleşme Sürecinde Bölgesel Kalkınma Yaklaşımındaki Gelişmeler ve Bölgesel Kalkınma Ajansları. *İstanbul Journal of Sociological Studies*, (44), 237-256. <https://dergipark.org.tr/en/download/article-file/101295>
- Akpınar, R. (2013). Türkiye'de Değişen Bölgesel Kalkınma Politikaları. *Karadeniz Sosyal Bilimler Dergisi*, 4(6), 29-46. <https://arastirmax.com/tr/system/files/dergiler/195525/makaleler/4/6/arastirmax-turkiyede-degisen-bolgesel-kalkinma-politikalari.pdf>

Alsaç, F. (2010). *Bölgesel Gelişme Aracı Olarak Kümelene Yaklaşımı Ve Türkiye İçin Kümelene Destek Modeli Önerisi*. (Yayınlanmamış DPT Uzmanlık Tezi). DPT Uzmanlık Tezleri, Ankara.

Arslan, İ. K. (2005). Bölgesel Kalkınma Farklılıklarının Giderilmesinde Etkin Bir Araç: Bölgesel Planlama ve Bölgesel Kalkınma Ajansları. İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi, 4(7), 275-294. <http://www.ajindex.com/dosyalar/makale/acarindex-1423905087.pdf>

Atmaca, Y. Ve Sağır, H. (2017). Avrupa Birliği Bölgesel Politikası ve Türkiye: Kalkınma Ajansları Bağlamında Bir Analiz. *Artvin Çoruh Üniversitesi Uluslararası Sosyal Bilimler Dergisi*, 3(2), 67-88. doi: <https://doi.org/10.22466/acusbd.304471>

Aydoğdu, Ç. (2010). *Kalkınma Ajansları ve Toplumsal Sermaye İlişkilerinde Stratejik Yaklaşım (İzmir Kalkınma Ajansı Örneği)* (Unpublished doctoral thesis). Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü.

Berber, M., & Çelepci, E. (2005). Türk Bölgesel Kalkınma Politikalarında Yeni Arayışlar: Kalkınma Ajansları ve Türkiye’de Uygulanabilirliği. *Doğu Karadeniz Bölgesel Kalkınma Sempozyumu*, 13-14.

Bilen, G. (2005). Avrupa Birliği’nde Bölgesel Politikalar ve Türkiye’nin Uyumu. *Dünya Gazetesi*, 18.

Çetin, M. (2007). Yerel Ekonomik Kalkınma Yaklaşımı ve Uluslararası Organizasyonlar. *Yönetim ve Ekonomi*, 14(1). <https://dergipark.org.tr/en/download/article-file/145943>

Dawkins, C. J. (2003). Regional Development Theory: Conceptual Foundations, Classic Works and Recent Developments. *Journal of Planning Literature*, 18(2). 131- 172. doi: <https://doi.org/10.1177/0885412203254706>

Demircan, E. S. (2008). Yeni Ekonomik Düzendeki Küreselleşme Yerelleşme Bağlamında Belediyelerde Yeni Mali Yönetim Anlayışı. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 30, 99-128. <https://dergipark.org.tr/en/download/article-file/66493>

Devlet Planlama Teşkilatı. (2000). *Sekizinci Beş Yıllık Kalkınma Planı Bölgesel Gelişme Özel İhtisas Komisyonu Raporu*. Report No: 2502. Ankara: DPT.

Dinler, Z. (2012). *Bölgesel İktisat*. Bursa: Ekin Kitapevi Yayınları.

European Commission (2014). *Regional Policy, Priorities For 2014-2020*, November, Belgium

Eraydın, A. (1983). Türkiye’de Ulusal Kalkınma Planlarının Bölgesel Ayırıştırılmasına Yönelik Bir Yaklaşım. *Anadolu Üniversitesi İİBF Yayınları*, 12.

Erol, E. D. (2012). Küresel Rekabet Sürecinde Bölgesel Kalkınma Ajanslarının Rolü. *Hukuk ve İktisat Araştırmaları Dergisi*, 4(1), 87-95. <https://dergipark.org.tr/en/download/article-file/85260>

Ersungur, Ş. M. (2016). *Bölgesel İktisat: Teori, Politika ve Uygulama*. Ankara: İmaj Yayınevi.

Güler, U. V. vd. (2011). Avrupa Birliği'nde Ve Türkiye'de Bölgesel Kalkınma Politikaları. 26. *Türkiye Maliye Sempozyumu*, Şanlıurfa, 2-5 Mayıs. http://www.maliyesempozyumu.org/wp-content/uploads/2017/10/Maliye-Sempozyumu_26_38_55.pdf

Gündüz, A. Y. (2006). *Bölgesel Kalkınma Politikası*. Bursa: Ekin Kitapevi Yayınları.

Hill, H. (1998). The Challenge of Regional Development in Indonesia. *Australian Journal of International Affairs*, 52(1), 19-34. <https://www.tandfonline.com/doi/pdf/10.1080/10357719808445235>

Ildırar, M. (2004). *Bölgesel Kalkınma ve Gelişme Stratejileri*. İstanbul: Nobel Yayınevi.

International Labour Organization (2003). *IDEASS (Initiative-Innovations for Development and South-South Cooperation)*, Geneva, September, http://www.ilo.org/dyn/empent/docs/F514423847/adel_eng.pdf (10.07.2006)

İnanöz, N., & Narın, M. (2017). Yerel İşletmelerin Markalaşma Sürecinde Sosyal Medyanın Rolü: Burhaniye ve Edremit Yerel Zeytin/Zeytinyağı İşletmeleri Örneği. *International Journal of Social and Economic Sciences*, 7(1), 52-56. <https://ijses.org/index.php/ijses/article/view/204/210>

İncekara, A., & Savrul, B. (2011). Bölgesel Kalkınma Politikaları ve Türkiye Açısından Bir Değerlendirme. *İstanbul Journal of Sociological Studies*, (44), 91-132. <https://dergipark.org.tr/en/download/article-file/101290>

Kadiroğlu, A., & Türko, E.S. (2018). Bölgesel kalkınma ajansı mali destek programlarından faydalanan işletmelerde proje süreci: KUDAKA örneği. *İşletme Ekonomi ve Yönetim Araştırmaları Dergisi*, 1(2), 34-53.

Kandemir, O., & Ergin, Ü. (2018). Bölgesel Gelişme Bağlamında Kalkınma Ajanslarının Faaliyetleri: TR82 Bölgesi (Kastamonu, Sinop, Çankırı) Örneği. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 7(4), 2646-2671. <https://dergipark.org.tr/en/download/article-file/589513>

Karakurt, E. (2004). Sivil Toplum Örgütleri ve Küresel Direniş Hareketleri İlişkisi. *Endüstri İlişkileri ve İnsan Kaynakları Dergisi*, 6(1). <http://www.isguc.org/?p=article&id=202&cilt=6&sayi=1&yil=2004>

Kayan, A. (2012). Türkiye’de Bölge Planlaması: Sorunlar ve Çözüm Önerileri/Regional Planning in Turkey: Problems And Solutions. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 9(20), 103-134. <https://dergipark.org.tr/en/download/article-file/183079>

Keleş, R. (2013). *Kentleşme Politikası*. Ankara: İmge Yayınevi.

Keskin, H., & Sungur, O. (2010). Bölgesel Politika Ekseninde Yaşanan Dönüşüm: Türkiye’de Kalkınma Planlarında Bölgesel Politikaların Değişimi. *Süleyman Demirel Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi*, 2010(21), 271-293. <https://dergipark.org.tr/en/download/article-file/117935>

Kılınç, E. (2016). Küreselleşme Sürecinde Yerel Ekonomik Kalkınma: Gaziantep Örneği. *Uluslararası Ekonomik Araştırmalar Dergisi*, 2(1), 1-18. <https://dergipark.org.tr/en/download/article-file/792787>

Köse, Ö. (2003). Küreselleşme Sürecinde Devletin Yapısal ve İşlevsel Dönüşümü. *Sayıştay Dergisi*, 49(3), 3-46.

Kuran, İ. (2019). *Kalkınma Ajanslarının Kurumsal Sorunları Ve Çözümlerine İlişkin Ampirik Analiz: Türkiye Örneği*. (Unpublished doctoral thesis). İstanbul Üniversitesi Sosyal Bilimler Enstitüsü.

Kutlutürk, D. S., & Orhan, A. (2021). Bölgesel Kalkınma Ajanslarının Etkinliği: Doğu Marmara Kalkınma Ajansı (MARKA) ve Çukurova Kalkınma Ajansı (ÇKA). *Hukuk ve İktisat Araştırmaları Dergisi*, 13(2), 210-244. doi: <https://doi.org/10.53881/hiad.1030220>

Küçüköğlü, M. (2005). *Vergisel Teşviklerin Bölgesel Kalkınmadaki Rolü: Güneydoğu Anadolu Bölgesi Üzerine Bir Uygulama*. (Unpublished doctoral thesis). Bursa: Uludağ Üniversitesi Sosyal Bilimler Enstitüsü.

Olgun, H. (2007). Türkiye’de Büyükşehir Belediyelerine Küre-Yerelleşme (Glocalisation) ve Yerellik (Subsidiarity) Kavramları Çerçevesinde Bir Bakış. *Sosyoekonomi*, 5(5), 109-118. <https://dergipark.org.tr/en/download/article-file/197611>

Öcal, F. M., Darıcı, B., & Okyar, M. C. (2014). Şırnak sanayi sektöründe faaliyet gösteren firmaların sahiplerinin sosyo-kültürel açıdan incelenmesi: 2011. *Kilis 7 Aralık Üniversitesi Sosyal Bilimler Dergisi*, 1(2), 57-74. <https://dergipark.org.tr/en/download/article-file/717513>

Özdemir, K. (1999). Bölgesel Kalkınma Politikaları ve Türkiye’de Bölgesel Dengesizliği Azaltmada Teşvik Uygulamalarının Önemi. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, (15), 121-126. <https://dergipark.org.tr/en/download/article-file/508425>

Özel, M. (2009). Avrupa Birliği'ne Uyum Sürecinde Türkiye'de Bölgelerarası Dengesizlik ve Yeni Yönetmelik Birim Arayışları. *Ankara Üniversitesi SBF Dergisi*, 64(01), 165-199. doi: https://doi.org/10.1501/SBFder_0000002091

Özker, A. N., & Biniş, M. (2010). Vergi Uygulamalarında Bölgesel Kalkınma Hedefleri ve Bölgesel Mali Teşvikler Açısından Değerlendirilmesi. *Sosyal Ekonomik Araştırmalar Dergisi*, 10(19), 491-508. <https://dergipark.org.tr/en/download/article-file/289181>

Pehlivan, P. (2013). Türkiye'de Kalkınma Ajanslarının Yerel Ekonomi Üzerine Etkileri: Zafer Kalkınma Ajansı Örneği. *Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*, 11(03), 412-439. <https://dergipark.org.tr/en/download/article-file/45779>

Planning Commission (2005). *Report of the Inter-Ministry Task Group on Redressing Growing Regional Imbalances*. Government of India, New Delhi.

Raheem, W. M., Oyeleye, O. I., Adeniji, M. A., & Aladekoyi, O. C. (2014). Regional Imbalances and Inequalities in Nigeria: Causes, Consequences and Remedies. *Research on Humanities and Social Sciences*, 4(18), 163-174.

Rodriguez-Pose, A. (2001) *The Role of the ILO in Implementing Local Economic Development Strategies in a Globalising World*. Geneva: ILO.

Sevinç, H. (2011). Bölgesel Kalkınma Sorunsalı: Türkiye'de Uygulanan Bölgesel Kalkınma Politikaları. *Girişimcilik ve Kalkınma Dergisi*, (6:2), 35-54. <http://acikerisim.comu.edu.tr/xmlui/handle/20.500.12428/370>

Stilwell, F. J. B. (1972) *Regional Economic Policy*, London: The Macmillian Press.

Soja, E. W. (2009). Regional Planning and Development Theories. *International Encyclopedia of Human Geography*, 259-270.

Soyak, A. (2003). Türkiye'de İktisadi Planlama: Devlet Planlama Teşkilatına İhtiyaç Var mı?. *Doğuş Üniversitesi Dergisi*, 4(2), 167-182. <https://ideas.repec.org/p/pram/prapa/2906.html?pagewanted=all>

Taylan, A., & Topçu, K. D. (2015). Küreselleşme-Yerelleşme Ekseninde Yerellik Olgusu Ve Kimlik. 9(12), 34-41. <http://www.konyamimod.org.tr/upload/files/mimaran-no12.pdf#page=35>

Türko, E.S., & Kadiroğlu, A. (2017). Yerel ekonomik kalkınma ve ihracat: Erzurum ilinde bir uygulama. *The Journal of Academic Social Sciences*, 5(57), 76-99. <http://dx.doi.org/10.16992/ASOS.12862>

TÜSİAD (2008). *Türkiye'de Bölgesel Farklar ve Politikalar*, Eylül 2008, (Report No. TÜSİAD-T/2008-09/471).

Yellice, B., & Türko, E.S. (2023). Theoretical framework of clustering concept in regional economics. In Y.A. Ünvan (Ed.), *Recent Advances in Economics and Administration Sciences Concepts, Researches and Applications* (pp. 103-134), Lyon, France: Livre de Lyon. https://bookchapter.org/kitaplar/Recent_Advances_in_Economics_and_ad_.pdf

Yıldırım, N. (1998). *Türkiye'nin Gelişme Sürecinde Devlet Planlama Teşkilatı*. (Unpublished Doctoral dissertation), Marmara University Institute of Social Sciences.

CHAPTER II

EFFICIENCY OF PIGOU TAX IN THE DISTRIBUTION OF RESOURCES AND POSSIBLE DEFLECTIONS IN PIGOUVIAN TAX TARGETS

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1. Introduction

The Pigou tax, coined after the eminent British economist Arthur Cecil Pigou (1877-1959), encompasses a set of financial strategies that hold paramount importance in mitigating negative externalities by means of taxation, particularly in the realm of resource allocation and market production. Specifically tailored for developing nations, the efficaciousness of the Pigou tax lies in its endeavor to rectify market failures stemming from suboptimal resource allocation while internalizing the costs associated with information asymmetry, thus fostering a balanced sector-specific distribution of resources. The Pigou tax assumes an integral role in driving structural transformations, wherein it engenders a discernible and substantive influence over public resources, transcending the temporal boundaries within which negative externalities are acutely salient. Although conventionally perceived as a wellspring of public financial reserves, it also exhibits a nuanced framework that endows it with pertinence within the realms of resource apportionment, particularly during the production and consumption phases (Daubanes & Lasserre, 2011: 12).

Undoubtedly, the most crucial approach to understanding the Pigou tax can provide market price balances by providing an absolute production balance in

the distribution of production factors based on sectors. This approach based on the private sector towards providing all kinds of goods and services also brings a negative externality process directly related to the public sector to the agenda. However, in today's practices, Pigou tax mostly refers to a structure in which the effects of the production and consumption phase of the private sector, as well as some negative external structures that may arise from the public sector, are put into the background (Blomquist & Christiansen, 2008: 223-224). On the other hand, it is also observed that the concreteness of the Pigou tax has an important effect on making the fiscal structural elements that emerge with different values meaningful with different structural values that can be understood at a different level. On the other hand, one of its most important features is that there is no market price formation in which the Pigou tax is included in the production process costs, that is, this tax is not reflected in the market prices. In other words, this requirement frequently raises the issue that the Pigou tax should not be included in market prices, especially regarding environmental policies. In other words, preventing the reflection of Pigou tax means that it should be emphasized that the effectiveness of a Pigou tax should not be reflected to the consumers by including it in a production cost that can be used as a tax in such a case. Therefore, as always, a Pigou tax has taken its place on the agenda as a cost policy that can provide an equal distribution of negative externalities related to the production of goods and services, which can be expressed with some keywords on the society and sectors as a financial burden in an equal cost distribution based on costs for social policies.

In the opposite situation, the possibility of the Pigou tax turning into a structure that expresses a loss of efficiency that may create a disadvantage in research within the scope of cost transactions theory may mean that the Pigou tax may turn into an undesired structure. This fact means that fiscal structure can turn into a significant disadvantage based on the Pigou tax applications (Kosonen & Nicodème, 2009: 7). In this context, the fact that the Pigou tax effect takes place in the process with a factual effect, also known as the "Real Balance Effect", can also be considered a structural change model that acts with the approach of any increase or decrease. Therefore, it should be emphasized that the main argument that Pigou differs from a Keynesian fiscal policy is based on the critical that there is no relationship between current economic-fiscal real balances and current consumption. To the Pigou tax, this approach represents structural integrity added to the marginal private costs as a tax, in other words, a separate tax for cost-individualization with the internalization of the equilibrium

at a point where the marginal private benefit is equal to marginal private costs and providing an optimal social value in the taxation process (Mooij & Devereux 2009: 21). In this respect, it shows that the structural values related to environmental taxes and corporate sensitivities have a place in the process, with a phenomenon that draws attention to the pay-as-you-throw, especially in ecological relations in local governments.

2. The Structural of Pigou Tax and Analysis of Impact Position Variability in Practices

Although the Pigou tax has an important place in processes that emphasize environmentally sensitive corporate practices, it is considered far from being an effective source of public revenue. In other words, although the Pigou tax creates a trim level of financial contribution as public income, it can still be said that there is an absolute existence of a small contribution value towards welfare expectations in the public sense. Despite all this, it is essential to consider the additional payments that may arise with the right to pollute and purchase as a tax element (Fullerton & Wolverton, 2005: 1964).

2.1. Structural Position of Pigou Tax and the Expected Economic Impact Components Process

Pigou tax applications, which can also be expressed as commercial permits, reveal that some of the permits' usage rights and negative environmental impact values are described through a mutual production process that can be balanced with some of the traded structural values. This factor balances the deviations in the marginal cost and benefit balances related to their proportion in the market, especially the deviation from the social optimality where the marginal costs are high, with taxes, the central theme of the Pigou tax and the expected impact scales (Nerudova et al, 2019: 1702).

The issue to be considered here is the possibility, in particular, that the revenues are typically much greater than the benefits achieved. This situation regarding public expectations may become a process far from the approach that marginal costs can be balanced with taxes in the relevant procedure and may turn into a higher tax burden perception (Cottarelli, 2010: 9). The fact that the tax revenues that may arise, mainly when reflected on the consumers in the use of the environment, are significant compared to the net benefit also necessitates a standard balance policy regarding the acceptability of the main determining

biases and mechanisms based on financial incentives. In this context, the Pigou tax can be shaped to balance social costs, environmental pollution and indirect and direct costs, especially with typical examples of trade and related taxes, with some practices such as traffic congestion, gasoline taxes, and road tolls.

Especially for developing countries, this points to the rationale for applying Pigou taxes as a countervailing effect to avoid potential high tax releases or their operating costs. However, when it comes to perceived costs, it should be pointed out that the undetected marginal costs, which are not perceived to have a tangible value, are again included in the process with tax, creating a tax reflection. In particular, the recommendation for unpaid leave appears as an expression of a process in which the Pigou tax is ineffective, with an approach that companies make big profits in some markets, especially in markets where demand is inelastic. However, it is understood that the taxation arising from the power plants corresponding to the emissions included in the European Union Emissions and Trade program makes the existence of the Pigou tax inevitable in a structure where marginal social costs and personal costs. This phenomenon is included in the process as opportunity costs and energy power plants. In this context, concerning policies for individuals, social rights as essential determinants of these policies in terms of monetary and environmental consequences, as well as based on companies, especially with a sectoral approach based on the energy sector, Pigou has made the tax a more meaningful tax application in terms of social expectations (Schwert & Seguin, 1993: 29).

Looking at the subject from another perspective, it can be said that the taxes paid on a factual basis, especially within the scope of the environmental obligation of energy users, create a more developing incentive effect and transfer an essential resource to the energy sector. In this context, this fact also means a common balance point where financial wealth obtained from consumers and companies within the European Union Emissions Trade Plan framework is transferred to the energy sector and most of the possible costs of the energy sector are shared with consumers. In other words, it is understood that the issue of how a Pigou tax will create a perception of the tax burden in terms of consumers or producers comes to the fore (Perotti & Suarez, 2011: 16). If the tax is levied on consumers as Pigou tax, consumers who do not expect to receive any share from the income will act with a strong self-interest motive to oppose the tax. In this situation, consumers tend to have a self-interested but more social benefit to support the tax, especially considering equal shares.

Pigou tax, especially in an absolute process where producers and consumers are in different facts, tax liability will gain effectiveness with a more increased mutual benefit phenomenon arising from reduced negative externalities between consumers and producers. Therefore, the Pigou tax will take place in the process as a combination of consumers who will benefit financially from tax and consumers who will lose financially from possible tax but will gain socially. The net benefit is more significant as a social benefit in converting tax revenues to a net benefit (OECD, 2011: 6). However, the extent to which the use of income will create an incentive for taxation also reveals an essential contradiction in the Pigou tax. Suppose there is no prejudice due to a possible independent corporate-fiscal status quo. In that case, it is evident that the social benefit obtained from using revenues will come to the forefront in implementing the relevant tax and a more significant benefit. This approach in the Pigou tax practices will put forth a more rational approach via the increased potential social use that will turn into balancing the negative externals.

In the given context, the opposition posed by consumer or producer groups towards an additional tax, such as the Pigou tax, signifies the potential engagement of mechanisms involving interest rates and fiscal incentives within an alternative structural process aimed at mitigating the associated costs with specific implications (Olivier & Korinek, 2010: 23). Nevertheless, this reality falls short of an acceptable rational framework in line with the anticipated effects of the Pigou tax. Consequently, the most critical deliberations surrounding the Pigou tax centre on an impact structure that prominently places producers at the forefront, particularly within a market scenario where potential transactions between producers and consumers are brought into question. It is worth noting that the inclusion of commercial and usage permits, mentioned as prospective tax options in previous discussions, introduces an additional cost element. The requirement of permits for these costs highlights the inherent contradiction in the utilization of meaningful tax practices. Furthermore, each variant of the Pigou tax, encompassing fuel taxes, traffic congestion charges, road tolls, and energy usage levies, entails transaction costs as an integral component, extending their influence to encompass personal household transactions. Consequently, the potential deviations in balancing the tax burden towards achieving a rational social benefit, considering both production and transaction costs, emphasize the indispensable relationship between the Pigou tax and other complementary tax measures, as well as the overall coherence of their implementation (United Nations, 2022: 16-17).

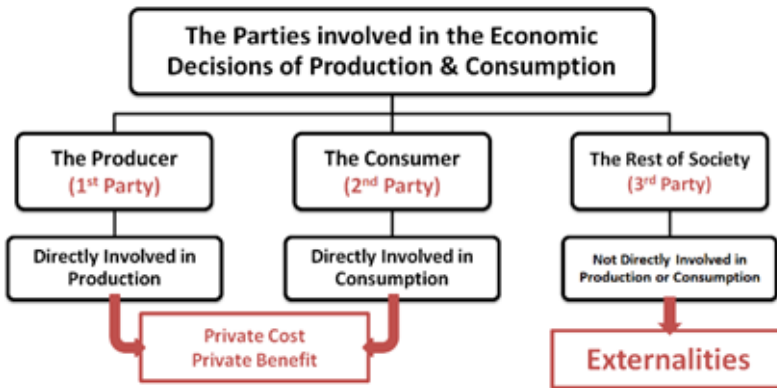
2.2. Impact Components Relationship in Pigou Tax Process and Aimed Net Benefit Balance Analytical

The Pigou tax operates within economic scarcity and demand processes, exerting a direct influence on taxation through mutual interactions among relevant parties. It entails a dynamic framework where producers and consumers play a pivotal role in shaping economic decisions, fostering a market environment conducive to a broad spectrum of decision-making processes beyond production and consumption. This inclusive configuration encompasses the involvement of third parties, encapsulating diverse societal stakeholders in multifarious decision-making spheres. Consequently, the tax's foundational infrastructure rests upon the bedrock of specific costs and benefits associated with the production process, wherein indirect participation of consumption and production proponents is observed (Sanin et al, 2015: 328).

This approach has engendered considerable deliberation surrounding the appropriate economic structure of the Pigou tax. The tax, designed to mitigate society's social costs and address both production and consumption realms, assumes an indispensability in internalizing potential negative externalities within the production process or curbing undesirable externality effects within the consumption stage (Reguant, 2019: 133-134). Hence, the equitable distribution of distinctive costs and benefits that imbue the pertinent economic process assumes the guise of a structure endeavoring to achieve a delicate equilibrium via a decision tax, thereby ameliorating plausible social costs. This construct engenders an optimal externality balance through calibrated tax rates, whereby escalating marginal costs meld with a fixed tax rate, particularly in the context of social entities positioned as third parties. Such a balance manifests as an equilibrium point, embodied by the notion of a Pigou tax replete with an ideal tax rate and the unit cost associated with an immaculate production-consumption quantum. Consequently, the objective lies in accentuating the tax's primacy by instituting an efficiency mechanism that engages the remaining societal factions.

This mechanism strives to reconcile private costs with private benefits, chiefly during the emergence of costs, wherein personal benefits eclipsing private costs necessitate profound emphasis. Here, taxation aims to balance the possible rise of private benefits in the production and consumption stages with increasing social costs and to provide an optimal favorable social position by internalizing negative social costs. This constraint in the production and consumption process constitutes the constraint analytics of the Pigou tax. The Pigou tax embodies a

principle striving to orchestrate a symbiotic interplay between costs and benefits across a tripartite framework comprising involved stakeholders. Moreover, it endeavors to harmonize producers' and consumers' cost-benefit dynamics within the economic cycle while considering wider social ramifications (Woollacott, 2018: 8-9). To illustrate the structural components of the production and consumption phases and the consequential interplay of externalities constituting the bedrock of the Pigou tax, Figure 1 provides a visual representation of the intricate web of interdependencies characterizing these phenomena:



Source: Economicsonline (2020), *Pigouvian Tax: What is a Pigouvian Tax?*, https://www.economicsonline.co.uk/definitions/pigouvian_taxes.html/ (Accessed June, 01.2023).

Figure 1. The Mutual Structural Relation of Costs and Benefits in the Production and Consumption Process

Figure 1, depicted above, illustrates that the primary drivers within the economic process revolve around production and consumption. These transactions establish a delicate equilibrium between supply and demand, resulting in a distribution of factors where personal benefits outweigh personal costs. However, while this structure fosters a balance in factor distribution in terms of supply and demand, it also gives rise to negative externalities that impact factor distribution across all social structures within the market, affecting social balances and costs. Despite the increased recognition of individual profits and productivity, such a situation can also reveal potential positive structural impacts, mitigating market failures by positively influencing factor distribution balances as a third equilibrium element through internalising negative externalities within the production-consumption margins (Yusuf & Resosudarmo, 2015: 142).

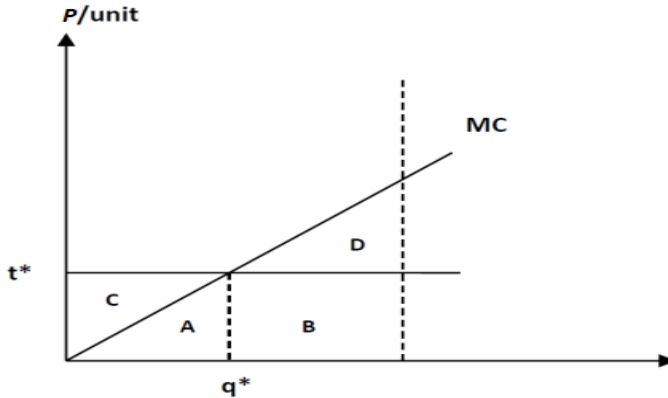
This observation implies an approach that aims to maintain social costs at an acceptable level within society as a whole and achieve the distribution of cost factors throughout the entire society through a favourable socioeconomic compromise that supports the markets. In this regard, it becomes evident that the key factor in balancing the external costs imposed on society as a third party is to increase or stabilize the measure of social welfare while simultaneously achieving social factor distributions. This fiscal phenomenon would contribute to improvements geared towards achieving an even higher market equilibrium. Furthermore, the pursuit of market equilibrium through the distribution of production factors within a balanced market becomes an element of social benefit and positive externalities. However, this can only be achieved through a targeted factor distribution, resulting in a positive social equilibrium that influences socioeconomic components.

3. Analytical Equilibrium of The Pigou Tax and Dynamics of Marginal Cost-Benefit Equilibrium Changes

Within this context, the positive impact of sector-specific support in terms of factor resource distributions becomes significant, leading to a common equilibrium point where the costs for both the production and consumption sectors decrease. At this juncture, the crucial question arises regarding analysing at what level a Pigou tax regime can generate unit costs and where an ideal position for the Pigou tax can be established in a pre-tax and post-tax scenario that can be balanced with the aforementioned as based on the marginal costs.

3.1. Potential Balances in the Process of Marginal Cost-Marginal Benefit Balance Changes

This ongoing adverse process in Region D implies that within this realm of expanding production levels, the additional tax costs combined with potential marginal expenses create an impact that counteracts negative externalities. This phenomenon, which engenders controversy concerning the ideal Pigou tax, is also put forth as a structural examination of the equivalence in financial decision effects, particularly regarding the tax's capacity to generate distinct cost effects based on unit prices. Figure 2 below shows the equilibrium preferences of possible marginal costs and production-consumption equilibrium where the tax rate for negative externalities (or tax cost as unit price) is fixed:



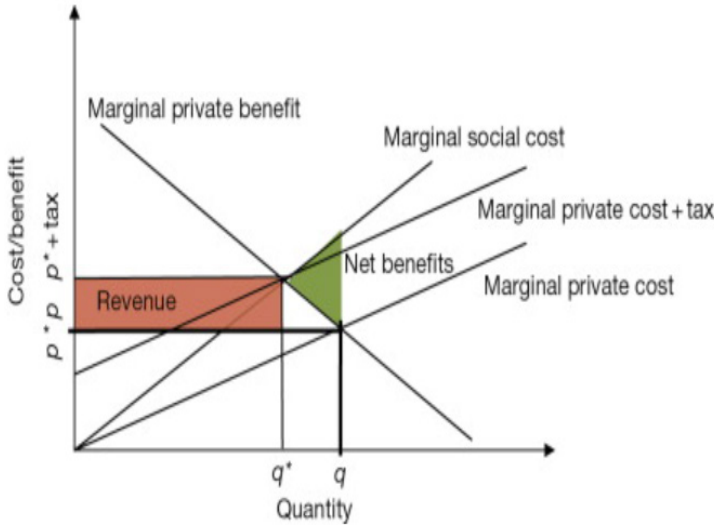
Source: Christina Oh & Gert Tinggaard Svendsen (2015). “Command-And-Control or Taxation? The Cases of Water Regulation in California and Denmark”, *Environmental Management and Sustainable Development*, 4(2), p. 144.

Figure 2. Ideal Position of Pigou Tax with Target Consumption Amount for Social Costs

The ideal Pigou tax can be traced in Figure 2 above. It is characterized by a significant equilibrium point with fixed unit tax costs and marginal costs. At this equilibrium point, production and consumption continue due to the low production costs in regions C and A. This continues until the tax equals the costs of production and consumption. However, this equilibrium point is compromised beyond a certain threshold as the increasing tax costs and increasing quantity in region B yield deteriorating marginal costs. This indicates that tax efficiency increases beyond the initial ideal equilibrium point of a Pigou tax with increasing marginal costs.

It is important to note that the unit costs, including taxes, incurred by each unit of production and consumption in regions A and C, remain lower than the equivalent unit tax cost in production and consumption. This yields higher benefit values compared to marginal benefit values. Thus, an ongoing profitable state is observed. In the context of escalating production and consumption, a situation arises in Region D whereby financial penalties and intervention measures manifest subsequent to the upsurge in marginal costs due to an increase in the Pigou tax. In this regard, an essential approach to expressing the efficiency of a Pigou tax in an implementation process can be expressed as a process in which the balance between marginal costs and marginal private benefits is in question. Namely, personal private marginal costs increased due to tax application effects

and via probably the increased tax ratios. Figure 3 below represents a position where increased marginal costs after the Pigou tax can create an equivalent new equilibrium point:



Source: ScienceDirect (2013). *Pigouvian Tax: Environment*, <https://www.sciencedirect.com/topics/economics-econometrics-and-finance/pigouvian-tax> (Accessed Jun, 01.2023).

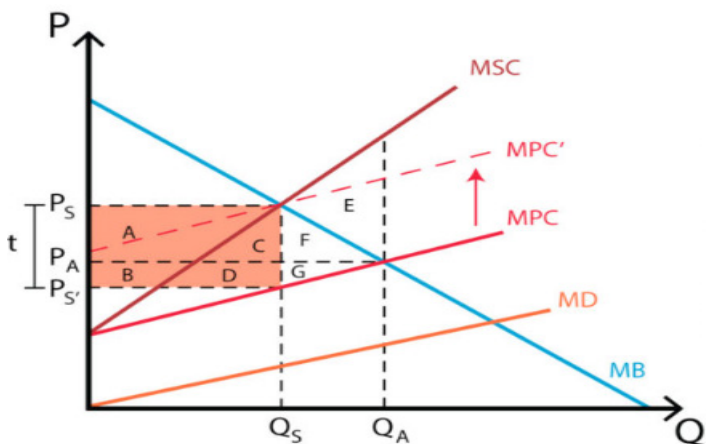
Figure 3. Net Benefit Effect of Pigou Tax in Terms of Marginal Benefit and Marginal Cost Analysis

As seen in Figure 3 above, this position, where marginal social-private benefits increase with the increase in tax costs in the production and consumption process, can also create deviations in the balance of benefit values. This phenomenon affects the distribution of economic factor elements due to the shrinking marginal private costs. It is important to note that, beyond the net benefit of this process, the reduction in quantities creates a certain level of public income and a significant positive emphasis on the net social benefit scales, which increase with the reduction of social costs. This social benefit also means a favourable economic factor distribution in which the net benefit scale has increased after the increase in the Pigou tax.

On the other hand, when this phenomenon is evaluated in terms of social costs, it can create public justifications for an intrusive position where every part of production and consumption can be balanced, especially with price increases, in a balance where social costs reduce net social benefits. On the other

hand, a structure in which market prices increase due to reduced production and consumption limits based on negative externalities undoubtedly creates an increasing resource effect on public income. It is important to note that this phenomenon, which cannot be ignored within the scope of target policies, will create social policy support for increasing public finance due to increasing tax limits, again for social welfare purposes. This situation will create a positive basis for a balanced factorial distribution that can increase net social benefits, albeit indirectly, with the possible sectorial support effect, and also make it meaningful to control social costs. This situation, which is also a matter of discussion regarding economic factor distribution, makes the fact that a net social benefit can be obtained for reducing social costs by increasing the private benefits and costs. This is with the level of public income obtained as tax revenue at the possible new equilibrium point.

Implementing the Pigou tax entails a central focus on attaining after-tax income, mainly by considering offsetting marginal social costs. Determining the tax amount becomes significant, particularly in relation to deviations in production and consumption, as well as the equitable distribution of the tax burden between these two dimensions. Consequently, applying the Pigou tax also leads to a noteworthy production deviation linked to maintaining overall marginal cost integrity, especially when the increase in marginal production margins is effectively balanced with marginal social costs (Morris et al, 2012: 328). The tax burden distribution associated with this production deviation forms the foundation for understanding the aforementioned production constraint. Figure 4, presented below, put forth as an illustrative representation of this phenomenon, demonstrating the equilibrium position where the costs arising from marginal externalities transform into collective social costs:



Source: Policonomics (2017). *Pigouvian Tax*, <https://policonomics.com/pigouvian-tax/> (Accessed June, 01.2023).

Figure 4. Pigou Tax on the Market Prices and Sharing of Social Costs in the Production Process

The distinction between Figure 4 presented above and Figure 3, which precedes it, lies in its explicit depiction of the assessment of how the tax burdens will be shared between producers and consumers in a post-tax scenario. This analysis can also be elucidated through the examination of the demand curve (or the marginal utility curve) of a specific structure located in areas that generate marginal utility. In the case of equilibrium at point Q_A , particularly in terms of marginal social costs, the imposition of a new tax position upon marginal private costs reveals that the new equilibrium position Q_S is also in equilibrium with the externalities it has engendered related to social costs. Although this equilibrium position at Q_S has indeed resulted in significant tax revenue between prices P and P' , adopting a special approach, the primary question pertains to how the tax distribution in the shaded areas relating to the deviation values between producers and consumers will change subsequent to the implementation of a Pigou tax.

This fiscal phenomenon necessitates analysis, as it creates a tax burden due to the Pigou tax, resulting in a decrease in the producer surplus area compared to the combined $B+D+G$ areas, while also experiencing a decrease itself. In this regard, it becomes evident that this situation will generate tax revenue equal to the darkened area $A+B+C+D$. However, the issue lies in how this area will impact the balance of production factor income between producers and consumers, concerning the distribution of economic factors. Aside from

excluding areas F+G from this consideration, given their association with consumption and production surplus, and incorporating the triangular area E, representing a net positive social balance, into this scenario, a tax paid by consumers equivalent to areas A+C+F becomes significant, while areas F+G reflect the positive externalities.

Conversely, this positioning of the externality causes the after-tax areas to expand as the B+D+G area within the region of marginal production costs, particularly in shaping certain structural values for producers. The fact that the consumer bears a greater tax burden places the producer in a more advantageous position with respect to the distribution of production factors and increases the financial resilience of tax-contracting producers. However, it is evident that a structural arrangement where consumers bear the tax burden to the extent of areas A+C will result in a significant reduction in consumer surplus, while also negatively impacting the distribution of production factor incomes. This reality, occurring after the A+B+C areas within the surplus of production and consumption, constitutes the balance of income.

In this regard, particularly concerning the Pigou tax, in interpreting this matter, the new balance based on the marginal utility curve entails the division of the Pigou tax between producers and consumers, as expressed in the total marginal social costs at point Qs. It is worth emphasizing that the taxation of externalities arising from all forms of value that may emerge during the production phase and the reduction of production to the quantity of Qs can lead to a financial phenomenon wherein the increased tax burden resulting from the Pigou tax. In this location, the Pigou tax is more heavily borne by consumers rather than production units. Undoubtedly, this process can also be interpreted as an analysis of the escalating tax burden on consumers, as well as a situation where socio-economic factor distribution are adversely affected to a greater extent (Kumari et al, 2021: 3-4).

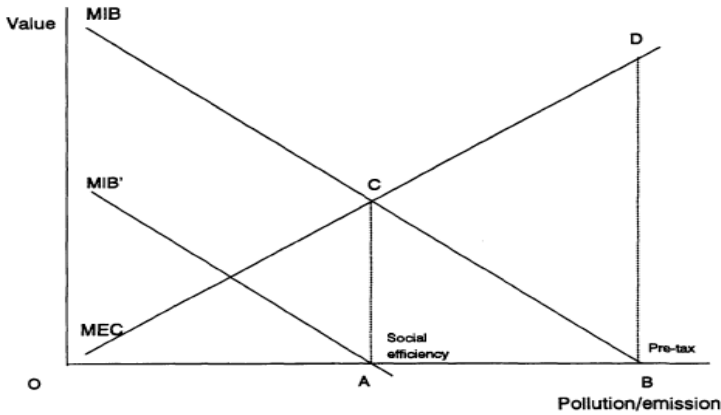
3.2. The Pigou Tax in Dispersion of Factorial Resources, and Its Social Cost Balances Relation

The structural implications of the Pigou tax on impact values can be comprehended through a comprehensive analysis of marginal personal benefits, particularly within the framework of the marginal internal benefit (MIB) position. Consequently, the effects of a potential Pigou tax on the allocation of factorial resources, particularly pertaining to environmental pollution and carbon emissions, can be expressed by comparing the pre-tax and post-tax

scenarios within the realm of environmental policy (Daugbjerg & Svendsen, 2003: 78). Designing green taxes in a political.

This approach towards structural change assumes paramount significance, primarily due to the emergence of novel impact values resulting from the contraction of marginal personal benefits, thereby signifying the novel equilibrium point within the impact value of marginal external benefits subsequent to taxation, and the subsequent attainment. This means occurred by the variable emission level thresholds intended for both social cost efficiency and resource allocation.

Notably, this phenomenon, which manifests as a reduction in the derived benefit values, establishes targets aimed at mitigating potential social costs associated with the environment through the instrumentality of taxation, particularly within the ambit of environmental policies, while directly influencing the distribution of economic resources (Rogers et al, 2002: 12-13). Elucidating the potential tax effects on resource allocation within the context of public decision-making processes increases the salience of addressing production-related risks in the marginal negative external process as related to indirect tax applications. However, it would make clearly discernible that the dormant state of incomplete distribution of production resources factors within the utilization of this plausible secondary optimal scenario concerning the production of goods and services permeates the process, thereby yielding a discernible negative impact increasingly. In this context, as depicted in Figure 5 below, the incorporation of a comprehensive structure encompassing the management costs of financial control policies, often characterized as structural fiscal policies, elucidates the levels of social efficiency germane to benefit-cost analyses, significantly influencing resource allocation:



Source: Ronald T. McMorran and David C.L. Nellor (1994), *Tax Policy and the Environment Theory and Practice*, IMF Working Paper, WP/94/106, Washington D. C.: International Monetary Fund (IMF) Fiscal Affairs Department, 1994, p. 2a.

Figure 5. The Location of Social Activity and Factorial Benefit Distribution Before and After the Pigou Tax

The analysis presented in Figure 5 above elucidates that the fundamental objective of the Pigou tax resides in generating a tax effect characterized by minimal costs, particularly within the domain of environmental policies, while simultaneously maximizing social benefit efficiency. This phenomenon also entails a transformative process that impinges upon the distribution of factorial resources, whereby the elevation of social welfare levels coincides with the reduction of resource costs for social benefits and the amplification of social benefits. Within this context, it becomes apparent that enterprises capable of adapting with minimal costs engender a distribution of factorial resources that exerts a profound impact on social benefit values, specifically in terms of pollution reduction (Watkiss, 2006).

Conversely, this phenomenon illuminates the necessity for enterprises to engage in resource allocation practices that incentivize cost reduction, particularly with respect to social efficiency. As exemplified in the aforementioned figure, the diminution of waste emission values from point A is facilitated by alterations in input costs and the incorporation of novel technologies that effectively curtail environmental pollution at a minimal expense, thereby assuming a pivotal role in the process of resource allocation as an amalgamation of investment endeavours (Barr, 2010: 847 and 855).

Consequently, the emission values and environmental tax positioning of enterprises, along with their subsidiary entities, necessitate resource allocations

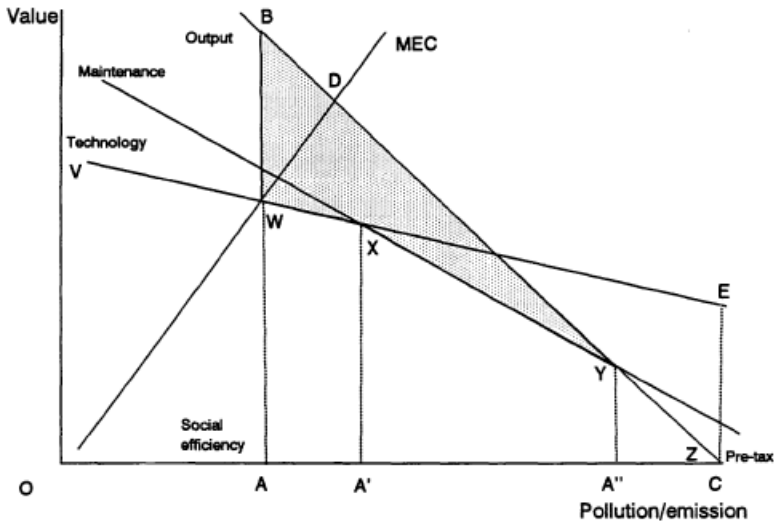
that contribute to enhancing their activities while striving to harmonize with the Pigou tax. The favorable repercussions ensuing from this endeavor, which are predicated upon the mitigation of detrimental environmental activities, entail an augmentation of social benefits and an imperative need for investments in catalytic converters, thereby necessitating novel allocations of factorial resources. The transition from point B to point A, resulting from the application of the Pigou tax, signifies the transference of negative externalities and concomitant reduction in the internal private utility of produced goods. Nevertheless, this transformation engenders a social equilibrium between costs and benefits wherein the negative externality diminishes as resource allocation.

This particular reality, which is embedded within the production and consumption processes, engenders a socially beneficial effect. In this context, the post-tax position between producers and consumers, wherein the Pigou tax assumes a role, reflects a harmonized distribution of factorial resources in consonance with social benefit scales (Eriksen & Kelly, 2007: 498-499). Hence, the implementation of a Pigou tax, particularly within the realm of environmental taxes, encompasses a structural framework wherein the imposition of taxes on production inputs or consumption goods yields a positive social factor effect, notwithstanding the weakened levels of direct efficiency following taxation.

The elevation of personal internal marginal benefit values, accompanied by escalating social costs in the pre-tax scenario, internalizes the marginal external costs at point A, where tax efficiency is achieved, thereby deviating from the preceding equilibrium point C. This intricate process operates through an exceptionally effective mechanism this process is characterized by an approach to zero effect. Thereby engendering substantial economic and political implications vis-à-vis the distribution of social-economic resources (Gallhofer & Haslam, 2007: 638).

The phenomenon of resource allocation related to the implementation of the Pigou tax also creates significant effects with an impact value that can be achieved with indirect taxes as well. This phenomenon, which is in question with indirect taxes, can create an important impact scale with the effectiveness of social-economic resource distribution in the process. Especially when environmental taxes are considered, the Pigou tax, as an indirect environmental tax, has an important place in the case of balancing the possible negative environmental externalities related to the use of production inputs in terms of social costs (Çelik et al, 2019: 2). This indirect approach to reducing negative externalities can also create a certain balance point with a production cut as a

result of increasing input costs and the division of factorial income distribution towards the production part in order to reach a socially efficient level in emission processes. Undoubtedly, the effective point here is the Pigou tax, which has a possible increase in increase in input costs. In Figure 6 below, it is possible to monitor the social balance position created by an indirect tax as Pigou tax in terms of the distribution of production factors:



Source: Ronald T. McMorran and David C.L. Nellor (1994), *Tax Policy and the Environment Theory and Practice*, IMF Working Paper, WP/94/106, Washington D. C.: International Monetary Fund (IMF) Fiscal Affairs Department, 1994, p. 4a.

Figure 6. Indirect Taxation Effects and the Pigou Tax on Social Costs and Resource Distribution

As depicted in Figure 6 above, the empirical analysis reveals that the implementation of the Pigou tax yields a substantial resource allocation effect, specifically about the indirect repercussions of such a tax, particularly within the framework of indirect taxation. This phenomenon exemplifies the significant impact that indirect environmental taxes have on resource allocation, which stems from judicious policy measures aimed at optimizing the underlying productivity dynamics. The objective is to further enhance the overall level of social efficiency, particularly in mitigating the negative externalities associated with environmental degradation.

With regard to environmental taxes, a complex process unfolds whereby the fundamental state of efficiency, seeking to establish a state of equilibrium using taxation, becomes intricately entwined with the amplification of resource

utilization. The equilibrium point of marginal external costs, as illustrated in Figure 6, is anchored in the intricate interplay between taxation and resource allocation that transpires after the pre-tax condition. In a context where equilibrium is achieved at point A, representing a harmonized equilibrium between output activities and social endeavours, the prevailing technological framework renders productivity susceptible to decline. However, the situation at point W, corresponding to the equilibrium position, is predominantly influenced by the intricate interrelationship between the technological structure and factor distribution (Matthews & Lave, 2000: 1392).

This interplay engenders a positive ripple effect throughout the system, increasing current output values. The focal point here lies in elucidating the salient impact of the Pigou tax on resource distribution within a context where it is applied directly as a tax, as opposed to an indirect tax. This particular circumstance entails a distinct process engenders an indirect effect mechanism, deviating from the modus operandi of indirectly applied taxes. This approach to indirect taxes aims to prevent environmental damage and other negative externalities after using these materials by taxing inputs for production in the production process. This incentive approach of indirect taxes finds a place in the application via price incentives to change producer and consumer behaviour.

Thus, it is aimed at increasing the level of social efficiency. However, the baseline productivity situation targeted by indirect taxes for negative externalities generally lowers efficiency levels in using these taxes. In other words, the utilization of a Pigou tax and an indirect environmental tax gives rise to a process whereby an indirect effect is crafted, separate from the realm of Pigou tax implementation. Examining Figure 6, examining the social efficiency of an indirect environmental tax and a Pigou tax, unveils two consequential effects of paramount importance on resource allocation, particularly regarding efficiency and sustainability.

The first is finding constitutes the first among its peers, as it suggests that employing an indirect environmental tax, distinct from the Pigou tax, might entail higher costs and become entangled in a process characterized by heightened implementation costs vis-à-vis the Pigou tax. Consequently, the Pigou tax elicits its direct effect, effectively addressing the challenge of low-cost compliance while curbing transaction costs within a process featuring negative externalities from firms, thereby instigating a positive impact on resource allocation relative to alternative environmental taxes. When scrutinizing Chart 6 above, it becomes evident that a technological framework is at play, whereby a transition from

point C to prime point A'' assumes significance, primarily concerning factorial resource distribution and the amplification of positive factorial resource effects.

This shift seeks to incorporate novel technology into the process, thereby transitioning from point A' to point A'', ultimately manifesting as an augmented factorial structure and investment. Hence, the overall reduction cost associated with factorial resource allocation, which imparts a production constraint, equates to the area encompassed by A W X Y Z. Moreover, it should be emphasized that the total reduction cost within this domain engenders a pronounced incentive effect, particularly when fostering environmental tax compliance among companies. Nonetheless, the shaded area beneath the marginal personal benefits, failing to express the desired point in resource allocation adequately, may inadvertently incentivize activities offering comparatively lower internal-personal benefits, especially in attaining predetermined emission limits.

Simultaneously, it may engender heightened activities about an indirect environmental tax. It is vital to acknowledge that as companies adapt to the tax regime by formulating output reduction plans, the efficacy of indirect environmental taxes may undergo a shift towards the W B D sector, characterized by elevated social costs resulting from reduced production outputs, unlike the Pigou tax. Notwithstanding the array of potential scenarios, the emergence of the W B D triangle after point B, typified by the presence of higher cost elements associated with indirect taxes vis-à-vis the Pigou tax in the context of mitigating negative externalities through socially efficient resource allocations, is implicitly mirrored in the marginal costs linked to production-based resource distribution effects, whereby the social losses surpass social benefits at the optimal juncture.

This fact also affects the extent of efficiency deviation in environmental taxes as costs escalate and also negatively affects resource distribution. The magnitude of negative impact scale variation in resource allocation is observed to occur within the BD range. It is essential highlighting, second all, that in situations where the implementation of the Pigou tax is generally unattainable, the adoption of financial anaesthesia in indirect taxes has been resorted to, owing to considerations surrounding the cost-effectiveness of environmental taxes. However, adopting such an approach, where indirect environmental taxes operate through price mechanisms rather than control policies, has rendered environmental taxes more practicable within the purview of environmental policy and engendered a perceptible asymmetry in sector-based resource allocation processes.

Additionally, unlike Pigouvian taxes, the absence of a fixed proportional standard Pigou tax in the mitigation of production constraints raises concerns regarding the risk of veering away from incentive-based policies to address environmental costs and social implications. In this regard, it becomes evident that incorporating indirect environmental taxes within social policies, driven by the perception of an inherent cost component in mitigating negative externalities, introduces a framework that necessitates the meaningful consideration of marginal internal benefits and marginal external costs via sector-specific indifference curves. The pronounced escalation in scale costs resulting from the excessive reduction of production outputs through indirect taxes has frequently engendered critical cost-benefit analyses (Department for Transport, 2023: 16-17).

4. Conclusion

The emergence of the Pigou tax as a significant financial and social phenomenon is rooted in its ability to internalize negative externalities and facilitate a financial resource procedure. This comprehensive approach integrates essential economic, social, and policy considerations, establishing the Pigou tax as an indispensable policy tool for internalizing negative externalities. Moreover, the perception of the Pigou tax as a financial element is evident in its effect mechanism, which aims to strike a delicate balance between environmental taxes and social costs, ultimately resulting in potential market price increases. On the other hand, it becomes evident that alternative indirect tax applications, characterized by varying effect values, raise specific tax-related concerns, thereby presenting an effect level that falls short of directly implementing the Pigou tax as an internalization tax.

Consequently, articulating tax elements for other tax applications, particularly within internalizing negative externalities through indirect taxes, proves less effective in reducing direct social costs than the direct application of the Pigou tax. Furthermore, these practices pose a challenge in aligning the Pigou tax with countries' social policies, necessitating a balanced approach corresponding to the country's level of development. This phenomenon, in turn, gives rise to different protective approaches associated with the significance of the Pigou tax at the national level, as countries employ distinct internalization policies based on varying approaches. The challenge of reconciling marginal social costs with marginal internal costs underscores the rationale for balancing

marginal internal costs and production costs through the direct imposition of the Pigou tax.

As a direct application, the Pigou tax enables structural changes and assumes a meaningful role in the process by discerning the impact values of negative externalities, such as pollution, property rights, and emissions, within the market. However, in this process, a critical aspect arises: within a framework of constant tax margin rates, the dynamic nature of marginal internal benefits and the financial burden resulting from tax implementation necessitate inevitable structural adjustments. This fiscal cycle can be counterbalanced by preventing price increases stemming from production and supply reductions following the imposition of the tax. Thus, the tax process involving the Pigou tax, whereby costs assume a significant effect scale upon reaching equilibrium with marginal internal costs, initiates a process to reduce social costs. However, a primary challenge in implementing the Pigou tax lies in perpetuating the cycle of negative external costs due to marginal tax rates, particularly in developing countries, falling below negative personal-internal costs. This understanding, in turn, may lead to deviations from the anticipated balance of social costs as a consequence of potential tax implications, especially in emerging economies. Conversely, this process establishes a more stable position for marginal tax rates associated with the Pigou tax, primarily influenced by the level of technological infrastructure development within countries. Consequently, the Pigou tax is a financial phenomenon prioritizing the equilibrium between development and production targets, especially in developing countries. Moreover, it assumes a socio-political role that necessitates a periodic reassessment of sector-specific incentive concerns in these nations.

References

Barr, Rhona; Fankhauser, Samuel & Hamilton, Kirk (2010). “Adaptation Investments: A Resource Allocation Framework”, *Mitig Adapt Strateg Glob Change*, 15, 843–858.

Blomquist, S., & Christiansen, V. (2008). “Taxation and Heterogeneous Preferences”. *FinanzArchiv*, 64, 218-244.

Cottarelli, Carlo (2010). “Fair and Substantial — Taxing the Financial Sector”, in *Financial Sector Taxation: The IMF’s Report to the G-20 and Background Material*. Stijn Claessens, Michael Keen & Ceyla Pazarbasioglu (Eds.), Washington D.C.: International Monetary Fund (IMF), 2010.

Çelik, Tolga; Arayici, Yusuf & Budayan, Cenk (2019). “Assessing The Social Cost Of Housing Projects on The Built Environment: Analysis and Monetization of The Adverse Impacts Incurred on The Neighbouring Communities”, *Environmental Impact Assessment Review*, 77, 1–10.

Daubanes, J. & Lasserre, P. (2011). *Optimum Commodity Taxation with a Non-Renewable Resource*. CER-ETH – Center of Economic Research at ETH Zurich Working Paper 11/151, September 2011, Economics Working Paper Series, Zurich: Swiss Federal Institute of Technology Zurich, 2011.

Daugbjerg, C. & Svendsen, G. T. (2003). Designing Green Taxes in A Politicalcontext: From Optimal to Feasible Environmental Regulation, *Environmental Politics*, 12(4), 76-95.

Department for Transport (2023). *Transport Analysis Guidance (TAG): Cost-Benefit Analysis*, London: Department for Transport, 2023.

Economicsonline (2020). *Pigouvian Tax: What is a Pigouvian Tax?*, January 29, 2020, https://www.economicsonline.co.uk/definitions/pigouvian_taxes.html/ (Accessed June, 01.2023).

Eriksen, S. & Kelly, P. (2007). “Developing Credible Vulnerability Indicators for Climate Adaptation Policy Assessment”, *Mitig Adapt Strateg Glob Change*, 12(4), 495–524.

Fullerton, D. & Wolverton, A (2005). “The Two-Part Instruments in A Second-Best World”. *Journal of Public Economics*, 89, 1961 – 1975.

Gallhofer, Sonja & Haslam, Jim (2007). “Exploring Social, Political And Economic Dimensions Of Accounting in The Global Context: The International Accounting Standards Board And Accounting Disaggregation”, *Socio-Economic Review*, 5(4), 633–664.

Kosonen, Katri & Nicodème, Gaëtan (2009). Taxation Paper: *The Role of Fiscal Instruments in Environmental Policy*, Eurorpean Commission Working Paper, No.19, 2009, Luxembourg: European Commission Office for Official Publications of the European Communities, 2009.

Kumari, Neha; Sahu, Naresh Chandra; Sahoo, Dukhabandhu & Kuma, Pushp (2021). “Impact of Socioeconomic Conditions on Happiness: Evidence from Emerging Market Economies”, *Public Affairs*, 2022;22(Suppl. 1):e2782, pp. 1-15.

Matthews, H.S. & Lave, L.B. (2000). “Applications of Environmental Valuation for Determining Externality Costs”. *Environ. Sci. Technol.* 34, 1390–1395.

McMorran, Ronald T. & Nellor, David C. L. (1994). *Tax Policy and the Environment: Theory and Practice*, IMF Working Paper, WP/94/106, Washington D. C.: International Monetary Fund (IMF), Fiscal Affairs Department, 1994, p. 2a.

Mooij, Ruud A. de & Devereux, Michael P. (2009). *Alternative Systems of Business Tax in Europe: An applied analysis of ACE and CBIT Reforms*. European Commission Working Paper, No.17, 2009, Luxembourg: European Commission Office for Official Publications of the European Communities, 2009.

Morris, J.; Paltsev, S.; Reilly, J. (2012). “Marginal Abatement Costs and Marginal Welfare Costs for Greenhouse Gas Emissions Reductions: Results from The EPPA Model”, *Environmental Modelling & Assessment*, 17(4), pp. 325–336.

Nerudová, Danuše; Dobranschi, Marian & Adam, Vojtěch (2019). Can Pigouvian Taxation Internalize The Social Cost of Platinum-Group Element Emissions?, *Current Science*, 117(10), 1701-1709.

OECD (2011). *Environmental Taxation: A Guide for Policy Makers*, Paris: OECD, 2011.

Oh, Christina & Svendsen, Gert Tinggaard (2015). “Command-And-Control or Taxation? The Cases of Water Regulation in California and Denmark”, *Environmental Management and Sustainable Development*, 4(2), pp. 141-151.

Olivier, Jeanne & Korinek, Anton (2010), “Managing Credit Booms and Busts: A Pigouvian Taxation Approach,” NBER WP No. 16377, Cambridge, MA: National Bureau of Economic Research (NBER), 2010.

Perotti, Enrico C. & Suarez, Javier (2011). *A Pigouvian Approach to Liquidity Regulation*, Paper Presented at the 12th Jacques Polak Annual Research Conference, November 10–11, 2011, Washington D.C.: The International Monetary Fund (IMF), 2011.

Policonomics (2017). *Pigouvian Tax*, <https://policonomics.com/pigouvian-tax/> (Accessed June, 01.2023).

Reguant, M. (2019). “The Efficiency and Sectoral Distributional Impacts of Large-Scale Renewable Energy Policies”. *Journal of the Association of Environmental and Resource Economists*, 6, 129- 168.

Rogers, P., De Silva, R. & Bhatia, R. (2002). Water Is An Economic Good: How To Use Prices To Promote Equity, Efficiency, and Sustainability, *Water Policy*. 4(1), 1-17.

Sanin M. E., Violante, F. & Mansanet-Bataller, M. (2015). "Understanding Volatility Dynamics in the EU-ETS Market". *Energy Policy*, 82, 321-331.

Schwert, G.W., and Seguin, P. (1993). "Securities Transaction Taxes: An Overview of Costs, Benefits and Unresolved Questions", *Financial Analysts Journal* 1(1), 27-35.

ScienceDirect (2013). *Pigouvian Tax: Environment*, <https://www.sciencedirect.com/topics/economics-econometrics-and-finance/pigouvian-tax> (Accessed Jun, 01.2023).

United Nations (2022). *Carbon pricing: A Development and Trade Reality Check*, United Nations Conference on Trade and Development, UNCTAD/DITC/TAB/2022/6, New York: United Nations Publications, 2022.

Watkiss, Paul (2006). *The Social Cost of Carbon*, <https://www.oecd.org/env/cc/37321411.pdf> (Accessed Jun, 13.2023).

Woollacott, Jared (2018). "The Economic Costs and Co-Benefits of Carbon Taxation: A General Equilibrium Assessment", *Climate Change Economics*, 1(9), -Special Issue on EMF 32 Study on U.S. Carbon Tax Scenarios, No. 1-, pp. 1-22.

Yusuf, A. A. & Resosudarmo, B. P. (2015). "On the Distributional Impact of a Carbon Tax in Developing Countries: The Case of Indonesia". *Environmental Economics and Policy Studies*. 17, pp. 131-156.

CHAPTER III

ASSESSMENT OF THE TURKISH CARBON TAX AND TOTAL EMISSIONS FORECASTS UNDER DIFFERENT CLIMATE CHANGE SCENARIOS

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1. Introduction

The term “climate change” refers to a change in climatic patterns primarily brought on by natural systems and human activity-related greenhouse gas emissions. The sources of greenhouse gas emissions are more diffuse than any other environmental problem. Global warming is primarily caused by greenhouse gas emissions, which trap heat in the earth’s atmosphere (Fawzy et al., 2020; Tol, 2009).

The facts and statistics, such as the following, clearly show these changes: The world’s carbon dioxide (CO₂) emissions have grown by over 50% since 1990; the average global temperature climbed by 0.85 degrees Celsius (°C) between 1880 and 2012; and the seas have warmed, the amount of snow and ice cover has reduced, and the sea level has risen (UN, 2015). In addition, energy consumption, health, and many other parts of nature are all impacted by weather, which then has an impact on everything and everyone (Tol, 2009).

Climate change might affect an economy’s capacity to expand over the long run by altering agricultural yields, changing the average over time and the unpredictability of weather, and lowering investment and labor productivity (Kahn et al., 2021). In addition, it is anticipated that climate change would have an influence on the world economy through temperature rises and other physical consequences on industries that are sensitive to the environment, such

as agriculture, forestry, coastal real estate, and the tourism industry, as well as through ecosystem disturbance, adverse health impacts, stress due to water, and other factors (IMF, 2016). In other words, a climate attack will have a detrimental impact on the most vulnerable sectors, including ecology, food, health, human habitat, infrastructure, and water (Fawzy et al., 2020).

From an economic point of view, climate change is linked to two significant financial risks: (i) the transition risks, which concern the revaluation of carbon-intensive assets as a result of shocks connected to the shift to a low-carbon economy; and (ii) the physical risks, which concern the financial losses brought on by climate-related disasters (Dafermos et al., 2018). Physical climate risks may be separated into: (i) acute physical climate risks associated with severe occurrences including floods, intense droughts, extreme temperatures, fires in forests, and hurricanes, both severity and frequency of which are being impacted by climate change; and (ii) long-term threats (chronic) associated with slowly changing occurrences like rising sea levels and gradual changes in precipitation and temperature cycles (NGFS, 2022a).

Real-world problems like the impact of climate change, which endangers both wildlife and humans, make economies more vulnerable (Islam et al., 2022). Emerging economies and developing countries are particularly vulnerable to climate change, as they are subject to both physical and transitional risks (NGFS, 2022a). Additionally, coastal nations or nations with a large reliance on agriculture are particularly susceptible to the effects of climate change (IMF, 2016).

Since the 13th of the Sustainable Development Goals, combating climate change and its consequences has been a priority. As a result, in recent years, academics, central banks, and regulators have paid more attention to probable climate change scenarios and when action is required. To the best of the writer's knowledge, the assessment of the Turkish carbon tax and total emissions (forecasts) based on hypothetical scenarios has remained little studied. To fill this gap in the literature, this chapter focuses on the assessment of Turkish carbon taxes and overall emissions predictions under various climate change scenarios.

The remainder of this chapter proceeds as below: Section 2 builds a conceptual framework for the economic impact of climate change; Section 3 reviews the literature, including theoretical and empirical analysis. Section 4 presents the basic framework of the climate change scenarios. Section 5 gives an assessment of carbon taxes, overall emissions, and Turkey's economic growth

predictions under various climate change scenarios. The paper's conclusion is presented in the last part, along with several significant cautions for further study and adoption of policies.

2. The Economic Impact of Climate Change

Since earnings are influenced by economic growth and the capital loss brought on by climate change, damages caused by climate change have a direct effect on both the rate of utilization of capacity and the financial performance of businesses. The intended investment of companies is impacted by both factors (Dafermos et al., 2018). Additionally, the detrimental effects of climate change on economic activity may be seen in a variety of areas, including agriculture, industry, the environment, human health, and other effects (Duan et al., 2022). In other words, both the causes and effects of climate change are quite distinct, and those who live in low-income nations and make the least effort to combat it are the most susceptible to its impacts (Tol, 2009). Tol (2018) came to the conclusion in his later study on the economic effects of climate change and the policy implications of the findings that, due to the initial positive impacts of climate change, the economy and human welfare will be affected very limitedly. However, in the long run, "climate change may affect the growth rate of the global economy, and negative impacts will be substantially greater in poorer" countries.

Given all these aspects, climate change is both a long-term and the most important environmental problem today, albeit not a new one since the late 20th century (Tol, 2009). The history of the climate change debate demonstrates that it developed from a primarily scientific matter to a public concern whose consequences are now more likely to be a development problem (Rahman, 2013). This is the rationale underlying the Paris Agreement's primary goals, which are: (i) to enhance the worldwide response to the risk of climate change by limiting the increase in worldwide temperatures this century to just below 2 °C above pre-industrial levels; and (ii) to continue making efforts to keep the rise in temperatures to a maximum of 1.5 °C (UN, 2015). By 186 nations making climate change promises under the Paris Agreement that account for 96% of global emissions. It will be necessary for significant emitters of CO₂, notably those in emerging economies, to reduce their energy-related emissions in order for the Paris Agreement to be successful (IMF, 2016).

As an illustration, the average temperature in China, the world's greatest emerging economy and carbon emitter, is projected to increase by 3.9–6.0 °C

and is expected to be over 4 °C compared to preindustrial values, resulting in a loss of 2.8–5.7% of overall GDP (Duan et al., 2022). Additionally, the economies that are the top polluters of CO₂ worldwide, including China, the EU27, India, the United States, Japan, and Russia, generated 67.8% of the world's emissions in 2021. The CO₂ emissions of seven countries —Brazil, China, India, Iran, Saudi Arabia, Russia, and Turkey —are higher in 2021 than they were in 2019 (before the pandemic), with Turkey seeing the largest rise (+7.9%) (European Commission, 2022).

Natural catastrophes, which are mostly caused by climate change, should also be considered owing to their negative impact on the global economy. In 2018, there were 315 natural disasters that affected 68.5 million people worldwide and were mainly attributed to the climate, according to the Center for Research on the Epidemiology of Disasters (CRED). Droughts (\$9.7 billion), floods (\$19.7 billion), storms (\$70.8 billion), and wildfires (\$22.8 billion) contributed to over 93% of all catastrophe-related costs in 2018 (Fawzy et al., 2020). Based on a recent World Health Organization (2021) assessment, a loss of \$2–4 billion per year is expected by 2030 owing to climate change difficulties (Islam et al., 2022). Additionally, according to the World Bank (2023), more has to be done since major climate change-related catastrophes in 2022 destroyed billions of dollars' worth of property and uprooted millions of people, particularly in poor nations.

According to the IMF (2016), the root cause of climate change is that corporations and families are not penalized for the negative environmental effects of their greenhouse gas emissions from petroleum and coal, as well as other resources. An appropriate emission charge should be set as part of the solution.

In its groundbreaking analysis in this area, the Stern Review published in 2005 suggested potential solutions as follows when assessing the national and international policy reforms to address climate change and transition to a low-carbon global economy: (i) carbon pricing, which can be accomplished through taxes, emissions trading, or regulation; (ii) technology policy, which encourages the creation and adoption of low-carbon and high-efficiency products; (iii) the removal of obstacles to energy efficiency; and (iv) public awareness, education, and persuasion regarding what individuals can do to address climate change (Stern, 2005). Also, another factor that should be taken into account is the fact that increased energy costs have a tendency to slow down overall economic activity by reducing both investment and employment (IMF, 2016). As a result, according to the World Bank (2023), in order to fulfill the Paris temperature

objectives, carbon taxes must keep growing in the context of distribution and cost; however, governments must evaluate trade-offs when determining which carbon pricing method to put in place.

The Paris Agreement was approved internationally as a result of the growing public awareness of the damaging impacts of climate change on the economy, and a timeframe was set forward to meet the sustainability targets, including: (i) Each of the Parties to the Agreement started submitting nationally determined contributions (NDCs), which are climate mitigation plans, in 2015 and 2017 as the next stage for historicizing the climate change efforts; (ii) Pertaining to 2020 and 2021, countries have started adjusting their NDCs to reduce carbon emissions and attain net zero by 2050 as the COP26 climate negotiations approach; (iii) For 2030, countries must reduce emissions by a minimum of 45% from 2010 levels in order to limit the temperature rise to 1.5 degrees; (iv) By 2050, all steps in the transition to emissions that are net-zero must be accomplished (UN, 2022).

3. The Network for Greening the Financial System Scenarios (NGFS)

Climate scenarios are mathematical model simulations of several possible climate system states. These models depict the complicated cycles and interactions of the climate system (Euro-Cordex, 2017).

There are many different climate change scenarios in the literature, including Shared Socioeconomic Pathways (SSPs) with diverse climate outcomes and Representative Concentration Pathways (RCPs) scenarios with diverse emissions trajectories (Wang et al., 2022; Monasterolo et al., 2023), the Intergovernmental Panel on Climate Change (IPCC), the Special Report on Emission Scenarios (SRES) (Nakicenovic et al., 2008), and numerous models, including Regional Climate Models (RCMs) (Abiodun & Adedoyin, 2016); and Global Climate Models (GCMs) (Sweeney, 2009; Evans et al., 2012). Despite the wide range of options, the Network for Greening the Financial System Scenarios (NGFS) are taken into account in this study since (i) these scenarios comprise a dependable set of transitional pathways, physical impacts of climate change, worldwide applicable economic indicators, and a combined risk analysis (Monasterolo et al., 2023), (ii) they are used as a reference by all the central banks to govern their policies, (iii) they were created as a tool to raise awareness of potential future threats and to protect the financial system from any unexpected shocks, and (iv) they aim to evaluate the extremes of possible futures (neither the most likely nor the most desired) in order to evaluate financial risk (NGFS, 2022b).

The Network for Greening the Financial System (NGFS), a network of central banks and regulators established in 2018, has developed supervisory climate mitigation scenarios for use in climate economic and financial risk assessment and in the context of climate stress testing (Monasterolo et al., 2023). The goals of the NGFS are (i) to include developing climate and environmental risk management strategies for the banking and insurance sectors and (ii) to assemble mainstream financing to promote the shift to an economy that is sustainable (NGFS, 2022b). NGFS scenarios consider climate-change-related financial risks, transition risks stemming from the transition to a low-carbon economy, and physical risks related to global warming and its associated climate disasters (Allen et al., 2020; NGFS, 2022a). Also, in the NGFS scenarios, both transition and physical risk impacts vary across countries according to various factors (NGFS, 2022b).

The NGFS has created six scenarios with the assistance of a group of renowned academic research institutions to address a wide variety of physical and transition concerns. The socioeconomic assumptions in these situations are similar (NGFS, 2022c) and shown in Table 1.

Table 1. Types of NGFS Scenarios

Type of Scenarios	Policy Target Temperature (°C)	Response to Policy	Technological Advancement	Differences in Regional Policy	Removing Carbon Dioxide
Current Policies	3 °C	None-current policies	Slow Variation	Low Change	Low Usage
Nationally Determined Contribution (NDC)	2.6 °C	NDCs	Slow Variation	Medium Change	Low-Medium Usage
Delayed Transition	1.6 °C	Delayed	Slow / Fast Variation	High Change	Low-Medium Usage
Divergent Net Zero	1.4 °C	Immediate but Divergent	Fast Variation	Medium Change	Low-Medium Usage
Below 2	1.6 °C	Immediate and Smooth	Moderate Variation	Low Change	Medium-High Usage

Source: NGFS, 2023c.

3.1. Current Policies

As long as current climate policies are in place, emissions will continue to rise until 2080, which will result in a temperature of around 3 °C and serious physical risks. This entails permanent shifts, such as rising sea levels. Awareness

of the long-term physical threats to the economy and financial system can be aided by this scenario for central banks and regulators (NGFS, 2023c).

3.2. Nationally Determined Contribution (NDC)

The goal of the Nationally Determined Contribution (NDC) is to reduce emissions and prepare for the effects of climate change. The nations establish goals for reducing greenhouse gas emissions that contribute to climate change and preparing for its effects. Additionally, this scenario assumes that all nations will meet their individual energy and carbon goals in 2025 and 2030. Each party is expected to create an NDC and revise it every five years under the terms of the Paris Agreement (United Nations, 2023b).

3.3. Delayed Transition

The delayed transition scenario implies that climate policy follows only NDCs with no regulations and that worldwide yearly emissions do not drop until 2030. Furthermore, there is a notion that there are only a limited number of carbon dioxide removal (CDR) technologies accessible. Depending on the policies that are currently in place, different countries and regions take distinct steps, which results in a “fossil recovery” from the COVID-19-induced economic catastrophe. In light of this, there is a 67 percent possibility of keeping global warming below 2 °C after 2030 even if emissions abruptly rise above the carbon budget (NGFS, 2023c; Allen et al., 2020).

3.4. Divergent Net Zero

Divergent Net Zero proposes that a faster transition of fossil fuels and diverse policies across sectors will result in higher expenses for achieving the net-zero target in 2050. This scenario also asserts that the building and transportation industries have stricter climate policies. Although the physical risks of this scenario are generally the lowest of the six NGFS scenarios, there will be increased transition risks compared to the Net Zero 2050 scenario (NGFS, 2023c).

3.5. Below 2 °C

This scenario proposes (i) the initial implementation of tough climate measures that progressively increase in severity over time while remaining below Net Zero 2050 levels, and (ii) the achievement of net-zero CO₂ emissions

by the year 2070. According to this scenario, the risks of both the physical and the transition are rather minimal (NGFS, 2023c).

3.6. Net Zero 2050

Net Zero 2050 is an ambitious scenario that assumes (i) climate policies are introduced immediately and (ii) through strict climate regulations and technological advancement, global warming is kept to 1.5 °C, with net zero CO₂ emissions occurring around 2050. Additionally, physical risks are limited, whereas transition risks are considerable (ECB, 2022; NGFS, 2023c).

4. The Analysis of the Turkish Carbon Tax and Total Emissions Forecasts Under Different Climate Change Scenarios

Climate-related risks can harm a country's financial sector, while macro-financial risks lead to weaker resistance to physical climate risks and less capacity to combat climate change. Due to its high carbon footprint, continuous use of coal in the power mix, energy-intensive industries, and significant air pollution, Turkey is already experiencing the severe effects of climate change, such as the disastrous floods of 2019. As a result, incorporating the sustainable development goals into the 11th National Development Plan (2019-2023) establishes a number of targets, including (i) enhancing natural resource quality and environmental protection; (ii) maintaining effective, combined, and sustainable management; (iii) implementing environmentally and climate-friendly actions in all areas; and (iv) raising environmental sensibility and awareness for everybody in society. Other actions accomplished to embrace sustainable finance and green growth include the country's expansion of renewable energy production, the issue of green bonds and mortgages, and the Zero Waste Regulation (2019). Turkey, however, confronts difficulties with the policy environment, inadequate sectoral knowledge and institutional ability, and a low degree of preparedness to enable robust green growth (WB, 2023; CMCC, 2022).

This chapter will assess the state of future carbon tax rules and emissions using current data and several scenarios to provide policymakers and banks with insight.

Carbon tax and total emissions data are gathered from the NGFS database hosted by the International Institute for Applied Systems Analysis (IIASA). These data are obtained from three different Integrated Assessment Models

(IAMs)¹, such as (i) REMIND-MagPIE 3.0-4.4, (ii) MESSAGEix-GLOBIOM 1.1-M-R12, and (iii) GCAM 5.3+ NGFS, which are used to provide cost-effective transition pathways. These models enable (i) to calculate the costs of global and local mitigation, (ii) to analyze the features of energy system transitions, (iii) to estimate the costs of investments needed to convert the energy system, and (iv) to find trade-offs between diverse sustainable development paths (NGFS, 2021). In other words, the similarities between the three models' frameworks come from their ability to analyze complicated and non-linear dynamics inside and across macroeconomic, agricultural, energy, and climatic systems using a single numerical model. Furthermore, to avoid misunderstanding, it should be noted that these models cannot calculate the social cost of carbon (NGFS, 2020).

As mentioned, a number of econometric models are used to anticipate the values of the variables in the future and underlie the scenarios presented by the NGFS. In this study, to analyze the Turkish carbon tax and total emissions under different climate change scenarios, the REMIND-MagPIE 3.0-4.4 model is used due to the available data and scenarios. In order to assess the effectiveness of combating climate change, the gathered data on the carbon tax for Turkey under different scenarios is shown in Figure 1.

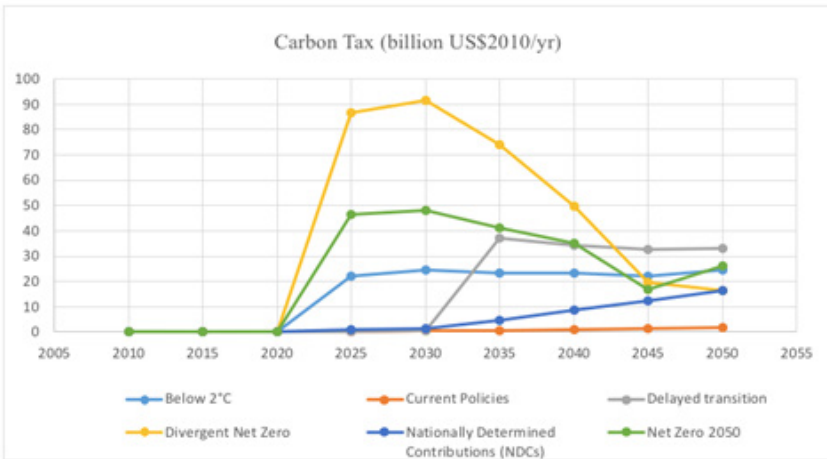


Figure 1. Carbon Tax (Billion US\$ 2010/ yr) Under Different NGFS Scenarios

¹ To calculate the social cost of carbon and direct climate change policy, integrated assessment models (IAMs) are utilized. For further information, see <https://unfccc.int/topics/mitigation/w-orkstreams/response-measures/modelling-tools-to-assess-the-impact-of-the-implementation-of-response-measures/integrated-assessment-models-iams-and-energy-environment-economy-e3-models#GCAM>

Comparing the carbon tax regulations under various NGFS climate change scenarios, the divergent net zero scenario has the highest carbon tax for the years 2025–2040. The second-highest carbon tax level, followed by the third-highest tax (Below 2) and the fourth-highest tax (NDCs) for these years, is that of the Net Zero 2050 scenario. After 2040, this ranking changes. The cost that the divergent net zero policy places on firms may be one of the factors causing this change. By deciding on more environmentally friendly production techniques, firms might avoid paying excessive carbon taxes.

The delayed transition, which begins regulating carbon taxes in 2030, imposes the maximum carbon tax between 2045 and 2050. The Below 2 and Net Zero 2050 scenarios, when taken together, result in the second-highest carbon tax at the end of 2050. And the third-highest carbon tax is implemented in the target year, 2050, along with net zero 2050 and NDCs. As can be observed, there is no policy regulation for reducing emissions under the current policy scenarios, which implies that no revenue is generated by the carbon tax for the economy.

One of the findings of this analysis is that, despite initial disparities in terms of carbon taxes throughout the scenarios, in the long run, carbon taxes ultimately seem to be similar across scenarios. Considering the NDCs will also be modified every five years as part of the Paris Agreement, the policy criteria for these scenarios may change in light of the most recent data as well as carbon taxing in the upcoming years.

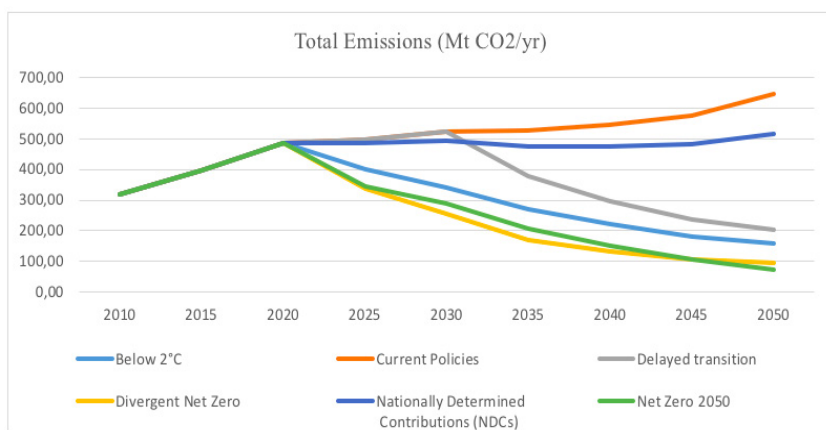


Figure 2. Total Emissions (Mt CO₂/yr) Under Different NGFS Scenarios

Comparing the total emissions under different climate change scenarios of the NGFS', as expected, "the current policies" scenario has the highest total emissions during all the assessment terms due to no carbon tax regulation. As "the delayed transition" scenario implements no regulations, both global and Turkish yearly emissions will not drop until 2030. From 2035 to 2050, the total emissions of the NDCs scenario ranked second in total emissions due to the second-lowest carbon tax regulations of this scenario for the 2030-2050 term. And for this term, the ranking of the total emissions follows: "the delayed transition" scenario comes in third, "below 2" scenario comes in fourth, and "divergent net zero" and "net zero 2050", together having approximately the same amount of total emissions, come in last.

The conclusion that can be drawn from looking at the different scenario analyses in the two figures is that carbon emissions can or may decrease if the carbon tax is kept high until the targeted goal year. In accordance with The Global Recovery Observatory, Turkey spent 2.63 billion USD in 2020 on recovering from the COVID-19 epidemic, which may be regarded as green spending as it prioritizes clean transportation (CMCC, 2022). However, the current status of Turkish CO₂ emissions is above the predictions for 2022 (UNEP, 2022). This consequence should be considered as well while assessing the climate change policies being monitored in Turkey.

6. Conclusion

The trees in a forest take in carbon from the expanding atmosphere and keep it in the ground, plants, and wood. Without trees, a significant percentage of this carbon would continue to exist as carbon dioxide (CO₂), the main greenhouse gas causing climate change (MIT, 2021).

Based on the latest projections, forests absorb 90.19 million tons of carbon dioxide (CO₂) from the atmosphere, thus protecting forests in Turkey crucial to the country's goals of reducing emissions. However, the statistics demonstrate that, in Turkey, there were 20 million hectares (mln ha) of forested area in 1990, but by 2020, that number had increased to 22 mln ha. After all, carbon dioxide emissions per hectare (ton/ha) increased from 21 tons in 1990 to 87 tons/ha in 2020. Although forested area has risen by roughly 9% in the last decade, one of the reasons for the 76% increase in carbon emissions is that the largest fires in Turkey happened in 1994, 2000, and 2008 (affecting 15,800 hectares of forested area in Antalya). In 2021, there were over 130 recorded fires in a single week,

which is between 104% and 450% greater than the equivalent averages for 2008 and 2020 (CMCC, 2022).

According to the UNEP (2022), being 16th for greenhouse emissions among G20 members, Turkey's predicted emissions under NDCs have regularly exceeded current policy forecasts, and still there's no further update on the NDC from Turkey. In addition, if NDC forecasts are not reached, the G20 will fall 2.6 GtCO₂e short of meeting its NDCs by 2030. All these climate change impacts have crucial and devastating consequences for the macroeconomic variables in the country as well as the Turkish economy. Therefore, in this study, carbon taxes and carbon dioxide gas emissions from the NGFS database between 2020 and 2050 were utilized for assessing various potential climate change scenarios for Turkey to provide policymakers and banks with insight to combat climate change and a possible climate crisis.

Besides the largest fires, due to its high carbon footprint, continuous use of coal in the power mix, energy-intensive industries, and significant air pollution depending on non-renewable energies, Turkey is already experiencing the severe effects of climate change. Therefore, the financial sector in Turkey must be capable and prepared to respond to a climate crisis given the growing awareness and comprehension of these risks, the increasing number of catastrophic weather events, and the awareness of transition-related threats.

References

Allen, T. and Déés, S. and Caicedo G., Carlos M. and Chouard, Valérie and Clerc, Laurent and de Gaye, Annabelle and Devulder, A. and Diot, Sebastien and Lisack, N. and Pegoraro, F. and Rabate, M. and Svartzman, R. and Vernet, L., (2020). *Climate-Related Scenarios for Financial Stability Assessment: An Application to France*, Banque de France Working Paper No. 774, Available at <https://ssrn.com/abstract=3653131>

CMCC, (2022), "G20 Climate Risk Atlas: Impacts, policy, economics", Available at <https://files.cmcc.it/g20climaterisks/Turkey.pdf>

Dafermos, Y., Nikolaidi, M., & Galanis, G. (2018). "Climate change, financial stability and monetary policy". *Ecological Economics*, 152, 219-234.

Duan, H., Yuan, D., Cai, Z., & Wang, S. (2022). "Valuing the impact of climate change on China's economic growth". *Economic Analysis and Policy*, 74, 155-174.

European Commission, (2022). CO2 emissions of all world countries, JSR Science For Policy Report. Available at https://edgar.jrc.ec.europa.eu/report_2022#emissions_table

ECB, (2022). Macro-Financial Scenarios for the 2022 Climate Risk stress Test, Available at <https://www.dirittobancario.it/wp-content/uploads/2022/01/Macro-financial-scenarios-for-the-2022-climate-risk-stress-test.pdf?>)

EURO-CORDEX, (2017). Guidance for EURO-CORDEX climate projections data use, Available at https://www.euro-cordex.net/imperia/md/content/csc/cordex/euro-cordex-guidelines-version1.0_2017_08.pdf

Fawzy, S., Osman, A. I., Doran, J., & Rooney, D. W. (2020).” Strategies for mitigation of climate change: a review”. *Environmental Chemistry Letters*, 18, 2069-2094.

IMF (2016). After Paris: Fiscal, Macroeconomic, and Financial Implications of Climate Change, Available at <https://www.imf.org/external/pubs/ft/sdn/2016/sdn1601.pdf>

Islam, M. M., Chowdhury, M. A. M., Begum, R. A., & Amir, A. A. (2022). “A bibliometric analysis on the research trends of climate change effects on economic vulnerability.” *Environmental Science and Pollution Research*, 29 (39), 59300-59315.

Kahn, M. E., Mohaddes, K., Ng, R. N., Pesaran, M. H., Raissi, M., & Yang, J. C. (2021). “Long-term macroeconomic effects of climate change: A cross-country analysis”. *Energy Economics*, 104, 105624.

MIT, (2021). *Climate Portal, Forests and Climate Change*, Available at <https://climate.mit.edu/explainers/forests-and-climate-change>

Monasterolo, Irene and Nieto, Maria J. and Schets, Edo. (2023), *The Good, the Bad and the Hot House World: Conceptual Underpinnings of the NGFS Scenarios and Suggestions for Improvement*. Banco Espana Working Paper No. 2302, Available at SSRN: <https://ssrn.com/abstract=4211384>

NGFS (2020). *Climate Scenarios Database: Technical Documentation*, Available at https://pure.iiasa.ac.at/id/eprint/17509/1/ngfs_climate_scenario_technical_documentation_final.pdf.

NGFS (2021). NGFS Phase 2 Scenario Explorer, Available at <https://data.ece.iiasa.ac.at/ngfs-phase2/#/login?redirect=%2Fworkspaces>.

NGFS, (2023 a). *Physical Climate Risk Assessment: Practical Lessons for the Development of Climate Scenarios with Extreme Weather Events from Emerging Markets and Developing Economies*, Disaster Risk Financing & Insurance Program, World Bank Group, Technical Document, September 2022.

Available at https://www.ngfs.net/sites/default/files/media/2022/09/02/ngfs_physical_climate_risk_assessment.pdf

NGFS, (2023 b). *NGFS Scenarios for Central Banks and Supervisors*, September 2022, Available at https://www.ngfs.net/sites/default/files/me/dias/documents/ngfs_climate_scenarios_for_central_banks_and_supervisors.pdf

NGFS, (2023 c). *Scenarios Portal*, Available at <https://www.ngfs.net/ngfs-scenarios-portal/explore/>

United Nations, (2023). *Key Aspects of the Paris Agreement*, Available at <https://unfccc.int/most-requested/key-aspects-of-the-paris-agreement#:~:text=The%20Paris%20Agreement's%20central%20aim,further%20to%201.5%20degrees%20Celsius>.

United Nations, (2023 a). *Climate Action*, Available at <https://www.un.org/en/climatechange/net-zero-coalition#:~:text=To%20keep%20global%20warming%20to,reach%20net%20zero%20by%202050>.

United Nations, (2023b). *Climate Action: All about the NDCs*, Available at <https://www.un.org/en/climatechange/all-about-ndcs>

United Nations Environment Programme (UNEP), (2022). *Emissions Gap Report 2022*, Available at <https://www.unep.org/interactive/emissions-gap-report/2022/>

Rahman, M.I.U. (2013). Climate change: A theoretical review. *Interdisciplinary Description of Complex Systems: INDECS*, 11(1), 1-13.

Stern, N. (2006). *Stern Review: The economics of climate change*.

Tol, Richard S. J. (2009). "The economic effects of climate change". *Journal of economic perspectives*, 23(2), 29-51.

Tol, R. S. (2018). "The economic impacts of climate change". *Review of Environmental Economics and Policy*.

CHAPTER IV

WELFARE PERCEPTION OF TURKISH PEOPLE: AN INDIVIDUAL LEVEL ANALYSIS

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1. Introduction

The concept of welfare is a term related to the quality of life, happiness, and satisfaction level of people. It generally refers to a state in which an individual's material, physical, mental, and social needs are satisfied and overall welfare is enhanced. Welfare is not only related to material wealth or possessions but also to various factors such as health, education, relationships, freedom, and social justice. The meaning and priorities of welfare may differ from culture to culture and from individual to individual. For some people, welfare can mean having a high standard of living, owning luxury goods, and acquiring material wealth. For others, welfare may mean maintaining a healthy and balanced lifestyle, achieving personal goals, establishing social connections, and finding inner peace. Thus, the concept of welfare differs in terms of personal considerations and priorities.

On the other hand, welfare is not only related to the level of individuals, but also to the general welfare of society. The welfare of a society can be measured by providing such factors as meeting the basic needs of its members, a fair economic system, and access to education and health care. Reducing

inequalities in society, taking social security measures and respecting human rights are also important elements of welfare. For all that, welfare is not only a valuable goal for individuals and societies, it is also an important factor in economic and social policy making. Governments can take steps to improve welfare, such as regulating income distribution, investing in social services, reducing unemployment rates, and strengthening education and health systems. Therefore, welfare is a complex notion that frequently encompasses diverse interpretations, resulting in its ambiguity and varying implications for individuals and different nations. The term is frequently associated with other concepts like government, society, policies, and labour, and is often perceived as involving the public sector. However, many of these issues are also linked to enhancing well-being and happiness, thus falling under the purview of welfare. This relates to our daily lives and our ability to navigate numerous aspects of everyday existence. Consequently, welfare has been approached from diverse perspectives and methodologies, not always explicitly referred to as “welfare.” Economists, sociologists, psychologists, philosophers, and political scientists have all been engaged in discussions regarding the nature of welfare, its attainment, and how its consequences and outcomes can be comprehended (Greve 2012).

Furthermore, people’s perception of welfare and expectations are among the factors that determine the effect of income. Welfare may differ from person to person, and each individual’s understanding and goals of welfare may differ. A sufficient income level for one person may be insufficient for another. From this point of view, the aim of this study is to reveal the welfare perceptions of people in Türkiye, using the Life Satisfaction Questionnaire Micro Data Set (2021). It is expected to contribute to the literature, as this is the first study in Türkiye to examine the welfare perceptions of people on income. Besides, this research can act as a guide for academics and politicians interested in this field, particularly in Türkiye and other developing nations.

The remainder of this article is separated into four sections. Section 2 presents the literature review. Section 3 describes the data set and methodology. The findings are presented in Section 4. Finally, Section 5 provides the conclusion.

2. Literature Review

Welfare has been examined in a wide range of disciplines. Sociologists discuss well-being, economists investigate utility, and philosophers have concentrated on the good life. The fundamental question that needs to be

answered here is: what is welfare? Although there are many definitions of the concept of welfare, there has never been one standard description of what welfare is and how it can be analysed (Greve, 2008). Nevertheless, one definition of welfare is as follows:

“Welfare is the highest possible access to economic resources, a high level of well-being, including the happiness of the citizens, a guaranteed minimum income to avoid living in poverty, and, finally, having the capabilities to ensure the individual a good life.” (Greve, 2008)

Remember that the root of welfare is *wel fare*, which is “well in its still familiar sense and *fare*, primarily understood as a journey or arrival but later also as a supply of food”. Although its current meaning only came into being in the 20th century, the word welfare has historically been associated with happiness and prosperity (Williams 1976). Thus, the term welfare refers to elements that are crucial to people’s daily life. It also entails comprehending what and how to interpret well-being, as well as how a decent society may be built with many people who have different preferences (Greve, 2012). However, a long historical analysis of the concept of welfare is far beyond the scope of this paper.

On the other hand, welfare perception refers to individuals’ subjective evaluation and assessment of their overall well-being. It encompasses various dimensions, including subjective well-being, life satisfaction, and happiness. Understanding how people perceive their welfare is crucial for policymakers, researchers, and organizations aiming to enhance societal well-being. For all that, in the literature, the concepts of welfare and well-being are often used interchangeably. However, the word welfare has more economic connotations. When we look at the literature, it is seen that the word welfare is mostly used to describe the well-being of countries and societies, and well-being is used to describe the well-being of individuals and groups. Accordingly, while GDP and social transfers are macro indicators of welfare, happiness, and poverty rate are micro indicators of welfare. GDP and social transfers show the resources allocated to welfare, the level of happiness shows the perception of the welfare level by individuals, and the poverty rate shows the role of resources in order to prevent poverty. All these need to be utilized in the analysis of well-being. In our study, we used microdata to investigate the welfare perception of the Turkish people. For this reason, in the remainder of this section, empirical researches on the perception of welfare in the literature are discussed.

Akman (2021) utilised 2019 Life Satisfaction Survey, including monthly family income satisfaction, perceived welfare level, social life, and housing

satisfaction, as well as time and personal health satisfaction, using binary logistic regression. According to the analysis's results, Akman (2021) found that women showed higher life satisfaction than men and that life satisfaction increased with increasing age, education, and perceived well-being. He also demonstrated how people's satisfaction is influenced by monthly household income, social lives, physical health, and quantity of free time which were found to be positively associated with their degree of life satisfaction.

Payzun & Diner (2011) investigated the concepts of family welfare and the welfare level of families in Türkiye by using qualitative and quantitative data collection methods together. They showed that as the level of poverty increases, the correlation of well-being and happiness with income rises to a point that overshadows other determinants. In this case too, 'having a job' and/or 'having a good job' is becoming an indispensable condition for well-being as a priority approach. Furthermore, they determined that the level of welfare increases as the socio-economic status increases, the average education level increases, the number of children in the family is not to be more than 2, the place of residence moves from towns and villages to cities and metropolises, the deficiencies of the dwelling decrease, and the rate of employment in the population increases.

Aysan (2017) examined the subjective well-being perceptions of elderly people in Türkiye using the data from the Turkish Statistical Institute Life Satisfaction Survey 2004-2015 and the European Quality of Life Survey 2012 data. She showed that there was no decrease in the happiness and satisfaction levels of the elderly when compared with the population under 65 years of age. In the study, when the situation of the elderly in Türkiye is compared with the European welfare regimes, it has been determined that the level of satisfaction is behind the Social Democrat, Liberal, and Conservative welfare regimes. On the other hand, it has been revealed that elderly people in Türkiye have satisfaction levels close to those in Southern Europe and Post Socialist countries in some areas.

Kozan, Işık & Blustein (2019) tested the associations of social class with work volition and career adaptability in predicting decent work and job and life satisfaction with a sample of 401 low-income Turkish employees. They proved that structural equation modelling analyses supported all hypothesized paths of the proposed model. Furthermore, the findings of this study highlight the significance of encouraging good employment among low-income people to enhance their personal and professional life.

Zhu et al. (2021) study examined, using panel data on 3590 elderly residents aged between 60 and 95 in 28 provinces in China in 2015, older adults' subjective well-being in terms of income, relative income, and social capital. The investigation's findings show that relative income and social capital had a considerable impact on the happiness of urban and rural people, whereas real income had a small influence on subjective well-being. This study demonstrates that growing wealth disparity contributes to the unhappiness of rural old people while increasing social trust and interaction counteract this detrimental effect. It also shows a mediating or moderating relationship between relative income and the subjective well-being of senior urban and rural residents. Easterlin (2001) showed that one of the key variables influencing people's happiness is their relative income, which can be calculated by comparing their current income to that of others as well as their former income and is a measure of income inequality. Diener & Lucas (2000) discovered that people rely on perceived emotions that are ascertained through comparisons with other social groups, and earlier research has found a link between reduced happiness and perceived relative income, which expresses one's subjective income status compared to reference groups (Cheung et al., 2016; Ng & Diener, 2019; Luo, 2009). A reference group should be employed in research on the relationship between subjective well-being and relative income.

Layard, Mayraz & Nickell (2010) used a five-point Likert scale (far above average to considerably below average) to calculate the perceived relative income of US families. Although Deaton & Stone (2013) found that having wealthier neighbours was favourably associated with life satisfaction, Luttmer (2005) revealed that neighbourhood income had a substantial negative association with well-being. Gao (2013) determined that relative income was significantly positively correlated with the subjective well-being of elderly Chinese people using relative economic status compared with peers on a 3-point scale (lower, similar, and higher) and self-assessed social class on a 10-point Likert scale (lowest to highest). Based on a national household survey in 2002, Knight et al. (2010) investigated how subjective well-being functions in urban and rural China. They found that even though the enormous income inequality between urban and rural families has been proven, rural households report better subjective well-being than their wealthier urban counterparts.

In general, when the literature on the perception of welfare is examined, it is seen that the perception of welfare on income is not fully considered. It is expected that our study will contribute to this gap in the literature.

3. Data and Methodology

This chapter uses TurkStat data of Life Satisfaction Survey Micro Data Set to investigate welfare perception of Turkish people. This particular data set is covered within Group B Micro Data which is not publicly available and free of charge though it is provided free of charge under certain circumstances of applicant. It requires a formal process through a signed request form to send to the institution, and the data set is provided following the evaluation by the institution.

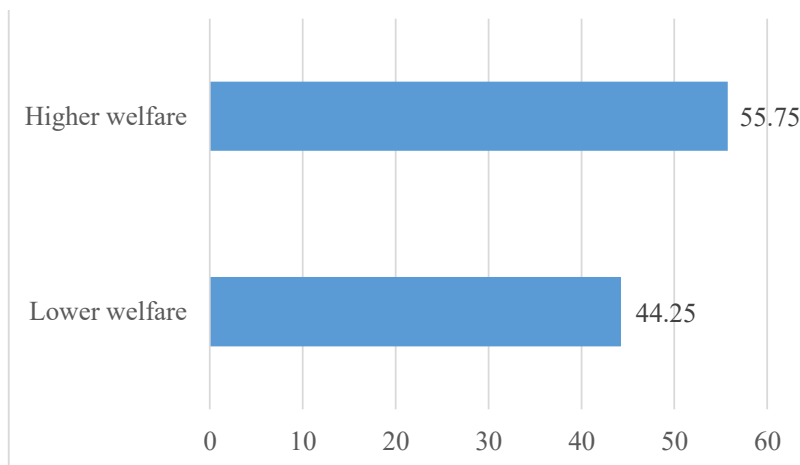
The last survey was conducted in 2021, and the time period chosen in this chapter covers from 2015 to 2021. Data for each year was given separately, although those years were appended to facilitate advantages of pooled cross section structure rather than a single cross section such as having a larger set of observations, or being able to absorb time-specific changes across survey rounds. Eventually, seven rounds of survey ends up with 67,361 observations. Survey has a separate question on relative welfare perception, i.e., When you think of '0' is the lowest level and '10' is the highest level in the level of welfare of the people living in Türkiye, what level do you see yourself?. As might be understood, corresponding answers includes 11 categories from zero being the lowest level to ten being the highest level of welfare. This variable is used as dependent variable of this investigation. Yet, it is not used as its original form. More clearly, considering fewer observations across many categories (i.e., 11 categories), we dichotomise those categories. Hence, categories from 0 to 5 including are categorised as 0 being lower welfare perception, and categories from 6 to 10 including are categorised as 1 being higher welfare perception. Therefore, the dependent variable becomes a dichotomous variable. Considering this structure of the dependent variable, following probit model is used to explain welfare perception of Turkish individuals:

$$[(WP)]_{iy} = \beta_0 + \beta_1 G_{iy} + \beta_2 [(MS)]_{iy} + \beta_3 [(Edu)]_{iy} + \beta_4 [(ES)]_{iy} + \varepsilon_i$$

where subscript i refers to individual i , and y refers to survey year y ; WP refers to individual welfare perception (i.e., lower or higher welfare); G refers to gender of the respondent; MS refers to marital status of the respondent; Edu refers to completed level of education; ES refers to employment status of the respondent; and finally ε presents random error term. This model present our baseline specification. Along with this specification, we aim to explore the following situations based on sub groups of the sample. All of those subgroupings are made through specific survey questions that are mentioned below:

- What is the effect for those whose income decreased in the last year?
- What is the effect for those whose income increased in the last year?
- What is the effect for those whose savings decreased in the last year?
- What is the effect for those who started to save in the last year?
- What is the effect for those who reduced leisure/vacation expenditures in the last year?
- What is the effect for those who had a child in the last year?
- What is the effect for those who had a serious health issue in the last year?

The percentage of respondents who reported a higher or lower welfare is as presented in Figure 1. Based on the sample of this study, almost 56 per cent of the respondents reported a higher welfare, while 44 per cent of them reported their welfare is lower.



Source: Author's on calculation based on TurkStat Data

Figure 1: Distribution of responses on welfare perception, percentage

Summary statistics are shown in Table 1. As seen, almost 47 per cent of the population is male, while female population consists of 53 per cent of all population. Most of the sample is married, with 72.65, while 17.66 per cent is single. Divorced and widowed ones consist of the lowest share with 3.36 and 6.33 per cent, respectively. Survey provides a detailed categorisation of education levels. Although this categorisation was not identical in 2015 and 2016, these categories are unified to make them consistent across survey rounds. Among these 11 categories, the highest percentage (33.22 %) is observed in the group of

individuals with primary school diploma. This refers to a 5-year education. The lowest percentage (0.3 %) is seen in individuals with a doctorate level diploma. Finally, in terms of employment status of individuals, it is seen that 44 per cent of them was employed last week, while 56 per cent was not employed.

Table 1: Summary statistics of the variables used in the analysis

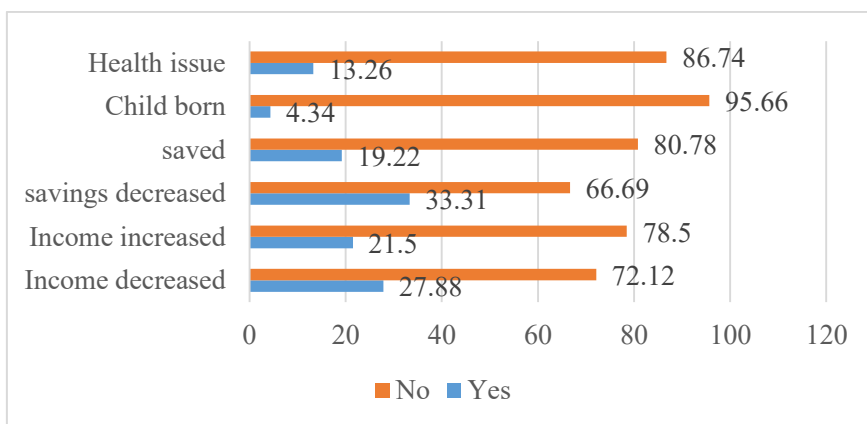
Variable	Freq.	Percent	Cum.
Welfare Perception			
Lower welfare	29,806	44.25	44.25
Higher welfare	37,555	55.75	100
Total	67,361	100	
Gender			
Male	31,471	46.72	46.72
Female	35,890	53.28	100
Total	67,361	100	
Marital Status			
Never married	11,899	17.66	17.66
Married	48,938	72.65	90.31
Divorced	2,262	3.36	93.67
Widowed	4,262	6.33	100
Total	67,361	100	
Completed Level of Education			
No school completed	9,318	13.83	13.83
Primary school	22,380	33.22	47.06
General lower secondary school	7,007	10.4	57.46
Voc. and tech. junior secondary school	433	0.64	58.1
Primary education	2,179	3.23	61.34
General high school	7,979	11.85	73.18
Voc. and tech. high school	5,817	8.64	81.82
Faculty of 5 or 6 years	938	1.39	83.21
Doctorate	201	0.3	83.51
Post-secondary of 2 or 3 years	3,776	5.61	89.11
Faculty of 4 years	7,333	10.89	100
Total	67,361	100	
Employment Status			
Employed	29,603	43.95	43.95
Unemployed	37,758	56.05	100
Total	67,361	100	

Source: Author's on calculation based on TurkStat Data

Regarding to the subgrouping within the sample, following survey questions are used:

1. In the last year, my income has decreased?
2. In the last year, my income has increased?
3. In the last year, my savings has decreased?
4. In the last year, I have started to save?
5. In the last year, I reduced my leisure /vacation spending?
6. In the last year, I have had a child?
7. In the last year, I have had a serious health problem?

The responses to these questions are the same and takes 1 if an individual reports “Yes”, and 2 if an individual reports “No”. So, subgroupings are made from those who responded as “Yes” to particular questions. Distributions of the responses are given in Figure 2. Accordingly, 13.26 per cent of them had a serious health issue; 4.34 per cent had a child last year; 19.22 per cent started to save last year; 33.31 per cent had lower savings last year; 21.5 per cent had an increase in their income; and 27.88 per cent had a lower income.



Source: Author’s on calculation based on TurkStat Data

Figure 2 Distribution of the responses across subgroups, percentage

4. Findings

This section provides the findings of the empirical investigation described above. As explained in the data and methodology section, probit model was applied considering binary structure of the dependent variables. Results that

are directly drawn from probit estimates are not interpretable as standard OLS estimates, although sign and significance of the coefficients are still useful. Therefore, it is necessary to calculate margins to interpret the magnitudes of the variables. Table 2 below shows both original estimates from probit model and margins as well for the baseline specification of this chapter.

Table 2: Findings of the baseline specification

Variables	Probit estimate	Margins
Gender		
Female	0.111*** (0.011)	0.043*** (0.004)
Marital Status		
Married	0.107*** (0.014)	0.042*** (0.005)
Divorced	-0.256*** (0.029)	-0.100*** (0.011)
Widowed	0.081*** (0.025)	0.032*** (0.010)
Completed Level of Education		
Primary school	0.287*** (0.016)	0.113*** (0.006)
General lower secondary school	0.299*** (0.021)	0.118*** (0.008)
Voc. and tech. junior sec. school	0.394*** (0.062)	0.156*** (0.024)
Primary education	0.300*** (0.031)	0.119*** (0.012)
General high school	0.401*** (0.021)	0.158*** (0.008)
Voc. and tech. high school	0.491*** (0.022)	0.193*** (0.009)
Faculty of 5 or 6 years	0.760*** (0.046)	0.290*** (0.016)
Doctorate	1.202*** (0.108)	0.418*** (0.026)
Post-secondary of 2 or 3 years	0.533*** (0.026)	0.209*** (0.010)

Faculty of 4 years	0.613*** (0.022)	0.238*** (0.008)
Employment Status		
Unemployed	-0.033*** (0.011)	-0.013*** (0.004)
Constant	-0.307*** (0.021)	
Observations	67,361	67,361
Pseudo-R2	0.0160	
Standard errors in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		

The first column of Table 2 present probit estimates that might be used to understand direction of the relationship and statistical significance of each variable. The second column, however, presents marginal effects that are calculated following the probit estimates. These marginal effects allow us to have an idea on the magnitude of the coefficients. All of the variables exhibits statistically significant coefficients at 1 per cent significance level. Accordingly, it is seen that there is a significant gender difference, being a female rather than a male increases the probability of reporting a higher welfare perception by 4.3 percentage points. In the categories of marital status, the category of “divorced” reveal negative relationship, while “widowed” and “married” reveal positive relationship. More specifically, being divorced rather than a never married one decreases the probability of reporting higher welfare perception by 10 percentage points, while being married and being widowed increases that probability by 4.2 and 3.2 percentage points, respectively.

Education level as another indicator of individual welfare perception exhibit all positive coefficients across ten categories (no schooling being the reference category). This means the more completed level of education, the higher likelihood of reporting higher welfare perception. As expected, the largest coefficient in magnitude is found in Doctorate level which is the highest level of education. Having a doctorate diploma increases the probability of reporting a higher welfare perception by 41.8 percentage points. Finally, being unemployed rather than employed decreases the probability of reporting a higher welfare by 1.3 percentage points, as expected.

Table 3, on the other hand, presents findings for subgroups of the sample. To save space only marginal effects are presented rather than original probit

estimates. The first column of the table gives coefficients for those whose income decreased in the last year. The sign and significance of the coefficients are almost identical to the baseline specification though a slight difference is observed in the magnitude of some variables. In terms of gender, the impact of being a female is larger for lower income group. When compared with all subgroup specification, the largest effect is found in the specification that is for those who had a child last year. Another important point to mention is that the effect of gender turns to not significant for those whose income was increased last year. The second coefficient, being married, reveals all positive and significant. Similarly the largest effect is found in the specification that is for those who had a child last year. Different than the baseline specification, the effects of being divorced rather than a single/never married are found not statistically significant for those who had a higher income, started to save, and had a child. For the widows, statistical significance is quite lower than the baseline specification, even though the sign of the coefficients are still same. In terms of education level, all of the coefficients are still positive and significant which is consistent with the baseline specification. Yet, the size of the coefficients varies across subgroups and categories. For the final variable, being unemployed rather than employed, findings are not identical to the baseline specification. For example, the effect for those who had a higher income in the last year, the sign of the coefficient turns to positive. This means being unemployed increases the probability of reporting higher welfare perception for those who had a higher income in the last year, as expected. Besides, the effect of being unemployed is not significant for those who had a serious health issue in the last year, which is different than the baseline specification.

Table 3: Findings of subgroups, margins

Variables	Lower Income	Higher Income	Lower Saving	Saving	Lower Entertaining	Child	Health
Gender							
Female	0.060*** (0.009)	0.002 (0.009)	0.055*** (0.008)	0.033*** (0.010)	0.048*** (0.007)	0.144*** (0.026)	0.033*** (0.011)
Marital Status							
Married	0.057*** (0.011)	0.049*** (0.011)	0.073*** (0.011)	0.063*** (0.012)	0.048*** (0.008)	0.289** (0.116)	0.051*** (0.017)
Divorced	-0.052*** (0.019)	-0.039 (0.026)	-0.064*** (0.021)	-0.048 (0.030)	-0.085*** (0.017)	0.100 (0.170)	-0.083*** (0.028)
Widowed	0.041* (0.022)	0.030 (0.022)	0.041* (0.021)	0.065** (0.026)	0.009 (0.019)	0.442* (0.230)	0.038* (0.023)
Completed Level of Education							
Primary school	0.094*** (0.014)	0.109*** (0.020)	0.084*** (0.015)	0.112*** (0.020)	0.068*** (0.015)	0.152*** (0.034)	0.089*** (0.013)
General lower secondary school	0.093*** (0.016)	0.133*** (0.023)	0.087*** (0.017)	0.118*** (0.023)	0.074*** (0.017)	0.161*** (0.036)	0.109*** (0.020)
Voc. and tech junior sec. school	0.090** (0.042)	0.138** (0.056)	0.091** (0.043)	0.184*** (0.051)	0.111*** (0.039)	0.262** (0.107)	0.075 (0.069)
Primary education	0.133*** (0.025)	0.088*** (0.032)	0.126*** (0.026)	0.120*** (0.030)	0.091*** (0.022)	0.117*** (0.040)	0.115*** (0.036)
General high school	0.110*** (0.017)	0.134*** (0.023)	0.122*** (0.017)	0.152*** (0.022)	0.108*** (0.016)	0.201*** (0.037)	0.138*** (0.021)
Voc. and tech high school	0.154*** (0.018)	0.165*** (0.023)	0.157*** (0.018)	0.213*** (0.023)	0.148*** (0.017)	0.215*** (0.041)	0.164*** (0.023)
Faculty of 5 or 6 years	0.256***	0.295***	0.262***	0.300***	0.221***	0.400***	0.207***

Table 3: Cont.

Variables	Lower Income	Higher Income	Lower Saving	Saving	Lower Entertaining	Child	Health
	(0.034)	(0.029)	(0.027)	(0.031)	(0.024)	(0.065)	(0.051)
Doctorate	0.427***	0.377***	0.441***	0.323***	0.402***		0.456***
	(0.064)	(0.038)	(0.041)	(0.053)	(0.036)		(0.081)
Post- secondary of 2 or 3 years	0.189***	0.188***	0.177***	0.209***	0.144***	0.296***	0.200***
	(0.020)	(0.024)	(0.019)	(0.024)	(0.018)	(0.041)	(0.028)
Faculty of 4 years	0.192***	0.244***	0.209***	0.228***	0.167***	0.295***	0.218***
	(0.017)	(0.021)	(0.016)	(0.022)	(0.016)	(0.036)	(0.022)
Employment Status							
Unemployed	-0.017**	0.027***	-0.019**	-0.036***	-0.019***	-0.057**	-0.005
	(0.008)	(0.010)	(0.008)	(0.010)	(0.007)	(0.028)	(0.012)
Observations	17,098	12,554	18,436	11,285	24,324	2,953	10,514
Pseudo-R2	0.0122	0.0174	0.0155	0.0178	0.0114	0.0338	0.0131

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

5. Conclusion

Either developed or developing countries aim to increase welfare in the society. Literature has widely discussed the determinants of it in a variety of case countries. Welfare perception, however, refers to a slightly different and crucial concept. It is about a subjective evaluation of welfare by individuals. This is important as it may influence individuals' behaviour that matters in terms of its economic and social consequences. This chapter, in this respect, investigates the determinants of welfare perception concept in a developing country case, Türkiye.

Using Life Satisfaction Survey Micro Data Set (2015-2021) which was obtained from TurkStat, a probit model is used to explain welfare perception of Turkish individuals. In order to better understand how it is for particular groups of individuals, seven subgroups, that are those whose income has decreased;

whose income has increased; whose savings has decreased; who started to save; who reduced leisure /vacation spending; who have had a child; who had a serious health problem, were considered along with the baseline specification that covers all of those in the sample. Accordingly, it is seen that there is a significant gender difference. Being a female increases the probability of higher welfare perception, that is at the highest for those who had a child last year. Being married is also a significant and positively associated with a higher welfare perception, while being divorced is negative. This finding might be related to Turkish society's negative attitudes towards divorced people, women in particular. As expected a higher education level is associated a higher welfare perception. Finally, being unemployed is negatively and significantly associated with a higher welfare perception, with the exception of those whose income increased.

Findings of this chapter provides useful insights to understand dynamics of welfare perception in Türkiye. From policy point of view, it can be suggested that education level should be increased to increase welfare perception of Turkish people. Attitudes towards marital status is another important issue. As a traditional society, being married is perceived as a positive circumstance, while being divorced might be perceived as a negative circumstance. This is particularly likely to influence females in Türkiye. Therefore, this view needs to be change to enhance welfare perception across different subgroups within the country. This can be achieved through more egalitarian perspectives to be accepted by members of the society. As a labour market indicator, being unemployed seem to be an important indicator to deal with. A strong economy with a less risk of being unemployed is crucial not only for market efficiency purposes but also for a happier society.

It is worth mentioning a few limitations and potential future directions of this chapter. First of all, welfare concept includes a very wide range of potential indicators. However, the empirical investigation in this chapter considers a limited number of them as many as the survey allow us to have. Secondly, it would be interesting and intuitive to see how different parts of Türkiye is in terms of welfare perception. Then, it might be possible to recommend a region-specific policies to increase welfare perceptions there. However, within the current scope of this chapter, we preferred not to include such an analysis. Lastly, a longer time period in the analysis would be more intuitive since Türkiye is a country where economic, political, and social environment are rather fluctuating. Hence, they might affect individual welfare perception in different ways.

References

Akman, S. U. (2021). Mutluluk ve Yaşam Memnuniyetinin Belirleyicileri: Türkiye İstatistik Kurumu Yaşam Memnuniyeti Araştırması Üzerine Analizler. In *Journal of Social Policy Conferences* (No. 81).

Cheung, F., & Lucas, R. E. (2016). Income inequality is associated with stronger social comparison effects: The effect of relative income on life satisfaction. *Journal of personality and social psychology*, 110(2), 332.

Deaton, A., & Stone, A. A. (2013). Two happiness puzzles. *American Economic Review*, 103(3), 591-597.

Diener, E., & Lucas, R. E. (2000). Explaining differences in societal levels of happiness: Relative standards, need fulfillment, culture, and evaluation theory. *Journal of happiness studies*, 1, 41-78.

Easterlin, R. A. (2001). Income and happiness: Towards a unified theory. *The economic journal*, 111(473), 465-484.

Gao, Y. (2017). Social economic status of Elderly and Subjective well-being—an Empirical Analysis Based on CGSS (2013). *Decis. Inf.*, 459, 107–115.

Greve, B. (2008). What is welfare?. *Central European Journal of Public Policy*, 2(01), 50-73.

Greve, B. (2012). What is welfare and public welfare?. In *The Routledge Handbook of the Welfare State* (pp. 25-32). Routledge.

Knight, J., & Gunatilaka, R. (2010). The rural–urban divide in China: Income but not happiness?. *The Journal of Development Studies*, 46(3), 506-534.

Kozan, S., Işık, E., & Blustein, D. L. (2019). Decent work and well-being among low-income Turkish employees: Testing the psychology of working theory. *Journal of Counseling Psychology*, 66(3), 317.

Layard, R., Mayraz, G., & Nickell, S. (2010). Does relative income matter? Are the critics right. *International differences in well-being*, 28, 139-66.

Luo, C. (2009). Absolute income, relative income and subjective well-being: Empirical test based on the sample data of urban and rural households in China. *Journal of Finance and Economics*, 35(11), 79-91.

Luttmer, E. F. (2005). Neighbors as negatives: Relative earnings and well-being. *The Quarterly journal of economics*, 120(3), 963-1002.

Ng, W., & Diener, E. (2019). Affluence and subjective well-being: Does income inequality moderate their associations?. *Applied Research in Quality of Life*, 14, 155-170.

Payzun, A., & Diner, Ç. (2011). Türkiye’de ailelerin refah düzeyi. *Sosyal Politika Çalışmaları Dergisi*, 26(26), 117-130.

Williams, R. (1976). *Keywords: A vocabulary of culture and society* (1997 ed.). Glasgow, GB: Fontana.

TurkStat, Turkish Statistical Institute, Group B Micro Data, Life Satisfaction Survey Micro Data Set (2015-2021).

Zhu, J., Liang, C., Lucas, J., Cheng, W., & Zhao, Z. (2020). The influence of income and social capital on the subjective well-being of elderly Chinese people, based on a panel survey. *Sustainability*, 12(11), 4786.

CHAPTER V

RELATIONS BETWEEN STRATEGIC HUMAN RESOURCES MANAGEMENT ROLES, COMPETENCIES, DIRECTIONS AND PERFORMANCE

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1. Introduction

In the face of changing and developing competitive conditions, businesses have to constantly change and develop in order to maintain their existence in the market, to be successful in the national and international area within the industry and to reach potential customers more easily. By the beginning of the 1990s, rapid changes in the business world have become obvious and it has become necessary for enterprises to use some resources in order to achieve the goals set in this position. When these resources are reviewed; a

physical area capable of production, financial resources for raw materials and all other resource supplies, marketing resources that ensure the delivery of the produced service or product to customers, and in fact human resources, which are a single place where all resources are connected, which covers all of them, enables the structuring of the structure of the enterprise and the evaluation of its performance. Beyond all the resources counted, the human resources factor is a structure that has the potential to affect the course of the enterprise. The role of human capital as an important resource for the sustainability of competitive advantage for businesses has been a major focus of interest in academic circles (Becker and Huselid, 1998).

As mentioned in the literature, it has been observed in the last 20 years that human resource management has moved towards the macro-analytical approach from the perspective of the micro-analytical approach that it was based on in the past. The traditional roles and responsibilities of human resources from the past to the present have changed and developed and have assumed strategic roles as a role and competency holder in critical issues such as participation in the strategic decisions of the enterprise, emergence of new products, quality management and new facility and field purchases. In this context, businesses that attach importance to human resources management are aware of the fact that the way to achieve their goals is through human resources, and they support human resources management in this direction and include it in the processes. In one of the studies recorded in 1997, it was stated that human resources could not only be evaluated according to their perceived traditional value, but also realized this value, which created real and measurable economic value, through employees, and that this value it created should be evaluated according to whether it provides a competitive advantage to the business (Beatty and Schneier, 1997:115). In the study conducted by Kuipers (2016), it is mentioned that besides the discussions about the roles of human resources, the alignment of human resources practices and policies with the enterprise in terms of organizational strategy is a source of competitive advantage of human resources.

2. Strategic HR Roles

Resulting from the changing business environment and increasing focus on strategic management, human resources professionals have important effects in terms of increasing the status of the business in the sector and creating a strong image. In this sense, human resources professionals have to have some roles in order to achieve strategic goals. For this purpose, the roles of human

resources professionals are discussed under the heading of 'Strategic HR Roles' and it is observed what kind of effects the revealed roles have.

It has been seen that human resources department managers and personnel have taken on many different roles throughout history. After the industrial revolution, manufacturing processes have focused on maximum efficiency from the employee and the continuation of the organization's operation with full performance are at the forefront, and the operational role is given great importance. However, over time, HR personnel were evaluated as registrars/administrative officers due to the orientation towards administrative processes such as giving premiums in wage systems and recruiting personnel according to quality. The typical middleaged male senior HR professionals who gained experience in low-level staff positions in Europe and the United States in the 1960s have continued in this role. In the 1970s, it was revealed that a negotiator role should be assumed because industrial relations were added to the responsibility of the human resources department and the development of business relations was important. By the 1980s, HR professionals, who assumed the role of architects, continued with the process management, with the emergence and necessity of business planning and reconstruction of processes within the enterprise. The 1990s were seen as a completely new process and the beginning of a new period for the human resources department. The human factor/resource has become more visible and important in businesses and organizations, and personnel management departments have been closed and human resources departments have gained ground. According to Price Waterhouse/Cranfield research, it has been found that many senior HR managers in Europe have a university degree. A similar study, Stablein and Geare (1993), conducted a survey of New Zealand organizations with 100 and more than 100 employees, and the reporting of this survey found that 31 percent of HR managers were women and 37 percent were university graduates. In addition to these developments, human resources departments have not focused only on the wage or qualification of the employee but have played a role in the realization of many functions such as performance evaluation, motivation examples, training, career management, planning, and job orientation.

Today, this process continues by developing. Functions covering agile and strategic management approach such as performing business analysis, creating appropriate environments for the development of talents, developing information systems technologies within the enterprise or organization, and integrating them into processes continue to be added to the specified functions. International

competition wars force businesses to go global and create a competitive advantage. Especially in the last 20 years, the process draws attention to reviewing the managerial processes of the enterprise, evaluating organizational performance from a general framework. It is evaluated that with the changing demographic structures in the workforce, the emergence of evolution from business loyalty to customer loyalty, and the emergence of fast and agile service delivery, enterprises should evaluate their existing human resources in the best possible way. Realizing the critical importance of human resources, enterprises support the strategic position of the human resources department, which includes this resource in processes, orients it, evaluates its performance, and ensures its retention. While the human resources department is a department that performs human resources practices at the most basic level and the importance of which cannot be noticed within the enterprise, it is inevitable to say that it has become critically important to get out of its classical roles and assume a strategic role and ensure the implementation and maintenance of strategic policies in accordance with the organizational goals of the enterprise.

Table 1 summarizes how the HR roles in organizations are evaluated in different studies on a yearly basis conducted by various researchers and academicians. The researchers who carried out the studies and researches have carried out ongoing studies by making references to each other's explanations.

Table 1. HR Roles According to Various Researchers

Tyson, 1987	
The Main Role	Explanation
The Clerk of Works	This role deals with remuneration information, procedures, which are positioned to perform administrative activities that do not have a strategic character.
Contract Manager	It is a role that carries out industrial work, requires specialization in union processes, and includes short-term plans.
Architect	In order to contribute to the success of the enterprise, it includes considering and shaping the business structure as a whole, adapting the business structure to change in long-term plans and developing appropriate policies regarding the location.

Storey, 1992	
Changemaker	This role, which is in the interventionist dimension of HR, is the role that examines and supports the alignment of HR practices and business strategies and the development of employee motivation and commitment.
Regulator	This role, which is in the interventionist dimension of HR, is mainly concerned with issues such as employment regulations, supervision, and business policies.
Advisor	This role is one of the facilitator roles of HR, providing internal consultancy on functional expertise of line managers, providing support but not intrusive.
Handmaiden	This role, which is in the non-intrusive dimension, includes personal records such as absenteeism tracking. It is similar to the HR role that deals with employee problems, which Ulrich evaluates as an employee champion.
Schuler, 1994	
Business Partner	It provides support to the business with short, medium and long-term planning by harmonizing HR policies and procedures in line with the goals and objectives of the business.
Facilitator	With this role, HR analyzes the needs and demands of department managers and supports them with appropriate practices and procedures.
Controller	With this role, it is audited whether HR practices and policies are implemented as desired. This role requires some HR expertise.
Innovator	It is aimed to follow up the current practices and procedures of HR, and to integrate and develop them within the business.
Adapter	It is similar to the innovative role, it involves the incorporation, adaptation and design of new technology, organizational procedures and structures, cultural developments into the enterprise.

Ulrich, 1997	
Strategic Partner	This role is based on the conclusion that it should be able to be carried out through the HR function, which collaborates and bridges the gap with both senior managers and department managers in achieving the organization's intended corporate strategies and focusing on how to most effectively provide the basic needs of the organization (Ulrich, 1997).
Administrative Specialist	The HR function has been an administrative function headed by individuals with roles for cost control and administrative activities (Ulrich, 1997).
Employee Champion	While shifting the operational focus from processes to employees, the third role, the employee champion, emphasizes the needs of employees with the aim of increasing loyalty and talent. (Ulrich, 1997).
Change Agent	The change agent is responsible for the organizational transformation and cultural change of the enterprise, and this role creates value by developing the ability of the entire enterprise to transform into its core competencies and change according to the circumstances.
Hunt and Boxall, 1998	
Introduction of new technology	It draws attention to the importance of the HR function in the integration of major technological developments within the sectors into the company structure and in the adaptation of the top management and personnel process. An HR manager or professional needs to have accountability to the organization's information technology, and an HR professional in this role is aware of the importance of the issue.
Involvement in quality management	It was necessary to have a structure that focuses on continuous renewal and improvement within the organization and to ensure this with quality management. It is expected that there will be an increase in interest in quality initiatives through the support and provision of training programs on this subject.
New plants and company acquisitions	The purchase of a new company or the opening of a factory, which is one of the strategic decisions, has been considered one of the issues that the HR professional should be involved in, and it is expected from the HR professional to have the ability to analyze the degree to which the recruitment of personnel for the new facility, the implementation and policies in accordance with the vision and mission of the organization can be applied.

Caldwell, 2001	
Champion	This role is played by the business's top executives and HR directors, and includes the process of integrating business strategies with HR transformation strategies.
Adapter	It aims to provide change in the business departments and basic functions of the enterprise and to create value for business performance.
Synergist	With this role, it is attributed as the consulting role that strategically coordinates the targeted change activities within the enterprise and harmonizes them with the enterprise.
Consultant	It is similar to Ulrich's role as an administrative specialist, but requires skills in project and time management. It is expected to have experience with change both inside and outside the business.
Ulrich, 1997; Bhatnagar and Sharma, 2005	
Administrative Expert	With this role, processes such as efforts to increase the efficiency of the enterprise and management of operational processes are managed.
Change Agent	It is aimed at enhancing the business change capability of HR processes and projects, supports participation in shaping culture change, and includes the ability to anticipate potential future problems.
Employee Champion	It involves ensuring employee engagement and motivation, and is similar to the role of employee champion that Ulrich evaluated in 1997.
Strategic Partner	It provides support for the realization of the goals of the enterprise and participates in the process of defining business strategies. It analyzes the common and compatible HR strategies and business strategies.

Reference: Duplicated from Tyson, 1987; Storey, 1992: 989-990; Schuler, 1994: Ulrich, 1997: 116-117; Hunt and Boxall, 1998: 770-777; Caldwell, 2001: 985-989; Bhatnagar and Sharma, 2005: 1712- 1719.

2.1. HR Roles According to Tyson

Tyson (1987) has identified three traditional roles when defining HR roles. These; It is in the form of Chief Administrative Affairs, Contract Manager and Architect. He argued that these roles he defined were the 'ideal type' for HR and stated that the roles undertook activities in many areas and that these roles included complementary processes of HR management. These three roles are

explained using the metaphor of building construction. Accordingly, modeling was done as an architect for the construction of the staff and the organization, as the chief of administrative affairs for the administrative processes and as the contract manager for the short-term planning and contract processes. This model follows inspiration from the ideas of Crichton and Collins (1966). The roles in the model are described as (Tyson, 1987:526):

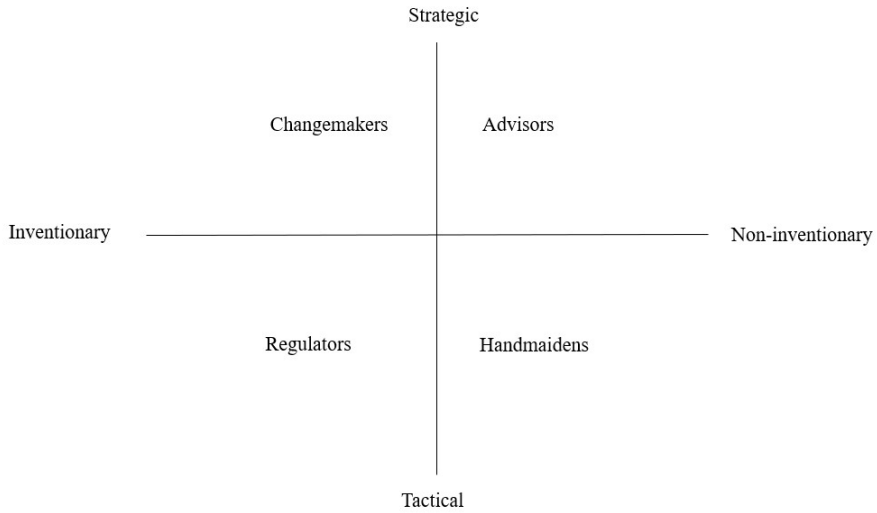
➤ *The Clerk of Works*: A support activity, this role includes non-strategic activities. In this role, authority is predominantly vested in department managers. In this role, which is not involved in business planning, there are fewer HR systems and the majority are employees with less on-the-job training. HR provides support to department managers, especially in the process of conducting basic personnel affairs and ensuring selection.

➤ *Contract Manager*: The HR role here is carried out for 1-2 years in the short term of planning. HR professionals with this role are experts in making quick decisions, solving everyday problems in union contracts and with unions. It handles industrial relations by providing support to department managers on informal relations and agreements.

➤ *Architect*: HR professionals who assume the role of architect consider the whole organization as a whole and work on rebuilding the organization in order to ensure success or make a contribution. HR professionals are at the top of this role and support the development of the organization with long-term planning and policies that are in line with the mission of adaptation to change and vision, as opposed to the role of contract manager. In addition, according to Tyson, the role of architect provides HR with many opportunities for change management and argues that corporate planning can be carried out within a system where personnel and department managers are integrated.

2.2. HR Roles According to Storey

According to Storey, one of the researchers working on HR professionals, there are 4 main roles as changemakers, servants, consultants and regulators on two opposite polar axes, and these roles are divided into inventory/non-inventory and tactical and strategic within the organization. Figure 1 shows the roles.



Reference: Storey, J. (1992), *Developments in the Management of Human Resources: An Analytical Review*, Oxford: Blackwell Publishing, p.168.

Figure 1. The Four Main Roles According to Storey

On the non-inventary side, HR management and department managers are in a position where the demands, needs and expectations are met in the administrative processes section, while on the inventory side, they are in a position to support the strategic decision-making process with department managers in order to achieve the organization's goals (Armstrong, 2006).

➤ *Changemaker*: This role is a proactive position with strategic contribution objectives located in the interventionist part of HR. It develops policies by considering the performance of the organization in the development of employee motivation and loyalty. In order to fulfill the change-creating role that differs from traditional HR management, it is important that the HR practices developed are matched with the organizational goals (Storey, 1992:171).

➤ *Regulator*: Industrial relations policies, which are at the core of HR's traditional management policies, are intrusive in determining employment regulations and tactical roles.

➤ *Advisor*: The advisory role is non-inventary, providing advice specifically to line managers, similar to an internal consultant.

➤ *Handmaiden*: This role, which is included in the non-inventary dimension, includes personnel absence monitoring, personnel file arrangements and keeping wage records. This role, which is oriented to the day-to-day work

of the department managers, is similar in structure to the role that Ulrich (1997) considers to be the employee champion, dealing with the problems and needs of the staff. It involves administrative and tactical tasks extensively (Storey, 1992:171).

2.3. HR Roles According to Schuler

Schuler has identified five main topics while defining HR roles. These; they are ranked as business partner, facilitator, controller, innovator and adaptor. According to Schuler's study, in order for the organization to survive and develop in an area where the competitive environment is quite fierce, HR must assume various roles within the organization (Schuler, 1994:268).

➤ *Business Partner*: While decisions are made about the strategic goals and objectives that will determine the course of the organization, HR professionals can fulfill this role by developing policies and practices that are compatible with the goals and objectives with the business partner role and by participating in the decisions to be made. While the decisions to be taken are determined in the short, medium and long term, HR provides support in three different positions in this position, these are; operational, administrative and strategic activities.

➤ *Facilitator*: Although it is said that HR professionals undertake this role in operational activities, it provides support for the implementation of HR practices and procedures by considering the demands and needs of department managers. With this role, HR is able to deal closely with employees and analyze the demands and needs of external customers from an indirect context.

➤ *Controller*: As the name suggests, the most obvious purpose of this role is to oversee at what level and how HR practices and procedures are implemented within the organization. It is expected that HR professionals will have a number of expertise within the organization in order to perform this role in the healthiest way.

➤ *Innovator*: Considering that HR practices and procedures are constantly developing and changing, it is evaluated that the role of innovator is one of the main roles that HR should have and be able to implement. This role, which includes the need to have analysis and prediction skills, is very important for the success of the organization.

➤ *Adapter*: The adaptive role, which is similar to the role of innovator, aims to bring new and changed HR practices and procedures to the organization by evaluating them internally. For this reason, in order to ensure the continuity of

the organization and not to disrupt the organizational structure, it is the greatest expectation from this role to follow the current HR practices and procedures, to revise and integrate them in accordance with the culture of the organization.

2.4. HR Roles According to Ulrich

HR roles and performance when defining the roles of the HRM function, the most commonly used framework is the one developed by Ulrich (1997). He argues that HR professionals should be well on their way to becoming business partners within the company and should use their knowledge and skills to achieve a harmony between HR capabilities and both internal and external business requirements (Ulrich, 1993).

In his study conducted in 1997, Ulrich stated that human resources professionals contribute to the process by enabling the business to change, learn, act in line with the objectives and make faster and more active decisions (Lemmergaard, 2009:183). According to Ulrich (1997:25), human resources professionals and managers should have four basic roles. It is as listed in Table 2. As a leading advocate for HR as a business partner, Ulrich has argued that HR must be strategically proactive, go beyond administrative expertise, and be an expert in strategic business partnerships, change management, and employee advocacy. He suggests that performance can be improved when all HR roles are performed simultaneously (Ulrich, 1997:24)

Table 2. Ulrich's Four HR Roles Definitions and Explanations

Role	Metaphor	Competence	Activities	Results
Strategic Human Resources Management	Strategic Partner	Organizational awareness Problem solving Customer service Stress tolerance Verbal communication	Implementing strategies and creating an organization that creates value.	To align human Resource management practices with the organization's choice of strategy and the environment in which the organization operates: organizational diagnostics
Management of Human Resources Processes	Administrative Specialist	Attention to detail Verbal communication Customer service Information management Law, government and case law Technical competence	Implementing an efficient and effective infrastructure (i.e. doing things better, faster and cheaper)	Creating harmony between various human resource management practices and techniques: restructuring of organizational processes
Employee Advocate (EA) and Human Resources (HR) Developer	Employee Champion	Interpersonal skills Verbal communication Teaching Flexibility Learning	Increasing employee engagement and competencies	Employees are increasingly critical to the success of organizations. EA focuses on today's employee; The HR developer focuses on how employees are prepared for the future. Listening and responding to employees: providing resources to employees.
Change Management	Change Agent	Reasoning Influence/bargain Honesty/honesty Creative thinking Stress tolerance Verbal communication	Innovating to improve the competitive position of the organization	To catalyze, change and manage the capacity for change: managing transformation and change

Reference: Ulrich, D. (1997), Human Resource Champions. Boston, MA: Harvard Business School, p. 303–320.

Ulrich (1997) proposed a framework consisting of four HR roles that together enable the HR function to be a business partner in the organization.

Through this focus, the HR function provides added value due to its potential to create organizational competitiveness (Ulrich, 1997). Ulrich (1997) suggested in a study conducted in the United States that the changing business environment and the increasing focus on strategic management have benefited HR functions to gain both status and influence within organizations. Conner and Ulrich (1996) identify four HRM roles based on a survey of 256 middle and senior HR managers (Lemmergaard, 2009:183);

- strategic HR/IR planning and policy;
- management of change;
- management of employee welfare; and
- development and provision of administrative and functional services.

These roles refer to the roles of ‘Strategic Partner’, ‘Administrative Specialist’, ‘Employee Champion’ and finally ‘Change Agent’ as can be seen in the table. This survey, conducted by Conner and Ulrich in 1996, forms the basis of the four HR functions that Ulrich identified in 1997. The content and scope of these functions are described below.

➤ *Strategic Partner*: This role is based on the conclusion that it should be able to be carried out through the HR function, which collaborates and bridges the gap with both senior managers and department managers in achieving the organization’s intended corporate strategies and focusing on how to most effectively provide the organization’s core needs (Ulrich and Brockbank, 2005b). The strategic partner role is directly related to a focus on the future, participation in the process of making strategic decisions at the organizational level, and the development of process-integrated HR strategies, all of which are at the heart of the overall change and trajectory of the organization (Ulrich, 1997; Hailey et al., 2005; Scissors, 2008;). Therefore, the role of strategic partner is also expected to have a high impact on organizational performance (Kuipers and Giurge, 2016:6).

➤ *Administrative Specialist*: The main focus expected from this role is to reduce these costs while employees are considered as a cost and thus to gain competitive advantage by increasing productivity (Ulrich, 1987). When we look at traditional human resources activities, it is expected that this basic HR function will provide added value to the organization in all processes and that the process will be carried out in the most effective and efficient way in activities such

as personnel and training (Lemmergaard, 2009:5). Similarly, in Ulrich's 1997 analysis, this HR function is expressed as an administrative function headed by individuals with roles in cost control and administrative activities (Ulrich, 1997).

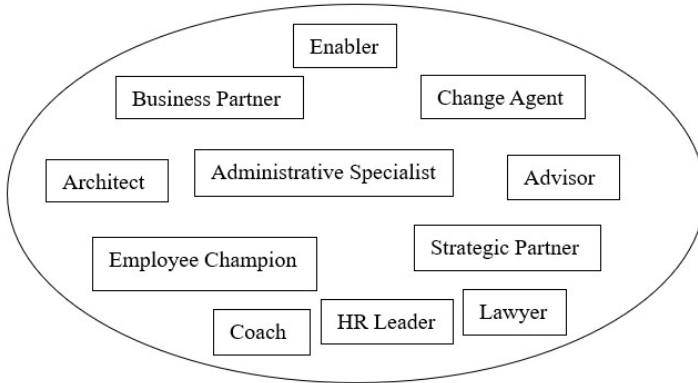
➤ *Employee Champion:* While shifting the operational focus from processes to employees, the third role, the employee champion, emphasizes the needs of employees with the aim of increasing loyalty and talent. (Ulrich, 1997). This role is related to the well-being of the employee and the relationship between the company and the employee. In other words, this role deals with the daily needs, problems, and concerns of the employee (Kuipers, 2016). In its latest change to the model, Ulrich divides the employee champion role into "employee advocate" and "human resource developer," positioning the latter as a more future-oriented process role. (Ulrich and Brockbank, 2005).

➤ *Change Agent:* The change agent is tasked with ensuring the organizational transformation and cultural change of the enterprise, and this role creates value by developing the ability of the entire enterprise to transform into its core competencies and change according to circumstances (Lemmergaard, 2009:6). It aims to improve an organization's capacity to effectively manage change by focusing on adaptive behavior of employees to maintain the organization's competitiveness. The study by Conner and Ulrich (1996) shows how the strategic partner and the change agent have essentially the same role, since 'the ability to change is critical to all strategic work in human resources' (Kuipers, 2016:10).

Another study by Ulrich and Beatty in 2001 argued that corporate excellence should be achieved especially by HR professionals. It is stated that the enterprise can contribute to rapid changes, management of global processes, understanding of strategic objectives with the role of the player rather than the common role and 6 compatible roles are proposed to be a player. These are leader, coach, architect, referee, facilitator, and builder (Ulrich and Beatty, 2001:2). With these roles, it is suggested that the strategic objectives of the enterprise can be realized with HR studies, and it is stated that HR professionals who see the business and the business world they are in as a business game can make a difference thanks to these roles. By fulfilling these roles, it is evaluated that the business structure will be contributed and gains will be achieved in competitive advantage.

Ulrich conducted a similar study with Wayne Brockbank in 2005 and pointed out that HR has many more roles than are known to take on (Ulrich and

Brockbank, 2005). (See Fig.2.) Although the 4 main roles (Strategic Partner, Change Agent, Employee Champion and Administrative Specialist) that Ulrich put forward as a result of his studies in 1997 have become very popular in the world and are considered as basic roles, the studies put forward in 2005 and after reveal different roles except for 4 main roles.



Reference: Ulrich, D. and Brockbank, W. (2005), *The HR Value Proposition*, Boston, Harvard Business Press, p.200.

Figure.2. The Roles of HR

In 2016, Ulrich and others collected data from 30.227 HR and nonHR participants to update their HR competency model (Ulrich et al. 2016: 10). As a result of the analysis of these data, a new HR competency model consisting of 9 competencies, divided into groups of three (7. Round) (Ulrich et al. 2016:20-22, Prikshat et al., 2018). The competencies included in this model are divided in three main categories; basic triggers, strategic facilitators and key facilitators. Ulrich and others (2016:21) proposed three roles as basic triggers. As a *Strategic Positioner* HR professionals interprets the internal and external context of the organization and, understand its business operations and knows/responds to stakeholder expectations and emerging trends. *Credible Activist role* includes establishing a real relationship with others, influencing them with their personalities and producing results by being a reliable, respected and valuable business partner. *Paradox Navigator role* is the ability of HR professionals to manage the tension created by conflicting ideas and outputs. These contradictions, strategic vs. operational priorities, customer / investor etc. employee orientation, quality etc. result oriented, global vs. local demands,

change etc. need for stability etc. *Strategic Facilitators role* shows the extent to which the HR professional is able to evaluate both external and internal business contexts and translate these assessments into practical insights that will help the organization succeed (Ulrich et al. 2017:203-204; 2016:24) *Culture & Change Champion role* is to achieve consistent and lasting change by shaping culture and managing change; *Human Capital Curator role* is the provision of integrated and innovative solutions that develop the talents, technical skills and leaders in their organizations, triggering performance; *Total Rewards Steward role* is the creation of intangible rewards by HR professionals by designing material and meaningful work by managing wages and benefits (Ulrich et al., 2017:215-216; Ulrich et al. 2016:26). Key facilitator roles include technology and media integrator, analytics designer and interpreter, compliance manager roles. As *technology and media integrator*, HR professionals create of a high-performance organization by using social media tools and technology effectively to facilitate the workflow of the organization. *Analytics designer and interpreter role* includes the effect of HR professionals on the decision-making mechanism by obtaining the right data and interpreting the business data. As *compliance manager* HR professionals should carry out HR practices in compliance with legal regulations, defend the rights of employees and inform employees and managers about legal rights and responsibilities.

2.5. HR Roles According to Caldwell

Another researcher who has studied HR roles, Caldwell, has identified four main roles based on Storey's modeling. These roles are; champion, adaptor, synergist and consultant. According to Caldwell, Storey's modeling does not include the multifaceted functions of HR that have changed and transformed over the years, so a number of weaknesses have been found. According to Caldwell's modeling, the content of HR roles is as follows:

➤ *Champion*: The role of champion is played by senior executives at the top of the organization, implementing and directing HR practices and policies. Caldwell defines the role of champion and puts into practice the organizational strategies of the HR professional and director by aligning them with the change and transformation strategies of HR.

➤ *Adapter*: The role of adaptor is played by the mid-level HR professionals and specialists of the organization. These individuals are responsible for supporting and advancing change in units within the organization. Making sense

of the need for strategic changes and designing and overseeing HR policies and practices at this point is part of this task.

➤ *Synergist*: The role of synergist is played by senior HR managers or HR consultants who provide external consultancy to the organization in order to ensure strategic coordination in large-scale and multiple change projects throughout the organization. The need for a synergist role often arises from situations outside the organization and the change within the organization arises in bringing about transformation.

➤ *Consultant*: The consultant role is played by HR consultants who have experience with change from within or outside the organization. This role, which is similar to the administrative role described by Ulrich, requires skills such as the ability to provide consultancy, coordinate projects and carry out time management.

2.6. HR Roles According to Bhatnagar and Sharma

A study similar to this framework put forward by Ulrich, by Jyotsna Bhatnagar and Anuradha Sharma in 2005, focused on the conceptual relationship between the four basic HR functions and organizational learning ability and presented a picture explaining that HR has common roles with different stakeholders. The study also reflects that there is a conceptual relationship between Human Resources and organizational learning ability in India. Table 3 is presented in the form of a matrix covering the work done from the HR functions mentioned since 1979 to the HR roles introduced in 2000.

Table 3. HR Roles Matrix and Overlap in Research Literature

Authors	Administrative Role	Transformational Role	Welfare Role	Strategic Partner Role	Strategic HR Role
Legge (1995b)		Deviant innovator		Organizational Diagnostician	
Tyson (1999)	Clerks of works		Contract Manager		
Torrington (1979)	Analysts of benevolence		Human Bureaucrat		
Storey (1992)	Handmaiden	Adviser	Regulator	Change Maker	
Ulrich (1997)	Administrative Expert	Change Agent	Employee Champion	Strategic Partner	Business Partner Role
Buyens and Vos (1999)	Boffin	Fireman	Butler	Dreamer	
Kossek and Block (2000)	Transactions	Transition	Translation	Transformation	
Jackson and Schuler (2000)	Monitoring	Change Facilitator	Enabler	Partnership	Strategic and innovation

Reference: Bhatnagar , J. and Sharma A. (2005) The Indian perspective of strategic HR roles and organizational learning capability, *The International Journal of Human Resource Management*, 16:9, pp. 1711-1739.

It is observed that there are synonyms with the relabeling of job titles from Management and Human Resources personnel management to HRM manager (Bhatnagar and Sharma, 2005). Within the scope of the research, 50 Indian organizations were selected and 640 managers, including middle and senior managers and department managers in HR, were surveyed. The organizations to which executives respond include the public sector, the private sector, and multinational corporations. At the end of the study, a positive relationship was found between strategic HR roles and organizational learning ability. In addition, it was concluded that there were significant differences in the strategic partner role and organizational talent perceptions of department managers

and HR managers in India, and organizational learning ability was higher for department managers and strategic HR role perception was higher for HR managers (Bhatnagar and Sharma, 2005).

As a result of the researches, it has been revealed that the strategic role acts as a bridge between business strategy and human resources management. It was determined as one of the results of the research that the strategic focus of the Human Resources department was organizational learning, organizational abilities and competitiveness (Bhatnagar and Sharma, 2005). In the study, which includes that the strategic HR role is also linked to organizational leadership ability, the effectiveness of human resources practices is mentioned (Bhatnagar and Sharma, 2005).

2.7. HR Roles According to Hunt and Boxall

Another study is a report by Jeremy Hunt and Peter Boxall (1998) on the qualifications, work histories, role orientations and strategic contributions of top HR managers in New Zealand. It has been argued that changes in business contexts and philosophies provide HR managers with the opportunity to become ‘strategic partners’ (Dyer and Holder, 1988: 659), while they play roles that help organizations define and meet their ‘strategic needs’ (Schuler 1992:20).

Within the scope of the research, large-scale surveys that offer a limited number of response options were used in the research on HR managers. This study is based on semi-structured interviews and archival data. It was decided to meet with the corporate General Managers and HR managers of the largest private sector companies in New Zealand. These interviews, held in late 1995, addressed the following topics:

- General Manager - HR’s experience, training and career.
- The structure of each firm and its position within the HR function.
- General Manager - HR’s role perceptions
- General Manager - HR’s involvement in “strategic issues”
- Comparison with other general managers.

General Managers and HR managers were asked to disclose their involvement in ‘strategic decisions’ to explore the nature of their roles in senior

management. To assist in structuring this question, questions were asked about the strategic decisions outlined below;

- *Introduction of new technology*
- *Promotion and development of quality initiatives*
- *New plants and company acquisitions*

At the end of the interviews, it was concluded that the General Managers and HR Managers in the sample had sufficient training, experience and formal status to play broad, strategically oriented roles (Hunt and Boxall, 1998). General Managers and HR managers have been shown to aim to focus on the business as a whole and its wider environment. The extent to which such a goal can be achieved is the result that it requires more work, including other members of senior management. However, the results of the interviews showed signs of closer integration, especially between HRM and quality management (Hunt and Boxall, 1998:778).

3. Best Practices for Strategic HRM

As mentioned above, the competencies that HRM should have for every process and application it conducts within the enterprise have been the subject of studies in the academic literature for many years, and what functions it includes have been discussed.

The ability to increase organizational performance and the fulfillment of Strategic HR roles depend on the implementation of best practices by HR within the enterprise. The origin of “best practices” is based on North America (Gurbuz, 2013:9). Pfeffer, in his empirical study in 1994, claimed that HR practices in 16 different subjects such as participation and empowerment, job security, training and development will bring benefits in terms of productivity and profit of the enterprise .

Table 4. Principles that HR Departments Should Apply throughout the Business

Factors That Have Direct Impact on Global Organizations
Implementing official systems that improve worldwide communication Designing and implementing an international human resources information system Promoting a global mindset in all employees through training and development Developing global leadership with developmental cross-cultural assignments Positioning the human resources function as a strategic partner in global business.
Factors That Have Direct Impact on the Functioning of Global Human Resources
Ensuring flexibility in all human resources programs and processes Build relationships with international HR colleagues to promote knowledge Ability to express the relative value of Human Resources programs Ability to market HR globally as a source of strategic advantage Ability to encourage local HR power to be relinquished to a worldwide HR structure Ensuring flexibility in all human resources programs and processes Build relationships with international HR colleagues to promote knowledge Ability to express the relative value of Human Resources programs Ability to market HR globally as a source of strategic advantage Ability to encourage local HR power to be relinquished to a worldwide HR structure

Reference: Stroh and Caligiuri (1998) Strategic human resources: a new source for competitive advantage in the global arena, *International Journal of Human Resource Management*, 9(1), pp. 1-17.

Osterman, on the other hand, in his study conducted in 1994, suggested that enterprises that value the commitment of employees in the long term will not employ temporary employees, and with this, focusing on the abilities and competencies of their existing employees, innovation provider HR practices such as incentive and motivation provider compensation are the most important investment in achieving business goals (Osterman, 1994). While the wage systems made to increase incentive and motivation show positive results in terms of increasing the loyalty of the employees, they can create an attractive situation for candidates with high performance and competence.

One of the best practices reported by Huselid in 1995 is to increase career opportunities for the enterprise and to combine this opportunity with an incentive compensation system, it is considered to be one step closer to both investment and

strategic goals and objectives in employee training and development (Huselid, 1995:642). Businesses have to have a global human resources function due to their goal of getting a share from the global market (Stroh and Caligiuri, 1998:14). Stroh and Caligiuri, who conducted research on this subject in 1998, interviewed global human resources managers of 60 US-based multinational organizations. Research has shown that managers across companies view their strategic HR departments as more effective partners in driving their organization's larger business plans. In the interviews, ten factors that facilitate the effectiveness of the global HR function in multinational organizations were determined. While the first five are the principles that HR departments should apply throughout the enterprise, the other five factors are factors that can directly affect the success of the business (Table 4).

As mentioned above, different practices have been suggested by different researchers and authors for best practices. It is shown below that the practices related to the subject are gathered in a single table and which criteria are mentioned by which authors (see Table 5.). Studies of high-performance work practices can sometimes differ significantly in terms of whether a practice is positively or negatively associated with high performance.

According to Kochan and Osterman (1994), four main topics stand out in high-performance work practices. Self-managed business teams see taking initiative in the progress of processes, increasing experience through job rotations and preventing alienation from the task, managing the process more healthily with problem-solving groups / quality circles that can be created, being able to simultaneously carry out customer expectations and business development with a total quality management format as decisive in high-performance working practices.

Table 5. High-Performance Working Practices Featured by the Authors

High Performance Working Applications	Authors				
	Kochan and Osterman	MacDuffie	Huselid	Cutcher-Gershenfeld	Arthur
Self-managed business teams	✓	✓		✓	✓
Job rotation	✓	✓			
Problem solving groups/quality circles	✓	✓		✓	✓

Total quality Management	✓	✓		
Recommendations received or implemented		✓		
Recruitment criteria learning versus current job		✓		
Conditional payment		✓	✓	✓
Status barriers		✓		
First week trainings (orientation) Production, Supervision, and Engineering Employees		✓		
Annual hours after initial training		✓	✓	✓
Information sharing (for example, newsletter)			✓	
Business analysis			✓	
Recruitment			✓	
Attitude surveys			✓	
Complaints procedure			✓	
Employment tests			✓	
Official Performance evaluation		✓		
Promotion rules (merit, seniority, unity)		✓		
Selection rate			✓	
Feedback on production targets			✓	

Conflict resolution (speed, steps, how formal)	✓	✓
Business design (narrow or wide)	✓	
Percentage of skilled workers in the plant		✓
The duration of the auditor's control	✓	
Social events		✓
Average total labor cost		✓
Benefits/total labor cost		✓

Reference: Gerhart, B. T. (1996). New directions in employee compensation research. In G. R. Ferris (Ed.), *Research in personnel and human resources management*, pp. 143-203.

The high-performance work system, which Arthur (1994) calls the “commitment” system, emphasizes contingent pay at a lower level, while the high-performance work systems described by Huselid (1995:641) and MacDuffie (1995) seem to have strong emphases on contingent pay. Another example is; Applications based on internal promotions and providing access to employee grievance procedures are defined as a system of providing high performance according to Huselid (1995) and Pfeffer (1994).

As a result, almost all authors agree that the best practices of enterprises can achieve high performance and increase employee loyalty, in addition to all these; a competitive advantage can be achieved over rival companies. However, according to some researchers, claims have been made that applications may lose their value if they are imitated and used by rival businesses. Therefore, it has been stated that integrating these practices in accordance with their own business culture will not be effective in gaining competitive advantage (Bayat, 2008:70).

4. Strategic HR Roles and Performance Relationship

How and in which situations HRM functions affect and increase business performance is a subject that has been investigated from the past to the present

(Huselid, 1995). Over the years, the strategic HRM transformation from traditional HRM functions is seen in the literature as the position of human resources (Kuipers, 2016). Unless the strategic HRM functions are transformed, the strategic value of the enterprise cannot be demonstrated and will not contribute to the performance of the enterprise (Becker et al. 1997:39).

With the rapidly changing business environment and the increase in global organizations, the consensus that human resource management has a critical importance in the success of the organization has increased rapidly (Jackson et al. 2003). How this human resource should be managed, how which roles should be used by HRM and management, and which role HRM should focus on most in order to add value to the rapidly changing Sunday and enterprise structure, and what kind of performance benefits these roles or roles will provide, have been considered important agenda items of the issue (Lawler, 2003). The importance of this subject has found a response in the academic literature and research has continued to increase.

Lawler and Mohrman (2003) conducted a study on the performance and effectiveness of HR departments' activities as business partners within the enterprise and the development of business strategy skills, and as a result of the research, high results were obtained on the performance and effectiveness of activities in which HR units perform the role of business partners within the enterprise. The same table was used in 2000 and 2003. When looking at the HR activities in which the HR unit is a full business partner, employee advocacy in dealing with the personal motivation or problems of employees received a value of 7.5, while directing and adapting HR practices according to business needs followed the ranking with 7.0. Providing change consultancy services received the lowest value of 6.1 in the valuation, while helping to shape a viable employment relationship for the future and developing organizational skills and abilities were rated between 6.5 and 6.9. Considering that the HR unit is not fully partnered, strategic developments and change consultancy were subject to the lowest evaluation when the same issues were evaluated (Lawler and Mohrman, 2003:17).

According to Lawler and Mohrman's study, it has been stated that HR functions have 3 definable roles. The longest defined role, which also includes traditional management processes, is the provision of administrative services (Lawler and Mohrman, 2003). However, it has been stated that in the last ten years, with a better understanding of the critical importance of HR, evaluations have also started to be made as a business partner. According to the research, another and final role is strategic partnership. With this role, HR has a direct say

in the creation of organizational strategy and the making of all other important business decisions as a team member of senior management. In carrying out its activities, HRM not only needs to have competencies related to strategy and business issues involved in strategy development, but also must be able to contribute to organizational design and change management. It is argued that there is a requirement for competence apart from strategic activities in the form of carrying out basic administrative functions (Lawler and Mohrman, 2003).

By examining the relationship between the HR role and effectiveness, it was seen that there was a negative relationship between the time spent on records, supervision and service provision and effectiveness. On the other hand, it is concluded that there is a strong positive relationship between the extent to which an HR organization spends its time as a strategic business partner and its perceived effectiveness.

- Keeping records
- Audit control
- Delivery of HR services
- Development of HR systems
- Being a strategic business partner
- Ensuring the development of organizational skills and abilities
- Providing change consultancy services
- Adapting HR practices to business needs
- Helping shape a viable employment relationship for the future

The fact that there is a strong positive relationship between the applicability of all the above-mentioned items and how much strategic partner the HR unit can be and how much time they devote to this issue led to the analysis of Lawler and Mohrman and they developed a survey application.

Lawler and Mohrman conducted their analysis in 2003 according to the studies conducted on whether the strategic oriented changes envisaged for HR organizations in 1995 and 1998 really took place and what kind of differences might have been created for HR effectiveness. The study was conducted by taking into account a questionnaire completed by HR leaders at a level of director or above who were employed in 115 various sectors in 1995 and 1998. According to the results, HR leaders in both 1995 and 1998 reported a significant reduction in the HR time devoted to keeping records and auditing/controlling the business's HR practices over the past five to seven years. Table 6.shows

us percentage of time spent of HR leaders in various roles. In addition, they claimed that the time spent on the development of HR systems and applications and becoming a strategic business partner has significantly increased (Mohrman et al., 2003). While the recording and tracking of employee data was reported as 15.4% in 1995, it was observed that this percentage decreased from 1998 to 2001. In this case, it seems clear that the inclusion of technology in the processes over the years has had an impact. It is possible to organize the registration and tracking operations of the created databases by categorizing them. In the audit and control category, while the ratio was 12.2% in 1995, it was observed that it fell to 11.4% by 2001.

The clearest view revealed by the increases and decreases from year to year is that the role and functions of business partners are becoming increasingly important for companies, and the development of information technologies and changes in corporate culture and operation in order to adapt to global HR functions are revolutionary in HRM. It is understood from the results that business-oriented services can be provided more effectively if HRM is a business partner within the company.

In the study conducted by Ben S. Kupiers and Laura M. Giurge in 2016, researches were conducted on how both the operational and strategic roles used by the HR function contribute to the performance of organizations, and it is suggested that there is a positive relationship when the relationship between HR roles and performance is compatible with organizational strategy has been driven. In the continuation of the study, a survey was conducted with the participation of 336 managers who have HR functions or HR responsibilities in both private and public organizations. As a result of the survey, it was concluded that organizational performance increases when a strategic role is applied for HR (Kupiers and Giurge, 2016: 18).

Kupiers and Giurge (2016) presented a model for Strategic HR roles based on the model developed by Ulrich (1997), which is the most cited. In the model, it has been suggested that an Organizational Strategy should be developed in order to ensure harmony and coordination between HR Roles and Organizational Performance. It has been claimed that the compatibility of organizational strategy interactions between HR roles and performance creates a positive relationship. In other words, there must be a harmony between organizational strategy and HRM in order for HR roles to be implemented and to have an impact on organizational performance or to experience the impact it has created. Every strategy that aims to achieve similar goals necessarily intersects

and harmonizes at some point. It reflects the state of being able to create positive effects on performance in harmony and correct interaction.

5. Conclusion and Recommendations

Human resources management, which initially had a limited potential with personnel management and personnel functions, has become quite comprehensive and strategic. In other words, HR function left the support position and shifted to a strategic position in managerial issues and critical decisions by transforming as a strategic partner of the organization in the business context. The HR professional's participation in strategic decisions has become a critical role by contributing to the organization at a strategic level. According to the results of the historical literature research, it has been seen that strategic management models are used from the outside in and from the inside out, and organizational perspectives, vision and missions have been moved to advanced levels as an output of the evolution and development of these models towards the present day.

The roles that human resources experts and managers have acquired from the past to the present have guided the evolution of human resources management, and breakthroughs in strategic HRM have been made. Globalization and rapid changes have shown that businesses should receive support while providing competitive advantage and this support can be provided by the HRM department. Because, as mentioned in the study, the most basic step in the way that businesses can provide competitive advantage and reach their goals is to direct human resources correctly. The commitment of the employees, their adaptation to the organizational culture, the ability to develop and improve, and the improvement practices that can be made in this position are all carried out by the human resources department.

Since there is a positive relationship between the roles of strategic HRM and increasing organizational performance, it is important that businesses and organizations are open to developments and changes in this direction. The duty of human resources is to persuade the senior management about change and development and to encourage them by talking about the productivity and competitive advantage that can be obtained at the end of the process. With the beginning of the age of change and technology as a result of globalization, businesses that are aware of the fact that human resources are a critical and valuable factor create or revise their core values accordingly. It is observed that the commitment and performance of the employees of the organizations with a

management approach open to globalization and development have increased within the enterprises. In this process, human resources department employees should follow the process from many different perspectives as a strategic business partner.

Today, innovative HR strategies are implemented, advanced HR information systems are established, and HR structures and processes are redesigned. In order to add more value to companies, efforts are made to improve the quality of HR services and to establish stronger links with business needs. But all these changes require renewed roles and new competencies among HR professionals. Without aligning the skills of HR professionals with changing HR visions, strategies, structures, systems and processes, the transformation of HR functions will inevitably be incomplete. It requires renewed roles and new competencies among HR professionals.

Within the scope of this study, a framework of the acquired roles and functions and the effectiveness in terms of organizational performance and productivity were examined by referring to the various researchers in the academic literature from the past to the present. In our changing business environment, it is inevitable that the roles and competencies of human resources in strategic management will increase and evolve in the future.

References

- Amit, R. (1993). Strategic assets and organizational rents. *Strategic Management Journal*, pp. 33-46.
- Applebaum, E. (1994). The new American workplace: Transforming work systems in the United States. *Ithaca, NY: ILR Press*.
- Armstrong, M. (2006). *A Handbook of Human Resource Management Practice*, London, Kogan Page, pp. 72.
- Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, pp. 670-687.
- Baird, L. (1988). Managing two fits of strategic human resource management. *Academy of Management Review*, pp. 116-128.
- Barney, J. (1995). Looking inside for competitive advantage. *Academy of Management Executive*, pp. 49-61.
- Bayat, B. (2008). İnsan Kaynakları Yönetiminin Stratejik Niteliği. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi* , 10 (3) , pp. 6791.

Becker, B. (1998). High Performance Work Systems And Firm Performance: A Synthesis Of Research And Managerial Implications. *Research in Personnel and Human Resource Management*, pp. 53-101.

BNA. (1994). Human Resource Activities, Budgets, and Staffs . Washington, D.C.; BNA.

Brenner, L. (1996). The disappearing HR department. *CFO*, pp. 61-64.

Brian Becker, B. G. (1996). The Impact of Human Resource Management on Organizational Performance: Progress and Prospects. *Academy of Management Journal* , pp. 779-801.

Brockbank, W. (1999). If HR Were Really Strategically Proactive: Present and Future Directions in HR's Contribution to Competitive Advantage. *Human Resource Management*, pp. 337-352.

Boxall, P. and Purcell, J. (2003). *Strategy and Human Resource Management*, Palgrave Macmillan, Basingstoke.

Buyens, D. and De Vos, A. (1999). The added value of the HR function in International HRM. *Contemporary Issues in Europe*. C. Brewster and H. Harris (eds). London: Routledge .

Caldwell, R.(2001). "Champions, Adapters, Consultants and Synergists: The New Change Agents in HRM", *Human Resource Management Journal*, C.11, No: 3, pp. 40.

Caldwell, R. (2003). "The changing roles of personnel managers: old ambiguities, new uncertainties", *Journal of Management Studies*, Vol. 40 No. 4, pp. 983-1004.

Csoka, L. A. (1998). Transforming the HR Function for Global Business Success. *New York: Conference Board*.

Csoka, L. S. (1995). Rethinking human resources. *New York: Conference Board*.

Cutcher-Gershenfeld, J. C. (1991). The impact on economic performance of a transformation in workplace relations. *Industrial and Labor Relations Review*, p. 241-260.

Doty, D. H. (1993). Fit, equifinality, and organizational effectiveness: A test of two configurational theories. *Academy of Management Journal*, pp. 1196-1250.

Dyer, L. (1995). HR strategies and firm performance: What do we know and where do we need to go? *International Journal of Human Resource Management*, pp. 656-670.

Gerhart, B. (1990). Organizational differences in managerial compensation and firm performance. *Academy of Management Journal*, p. 663-691.

Gerhart, B. T. (1996). New directions in employee compensation research. In G. R. Ferris (Ed.), *Research in personnel and human resources management*, pp. 143-203.

Gurbuz, S. (2013). Stratejik İnsan Kaynakları Yönetiminin Kuramsal Temelleri: Evrenselci, Kosul Bağımlılık ve Yapısalcı Yaklaşımlar . *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 15 (1) , pp. 1-35 .

Huselid, M. A. (1995). High performance work systems and organizational performance. *Paper presented at the annual meeting of the Academy of Management, Vancouver*.

Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, pp. 635-672.

Ichniowski, C. S. (1994). The effects of human resource management practices on productivity. *Working paper, Columbia University Graduate School of Business, New York*.

Jeremy Hunt and Peter Boxall (1998). Are top human resource specialists ‘strategic partners’? Self-perceptions of a corporate elite, *The International Journal of Human Resource Management*, 9:5, pp. 767-781.

Kuipers, Ben S. and Giurge, Laura M. (2016). Does alignment matter? The performance implications of HR roles connected to organizational strategy, *The International Journal of Human Resource Management*.

Kochan, T. A. (1994). The mutual gains enterprise: Forging a winning partnership among labor, management, and government. *Boston: Harvard Business School Press*.

Kossek, E. E., and Block, K. (2000). Managing human resources in the 21st century: From core concepts to strategic choice. *Cincinnati, OH: Southwestern College Publishing*.

Lawler, E. (1995). Strategic Management: An Idea Whose Time Has Come.” In B. Downie and M.L. Coates (eds.), *Managing Human Resources in the 1990s and Beyond: Is the Workplace Being Transformed?* , pp. 46-70.

Legge, K. (1995). What is human resource management?. In: Human Resource Management. Management, Work and Organisations. *Palgrave, London*.

Lawler, E. S. (1993). Strategic Human Resources Management. In P. Mirvis (ed.). *Building the Competitive Workforce (New York: Wiley)*, pp. 31-59.

Lawler, E. E., and Mohrman, S. A. (2000a). *Beyond the visions: What makes HR effective?* *Human Resource Planning*, 23 (4), pp. 10-20.

Lawler, E. E., and Mohrman, S. A. (2003). HR As a Strategic Partner: What Does It Take to Make It Happen?. *Human Resource Planning*, 26(3), 15-29.

Lengnick-Hall and C. A.-H. (1988). Strategic human resource management: A review of the literature and a proposed typology. *Academy of Management Review*, pp. 454-470.

MacDuffie, J. P. (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *Industrial and Labor Relations Review*, pp. 197-221.

Meyer, A. D. (1993). Guest co-editors' introduction: Configurational approaches to organizational analysis. . *Academy of Management Journal*, pp. 1175-1195.

Milgrom, P. (1995). Complementarities and fit: Strategy, structure, and organizational change in manufacturing. *Journal of Accounting and Economics*, pp. 179-208.

Mohrman, A. G. (1998). Tomorrow's Organization: Crafting Winning Capabilities in a Dynamic World . (San Francisco: Jossey-Bass).

Mohrman, S. L. (1996). Directions for the Human Resources Organization . Los Angeles, CA: Center for Effective Organizations.

Mohrman, S. and Lawler E. (2003). HR As A Strategic Partner: What Does It Take To Make It Happen?. Los Angeles, CA: Center for Effective Organizations.

Osterman, P. (1994). How common is workplace transformation and who adopts it? *Industrial and Labor Relations Review*, 47(2), pp. 173-188.

Pfeffer, J. (1994). Competitive advantage through people. Boston: Harvard Business School Press.

Sahdev, K., Vinnicombe, S., and Tyson, S. (1999) Downsizing and the changing role of HR, *The International Journal of Human Resource Management*.

Schmidt, F. L. (1981). Task differences as moderators of aptitude test validity in selection: A red herring. *Journal of Applied Psychology*, pp. 166-185.

Schuler, R.S., Jackson, S.E., Story, J., 2000. HRM and its link with strategic management. In: Storey, J. (Ed.), *Human resource management: a critical text. IT, London*.

Storey, John (1992). Developments in the Management of Human Resources: An Analytical Review, Oxford: Blackwell Publishing, pp.168.

Tyson, S. (1987). The Management of The Personnel Function. *Journal Management Studies*, 24:5 September.

Torrington, D.P. and Chapman, J.B. (1979) Personnel Management. Hemel Hempstead: Prentice Hall.

Ulrich, D., Brockbank, W., and Yeung, A. (1989). Beyond Belief: A

Benchmark For Human Resources. *Human Resource Management* (1986/1998), 28(3), p.311.

Ulrich, D. (1997). *Human Resource Champions*. Boston, MA: *Harvard Business School*.

Ulrich, D. and Brockbank, W. (2005). *The HR Value Proposition*, Boston, Harvard Business Press, . 200.

Ulrich D. and Beatty D. (2000). *From Partners to Players: Extending the HR Playing Field*, *Human Resource Management*, C.40, No: 4, . 294.

Ulrich D. Kryscynski, D., Brockbank, W., and Ulrich, M. (2017). *Victory Through Organization Why The War Talent Is Failing Your Company And What You Can Do About It*. *New York: Mc Graw Hill*.

Ulrich, M., Kryscynski, D., Ulrich, D., Brockbank, W. and Slade, J. (2016). *HR Competency Model*, *Human Resource Competency Conference*, *www.rbl.net*. 11/04/2022.

Ulrich, D., Younger, J., Brockbank, W., and Ulrich, M. (2012). *HR From The Outside In: Six Competencies For The Future of Human Resources*. *New York: Mc Graw Hill*.

Ulrich, D., Younger, J., Brockbank, W., Johnson, D., and Sandholtz, K. (2008). *HR Competencies: Mastery at the Intersection of People and Business*. *USA: SHRM*.

CHAPTER VI

THE EFFECT OF TOXIC LEADERSHIP ON WORK ALIENATION AND TURNOVER INTENTION*

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1. Introduction

Leadership has been considered an important phenomenon in almost every field from the earliest periods of history to today's societies. As people who gather others around goals and objectives, guide and influence them in this direction, leaders are critical to organizations' success. In today's business world, effective leadership provides a high level of organizational effectiveness, productivity, and employee happiness. Successful leaders establish positive

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relationships based on high interaction with their employees considering individual differences, give individuals the opportunity to develop their abilities and skills with the awareness of continuous learning and development, and thus become facilitators in realizing goals and objectives. On the other hand, leaders do not come to the forefront only with their positive characteristics. In work environments, it is also possible to encounter leaders who use their power only for their own benefit, exaggerate their own value, establish negative relationships with their subordinates, underestimate and constantly criticize their work results, and avoid taking responsibility for mistakes. This style, which is expressed in the literature as toxic leadership, adversely affects many outputs such as job satisfaction, organizational commitment, organizational citizenship behavior, and organizational trust and also leads to the alienation of employees from their work and increases their turnover intention.

In this respect, the current study aimed to determine the effect of toxic leadership on work alienation and turnover intention. The study revealed the effect of toxic leadership on work alienation and turnover intention with the research that included 388 participants from two sectors, banking and insurance, in Istanbul, Denizli, and Kahramanmaraş provinces. It is thought that the study is important in terms of understanding the destructive effects of toxic leadership attitudes and behaviors on employees and creating mechanisms that prevent this leadership style from becoming widespread in organizations. Furthermore, there are few publications under the title of “toxic leadership” in the national and international literature relating it to work alienation and turnover intention. In this respect, it is expected that the study will contribute to developing the literature.

In the study, first, the concepts of toxic leadership, work alienation, and turnover intention were explained, and the findings of some domestic and foreign studies indicating the correlations between the variables were presented. The following sections include the methodology of the study, data analysis, and the findings. In the conclusion section, the findings of the study were evaluated by making comparisons with some studies in the literature, and suggestions were made to practitioners and researchers.

2. Conceptual Framework

2.1. Toxic Leadership

Leadership has been considered an important issue in almost every field of life from past to present, has been the subject of numerous disciplines and,

therefore, has become a concept with various definitions in the literature. According to Hicks (1978), leadership is the realization of the management skills of a person, who is described as a leader in a group or an organization including more than one person, in the dimension of social interaction (Erdem and Dikici, 2009: 199-200). In line with another definition, leadership is managing a dynamic process in which individuals display enthusiasm and desire to adopt and achieve goals in the process of reaching the goals set by the organization (İnce, Bedük and Aydoğan, 2004: 437). Although the concept of leadership usually connotes meanings such as having a positive effect on the environment, adding value to the environment, and providing benefits, leadership also has a dark side (Çelebi, Güner and Yıldız, 2015: 250).

Toxic leadership is one of the concepts related to the dark side of leadership. The word toxic comes from the word “toxicus,” which was first mentioned in Greek mythology and means “poison” (Singh, Sengupta and Dev, 2018: 149). The concept of toxic leadership was first used by Whicker (1996) (Çankaya and Çiftçi, 2020: 276). Not communicating openly, being closed to criticism, causing fear in subordinates by using their title, and having a narcissistic personality are among the characteristics of toxic leaders (Canbolat, Çelik and Yılmaz, 2021: 29). Moreover, toxic leaders use the power they derive from leadership in the negative direction by behaving in an authoritarian, oppressive, and insensitive manner toward the people they work with, abandoning the decisions taken without providing any reason or changing the relevant decisions based on illogical reasons (Çankaya and Çiftçi, 2020: 276-277).

In defining leaders as “toxic,” the environment and the characteristics of followers play an important role in addition to the leader’s personal characteristics (Zengin, 2019: 2759). Upon examining the personal characteristics of individuals with toxic leadership characteristics, it is seen that these individuals avoid honesty, exhibit hypocritical behaviors, constantly make fun of situations, people and events, disregard the happiness of their colleagues, exhibit selfish behaviors, and have an ambitious nature. Other prominent features of toxic leaders include not seeing their own mistakes or putting the mistakes of their subordinates to the forefront by covering up these mistakes, exhibiting dissatisfaction with money, ignoring the resources of the enterprise, displaying negligent behavior by ignoring the costs, avoiding making decisions, or exhibiting a cowardly attitude (Lipman-Blumen, 2005). Subordinates also have an effect on the formation and maintenance of toxic leadership. The fact that subordinates who are exposed to the negative behaviors of toxic leaders do not oppose these people and obey their orders and commands may be due to issues such as the need to be protected

and feel safe and the fear of being excluded from the group they belong to. Subordinates can be examined under two groups: followers and supporters of toxic leaders. Subordinates in the followers group follow toxic leaders to maintain their current position and gain belonging in line with their need for authority under the effect of low self-confidence. Individuals in the supporters group, on the other hand, support the behavior of toxic leaders as people who are close to the thinking style of toxic leaders or do not have values while realizing their ambitions about their job and the enterprise (Padilla, Hogan and Kaiser, 2007). In addition to this grouping, it is possible to define another group as “of course sir” or “herd mentality.” This group refers to a community that stands by the toxic leader, supports his/her every thought and decision, and acts in line with the leader’s orders and commands. Individuals in this group spend more time with those who exhibit toxic leadership behavior by being closer to them, do not make any negative statements about leaders, considering their interests in any case, and on the contrary, often exhibit behaviors that would be pleasing to toxic leaders with praise (Copeland, 2015: 18-20). Furthermore, the culture of the enterprise, the hierarchical order, and the inadequacy of working conditions are among the factors related to the environment in the formation and maintenance of toxic leadership (Aktaş, 2020: 13).

Toxic leadership has numerous adverse effects on individuals and organizations. Decreased self-esteem of subordinates, not regarding themselves as sufficient and not showing their talents, subordinates’ alienation from the goals of the enterprise, resorting to fraud in response to abuse inflicted on them, work avoidance or behavioral disorders, decreased productivity and effectiveness, decreased employee motivation, job satisfaction, organizational trust, justice and commitment, loneliness in the organization, problems in the communication process, conflict, absenteeism, increased turnover intention and work alienation are among the negative consequences of toxic leadership (Mehta and Maheshwari, 2014: 21-22; Tepper et al., 2009: 156-158; Aktaş, 2020: 2).

2.2. Work Alienation

The concept of alienation originates from the Latin word “alienato,” which was transferred into Greek as “alloiosis,” and transferred from there into all Germanic languages with approximately the same meaning and sound (Uysaler, 2010: 28). The concept is expressed with the word “alienation” in English. Alienation is basically a sociological concept developed by some classical and contemporary theorists (especially Durkheim, 1951, 1984; Fromm, 1941, 1955;

Marx, 1967, 1977; Seeman, 1959; Simmel, 1950, 1971) and is defined as “a situation in social relations between individuals, or between an individual and a group of people in a community or work environment, which is reflected by a low degree of integration or shared values and a high degree of distance or isolation” (Ankony and Kelley, 1999: 120-121). Hoy, Blazovsky, and Newland (1983) expressed the concept of work alienation as “a reflection of the feelings created by the disappointment experienced by a person regarding the employment position in the organization.” According to Blauner (1964), work alienation is the inability to provide conditions and environments that reveal the value of an individual as a human being, such as autonomy at work, responsibility, social interaction, and self-actualization (Elma, 2003: 15).

When the literature is reviewed, it is seen that work alienation is examined in five sub-dimensions, including powerlessness, meaninglessness, isolation, normlessness, and self-estrangement (Hırlak, Çiçeklioğlu and Taşlıyan, 2018: 248). According to Mottaz (1981), situations such as employees’ lack of dominance over the work they do and their inability to manage the work done and its result are related to the powerlessness dimension (Uğur and Erol, 2015: 184). The meaninglessness dimension is related to the inability of employees to understand how their roles and responsibilities contribute to the working system in which they are involved and to grasp the importance of their work. The facts that individuals are uncertain about how their duties and responsibilities within the framework of the vision in enterprises can contribute to this vision or goals and that the assigned duties and responsibilities are perceived as simple, routine, or boring compared to other works express the meaninglessness dimension of work alienation (Turgut and Kalafatoğlu, 2016: 31). The isolation dimension means that the employee distances himself/herself from his/her work sub-culture and colleagues with unfriendly feelings due to his/her knowledge and professional experience (Mühürçüoğlu, 2018: 68). The condition when individuals ignore principles and rules and do not take them as reference defines normlessness (Seçkin, 2020: 1212). Self-estrangement is the situation when an individual loses contact with his/her real self due to both internal factors and external pressures, creates an artificial self for himself/herself, and feels that all his/her behaviors in line with this self are not suitable for his/her real and valuable self (Turgut and Kalafatoğlu, 2016: 31).

The employee’s evaluation of his/her work as worthless and unimportant for himself/herself, the people he/she works with, the people he/she serves or society, having difficulty in communicating in the work environment or avoiding

this process, feeling powerless and inadequate, decreased interest in the work, having negative thoughts about the future, and describing himself/herself as a simple part of a functioning system are the indicators of the work alienation process. Likewise, employees' evaluation of their work as boring and meaningless, repeating the same work constantly, negatively evaluating the conditions in the work environment, not feeling the dominance of a manager or leader for these problems in the organization, and some deficiencies in the control mechanism are among the issues leading to work alienation (Kökalan, 2017: 40). The inability of employees to express themselves correctly within the enterprise and the low level of participation in decisions in the definition and implementation of business processes accelerate the work alienation process. In addition to individual and organizational factors, it is stated that the social environment where the person lives and the social conditions he/she is involved in also impact the process of work alienation (Hırlak, Çiçeklioğlu and Taşlıyan, 2018: 248).

Work alienation has some negative consequences on individuals and organizations. Some of these consequences are that the individual experiences high stress and psychological disorders (Sashkin, 1984), feels lonely and tired, has difficulty concentrating on tasks, has job dissatisfaction, and tends to slow down the work (İrdem, 2021: 144), the costs to meet the human resource needs arising with the increase in absenteeism and loafing behaviors, the increase in temporary assignments, burnout, organizational cynicism and organizational silence (Schabracq and Cooper, 2003: 70), the fact that employees experiencing the alienation process prevent the applications of potential qualified candidates and that the corporate image is adversely affected (Hirschfeld and Feild, 2000).

2.3. Turnover Intention

Turnover intention is defined as “conscious and deliberate willingness to leave the organization” and is considered the final step in the withdrawal process where an employee actively considers quitting and looking for alternative employment (Scott et al., 1999: 403).

Individuals may have turnover intention for various reasons. Gender, age, length of employment, status, and responsibilities are some individual factors related to turnover intention (Kaptanoğlu, 2020: 167). There are many organizational factors leading to turnover intention. Studies on this subject emphasize that wages are an important factor. While this factor, which considerably affects the continuity and satisfaction level of employees, can have a positive effect on employee productivity if paid equal to or in excess of the

amount deserved, it can result in dissatisfaction, absenteeism, and, ultimately, turnover intention when this amount is unsatisfactory or insufficient (Suğur, Suğur and Şavran, 2008). Social support offered by enterprises for employees is also crucial. Insufficient social support can lead to turnover intention (van der Heijden, van Engen and Paauwe, 2009: 832). Reasons such as deficiencies in the number of employees during various periods in enterprises and, therefore, the increased workload of the existing employees and the expectation of an efficient work output impact employees' psychology negatively, which may lead to turnover intention (Jones et al., 2007: 663). Employees' relations with their managers or leaders can also influence turnover intention (Van Breukelen, Schyns and Le Blanc, 2006). Furthermore, insufficient career opportunities and the lack of alternatives that can contribute to the development of employees are also shown among the important factors leading to turnover intention. This situation may cause the employee to make use of the opportunities in other organizations, and turnover intention may turn into the behavior of quitting the work (Houkes et al., 2003: 428-429). The country's economic problems, the reflection of economic problems in the market to the workforce, the increase in the number of jobs that can generate income with the development of technology, or the emergence of new business areas are among the environmental factors causing the employee's turnover intention (Kaptanoğlu, 2020: 164).

Turnover intention not only impacts the motivation of employees adversely but also reduces their productivity (Hui, Wong and Tjosvold, 2007: 745). The employee's turnover intention, starting to look for alternative job opportunities, not being able to come across any job that meets his/her expectations, and continuing his/her search continuously may lead to a further decrease in his/her performance in the current work and absenteeism (Bowen, 1982: 206).

Although employees' turnover intention usually results in the act of quitting the work, the process may not always proceed in this way, and even though employees have an intention to quit their work, they may not realize the act of quitting the work for various reasons. This is a warning for enterprises in terms of realizing the problem and reducing the possibility of losing employees by taking various precautions (Lee and Mowday, 1987: 723). Directing candidates correctly in the recruitment process by considering their knowledge and skills, clear statement of wages, fair execution of the reward and punishment system, determination of rewards in a way that motivates individuals, enabling career development and healthy progress of the promotion process, evaluating each employee as an individual based on their interests, abilities, and knowledge, and

conducting research to determine employee satisfaction at regular intervals are expressed as factors that can prevent turnover intention (Çarıkçı and Çelikkol, 2009: 153-156).

2.4. The Relationship of Toxic Leadership with Work Alienation and Turnover Intention

Various studies in the literature reveal the relationship of toxic leadership with work alienation and turnover intention. Although some studies have shown at the conceptual level that toxic leadership causes work alienation in employees (Işıkay, 2019: 46; Akca and Tuzcuoğlu, 2020: 262), few studies revealing the effect of this leadership style on work alienation with quantitative and/or qualitative methods have been found in the national and international literature. Pour et al. (2020) determined that toxic leadership had a significant positive effect on work alienation in a study carried out on 180 people working in the Ministry of Sports and Youth of Iran. Erçetin, Akbaşı, and Diş (2019) performed a study on 253 teachers working in public schools in Erzurum province and found that there were positive and highly significant correlations between school administrators' toxic leadership behaviors and teachers' work alienation levels and the sub-dimensions of toxic leadership significantly predicted the sub-dimensions of work alienation. Compared to the relationship between toxic leadership and work alienation, it is seen that more studies in the literature have revealed the effect of toxic leadership on turnover intention. Manaa (2022) showed that toxic leadership had a significant positive effect on turnover intention in a study conducted on 357 individuals working at the Egyptian Pharmaceutical Trading Company. The results of the study performed by Hattab et al. (2022) on 457 individuals working in various public institutions in Indonesia demonstrated that toxic leadership positively affected turnover intention. In a study carried out on 419 people continuing their graduate education at a state university and also working in a public or private institution, Kara (2022) found that the dimensions of not appreciating, self-seeking, and selfishness of toxic leadership had a significant positive effect on turnover intention. In a study conducted on 522 individuals working in a public institution, Akca (2021) stated that toxic leadership positively affected turnover intention. Naeem and Khurram (2020) revealed that toxic leadership increased employees' turnover intention in their study on 393 people working in the banking sector in Pakistan. A study carried out by Reyhanoğlu and Akın (2020) on a total of 403 employees working as nurses, assistants, health technicians, and office staff in a university teaching

hospital determined that toxic leadership had a significant positive effect on turnover intention. The results of the study performed by Labrague, Nwafor, and Tsaras (2020) on 770 nurses working in various hospitals in the Philippines revealed that toxic leadership positively affected turnover intention. Akca (2017) found that toxic leadership increased employee turnover intention in a study conducted on 282 employees of a company.

3. Research Methodology

3.1. Aim and Importance of the Study

The present study aimed to reveal the effect of toxic leadership on work alienation and turnover intention. It is expected that the study will be useful in providing information and awareness to enterprises and their employees about the concepts of toxic leadership, work alienation and turnover intention, realizing the toxic behaviors of leaders in work environments, understanding the impacts of these behaviors on employees in the context of work alienation and turnover intention, establishing mechanisms that will allow reviewing the suitability of individuals for the job and the organization by recognizing the existing and/or potential negative characteristics of individuals with various tools and practices such as competency-based interviews and personality inventories in the recruitment and placement processes, both changing the toxic behaviors of people who take on leadership roles with various training programs and providing the necessary attention and support to individuals working with leaders with this characteristic. Although various publications in the literature reveal the dark side of leadership and the relationship of some leadership styles, similar to the concept of toxic leadership, with work alienation and turnover intention, it is thought that the study is also important in terms of developing the literature, considering the few publications in the national and international literature related to the relevant variables under the title of “toxic leadership.”

3.2. Conceptual Model and Hypotheses of the Study

The conceptual model and hypotheses of the study were created in light of the findings of various domestic and foreign studies detailed in the theoretical framework. The models and hypotheses of the study are presented below.

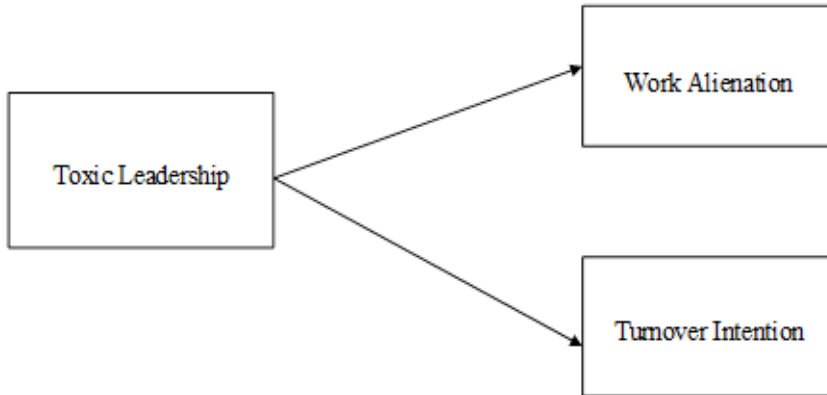


Figure 1: Conceptual Model of the Study

H₁: Toxic leadership has a significant positive effect on work alienation.

H_{1a}: Not appreciating has a significant positive effect on work alienation.

H_{1b}: Self-seeking has a significant positive effect on work alienation.

H_{1c}: Selfishness has a significant positive effect on work alienation.

H_{1d}: Negative mood has a significant positive effect on work alienation.

H₂: Toxic leadership has a significant positive effect on turnover intention.

H_{2a}: Not appreciating has a significant positive effect on turnover intention.

H_{2b}: Self-seeking has a significant positive effect on turnover intention.

H_{2c}: Selfishness has a significant positive effect on turnover intention.

H_{2d}: Negative mood has a significant positive effect on turnover intention.

3.3. Population and Sample of the Study

The study population consists of banking and insurance sector employees in Istanbul, Denizli, and Kahramanmaraş provinces. In the study, 388 individuals who were described as “white-collar workers” in the mentioned sectors were reached by the convenience sampling method.

3.4. Data Collection Method and Tool

The survey method was used as the data collection method in the study. The questionnaire consists of four sections. In the first section including the Personal Information Form, there are questions about the participants’ gender, age, educational level, years of experience, position in the enterprise, the

number of employees in the enterprise, and age of the enterprise. The second section includes the 30-item “Toxic Leadership Scale,” originally belonging to Schmidt (2008) and adapted by Çelebi, Güner, and Yıldız (2015). There are 4 sub-dimensions in the scale, including not appreciating, self-seeking, selfishness, and negative mood. In their study, Çelebi, Güner, and Yıldız (2015) determined the scale’s reliability coefficients between .89 and .94 in terms of sub-dimensions. The reliability coefficient for the overall scale was found to be .96. The third section includes the “Work Alienation Scale,” which was developed by Elma (2003) and contains 38 items. The scale includes the sub-dimensions of powerlessness, meaninglessness, isolation, and school alienation. The school alienation sub-dimension was adapted as organizational alienation in the study. Elma (2003) found the scale’s reliability coefficients between .62 and .86 in terms of sub-dimensions. In the fourth section, there is the 3-item and one-dimension “Turnover Intention Scale,” developed by Cammann et al. (1983) and adapted to Turkish by Gürbüz and Bekmezci (2012). Gürbüz and Bekmezci (2012) determined the scale’s reliability coefficient as .90 in their study.

4. Data Analysis and Findings

The study was conducted with 388 participants called “white-collar workers” in the banking and insurance sectors in Istanbul, Denizli, and Kahramanmaraş provinces. SPSS 22.0 and Amos 24.0 programs were used for data processing and analysis. Frequency and percentage were calculated to determine the descriptive information about the participants. The construct validity of the scales was examined with confirmatory and exploratory factor analyses. The hypotheses were tested using regression analysis.

The following sections contain the data analysis and the findings obtained.

4.1. Descriptive Information

Table 1 contains information about the participants’ demographic and occupational characteristics. As seen in the table, 51.8% of the participants are male, 84.5% are at least 30 years old, 80.1% have at least a bachelor’s degree, 56.7% have over 10 years experience in the sector, 51% work in a managerial position, 62.9% work in companies with at least 51 employees, and 57.5% work in companies that are “11-50 years old.”

Table 1: Distribution of the Participants by Demographic and Occupational Characteristics

Variable		n	%
Gender	Female	187	48.2
	Male	201	51.8
Age	20-29	60	15.5
	30-39	104	26.8
	40-49	133	34.3
	50 and Above	91	23.4
Educational Level	High School	77	19.9
	Bachelor's Degree	205	52.8
	Master's Degree	106	27.3
Experience in the Sector	5 Years and Below	77	19.8
	6-10 Years	91	23.5
	Over 10 Years	220	56.7
Position in the Enterprise	Senior Manager	63	16.2
	Mid-Level Manager	135	34.8
	Specialist	92	23.7
	Personnel	98	25.3
Number of Employees in the Enterprise	1-10	49	12.6
	11-50	95	24.5
	51-250	102	26.3
	251 and Above	142	36.6
Age of the Enterprise	0-10	61	15.7
	11-50	223	57.5
	Over 50	104	26.8
Total		388	100

4.2. Factor and Reliability Analysis

Confirmatory factor analysis was performed for the construct validity of the Toxic Leadership Scale. Confirmatory factor analysis (CFA) is a type of structural equation model (SEM) that can measure the correlation between observed and latent variables (Brown, 2006). Figure 2 shows the measurement model and solution values of the Toxic Leadership Scale, while Table 2 contains the goodness of fit values. The results of the measurement model show that all standardized factor loadings are above acceptable limits (0.50; Hair, Black and Babin, 2010: 708) and t values are significant. Furthermore, all the goodness of

fit values obtained are at an acceptable level. In line with these results, it can be said that the scale is a valid measurement tool.

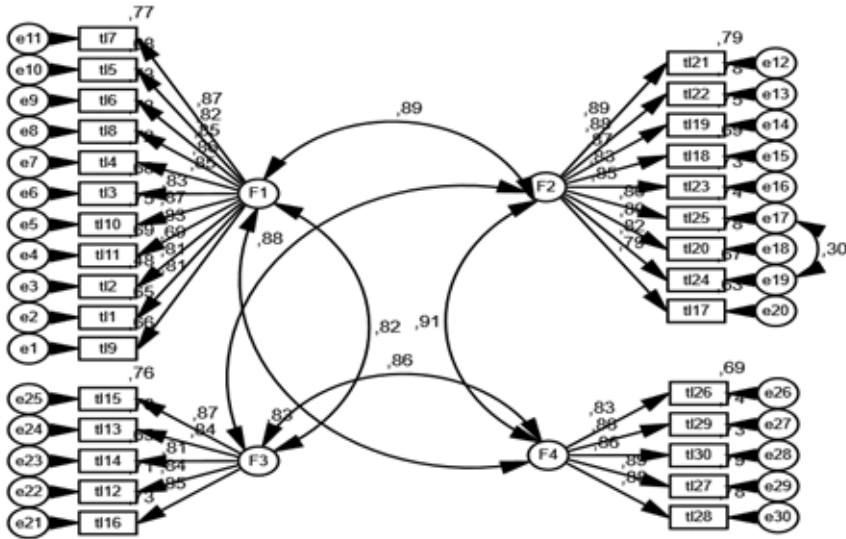


Figure 2: Diagram of the Confirmatory Factor Analysis of the Toxic Leadership Scale

Table 2: Goodness of Fit Index Values of the Confirmatory Factor Analysis of the Toxic Leadership Scale

Index	Normal Value*	Acceptable Value**	Value
χ^2/sd	<2	<5	1.83
GFI	>0.95	>0.90	0.90
AGFI	>0.95	>0.90	0.90
CFI	>0.95	>0.90	0.97
RMSEA	<0.05	<0.08	0.05
RMR	<0.05	<0.08	0.05

*, ** (Sümer, 2000; Schumacker and Lomax, 2004; Şimşek, 2007; Hooper and Mullen 2008; Waltz, Strickland and Lenz, 2010; Wang and Wang, 2012; Tabachnick and Fidell, 2013).

Figure 3 and Table 3 present the results of confirmatory factor analysis for the construct validity of the Work Alienation Scale. Although item 33 with .45 factor loading and item 35 with .43 factor loading remained below the acceptable factor loading of .50 in the model, the relevant items were not removed from the model in line with the opinion that both the relevant values were close to

the acceptable factor loading value and it was acceptable in the literature for a few items to be below .50 in cases where the general structure of the model was significant (Çömlekçi and Başol, 2019: 68). Furthermore, all t values were found to be significant in the model, and the goodness of fit values were also suitable for acceptable criteria. In line with these results, it is possible to say that the scale is a valid measurement tool.

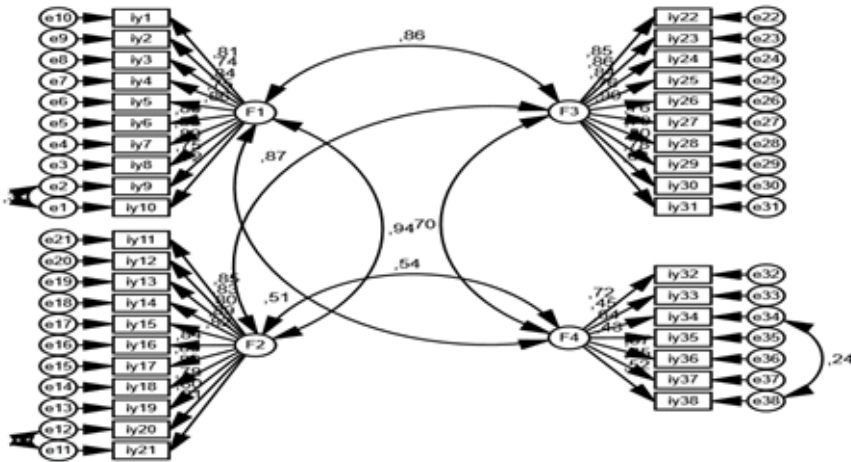


Figure 3: Diagram of the Confirmatory Factor Analysis of the Work Alienation Scale

Table 3: Goodness of Fit Index Values of the Confirmatory Factor Analysis of the Work Alienation Scale

Index	Normal Value*	Acceptable Value**	Value
χ^2/sd	<2	<5	2.82
GFI	>0.95	>0.90	0.90
AGFI	>0.95	>0.90	0.90
CFI	>0.95	>0.90	0.91
RMSEA	<0.05	<0.08	0.07
RMR	<0.05	<0.08	0.08

*, ** (Sümer, 2000; Schumacker and Lomax, 2004; Şimşek, 2007; Hooper and Mullen 2008; Waltz, Strickland and Lenz, 2010; Wang and Wang, 2012; Tabachnick and Fidell, 2013).

Since the degrees of freedom of a three-item scale are equal to zero, the model shows a perfect fit. However, the acquired findings are not valid because the estimates cannot be tested (Doğan and Aybek, 2021). Therefore,

the construct validity of the Turnover Intention Scale was tested by exploratory factor analysis. The fact that the KMO value is greater than .6 and Bartlett's test of sphericity is significant ($p < .05$) shows that the data are suitable for factor analysis (Pallant, 2017: 201). As a result of the analysis, the KMO test value was obtained as .736, and the result of Bartlett's test of sphericity was found to be significant ($p < .05$). According to these results, the scale is suitable for exploratory factor analysis. Furthermore, the total explained variance and factor loadings of the scale are shown in Table 4. The single-factor structure explains 82.50% of the total variance. It is seen that the factor loadings are also quite high. The results demonstrated that the scale is a valid measurement tool.

Table 4: Results of the Exploratory Factor Analysis
for the Turnover Intention Scale

Items	Factor Loading
Turnover Intention1	.928
Turnover Intention2	.913
Turnover Intention3	.884
Total Explained Variance: 82.501	

The study also examined the reliability of the scales. Ideally, Cronbach's alpha coefficient should be above .7 for a scale to be considered reliable (Pallant, 2017: 113). As a result of the reliability analysis, Cronbach's alpha coefficients were determined as .982 for the Toxic Leadership Scale, .974 for the Work Alienation Scale, and .984 for the Turnover Intention Scale. In light of these results, it can be stated that the scales are highly reliable.

4.3. Skewness and Kurtosis Measures

To apply parametric tests in the study, the conformity of the data to the normal distribution was examined over the skewness and kurtosis values, and Table 5 contains the results. Tabachnick and Fidell (2013) stated that skewness and kurtosis values between +1.5 and -1.5 were important determinants of the normal distribution of the data. The results indicate that all variables are in accordance with the normal distribution, and parametric tests were used in correlation and regression analyses.

Table 5: Skewness and Kurtosis Values of the Variables

Variable	N	Skewness	Kurtosis
Toxic Leadership (Total)	388	-0.692	-0.653
Not Appreciating	388	-0.374	-1.156
Self-Seeking	388	-0.796	-0.622
Selfishness	388	-0.790	-0.466
Negative Mood	388	-0.823	-0.439
Work Alienation (Total)	388	-0.166	-1.116
Powerlessness	388	-0.420	-1.007
Meaninglessness	388	-0.212	-1.317
Isolation	388	-0.144	-1.262
Organizational Alienation	388	-0.403	-0.129
Turnover Intention	388	-0.487	-1.189

4.4. Correlation Analysis

The results of the correlation analysis conducted to determine the correlations between toxic leadership, work alienation, and turnover intention are shown in Table 6.

The correlation coefficient (r) takes values between -1 and +1. The + sign in front of the coefficient value indicates a positive correlation between the variables, whereas the - sign indicates a negative correlation. Despite various opinions in the literature regarding the evaluation of the correlation coefficient as weak, moderate, and high, values between .10 and .29 indicate a weak correlation between variables, values between .30 and .49 indicate a moderate correlation, and values between .50 and 1.0 indicate a high correlation (Pallant, 2017: 144; 150).

In line with these explanations, upon examining the results in Table 6,

- There is a high and significant positive correlation between toxic leadership and work alienation ($r = .699$; $p < 0.01$),
- There is a high and significant positive correlation between not appreciating and work alienation ($r = .695$; $p < 0.01$),
- There is a high and significant positive correlation between self-seeking and work alienation ($r = .647$; $p < 0.01$),
- There is a high and significant positive correlation between selfishness and work alienation ($r = .583$; $p < 0.01$),

- There is a high and significant positive correlation between negative mood and work alienation ($r = .641$; $p < 0.01$),
- There is a high and significant positive correlation between toxic leadership and turnover intention ($r = .636$; $p < 0.01$),
- There is a high and significant positive correlation between not appreciating and turnover intention ($r = .632$; $p < 0.01$),
- There is a high and significant positive correlation between self-seeking and turnover intention ($r = .594$; $p < 0.01$),
- There is a high and significant positive correlation between selfishness and turnover intention ($r = .514$; $p < 0.01$),
- There is a high and significant positive correlation between negative mood and turnover intention ($r = .588$; $p < 0.01$).

Table 6: Results of the Correlation Analysis for the Variables

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Toxic Leadership Total (1)	1									
Not Appreciating (2)	.945**	1								
Self-Seeking (3)	.960**	.855**	1							
Selfishness (4)	.892**	.773**	.838**	1						
Negative Mood (5)	.905**	.784**	.863**	.797**	1					
Work Alienation Total (6)	.699**	.695**	.647**	.583**	.641**	1				
Powerlessness (7)	.722**	.694**	.672**	.618**	.693**	.941**	1			
Meaninglessness (8)	.656**	.655**	.602**	.543**	.610**	.945**	.899**	1		
Isolation (9)	.632**	.628**	.592**	.527**	.569**	.939**	.835**	.832**	1	
Organizational Alienation (10)	.354**	.394**	.317**	.277**	.265**	.599**	.418**	.419**	.547**	1
Turnover Intention (11)	.636**	.632**	.594**	.514**	.588**	.732**	.747**	.720**	.647**	.342**

** Correlation is significant at the 0.01 level.

4.5. Regression Analysis

Table 7 contains the results of the regression analysis regarding the effect of toxic leadership on work alienation. The established model is significant ($F = 368.565$; $p < 0.05$), and the results demonstrate that toxic leadership has a significant positive effect on work alienation ($B = 0.798$; $p < 0.05$). Toxic leadership explains 48.7% of the change in work alienation.

The model regarding the effects of toxic leadership's dimensions of not appreciating, self-seeking, selfishness, and negative mood on work alienation is also significant ($F=98.440$; $p<0.05$). Independent variables explain 50.2% of the change in the dependent variable. Concerning the results, it is seen that the dimensions of not appreciating ($B=1.415$; $p<0.05$) and negative mood ($B=1.545$; $p<0.05$) have a positive and significant effect on work alienation, and the dimensions of self-seeking ($B=0.116$; $p>0.05$) and selfishness ($B=-0.088$; $p>0.05$) do not have a significant effect on work alienation.

According to these results, hypotheses H_{1a} , H_{1b} , and H_{1d} were supported, while hypotheses H_{1c} and H_{1e} were not supported.

Table 7: Regression Analysis Results Concerning the Effect of Toxic Leadership on Work Alienation

Dependent Variable	Independent Variable	β	t	p	F	Model (p)	R ²
Work Alienation (Total)	Constant	39.836	8.713	0.000	368.565	0.000	0.487
	Toxic Leadership (Total)	0.798	19.198	0.000			
Work Alienation (Total)	Constant	42.445	8.951	0.000	98.440	0.000	0.502
	Not Appreciating	1.415	6.887	0.000			
	Self-Seeking	0.116	0.355	0.722			
	Selfishness	-0.088	-0.195	0.845			
	Negative Mood	1.545	3.203	0.001			

The results of the regression analysis regarding the effect of toxic leadership on turnover intention are presented in Table 8. The established model is significant ($F=261.666$; $p<0.05$), and the results show that toxic leadership has a positive and significant effect on turnover intention ($B=0.026$; $p<0.05$). Toxic leadership explains 40.2% of the change in turnover intention.

The model concerning the effects of toxic leadership's dimensions of not appreciating, self-seeking, selfishness, and negative mood on turnover intention is also significant ($F=70.560$; $p<0.05$). Independent variables explain 41.8% of

the change in the dependent variable. Considering the results, it is observed that the dimensions of not appreciating ($B=0.045$; $p<0.05$) and negative mood ($B=0.055$; $p<0.05$) have a positive and significant effect on turnover intention, and the dimensions of self-seeking ($B=0.010$; $p>0.05$) and selfishness ($B=-0.020$; $p>0.05$) do not have a significant effect on turnover intention.

According to these results, hypotheses H_{2a} , H_{2b} , and H_{2d} were supported, whereas hypotheses H_{2c} and H_{2e} were not supported.

Table 8: Regression Analysis Results Concerning the Effect of Toxic Leadership on Turnover Intention

Dependent Variable	Independent Variable	β	t	p	F	Model (p)	R ²
Turnover Intention	Constant	0.740	4.218	0.000	261.666	0.000	0.402
	Toxic Leadership (Total)	0.026	16.176	0.000			
Turnover Intention	Constant	0.850	4.669	0.000	70.560	0.000	0.418
	Not Appreciating	0.045	5.730	0.000			
	Self-Seeking	0.010	0.829	0.408			
	Selfishness	-0.020	-1.185	0.237			
	Negative Mood	0.055	2.997	0.003			

5. Conclusion

Leadership, which has always played a very important role in working life, is becoming more important for today's business world, where competition, uncertainty, and complexity increase every day. Leaders who have knowledge and awareness about the nature and dynamics of change, who constantly renew themselves in this direction, who prepare, support, and inspire the appropriate environment and conditions for employees to realize the organization's vision, goals, and objectives, as well as to achieve their own career goals, make a huge difference in the success of individuals and organizations nowadays. On the other hand, the dark leadership style, which generally expresses the negative characteristics, attitudes, and behaviors of leaders, adversely affects individual and organizational outcomes, prevents the effective and efficient use of all organizational resources, especially human resources, leads to wrong decisions

and practices, and poses a threat to the competitiveness and sustainability of the organization.

In this respect, it is possible to say that this study, aiming to reveal the effect of toxic leadership on work alienation and turnover intention, found results supporting the literature. The results of the correlation analysis indicating the correlation between the variables reveal that toxic leadership and its sub-dimensions have a high and significant positive correlation with work alienation and turnover intention. The regression analysis concerning the effect of toxic leadership on work alienation demonstrates that toxic leadership positively affects work alienation in general. When the effect of toxic leadership on work alienation is examined in terms of its sub-dimensions, the results reveal that the dimensions of not appreciating and negative mood have a significant positive effect on work alienation, while the dimensions of self-seeking and selfishness do not have a significant effect on work alienation. There is a similar situation for the effect of toxic leadership on turnover intention. In general, whereas toxic leadership has a positive effect on turnover intention; when the effect is examined in terms of its sub-dimensions, it is observed that the dimensions of not appreciating and negative mood positively affect turnover intention, and the dimensions of self-seeking and selfishness do not have a significant effect on turnover intention.

It can be said that the study results are similar to the results of the studies by Manaa (2022), Hattab et al. (2022), Kara (2022), Akca (2021), Naeem and Khurram (2020), Reyhanoğlu and Akın (2020), Labrague, Nwafor and Tsaras (2020), Pour et al. (2020), Erçetin, Akbaşlı and Diş (2019), and Akca (2017).

The study results reveal that the toxic leadership style increases work alienation and turnover intention in employees. In line with this, it is thought that evaluating the people who will assume a leadership role with objective evaluation methods that include correct and effective tools in the recruitment process, using various inventories that measure personality traits, knowledge and skills, conducting in-depth interviews, selecting the most suitable candidate accordingly by evaluating quantitative and qualitative data together, establishing mechanisms that monitor the relations of leaders with employees, their outcomes regarding their duties and responsibilities, and warn leaders when toxic leadership attitudes and behaviors are observed, organizing training and development activities for both leaders and subordinates, covering topics such as effective communication, decision-making, change, conflict and stress management that facilitate the elimination of emerging problems or deficiencies, and parting ways

with leaders who do not respond to the constructive feedback of the organization will contribute significantly to enterprises in terms of reducing or preventing toxic leadership attitudes and behaviors.

The study covers white-collar workers in two sectors, banking and insurance. Due to the sampling method used, it is impossible to generalize the results. Considering these limitations of the study, it is recommended that researchers design future studies with more participants from different sectors and various positions using sampling methods that enable generalization and investigate the effect of variables such as organizational culture, organizational support, and psychological capital, together with toxic leadership, on work alienation and turnover intention.

References

- Akca, İ. (2021). *Kamuda Toksik Liderlik, İşten Ayrılma Niyeti ve Etik İklim Algısı İlişkisi: Bir Alan Araştırması. (Doktora Tezi)*. Sakarya Üniversitesi Sosyal Bilimler Enstitüsü, Sakarya.
- Akca, İ., & Tuzcuoğlu, F. (2020). Toksik Liderliğin Üretkenlik Karşıtı İş Davranışları ve İşten Ayrılma Niyeti Üzerindeki Etkisine Yönelik Bir Model Önerisi. *Journal of Life Economics*, 7(3), 257-268.
- Akca, M. (2017). The impact of toxic leadership on intention to leave of employees. *International Journal of Economics, Business and Management Research*, 1(4), 285-298.
- Aktaş, K. (2020). Toksik Liderlik. Çiçek, B. (Ed.), *Liderliğin Karanlık Yönü* içinde (ss. 1-31). Ankara: Atlas Akademik Basım Yayın.
- Ankony, R. C., & Kelley, T. M. (1999). The impact of perceived alienation on police officers' sense of mastery and subsequent motivation for proactive enforcement. *Policing: An International Journal of Police Strategies & Management*, 22(2), 120-134.
- Bowen, D. E. (1982). Some unintended consequences of intention to quit. *Academy of Management Review*, 7(2), 205-211.
- Brown, T. A. (2006). *Confirmatory Factor Analysis for Applied Research*. Guilford Publications.
- Canbolat, M. A., Çelik, A., & Yılmaz, H. U. (2021). Toksik Liderlik Algısının Kariyer Bağlılığı ve Görev Performansı ile İlişkisine Yönelik Perakendecilik Sektöründe Bir Araştırma. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi*, 24(1), 28-40.

Copeland, C. E. (2015). *Followership: An essential ingredient of leadership. (Master's Thesis)*. Army Command and General Staff College, Fort Leavenworth, Kansas.

Çankaya, M., & Çiftçi, G. E. (2020). Hastane Çalışanlarının Toksik Liderlik ve Örgütsel Sinizm Algılarının Örgütsel Bağlılıklarına Etkisi. *Hacettepe Sağlık İdaresi Dergisi*, 23(2), 273-298.

Çarıkçı, İ. H., & Çelikkol, Ö. (2009). İş-Aile Çatışmasının Örgütsel Bağlılık ve İşten Ayrılma Niyetine Etkisi. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 9, 153-170.

Çelebi, N., Güner, A. G. H., & Yıldız, V. (2015). Toksik Liderlik Ölçeğinin Geliştirilmesi. *Bartın Üniversitesi Eğitim Fakültesi Dergisi*, 4(1), 249- 268.

Çömlekçi, M., & Başol, O. (2019). Sosyal Medya Haberlerine Güven ve Kullanıcı Teyit Alışkanlıkları Üzerine Bir İnceleme. *İleti-ş-im*, 30, 55-78.

Doğan, C. D., & Aybek, E. C. (2021). *R-Shiny ile Psikometri ve İstatistik Uygulamaları*. Ankara: Pegem Akademi.

Elma, C. (2003). *İlköğretim Okulu Öğretmenlerinin İşe Yabancılaşması (Ankara İli Örneği)*. (Doktora Tezi). Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

Erçetin, Ş. Ş., Akbaşlı, S., & Diş, O. (2019). Öğretmenlerin İşe Yabancılaşma Düzeylerinin Yordayıcısı Olarak Okul Yöneticilerinin Toksik Liderlik Davranışları. *Turkish Studies-Educational Sciences*, 14(4), 1313-1328.

Erdem, O., & Dikici, A. M. (2009). Liderlik ve Kurum Kültürü Etkileşimi. *Elektronik Sosyal Bilimler Dergisi*, 8(29), 198-213.

Gürbüz, S., & Bekmezci, M. (2012). İnsan Kaynakları Yönetimi Uygulamalarının Bilgi İşçilerinin İşten Ayrılma Niyetine Etkisinde Duygusal Bağlılığın Aracılık ve Düzenleyicilik Rolü. *İstanbul Üniversitesi İşletme Fakültesi Dergisi*, 41(2), 189-213.

Hair, J. F., Black, W. C., & Babin, B. J. (2010). *Multivariate Data Analysis: A Global Perspective*. 7th Edition. Pearson.

Hattab, S., Wirawan, H., Salam, R., Daswati, D., & Niswaty, R. (2022). The effect of toxic leadership on turnover intention and counterproductive work behaviour in Indonesia public organisations. *International Journal of Public Sector Management*, 1-18.

Hırlak, B., Çiçeklioğlu, H., & Taşlıyan, M. (2018). İşe Yabancılaşma ile Örgütsel Sağlık İlişkisi: Sağlık Sektöründe Bir Alan Araştırması. *Çukurova Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 22(2), 245-267.

Hirschfeld, R. R., & Feild, H. S. (2000). Work centrality and work alienation: Distinct aspects of a general commitment to work. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 21(7), 789-800.

Hooper, D. Coughlan, J., & Mullen, M. R. (2008). Structural Equation Modelling: Guidelines for Determining Model Fit. *Electronic Journal on Business Research Methods*, 6(1): 53-60.

Houkes, I., Janssen, P. P., de Jonge, J., & Bakker, A. B. (2003). Specific determinants of intrinsic work motivation, emotional exhaustion and turnover intention: A multisample longitudinal study. *Journal of Occupational and Organizational Psychology*, 76(4), 427-450.

Hui, C., Wong, A., & Tjosvold, D. (2007). Turnover intention and performance in China: The role of positive affectivity, Chinese values, perceived organizational support and constructive controversy. *Journal of Occupational and Organizational Psychology*, 80(4), 735-751.

Işıkkay, Ç. (2019). Toxic Leadership. Babacan, H., & Temizer, A. (Ed.), *In Social, Human and Administrative Sciences* (pp. 39-50). Ivpe Cetinje.

İnce, M., Bedük, A., & Aydoğan, E. (2004). Örgütlerde Takım Çalışmasına Yönelik Etkin Liderlik Nitelikleri. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 11, 423-446.

İrdem, Ş. (2021). *Yönetim Bilimlerinde Adalet Kavramı ve Yabancılaşma Sorunu*. İstanbul: Nobel Akademik Yayıncılık.

Jones, E., Chonko, L., Rangarajan, D., & Roberts, J. (2007). The role of overload on job attitudes, turnover intentions, and salesperson performance. *Journal of Business Research*, 60(7), 663-671.

Kaptanoğlu, R. Ö. (2020). İşten Ayrılma Niyeti ve Toksik Liderliğin Etkisi. *IBAD Sosyal Bilimler Dergisi*, 6, 161-173.

Kara, C. (2022). *Liderliğin Karanlık Yüzü, Toksik Liderlik Davranışının Çalışanlar Üzerine Etkisi. (Doktora Tezi)*. Karabük Üniversitesi Lisansüstü Eğitim Enstitüsü, Karabük.

Kökalan, Ö. (2017). İşyeri Maneviyatının Örgütsel Güven ve İşe Karşı Yabancılaşma Üzerinde Etkileri. *Dicle Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 18, 37-51.

Labrague, L. J., Nwafor, C. E., & Tsaras, K. (2020). Influence of toxic and transformational leadership practices on nurses' job satisfaction, job stress, absenteeism and turnover intention: A cross-sectional study. *Journal of Nursing Management*, 28(5), 1104-1113.

Lee, T. W., & Mowday, R. T. (1987). Voluntarily leaving an organization: An empirical investigation of Steers and Mowday's model of turnover. *Academy of Management Journal*, 30(4), 721-743.

Lipman-Blumen, J. (2005). Toxic leadership: When grand illusions masquerade as noble visions. *Leader to Leader*, 2005(36), 29-36.

Manaa, Y. H. (2022). The Effect of Toxic Leadership on Counter-Productive Work Behaviors and Intention to Leave: An Empirical Study. *International Business Research*, 15(11), 1-10.

Mehta, S., & Maheshwari, G. C. (2014). Toxic leadership: Tracing the destructive trail. *International Journal of Management*, 5(10), 18-24.

Mühürçüoğlu, E. (2018). İstifa Eden Jandarma Subaylarında İşe Yabancılaşma. *Sosyoloji Notları*, 2(1), 63-99.

Naeem, F., & Khurram, S. (2020). Influence of toxic leadership on turnover intention: The mediating role of psychological wellbeing and employee engagement. *Pakistan Journal of Commerce and Social Sciences*, 14(3), 682-713.

Padilla, A., Hogan, R., & Kaiser, R. B. (2007). The toxic triangle: Destructive leaders, susceptible followers, and conducive environments. *The Leadership Quarterly*, 18(3), 176-194.

Pallant, J. (2017). *SPSS Kullanma Kılavuzu: SPSS ile Adım Adım Veri Analizi*. 6. Basımdan Çeviri, S. Balcı & B. Ahi (Çev.), Ankara: Anı Yayıncılık.

Pour, K. E., Yousefi, B., Zardoshtian, S., & Eydi, H. (2020). Effect of Toxic Leadership Style on Organizational Cynicism and Job Alienation of Staff in the Sports and Youth Ministry of Iran with a Mediating Role of Machiavellianism. *Sport Management Studies*, 12(59), 1-19.

Reyhanoğlu, M., & Akın, O. (2020). Impact of toxic leadership on the intention to leave: a research on permanent and contracted hospital employees. *Journal of Economic and Administrative Sciences*, 38(1), 156-177.

Sashkin, M. (1984). Participative management is an ethical imperative. *Organizational Dynamics*, 12(4), 5-22.

Schabracq, M., & Cooper, C. (2003). To be me or not to be me: About alienation. *Counselling Psychology Quarterly*, 16(2), 53-79.

Schumacker, R. E., & Lomax, R. G. (2004). *A Beginner's Guide to Structural Equation Modeling*. Psychology Press.

Scott, C. R., Connaughton, S. L., Diaz-Saenz, H. R., Maguire, K., Ramirez, R., Richardson, B., Shaw, S. P., & Morgan, D. (1999). The impacts of communication and multiple identifications on intent to

leave: A multimethodological exploration. *Management Communication Quarterly*, 12(3), 400-435.

Seçkin, Ş. N. (2020). Algılanan sosyal mübadele, işe yabancılaşma ve sanal kaytarma davranışlarını etkiler mi? Mübadele İdeolojisinin Düzenleyici Rolü. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 34(4), 1207-1227.

Singh, N., Sengupta, S., & Dev, S. (2018). Toxic leadership: The most menacing form of leadership. *Dark Sides of Organizational Behavior and Leadership*, 147-164.

Suğur, N., Suğur, S., & Şavran, T. G. (2008). Türkiye’de Orta Sınıfın Mazbut Hizmetkarları: Kapıcılar, Gündelikçiler ve Çocuk Bakıcıları. *Ankara Üniversitesi SBF Dergisi*, 63(03), 161-183.

Sümer, N. (2000). Yapısal Eşitlik Modelleri: Temel Kavramlar ve Örnek Uygulamalar. *Türk Psikoloji Yazıları*, 3(6), 49-74.

Şimşek, Ö. F. (2007). *Yapısal Eşitlik Modellemesine Giriş, Temel İlkeler ve Lisrel Uygulamaları*. Ankara: Ekinoks.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate Statistics*. Pearson.

Tepper, B. J., Carr, J. C., Breaux, D. M., Geider, S., Hu, C., & Hua, W. (2009). Abusive supervision, intentions to quit, and employees’ workplace deviance: A power/dependence analysis. *Organizational Behavior and Human Decision Processes*, 109(2), 156-167.

Turgut, T., & Kalafatoğlu, A. G. Y. (2016). İşe Yabancılaşma ve Örgütsel Adalet. *ISGUC The Journal of Industrial Relations and Human Resources*, 18(1), 23-46.

Uğur, A., & Erol, Z. (2015). Örgütlerde Kritik Sorun Kaynağı Olarak İşe Yabancılaşma, Yabancılaşma ve Bürokrasi Arasındaki İlişkiye Yönelik Kavramsal Bir Yaklaşım. *Kastamonu Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 8(2), 182-192.

Uysaler, A. L. (2010). *Örgütsel Yabancılaşmanın Örgütsel Bağlılık, İş Tatmini ve İşten Ayrılma Eğilimi ile Bağlantısı ve Yabancılaşma Yönetimi. (Yüksek Lisans Tezi)*. Gebze Yüksek Teknoloji Enstitüsü Sosyal Bilimleri Enstitüsü, Kocaeli, Gebze.

Van Breukelen, W., Schyns, B., & Le Blanc, P. (2006). Leader-member exchange theory and research: Accomplishments and future challenges. *Leadership*, 2(3), 295-316.

van der Heijden, J. A., van Engen, M. L., & Paauwe, J. (2009). Expatriate career support: Predicting expatriate turnover and performance. *The International Journal of Human Resource Management*, 20(4), 831-845.

Waltz, C.F., Strickland, O.L., & Lenz, E. R. (2010). *Measurement in Nursing and Health Research*. Springer Publishing Company.

Wang, J., & Wang, X. (2012). *Structural Equation Modeling: Applications Using Mplus*. John Wiley & Sons.

Zengin, M. (2019). Toksik Liderlik: Kavramsal Bir Çözümleme. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 8(4), 2754-2766.

CHAPTER VII

EFFECTS OF UNCERTAINTY AND RISKS IN SUPPLY CHAINS: DISTURBANCES AND DISRUPTIONS

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1. Introduction

Supply chains tend to be global, comprising complex interactions and flows between tens or hundreds of companies and facilities geographically dispersed across regions and countries. A typical supply chain includes suppliers and the supplier's suppliers, manufacturers, logistics providers, warehouses, retailers, and financial institutions. Members of supply chains are multi-directionally interconnected by the flow of materials, information, and cash between them. This link can be expressed in network-like complex structures. These chains are often characterized by the presence of companies, also called channel managers, endowed with strong domain knowledge, design, branding, and marketing capabilities, such as Dell, General Motors, P&G, or Nike (Gaonkar & Viswanadham, 2007).

Supply chains include a number of components that are related to each other and, therefore, risk factors. Uncertainties and risks that may arise in parallel with the enhancement in global trade are, in fact, a part of the flow in the chain. Risks that occur in a certain part of the chain can affect the entire chain and may cause the supply chain to be disturbed or even disrupted, depending on the size of the problem. Disruption of supply chains can cause limping in

operations, resulting in loss of productivity, income, and customers, and even the loss of goods or service capabilities of businesses. For this reason, it is of prime importance for businesses to reveal the causes of disruptions in the supply chain caused by uncertainties and risks, and it is also significant for businesses to be resilient to possible adversities or to demonstrate good performance. Being acquainted with uncertainties and risks which cause certain types of disruptions should be evaluated within the framework of the plans of the enterprises. On the other hand, in the literature review, it is seen that there is no consensus about the disturbances and disruptions in the supply chain and their sources. In this context, it is aimed to reveal a conceptual framework for strategies such as stability, robustness, and resilience in combating uncertainty and risks by analyzing the uncertainty and risk factors that should be taken into account in supply chain management and examining the disturbances and disruptions which occur under these circumstances.

In the second section of the study, after the introduction, uncertainty and its sources in supply chains, and in the third section, the risks and their sources will be explained. In the fourth chapter, the effects of uncertainties and risks in supply chains will be discussed; in this context, the disturbances and disruptions in supply chains will be explained, and classifications will be given within the framework of different approaches in the literature. The fifth chapter will explain strategies such as stability, robustness, and resilience in the fight against uncertainty and risks in supply chains. The study will be completed with the conclusion and recommendations section.

2. Uncertainties in Supply Chains and Their Sources

Uncertainty is a feature that characterizes the need for more knowledge about the system under environmental and developmental conditions (Ivanov, 2021). Uncertainties arise while decision-makers cannot predict probability of an event (Sanchez-Rodrigues et al., 2008). Uncertainties exist in almost any system and are unavoidable for an extensive system with many components, such as a supply chain. Supply chain uncertainty is a situation where potential and unforeseen events can cause the balance and profitability of the supply chain to change, requiring a response to re-balance. Events such as an unexpectedly high volume order, late delivery, the failure of critical production equipment require changes in the flow of planned supply chain operations, causing disruption or even reduction of sales. Therefore, uncertainties can create confusion and unsettlement for the whole chain (Ivanov, 2021). Lack of information about the

supply chain or its environment, transparency of the supply chain, inability to accurately predict the impact of possible control actions on supply chain behavior, or lack of effective control actions are the root causes of this uncertainty (Vorst & Beulens, 2002).

There are different approaches to analyzing and classifying sources of uncertainties. While certain researchers have accepted the source of uncertainty from incorporating the businesses in the chain, some have argued that it originates from the entire supply chain. In contrast, others have argued that it originates outside the supply chain.

Cucchiella and Gastaldi (2006) used a simple classification as inside the network and outside the network and evaluated contingent events that may occur among the members as internal uncertainties; on the other hand, they evaluated political events, natural phenomena, and events that may arise spontaneously, such as epidemics, as external uncertainties. Christopher and Peck (2004) consider uncertainties within the supply chain as internal and external uncertainties depending on whether the uncertainties occur inside the supply chain network or outside the network. Uncertainties arising from the customer, procurement, nature, and human-made actions (accidental or deliberate) independent of the organization and often unpredictable are defined as external. However, they can also affect the internal resources of the business. For example, a cyclonic storm in the region where the suppliers are located may affect the enterprise's raw material supply and the whole chain's production. Kleindorfer and Saad (2009) identify sources of uncertainty as i. operational contingencies resulting from system failures such as equipment failures and sudden supply interruption, ii. natural hazards and terrorism, and iii. political instability. Also, Mason-Jones and Towill (1998) classified under four categories as follows:

- *Process uncertainty*: The uncertainty created by the internal capacity of the enterprise to reach the planned production.
- *Supply uncertainty*: The circumstances under which the supplier cannot supply the correct quantity with the desired characteristics and quality at the right time and the right price, in line with the needs of the business.
- *Demand uncertainty*: Inadequate forecasting of demand for the type and quantity of the product.
- *Control uncertainty*: When the business experiences difficulty converting information flow and orders according to production targets and material requests.

According to the researchers, although the sources of uncertainty are named differently, all these uncertainties pose various risks for supply chains. Risk and uncertainty are concepts often used interchangeably but are technically quite different (Ritchie & Brindley, 2007). While some researchers (Jüttner et al., 2003; Li & Hong, 2007) make a clear distinction between the terms risk and uncertainty, others (Hillson, 2006; Wagner & Bode, 2008) argue that risk is related with problems that may lead to adverse outcomes. Uncertainty, on the other hand, is claimed to be related to situations that can cause both positive (luck) and negative (threat) deviations from an expected result (Ivanov, 2021). For example, uncertainty concerning customer demand can cause demand to be better or worse than expected, while the risks associated with any natural disaster can only cause supply chain problems. Another difference is related to the fact that while risks can be measured and calculated (Khan & Burnes, 2007), uncertainties cannot be measured (Knight, 1921). Therefore, uncertainty refers to situations that cannot be eliminated. However, these uncertainties can be mitigated thanks to sound judgment and planning (Slack & Lewis, 2002). Therefore, it can be asserted that the concept of supply chain uncertainty is broader. In this context, since it would be meaningful to examine the risks that await supply chains and the sources of these risks, this issue will be addressed in the following section.

3. Risks in Supply Chains and Their Sources

There are several definitions of risk for businesses. Risk can be defined as the potential hazard, the probability of occurrence of the hazard, and the variability of its consequences (Grant et al., 2017). It is often mentioned that uncertainty factors such as demand fluctuations reveal risks. Risk can also be defined as the turnout of the probability of an adverse event occurring and the amount of damage caused (March & Shapira, 1987). Risk means uncertainty concerning an outcome (Teigen, 1996), but these uncertainties can be mitigated thanks to sound judgment and correct planning (Slack & Lewis, 2002). Otherwise, risks may result in deviations from the expected value of a certain performance measure towards negative results (Wagner & Bode, 2006). Therefore, risks are calculable (Khan & Burnes, 2007). As far as they can be calculated, risks are predictable, identifiable, analyzable, controllable, and regulated.

Supply Chain Risk Leadership Council defines the risk in the supply chain network as the probability and output of events occurring at any point in the supply chain and risk management as the coordination of activities regarding

risks in the network and controlling the end-to-end supply chain (Supply Chain Risk Leadership Council, 2011). The fragility of the supply chain underlies the adverse consequences of these risks, and as fragility increases at different levels of the chain, the risks to be encountered increase (Christopher & Peck, 2004). Vulnerability is related to being weak against the negativities that may occur in the chain. These vulnerabilities may have mild consequences in the form of deviations in various metrics in operations and severe consequences in the form of interruption of activities and flow.

To fully comprehend risks in supply chains, it is necessary to look at the sources of risk and how they occur. Ivanov (2021) argues that risks may arise, especially from the points of supply chains such as supply, production, distribution, and logistics processes where the flow of goods occurs. However, it can also be on a macro scale, such as the climate crisis and crises in natural raw materials. Therefore, risks in the supply chain may arise from environmental variables inside or outside the chain. In this sense, the risk may originate from external factors such as “political risks” and “market risks” or in-chain elements such as “volatility of customer demand.”

The term risk can also be used in relation to the potential consequences of risks. So that, the terms “operational risks,” “human-made risks,” or “risks of customer service levels” are the results of the transformation of risks into events (Jüttner et al., 2003). On the other hand, Grant et al. (2017) distinguish sources of risk as (i) unsystematic, that affect a limited portion of the supply chain (such as the failure of a manufacturing facility that does not disrupt the supply chain operations) and (ii) systematic, which cannot be easily accessed and eliminated by a single member as they involve widespread disruptions and multiple members. Potential risk types and sources in global supply chains presented in the Table 1 below.

Table 1. Supply Chains' Risks, Sources and Consequences

Risk Types	Sources of Risk	Conclusions
Demand Risk	Changes in demand (fashion, new product launch, seasonality), demand deterioration (or bullwhip effect)	Variability in demand can mean higher inventory costs and obsolete inventory and lost sales.
Supply Risk	Supply-side disruptions, design changes, quality issues, price fluctuations, shortages of supply, shipping schedules, and natural disaster.	This risk may result in production disruption and inability to supply according to the promised delivery dates to customers. Finding and accelerating alternative supply leads to increased costs.
Operational Risk	Disruption of operations, poor production planning, natural disaster, changes in technology, process variability, industry action (strike), accident, IT and telecommunications outage, power outage, etc.	This risk may cause customers not to be able to supply on the promised delivery dates and increase the costs of finding alternative capacity.
Competition Risk	Competitor's innovations, competitor's aggressive actions (discounts, special offers, price wars), competitor's influence on customers.	Innovative products or changes in purchasing behavior can make a product unpopular and therefore market share can be severely affected.
Security Risk	Information security, terrorism, crime and etc.	This risk can lead to the loss of sensitive data and important operating data, production disruption and inefficient worker safety.
Macroeconomic risks	Financial crisis, problems in the capital market, changes in wage rates-interest rates and costs.	This risk can lead to a fall in demand and price, increased costs. Although this risk cannot be avoided, there are ways to estimate its occurrence and magnitude.
Policy risk	Changes in the policies of national and international government bodies (currency, quota restriction, taxation, sanctions, advertising restrictions, commercial licenses, environmental responsibility).	This risk can lead to change and restriction of market access, increased costs, loss of market share, tax advantage, exchange rate to cost/profit, increased competition.
Prestige risk	Bad brand reputation due to public distrust, negative customer backlash, boycott and serious misconduct or abuse of trust with customers.	This risk can lead to difficulties in securing capital, liability and legal obligations. Poor brand image can lead to serious loss of market share.

Corporate fraud and crime risk	Corporate crime, fraud, bribery, accounting fraud, unfair/illegal trading practices and etc.	These can lead to reputational damage as well as heavy liability and penalty costs.
Sustainability risk	Scarcity or depletion of rare resources (water, metals, minerals and etc.), man-made and natural disasters that affect the supply of national resources.	These can lead to increased costs of acquiring natural resources and supply shortages.

Source: Ivanov (2021), Hamit (2018).

Due to the adverse consequences that these risks encountered in supply chain management may cause, it is vital to focus on risk factors, investigate cause-effect relationships, and evaluate and analyze these factors (Büyüközkan et al., 2021). Also, Grant et al. (2017) recommend the following five-step process to mitigate the effects of risks in the supply chain:

1. *Identification of the risk:* The management of risks needs to determine whether the risks are related to the operational issues within the chain, macro-economic/political issues originating from external factors, or whether they belong to destructive events such as war, cyber-attacks, or natural disasters. Risk management may be in question for each risk group with different experiences and practices. For example, special expertise is required for disasters.

2. *Rating of risks:* Categories such as insignificant, serious, and destructive can be used regarding the consequences of negativities. Rating requires an estimate of potential damage, liability, or cost.

3. *Determination of risk management strategies:* According to the probability of occurrence of risks and estimated loss in managing possible risks for businesses, risk reduction, loss reduction, etc., various risk management strategies can be used, as presented in Figure 1 (Grant et al., 2017). For example, although the probability of an event occurring due to any risk is low yet a harmful effect occurs in the supply chain due to the event, the occurrence constitutes a significant risk for the chain (Wang, 2017). Accordingly, loss-reducing strategies such as developing countermeasures and taking out insurance can be developed. Conversely, if the estimated loss for a low probability risk and the cost of countermeasures are low, a strategy of acknowledging risk and loss may be followed. In order to determine the most effective strategies, it is necessary to reduce the chain's vulnerability in response to risks. For this, risks should be defined and managed with a coordinated approach among the businesses in the chain (Goh et al., 2007).

4. *Implementation of risk management strategies for the entire supply chain:* Strategies that will increase stability, robustness, and resilience for disturbances in the chain should be identified and implemented. These concepts will be explained in the following sections.

5. *Risk mitigation and further risk identification:* Risks can be compared to viruses that enter the human body. Just as the immune system fights viruses, supply chains must generate various tools and situations, analyze risks in detail, and explore new ways to mitigate supply chain risks.

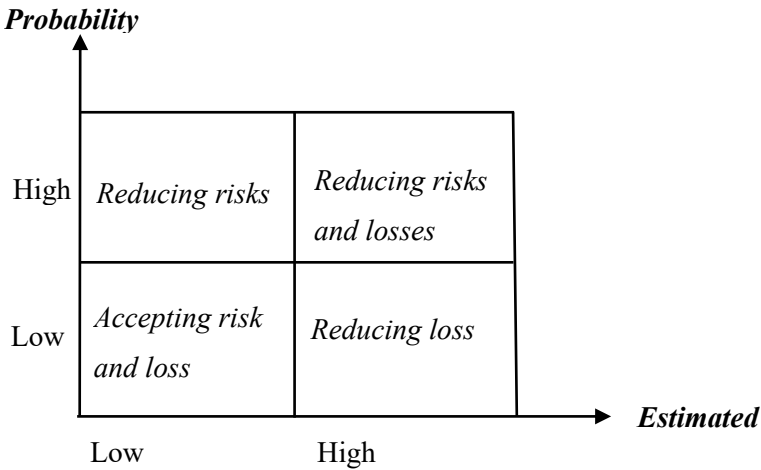


Figure 1. Risk Management Strategies (Grant et.al, 2017).

4. Impacts of Uncertainty and Risks in Supply Chains

While analyzing the uncertainty and risks, observing the situations that may occur afterward is necessary. Uncertainties can bring along risks, risks can bring along disturbances, and disturbances can bring along disruptions (Ivanov, 2021). For example, there may be a risk of demand fluctuation due to environmental uncertainty. In Figure 2, the relationship between uncertainty, risk, potential disturbances, disruptions, and their proximity to the center of the supply chain is given schematically. As can be seen from this figure, while uncertainties are formed in the outermost ring, they are more specific toward disruptions, and negative effects increase. Disturbances can be avoided and eliminated through reserves of excess and elasticity, although they can cause deviations when they arise from risk. Disruptions, conversely, can be defined as predictable or contingent events that directly affect the normal functioning and stability of an organization or a supply chain (Barroso et al., 2008). In fact,

according to Gaonkar and Viswanadham (2007), when disruptions are strong enough to disturb the supply chain, subversive interruptions can develop and result in the irreversible closure of the chain.

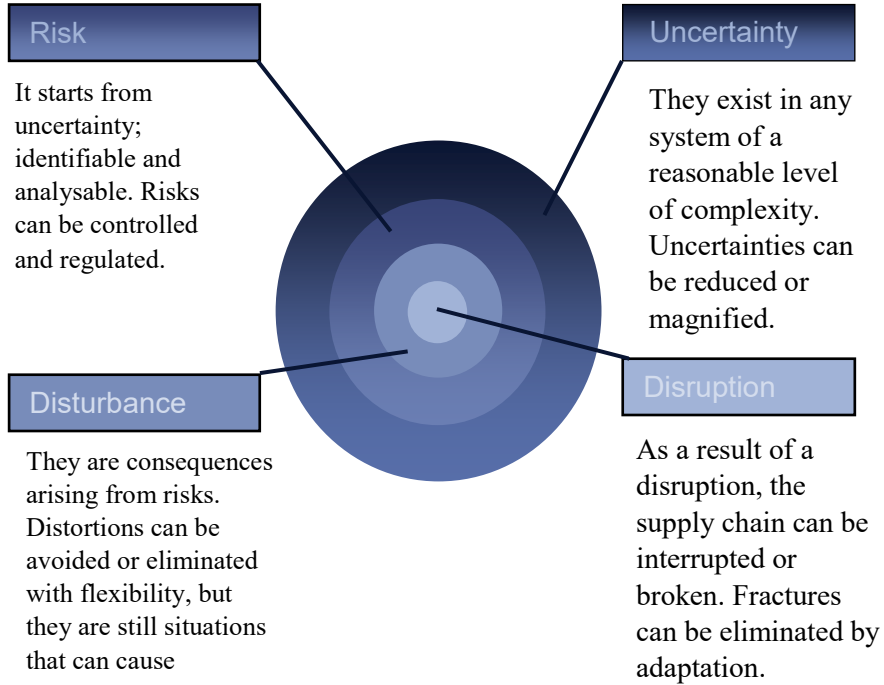


Figure 2. The Relationship of Uncertainty, Risk, Disruption and Disturbance in Supply Chains (Ivanov, 2021).

There is a linear relationship between risk and fragility, and the realization of risks arising from the vulnerabilities of the supply chain causes the chain to be disturbed or even disrupted. The following sections will explain disruptions and disturbances and their sources.

4.1. Disturbances in Supply Chains

Disturbances are unplanned and unforeseen events that disturb the flow of goods and expose affiliated businesses to risks (Craighead et al., 2007). Risks can cause deviations; i.e., disturbances from the expected or average values of one or more parameters, such as demand, cost, delivery time in supply chains without any change in the basic supply chain structure (Gaonkar & Viswanadham, 2007).

Classification of disturbances and sources of disturbance, defined as predictable or unforeseen situations that directly affect supply chains' normal functioning and stability, can be quite complex. The causes of disturbance can arise from many sources, such as defective product delivery, late delivery of the correct product, disturbances stemming from suppliers, strikes, quality problems, and production problems such as machine failure or human error. Therefore, in general terms, sources of disturbance can be classified under the headings of supply, production sources, customers, nature, and human-made actions (Barraso et al., 2008). For example, a decrease in occupancy rate due to demand fluctuations, changes in preferment/supply, differences in procurement, production, and logistics costs, and discrepancies in transportation and production times may cause deviations in related parameters. Compliance measures such as flexible capacity and additional stocks must be taken to adjust the supply chain in case of deviations. By observing the increasing trend in demand, increasing the capacity at the right time can be given as an example of adaptation. On the other hand, bringing up supplier training on quality problems or deviations in the goods procured from suppliers can be cited as an example of measures. As a result, regardless of the cause and source of disturbances, it is necessary to implement plans based on diversity and harmony, such as the following, to encourage a rapid return of the chain to a stable and normal operational state and to minimize disturbance effects:

- Setting up systems to enable real-time communication and strong collaboration between supply chain members,
- Conducting supply chain risk assessment,
- Diversifying of suppliers,
- Creating an emergency stock,
- Identifying backup suppliers etc.

Some disturbances have a short-term effect on the chain, while others may have a longer-term or repetitive effect. Again, while some affect a single business in the chain, some can be effective in more than one business in a larger part of the chain. In this context, to determine the extent of disturbance, it is necessary to plan by taking into account four factors such as the intensity of the disturbance effect, the time interval, the extent, and the duration of the disturbance (Barraso et al., 2008). Otherwise, the productivity of the enterprises in the supply chain may decrease, their costs may eventually increase, and as a

result, they may lose their competitiveness. Moreover, negativities may further develop up to disruption in the supply chain.

4.2. Disruptions in Supply Chains

Disruptions in supply chain are unplanned, unpredictable or undesirable situations that disrupt the flow of goods (Revilla & Saenz, 2017). Disruptions occur when certain production, storage facilities, and distribution channel or transportation options are not available and thus change radically following unanticipated events in the markets or nature. Therefore, accompanied by disruptions, some situations prevent one or several businesses or the entire chain from operating in the chain. For example, disruptions in production (disruptions in spare parts production due to a fire at Toyota's supplier's factory in Mexico and thus the closure of the sub-factory), preferment/supply disruptions (disruption of meat supply in the UK due to the spread of foot and mouth disease in animals), disruptions in logistics (the USA port closure and disruption of the shipment of products from Asia to the USA), the closure of any port entail disruptions. The enterprises in the supply chain are dependent on foreign sources to a high degree, there are important developments that will adversely affect the sales forecasts, which are the basis of supply chain planning, and because more than one member of the chain is affected by these negativities, disruptions in the supply chains may occur (Senir & Büyükkeklik, 2020). In this context, disruptions can be defined as experienced by unexpected and unforeseen events that interrupt the normal flow of goods in the chain and create serious adverse effects on supply chain operations.

It is hard to predict and foresee the consequences of disruptions (Gupta & Ivanov, 2020). Risks that will cause disruption are of great importance for supply chain managers due to their mostly subversive effects (Paul et al., 2017). Disruption risks include hurricanes, earthquakes, and foodborne events from natural disasters and human-made threats such as terrorist attacks. These risks can vary unpredictably in terms of type, scale, and nature, are difficult to identify and predict, and disruptions can be intermittent and irregular and have short- and long-term adverse effects. Gupta and Ivanov (2020) divide the disruptions into three, namely ordinary disruption, risky disruption, and depleted disruption:

- Ordinary disruptions are included in the known-known uncertainty class. For example, during the summer months, the countries in Southeast Asia

and the suppliers in these countries are affected by typhoons, which is true and known every summer.

- Risky disruptions are close to known unknown uncertainty; it is known which events may occur, but it is not known exactly when they will happen and their effects. The earthquake hazard, which is constantly present in Japan, but the potential effects are not fully known beforehand due to its size being difficult to estimate, can cause dangerous ruptures. For example, due to the tsunami and earthquake that hit Japan in 2011, Toyota's suppliers could not deliver parts in the expected volume and time, and Toyota had to halt production for several weeks. A similar incident occurred at General Motors, where the company had to halt production at its truck factory in Louisiana, USA, due to the shortage of raw materials from Japanese suppliers. For the same reason, Nissan had to temporarily halt production at its Sunderland plant in England, as it could not access the raw materials from suppliers that procured 12% of its engines (BBC, 2011).

- Depleted disruptions, on the other hand, are related to unknown-unknown uncertainty and are experienced in situations where it is unknown which event may happen when and what the consequences will be. Depleted disruptions represent the most complex situation for decision-making. An example of a depleted disruption is the closure of international borders and production facilities due to political reasons such as war, following the terrorist attacks in the USA on September 11, 2001, and the disruption in the supply chains of the members of that region. As an example of a more widespread effect, the COVID-19 pandemic, which started in 2019 and affected the entire world, can be given (Büyükkelik & Afşar, 2022). Because the epidemic is not limited to a certain geography or sector, its spreading level was high that affected all countries of the world, and almost every sector, and the supply and demand for some sectors, such as hygiene products, food, and home delivery services are extremely high, and it has created strong disturbances for sectors such as automotive and furniture, forcing them to hit rock bottom vice versa (Senir & Büyükkelik, 2020).

As can be seen from the explanations and examples above, disruptions adversely affect supply chains for various reasons. In particular, certain situations can make supply chains more vulnerable to disruption. For example, despite its advantages, such as cost and diversity, global sourcing and outsourcing make supply chains more complex and less controllable. Any disruption in global

supply can rapidly affect the whole chain. Moreover efficiency paradigms of lean processes, such as working with a few suppliers or using JIT resources, can lead to an increased vulnerability to disruptions due to incomplete structural and process diversity.

Table 2. Disruptions in Supply Chains and Its Effects

Factor	Example	Effect
Terror-Pirate	September 11 Attack on America	Five Ford factories have been closed for a long time.
	Somalia 2008 Pirate Attack	Many supply chains have been broken.
Natural Disasters	1999 Thailand Earthquake	Production of Apple computers in Asia has stopped.
	Germany Saxony 2002 Flood	Volkswagen automotive company experienced a significant decrease in production.
	Japan 2007 Earthquake	55,000 car production cuts occurred due to the break in Toyota's supply chains.
	USA 2006 Hurricane Katrina	Oil prices rose both at domestic and abroad as the US stopped 10-15% of gasoline production.
	Japan 2011 Earthquake and Tsunami	A major collapse occurred in the global automotive supply chains, and Toyota lost its market share.
	India 2015 Chennai Floods	Many international publishing houses has stopped.

Man-made Disasters	Explosion at BASF chemical plant in Germany	15% of the raw materials required for the entire supply chain were wasted, and the production of some of the factory's products was stopped for weeks.
	Transportation interruption in the Suez Canal 2021	Many ripple effects have developed in global supply chains due to delayed deliveries and the destabilization of global shipping schedules.
Political crises	Gas crisis 2009	GAZPROM and its customers lost billions of dollars as a result of interruptions in gas supply from Russia to Europe.
Financial crises	Autumn 2008	As a result of bankruptcies in businesses, interruptions have been experienced in global supply chains.
Walkout	2016 strikes at Hyundai automotive factories	Production of 130 thousand cars was affected.
Legal Contract Disputes	Contract dispute between Volkswagen and Prevent Group 2016	Six German factories had to stop production due to parts shortages; 27,700 workers were affected.

It is very hard to design a supply chains that is robust enough to respond to disasters. But, it is necessary to design a supply chain that is robust enough to continue operations profitably in the face of anticipated deviations and unexpected disruptions. Strategies for this will be discussed in the following section.

5. Tackling Risks in Supply Chains: Stability, Robustness and Resilience

Vulnerabilities negatively affect the ability of supply chains to withstand uncertainty and risks and to continue operating. For this reason, it is crucial to evaluate the fragility of the chain in the fight against uncertainties and risks in supply chains. In response to uncertainties and their risks, supply chains

have stability, robustness, and resilience for different difficulty levels (Ivanov, 2021). In this context, risk management aims to increase supply chain stability, robustness and resilience against risks.

Supply chain stability can be mentioned for short-term and limited-scope disruptions, such as disruption of a single function or process. Stability refers to the level of process control. For example, eliminating the bullwhip effect, where a small deviation in demand causes even larger deviations in order and production quantities up the supply chain, is related to supply chain stability. Accordingly, stability is the ability of parameter values with deviations to return to their pre-disruption state.

Robustness is to operate without being disrupted or to survive if exposed to disruptions and continue operating, which can be perceived as a proactive strategy for dealing with disruptions. Robustness is related to the entire supply chain system and is the system's ability to function almost unchanged when exposed to disruptions (Kwak et al., 2018). For example, efforts to reduce risk effects by having spare suppliers and resources (labor force, machinery, energy, etc.) that can increase capacity can be considered robustness indicators.

Resilience is the ability of supply chain to return to normal operations and targets by absorbing and improving adverse events brought about by risks and regaining operational capabilities. Indeed it is the ability to collectively adapt to react to a disruptive event, recover from that event, and regain performance by absorbing adverse effects and leveraging the knowledge of success or failure (Ivanov, 2021). Therefore, it is related to the chain's return to its original state and rapid adaptation after the disturbance of the chain (Christopher & Peck, 2004). A business can react to an unexpected obstacle and move to a new desired state (Barroso et al., 2008). In fact, according to these definitions, resilience includes a proactive component, such as developing the ability to avoid a possible outage, and a reactive component, such as the ability to restore operations after an outage (Melnik et al., 2014). Businesses risk losing the market if they cannot return to their former status. The following are used to ensure resilience in supply chains (Polyviou et al., 2019):

- Flexibility: the creation of stock flexibility (working with safety stock), supply flexibility (working with multiple suppliers), manufacturing flexibility (creating production operations equipped with different capabilities, logistics flexibility (using different modes and carriers in transportation, etc.), distribution flexibility.
- Cooperation with supply chain partners.
- Developing a risk-oriented business culture.

According to Miller and Engemann (2022), resilience strategies in supply chains should be developed according to risk types (Table 3). Systemic risks are related to poor supply chain design, insufficient capacity to meet product delivery times, unpredictable customer demand, inadequate suppliers and logistics partners, and logistics delays. Systemic risks are “internal” issues. Environmental risks are related to the natural environment and external issues related to the natural environment, such as hurricanes, earthquakes, extreme colds, fires, power cuts, and depletion of raw material resources. Social risks are related to external issues such as changes in trade agreements, campaigns by non-governmental organizations, the exploitation of child labor, maltreatment of workers in facilities, and negative reactions from local communities.

Table 3. Supply Chain Resiliency Strategies

		Strategies		
		Redundancy	Flexibility	Culture
Supply Chain Risks	Systemic	Use multiple suppliers; employ buffer inventories; configure multiple warehouses; employ product production capacity a multiple facilities.	Use modular product design; standardize products; share information along the supply chain; respond to demand via capacity and production flexibility.	Enhance communication with suppliers and customers; distribute power; establish a team culture; foster long term relationships; train vendors; act on customer feedback.
	Environmental	Avoid locating plants in high risk areas; employ redundancy in business continuity plans; avoid single raw material sources.	Be able to shift production from plants located in high risk areas; employ multiple links in infrastructure networks; foster flexibility in business continuity plans.	Enhance communication with suppliers and customers; establish a team culture; practice responding to disasters; foster long term relationships; establish links with customers
	Social	Ensure all suppliers follow laws and codes of conduct; monitor suppliers; monitor political and other risks; give back to local communities.	Maintain ability to switch quickly among suppliers; be able to effectively respond to changes caused by political and other risks; maintain a flexible workforce.	Enhance communication with governmental agencies and NGOs; establish links with communities; establish a “good practices” culture among all suppliers.

Source: Miller ve Engemann (2022).

In summary, stability is used for supply chain response to operational disruptions, while robustness and resilience are supply chain stances against breakage. While robustness is the ability of the chain to continue its activities in the same way against disturbance, resilience is the ability to return to its normal operations and targets and regain its operational capabilities. Disruptions can be overcome if supply chains are adequately robust and adaptable.

6. Conclusion And Recommendations

In today's global markets, the success of businesses is achievable with sound and effective supply chain management. However, disturbances and disruptions in supply chains due to uncertainties and risks occurring in the internal or external environment of supply chains are important challenges that businesses may encounter. To improve robustness and resilience of supply chains in dealing with these issues, chain members can be advised to:

1. Risk Analysis: Potential risks that may develop along the supply chain should be identified, and risk management strategies and contingency plans should be established in response. This way, we can be prepared for disturbances and mitigate the effects. For situations that may cause major disruptions, such as pandemics, relevant international institutions should be followed, simulations should be created according to updated information, and action should be taken.

2. Crisis Management: Effective crisis management strategies should be developed against global epidemics, disasters, and other crises. Research focusing on the effects of factors such as climate change on the supply chain and mitigating these effects should be conducted.

3. Demand Forecast: Accurate demand forecasting allows businesses to optimize their stock quantities.

4. Cooperation and Communication: Supply chain members need close cooperation to create a fast and instant communication environment and to create effective communication in terms of early detection and resolution of problems.

5. Supplier Diversification: Supplier diversification provides greater flexibility and quick response in supply disruptions.

6. Talent Development: By improving the training of employees in supply chain management, both specializations can be achieved, and it can be facilitated to develop innovative solutions in crisis resolution.

7. Continuous Improvement: Continuously reviewing the business processes in the chain and evaluating them with feedback mechanisms and performance metrics enables the identification of problems and areas for improvement. By adopting the philosophy of continuous improvement, solution-oriented and innovativeness can be created.

8. Technological Investments: Integrating technological developments such as monitoring and tracking systems, automation, blockchain, and data analytics into supply chain operations will help reduce errors and provide rapid responses to potential supply chain disturbances.

By all means, the items listed above may cause some cost increases. However, businesses can overcome this by effectively managing these costs and taking strategic steps.

It is very important that researchers and businesses in the supply chain can create new developments regarding risks, disturbances, disruptions in supply chains, and the measures that can be taken against them. Especially once the speed of technological developments and the development of a new business model every passing day is considered, researchers' studies on how these new technologies can be used to predict supply chain risks and mitigate their effects will create significant benefits. Accordingly, the following can be suggested to researchers as potential research areas on the subject:

- Researching new methods for predicting supply chain disturbances with comprehensive data analysis and modeling techniques,
- Exploring how data sources such as social media analytics can be used for risk management and
- Investigation of how Industry 4.0 technologies such as blockchain, artificial intelligence, the internet of things, and cloud computing can be integrated into chain to increase supply chain robustness and resilience.
- Investigating the relationship between human factors and organizational behavior in supply chain disturbances.

References

Barraso, A. P., Machado, V. H. and Machado, V. C. (2008). A Supply Chain Disturbances Classification, 2008 IEEE International Conference on Industrial Engineering and Engineering Management, 1870-1874. DOI: 10.1109/IEEM.2008.4738196.

BBC, (2011). Japan disaster: Supply shortages ‘in three months, 19 September 2022, <http://www.bbc.com/news/business-12782566>.

Bogataj, D., and Bogataj, M. 2007. Measuring The Supply Chain Risk and Vulnerability in Frequency Space, *International Journal of Production Economics*, 108, 291–301.

Büyükkeklik, A. and Afşar, Y. (2022). Lojistik ve Tedarik Zinciri Yönetimi için Covid-19 Salgın Dönemi Araştırma Eğilimlerinin İncelenmesi, *Ömer Halisdemir Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 15(3), 725-743. DOI: 10.25287/ohuiibf.1090258.

Büyüközkan, G., Havle, C.A., and Feyzioğlu, O. (2021). Intuitionistic Fuzzy Cognitive Map Based Analysis of Supply Chain Risks. In: Dolgui, A., Bernard, A., Lemoine, D., von Cieminski, G., Romero, D. (eds) *Advances in Production Management Systems. Artificial Intelligence for Sustainable and Resilient Production Systems. APMS 2021. IFIP Advances in Information and Communication Technology*, vol 634. Springer, Cham. https://doi.org/10.1007/978-3-030-85914-5_67

Christopher M. and Peck H., (2004). Building the Resilient Supply Chain, *International Journal of Logistics Management*, 15(2), 1-13.

Craighead, C.W., Blackhurst, J., Rungtusanatham, M.J. and Handfield, R.B. (2007). The severity of supply chain disruptions: design characteristics and mitigation capabilities, *Decision Sciences*, 38(1), 131-156.

Craighead C.W., Ketchen D.J. and Darby J.L. (2020). Pandemics and Supply Chain Management Research: Toward a Theoretical Toolbox, *Decision Sciences*. DOI: <https://doi.org/10.1111/dec.12468>.

Cucchiella F. and Gastaldi M., (2006). Risk management in supply chain: a real option approach, *Journal of Manufacturing Technology Management*, 17(6), 700-720.

Erdal, H. (2017). Tarihsel Tecrübeler Işığında Tedarik Zinciri Risk Yönetiminin Önemi, *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, (50), 121-139.

Gaonkar, R. S. and Viswanadham, N., (2007). Analytical Framework for the Management of Risk in Supply Chains, in *IEEE Transactions on Automation Science and Engineering*, 4(2), 265-273. DOI: 10.1109/TASE.2006.880540.

Goh, M., Joseph Y. S. Lim and Fanwen Meng. (2007). A stochastic model for risk management in global supply chain networks, *European Journal of Operational Research*, 182, 164–73.

Grant, D. B., Wong, C. Y. and Trautrim, A. (2017). *Sustainable logistics and supply chain management: principles and practices for sustainable operations and management*, 2nd edition. Kogan Page Publishers.

Gurtu, A. and Johny, J. (2021). Supply Chain Risk Management: Literature Review, *Risks*, 9(1),16. <https://doi.org/10.3390/risks9010016>.

Gupta, V. and Ivanov, D. (2020). Dual sourcing under supply disruption with risk-averse suppliers in the sharing economy, *International Journal of Production Research*, 58(1), 291–307.

Hamit, E. (2018). Tedarik zinciri risk yönetimi: Kavramsal çerçeve ve tedarik yönlü bir literatür araştırması, *Pamukkale University Journal of Engineering Sciences*, 24(4), 764-796.

Jüttner, U. (2005). Supply chain risk management Understanding the business requirements from a practitioner perspective”. *The International Journal of Logistics Management*, 16(1), 120–41.

Jüttner U., Peck, H. and Christopher, M. (2003) Supply chain risk management: outlining an agenda for future research, *International Journal of Logistics Research and Applications*, 6:4, 197-210, DOI: 10.1080/13675560310001627016.

Ivanov, D. (2021). Introduction to Supply Chain Resilience Management, Modelling, Technology, *Springer*.

Ivanov, D. and Sokolov, B. (2013). Control and system-theoretic identification of the supply chain dynamics domain for planning, analysis, and adaptation of performance under uncertainty, *European Journal of Operational Research*, 224 (2), 313–323.

Khan, O. and Burnes B. (2007). Risk and supply chain management: Creating a research agenda, *The International Journal of Logistics Management*, 18, 197–216.

Kleindorfer P. R. and Saad G. H., (2009). Managing disruption risks in supply chains, *Production and Operations Management*, submitted for publication.

Knight F. H. (1921). Knight’s Risk, Uncertainty and Profit Risk, Uncertainty and Profit, *The Quarterly Journal of Economics*, 36(4), 682-690.

Kwak, D. W., Seo, Y. J., and Mason, R. (2018). Investigating the relationship between supply chain innovation, risk management capabilities and competitive advantage in global supply chains, *International Journal of Operations and Production Management*, 38(1), 2–21.

Lee, H. L., Padmanabhan, V. and Whang, S. (1997). Information distortion in a supply chain: The bullwhip effect, *Management Science*, 43(4), 546–558.

March, J. G., and Shapira, Z. (1987). Managerial perspectives on risk and risk taking. *Management Science*, 33, 1404–1418.

Mason-Jones, R. and Towill, D. R. (1998). Shrinking the supply chain uncertainty circle, *Control*, *The Institute of Operations Management*, 24(7), 17-22.

Melnyk, S.A., Closs, D.J., Griffis, S.E., Zobel, C.W. and Macdonald, J.R. (2014). Understanding supply chain resilience, *Supply Chain Management Review*, 18(1), 34-41.

Miller H. E. and Engemann K.J. (2022). Resilience and Sustainability in Supply Chains, Muhlenberg College Special Collections & Archives. <https://www.jstor.org/stable/community.31637966>

Paul, S. K., Sarker, R. and Essam, D. (2017). A quantitative model for disruption mitigation in a supply chain, *European Journal of Operational Research*, 257(3), 881-895. <https://doi.org/10.1016/j.ejor.2016.08.035>.

Peck, H. (2005). Drivers of supply chain vulnerability: an integrated framework, *International Journal of Physical Distribution & Logistics Management*, 35(4), 210-232.

Polyviou, M., Croxton, K. L. and Knemeyer, A. M. (2020). Resilience of medium-sized firms to supply chain disruptions: the role of internal social capital, *International Journal of Operations & Production Management*, 40(1), 68-91.

Revilla, E., and Saenz, M. J. (2017). The impact of risk management on the frequency of supply chain disruptions: A configurational approach, *International Journal of Operations and Production Management*, 37(5), 557–576.

Ritchie, B. and Brindley, C. (2007). Supply chain risk management and performance: A guiding framework for future development, *International Journal of Operations & Production Management*, 27(3), 303-322. <https://doi.org/10.1108/01443570710725563>

Sanchez-Rodrigues, V., Stantchev, D., Potter, A., Naim, M. and Whiteing, A. (2008). Establishing a transport operation focused uncertainty model for the supply chain, *International Journal of Physical Distribution & Logistics Management*, 38(5), 388-411.

Senir, G. and Büyükkeklik, A. (2020). The Effects of COVID-19 Outbreak on Supply Chains and Logistics Activities. Reflections on the Pandemic in the Future of the World (Editors Prof. Muzaffer Şeker Prof. Ali Özer Dr. Cem Korkut) Turkish Academy of Sciences Publications, Ankara.

Simangunsong, E., Hendry, L.C. and Stevenson, M. (2012). Supply-chain uncertainty: a review and theoretical foundation for future research, *International Journal of Production Research*, 50(16), 4493-4523, DOI: 10.1080/00207543.2011.613864

Slack N., and Lewis M. (2002). *Operations Strategy*, 3rd ed. Harlow: Prentice-Hall.

Supply Chain Risk Leadership Council (2011). *Supply Chain Risk Management: A Compilation of Best Practices*. [http://www.scrhc.com/articles/Supply_Chain_Risk_Management_A_Compilation_of_Best_Practices_final\[1\].pdf](http://www.scrhc.com/articles/Supply_Chain_Risk_Management_A_Compilation_of_Best_Practices_final[1].pdf)

Teigen, K. H. (1996). Risk-taking behavior, J. Frank Yates (ed.), Chichester: JohnWiley, 345 ISBN 0-471-92250-1, (hc), ISBN 0-471-95140-4 (pb). *Journal of Behavioral Decision Making* 9: 73–74.

Vorst, J. V., Beulens, A., Wit, W. and Beek, P. V. (1998). Supply chain management in food chains: Improving performance by reducing uncertainty, *International Transactions in Operational Research*, 5(6), 487-499.

Vorst, J. V. and Beulens, A. (2002). Identifying sources of uncertainty to generate supply chain strategies, *International Journal of Physics Distribution & Logistics Management*, 32(6), 409- 430.

Wagner, S. M. and Bode C. (2006). An empirical investigation into supply chain vulnerability. *Journal of Purchasing and Supply Management*, 12, 301–12.

Wagner, S. M., and Bode, C. (2008). An empirical examination of supply chain performance along several dimensions of risk, *Journal of Business Logistics*, 29(1), 307–325.

Wang, M. (2017). “Impacts of supply chain uncertainty and risk on the logistics performance”, *Asia Pacific Journal of Marketing and Logistics*, 30(3), 689-704.

CHAPTER VIII

A FIELD RESEARCH ON MOBBING IN THE LOGISTICS SECTOR (PUBLIC AND PRIVATE)

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1. Introduction

The logistics sector creates an important employment force in countries that increase international trade volume and needs new employment. Individuals working in every workforce employed experience problems arising from psychological violence (mobbing), and this process causes both the mental and physical negativities of the employees and the financial and moral damages to the companies in the sector. This study covers the current situation of employees who are exposed to mobbing among public and private sector employees in the field of logistics. The research sample consists of 130 people working in the public and private sectors in the field of logistics. Leymann's LIPT scale was used in the study. According to the answers given by the participants of the survey, exposure to mobbing in the workplace; It has been determined that there is no significant difference with gender, years of service, position in the institution, marital status, sector, but there are differences according to education level and age. As a result of the study, some determinations were made and suggestions were made.

2. Mobbing

"*Mob*" literally means a disorderly crowd perpetrating unlawful violence. It is the uncertainty that speaks of this disorderly crowd. The Latin word meaning is the undecided crowd consisting of the words "mobile vulgus". "*Mob*" means "do not disturb" as a verb (Leymann, 1996; Tınaz; 2006; Dinçel; 2019).

Studies were carried out in the 1960's. Konrad Lorenz referred to relationships between animals while describing mobbing. An animal described it as a behavior exhibited to kidnap a different animal or a human being. Davenport, on the other hand, expressed it as actions performed by malicious people. According to Davenport, the aggressor exhibits cynical, suggestive and humiliating attitudes towards the victim. The aim here is to perform an act of dismissal of the victim (Lorenz, 1998; Davenport, 2002).

Mobbing is the display of behaviors such as harassing or excluding a person from business life for personal or impersonal reasons, regardless of factors such as religion, gender, age (Duffy & Sperry, 2011).

In many studies; They defined mobbing as bullying "In the definition of the International Labor Organization (ILO); It has been defined as" emotional harassment is a form of behavior manifested by cruelty, a sense of individuality and malicious and humiliating attitudes" (ILO, 2021). A behavior pattern is formed and collected against a person in charge, and that person is subjected to emotional harassment and the person is subjected to psychological harassment (Levinson, 2009; Dinçel, 2019).

The process related to mobbing shows some situations. For example, people who use mobbing subconsciously threaten and humiliate the other party. This is how the victim feels. In psychological violence, the attacker tries to reduce the self-confidence of the victim and put him in anxiety. In the light of all these definitions, "Mobbing"

- Get real in the workplace,
- By one or more people
- Realizing in a fictional way
- Hatred and grudge
- For very different reasons
- In order to intimidate the person,
- It refers to psychologically aggressive behaviors towards one's self-confidence (Görgülü, 2013).

In order for us to define the concept of mobbing as a source of stress and an act that causes discomfort, it must have some characteristics. These features are: (Taştan, 2015).

- Mobbing should be genuine in the workplace environment. Psychological actions that take place at home or in a friend environment are not called mobbing.

- Mobbing takes place secretly or explicitly. While some mobbings are obvious, sometimes the aggressor does mobbing secretly in order not to be recognized with a bad image against the outside environment.

- Mobbing should be an action that is repeated at certain intervals. At this point, the duration of the attacker's action and the perception of the victim depend on the size of the effect.

- Mobbing is done intentionally. It should be observed that this situation is implemented with a certain strategy. It should be concluded that the aggressor will want to upset, wear out, provoke the victim, harm his profession, reputation and health, and cause him to leave the workplace, which is his main purpose.

- In mobbing, there should be a power difference between the aggressor and the victim. What is meant by the difference in power mentioned here is not the position and position, but the difference in psychological power. The aggressor makes emotional attacks to psychologically wear out the victim.

In general, regardless of the characteristics of mobbing, it is desired to protect the victim. If we examine the determined features, it is observed that mobbing is hidden or obvious. It should be an action repeated at regular intervals, it should be done intentionally and there should be a power difference between the aggressor and the victim. The mobbing process is as much a static process as it is dynamic. Hundreds of academics have researched the reasons for the display of mobbing behaviors and have written theses and articles on this subject. It has been determined that the attacker exhibiting mobbing behavior has many remarkable features.

There are three criteria taken as basis in the explanation of mobbing. These criteria are; frequency, power differences and continuity (Mansur, 2015).

By definition, mobbing can be defined as the individual's exposure to malicious approaches, sarcastic attitudes, insinuations or negative efforts created in his reputation by different individuals in the same environment and being forced to leave the job after this point. The critical point in the formation of mobbing; It can be said that negative approaches are repeated at regular intervals and the attacker is persistent in the actions taken, as well as a power imbalance. The mentioned balance of power does not arise from subordinate or superior relations. The purpose here can be considered as psychological weakening of the victim (Zhao et al., 2016).

The "frequency" and "continuity" situations are generally approved by researchers in terms of describing the negative factors experienced in the workplace as mobbing. In different studies, it has been observed that while the

duration of mobbing is the shortest at 6 months, the application time is usually around 15 months, and the duration of permanent damage is around 29- 46 months. It takes more than 6 months for a mobbing process to take place. The tolerance limits of each person experiencing mobbing are different. While it is bearable for some, the feeling of pain and tolerability may be high for others. As the mobbing situation increases, the person does not only experience the effect of it, but also his family and close circles are also affected by the situation. The effect of the mobbing process may differ from country to country or from region to region (Pavey and Smyth, 1998; Weber et al., 2007)

Grouping of mobbing behavior patterns can be seen in Table 1 below (Şahin, 2015).

Table 1. Questions and Data about Logistics Businesses

Psychological Harassment Type of Behavior	Psychological Harassment Behavior
Behaviors that damage the personal or professional reputation of the targeted person	<ul style="list-style-type: none"> • Gossip about the targeted person, • False rumors about the targeted person, • Mocking the targeted person • Groundless accusations about the targeted person, etc.
Behaviors that challenge the personal tolerance of the targeted person	<ul style="list-style-type: none"> • Gossiping about the targeted person • Making baseless rumors about the targeted person • Making fun of the targeted person, Making unwarranted accusations about the targeted person, etc. • Naming the targeted person, insulting the targeted person publicly, • Publicly excluding the targeted person, • Despise the targeted person, • Belittle the targeted person, • Intimidate the targeted person, • Shouting at the targeted person, • Glancing at the targeted person, • Cursing the targeted person, etc.

<p>Behaviors aimed at excluding or isolating the targeted person, forcing them to resign or fire</p>	<ul style="list-style-type: none"> • To exclude the targeted person from professional activities, • Denying the targeted person's access to opportunities, Excluding the targeted person physically and socially, Rejecting the targeted goat 's job suggestions without showing a reasonable reason, • The targeted person organizational information, Arbitrarily reducing the responsibilities of the targeted person, • Intentionally making the targeted person work beyond the legal working time, Preventing the targeted person from being promoted, Giving the targeted person too much workload, • Of the targeted goat without a reasonable reason, • Forcing the targeted person to resign, etc.
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Mobbing can be grouped under various main headings as shown in the table above. The most common mobbing concept is examined within the scope of psychological harassment. It is ensured to intimidate the targeted person or persons, to put them under psychological pressure and to achieve the intended purpose by continuing this.

The type of psychological harassment behavior may be concepts that differ from each other. There is a relationship between type and behavior. It is the determinant of any behavior. If we examine these, the following can be seen in the behavior of the attacker, who exhibits behavior aimed at damaging the personal or professional reputation of the targeted person.

Such as gossiping about the targeted person, spreading false rumors, mocking. The point that draws attention at this point can be described as the attacker's attempt to resign or remove the victim from the workplace for whatever reason (Resch & Schubinski, 1996).

Another type of harassment behavior is behaviors that force the personal tolerance of the targeted person. The reason why this type leads to harassment behavior is due to the following reasons. Such as gossiping, making false rumors, mocking, making false accusations, calling names, publicly insulting,

ostracizing, despising, belittling, intimidating, shouting, glaring or swearing. The things mentioned here are the rights that the victim will be legally justified. It is obvious that no one deserves to be exhibited such behavior. Victims should always protect their rights (Vandekerckhove and Commers, 2003).

Finally, the type of behavior to be examined is psychological behaviors aimed at isolating, excluding, forcing resignation or dismissal of the targeted person. Regardless of the type of mobbing behavior, the victim should know, protect and defend their rights. It is imperative that the victim has the necessary evidence. At this point, the victim will defend their rights and prove that they are a victim of psychological violence (Duffy & Sperry, 2007).

Organizational culture structure has a great impact on the process of perpetuating psychological violence in organizations. Organizations are divided into cultures within themselves. These cultures can be perceived with rational and real perception. These organizations should not ignore the stress and conflict situation while carrying out their business activities, and it is necessary to create the appropriate cultural structure. For this, it should be freed from corrosive organizational activities. One method of preventing employees from using psychological violence against each other is when the organizational culture accepts the existence of psychological violence (Curio et al., 1978).

It is an undeniable reality that mobbing has an impact on the organizational environment, society and economic developments. These can be listed as follows; Insurance income and expenses, increase in health costs, increase in the number of early retirees, tax reduction, burnout syndrome in the victim and deterioration of family integrity in the victim, the community consisting of unhappy individuals and the work life without working order, can be said as the effect of psychological violence on the organizational environment, society and economic developments. (Soljan, 2008).

The person exposed to mobbing feels emotionally depressed. Their attitudes are negative and they draw a negative image around them. For these reasons, he falls out with his friends, loses his self-confidence and constantly experiences mental distress. If his/her friends consider the victim a failure and make the victim feel this, the victim may lose his/her former ability and lose his/her own values. It also reflects on his family. For this reason, the perpetrator of mobbing may not only cause the victim to lose his job, but also cause permanent damage to him. The person who applies mobbing also negatively affects other employees. The way to prevent this attitude is to conduct continuous psychological screening of employees and prevent such a problem (Dabu & Draghici, 2013).

The contribution of mobbing not only to individuals but also to organizations is negative. If the victim is exposed to mobbing, he will try to stay away from the workplace, take leave for this and will not be mentally attached to the work. By leaving the job, the process will result, in this direction, the organization will lose personnel and search for a new personnel, and will experience time, financial loss and poor quality of work. It should also be taken into account that the origin of this situation will not work efficiently until the point of departure of the personnel. However, the image of the organization will be shaken, employees will be distrusted, and if mobbing is proven, the victim company, which receives its legal rights, will suffer financially. Organizations that will lose their valuable personnel due to mobbing will decrease morale. Problems that occur after the deterioration of the organizational climate will cause pressure on employers and a decrease in respect for employers will occur (Davenport et al., 2002).

Mobbing causes inefficiency in the workplace. In this process, it is seen a lot in cases where wrong people are punished. While people who witness mobbing cannot concentrate on their work, both the organization and the personnel will lose after their employers do not manage the process correctly. This process triggers each other and the organization, which is worried about finding a new staff, will experience a decrease in workplace productivity. The lack of motivation in the organizational climate will lead to a decrease in team productivity (Zapf & Einarsen, 2005).

Mobbing harms both the organization and the victims in a chain relationship with each other. In order to prevent individual conflicts, it is necessary for the organization to carry out continuous inspections and to carry out predictive studies. Mobbing is also seen vertically or horizontally in the organizational structure. In vertical or „hierarchical harassment”, superiors harass their subordinates or subordinates harass their superiors. In horizontal or “functional harassment”, individuals of equal status harass each other emotionally (Teuschel, 2010).

The psychological violence applied from the lower level to the upper level or from the upper level to the lower level in a living organization is called vertical mobbing. Studies show that vertical mobbing is experienced more than horizontal mobbing. It is seen that it is realized by managers from top to bottom (Acar, 2013).

While the example of the manager applying mobbing to the employee is frequently encountered, it is also seen that the opposite situation is experienced. In this case, the Employee mobs the manager. It's a rare occurrence. The

following examples can be given regarding this. It is like the employee's not wanting and accepting the new manager, making the shadow of the old manager constantly feel to the new manager (Leymann, 2013).

Harassment in vertical mobbing is twofold. It also applies to subordinates at superiors. This could be for many reasons. The manager pushes his subordinates to make punitive actions. This is exactly what would be considered psychological harassment. In such cases, traditional managers are more likely to commit mobbing. While the manager is like friends with his subordinates, he may suddenly change direction and show a very harsh behavior. In this respect, subordinates need to develop a standard behavior for the manager and go in that direction. It would not be right to say mobbing for every single behavior. Some managers may be close to some of their employees and distant to others. Although this situation is felt as the beginning of harassment, it is not seen as a sufficient legal reason (Leymann, 2013; Resch & Schubinski, 1996).

Horizontal mobbing is the psychological violence that occurs between employees in the same position in organizations. In this type of mobbing, for example, someone who stands out with his hard work draws attention, his salary can be increased by the management or his different characteristics are appreciated. Afterwards, he is envied by other employees and is subjected to psychological harassment. This is an example of horizontal mobbing (Dambach, 2009).

In this type of mobbing, the person who harasses the person who is exposed to mobbing is his colleagues who are in the same duties or positions as him. The victim and the harasser are their colleagues in the same environment. They are on equal terms. This type of mobbing is caused by the lack of attraction, intense competition and conflict of interest (Esser, 2001).

In horizontal harassment, the victim is one of his colleagues in the same environment. If someone who has just started a job is successful and distinguished in the workplace and makes the power of expertise feel throughout the workplace, uneasiness may arise in the usual work order. Other personnel who perpetuate this unrest by mobbing behave aggressively, cynically and indifferently. However, they may be slandered or display racist approaches. Organization responsible should not be a party to rational harassment. In some cases, it is seen that organizations ignore such harassment. In this case, the victim will be psychologically removed from the workplace, and at the same time, he will enter into a personal struggle and lose his self-confidence. At this point, organizations should behave equally and fairly to everyone (Groeblichhoff & Becker, 1996).

There is no clear view about the situations that cause mobbing. The reason for this is that many factors play a role in the formation of mobbing. According to Leymann, the reason for mobbing is administrative and institutional factors. Personality has no role in this. It is difficult to reach only the institutional and managerial factors and the causes of mobbing (Karatuna & Tınaz, 2010).

There are many reasons for the emergence of mobbing. Some;

- The victim is intellectual, successful, creative, thoughtful, consistent, amiable, well-intentioned.
- The perpetrator is malicious, inconsistent, aggressive, problematic, controlling, jealous, and hypocritical.
- Reasons such as organizations not dealing with problems sufficiently, lack of control of the leader, not dealing with the root of problems, and lack of institutional culture can be listed (Mercanlıoğlu, 2010).

There are many reasons for mobbing to occur. At the root of the event lies the inability of the two parties to agree or the inability of one party to come to terms with the other. Although the victim tries to close the problems, the attacker does not ignore this situation and continues his attacks. First of all, the aggressor tries to reduce the respect of the victim in the environment. The victim maintains his respect, but after a while, the aggressor binds the victim to himself in every sense, making him a state in which he can have a say (Karlson et al., 2018).

However, an issue that causes psychological violence in organizations is the lack of organizational leadership. Even though the manager is aware of the issue, he ignores it and the problem harms both parties. Another reason for mobbing is the coldness in the organizational climate. The parties may apply psychological violence to each other with the reflection of the negative atmosphere on them. Another issue is the victim's professional inadequacy. Taking advantage of this, the attacker continues his attacks. However, there can be many reasons. Even if the victim is a talented and successful person, they may be exposed to mobbing (Kolodej, 2012).

3. Finding

This study has been brought into reality by examining the demographic factors of people working in the field of logistics in the public and private sectors operating in Turkey. In the logistics sector, which is one of the most important elements of world trade and supply infrastructure, the institution may suffer material and moral damage because of the mobbing of its employees. This study

was carried out in order to show the mobbing exposure of employees in the field of logistics in the public and private sectors in Turkey. It is thought that the result of the study will make a significant contribution to the employers, managers, workers and other employees working in the aforementioned region.

H₁: The participants exposure to mobbing varies according to their gender.

H₂: The mobbing exposure of the participants varies according to age groups.

H₃: Exposed to mobbing of the participants varies according to their marital status.

H₄: The participants exposure to mobbing varies according to their educational status.

H₅: The mobbing exposure of the participants varies according to their working status in the public and private sectors.

H₆: The mobbing exposure of the participants varies according to the years of service of the institution.

H₇: The mobbing exposure of the participants varies according to the title of the institution.

The form used to collect data in the study consisted of 2 parts. In the first part, the information form prepared to determine the demographic characteristics of the participants, and in the second part, the mobbing perception levels of the participants. Leymann mobbing typology scale was used in order to determine. This scale is written by Davenport, Schwartz and Eliot (2014). “*Mobbing at work Psychological Harassment*” has passed its publication. The general reliability of the mobbing scale applied to the shipyard workers was found to be highly reliable as $\alpha = 0.932$. The data obtained in the research were analyzed using the SPSS 27.0 program. Descriptive statistical methods (Number, Percent, Mean, Standard deviation) were used while evaluating the data. Difference t-test for comparison of quantitative data between two groups, comparison of parameters between groups in case of more than two groups One-way Anova test it has been used.

Table 2. Distribution by Demographic Characteristics

Tables	Groups	N	%
Gender	Male	92	70.8%
	Woman	38	29.2%
	Total	130	100%
Age Group	18-24	30	23.1%
	25-34	53	40.8%
	35-44	28	21.5%
	45-54	19	14.6%
	Total	130	100%
Civil Status	Married	69	53.1%
	Single	61	46.9%
	Total	130	%100
Education Status	Provincial education	15	11.5%
	High school	50	38.5%
	Associate degree	34	26.2%
	Licence	31	23.8%
	Total	130	%100
Working Organisation	Public institution	33	25.4%
	Special Organisation	97	74.6%
	Total	130	100%
Service Year	From 1 year Little	21	16.2%
	1-10 year	61	46.9%
	11-15 year	28	21.5%
	16-20 year _	11	8.5%
	21 years and above	9	6.9%
	Total	130	100%
Organisation Title I	Senior Manager	5	3.8%
	Intermediate Manager	28	21.5%
	Employee	69	53.1%
	Officer	17	13.1%
	Other	11th	8.5%
	Total	130	100%

As can be seen in Table 2, it was carried out with the participation of a total of 130 public and private sector employees, 92 men and 38 women. It is seen that 40.8% of the participants who responded to the survey are working

individuals in the 25-34 age group. It has been determined that 11.5% of the individuals participating in the research are primary school graduates, 38.5% are high school graduates, 26.2% are associate degree graduates, and 23.8% are undergraduate graduates. It is seen that 74.6% of the respondents work in the private sector in the field of logistics and 25.4% in the public sector in the field of logistics. When the years of service of the participants in the institution were examined, it was seen that 46.9% of them were employees of this sector between 1 and 10 years. When the position of the participants in the institution is examined, it has been determined that 3.8% of them are senior managers, 21.5% are middle managers, 53.1% are workers, 13.1% are civil servants and 8.5% are other employees.

Table 3. Exhibitors Mobbing Your perceptions by Gender See Averages

	Group	N	Cover	ss	t	p
Self don't show and communication of possibilities restriction	Male	92	1,485	0.479 _	1,276	0.089
	Woman	38	1,286	0.342		
Social to relationships Attack	Male	92	1,195	0.434	1,303	0.074
	Woman	38	1,142	0.253		
Social reputation attack	Male	92	1,242	0.716 _	1,153	0.273
	Woman	38	1,204	0.411 _		
Life quality and vocational to the situation attack	Male	92	1,342	0.548	0.684	0.542
	Woman	38	1,326	0.375		
To health directly attack	Male	92	1,221	0.434 _	0.540	0.524
	Woman	38	1,124	0.618 _		
General mobbing level	Male	92	1,567	0.298 _	1,317	0.395
	Woman	38	1,437	0.253 _		

According to Table 3, no significant relationship was observed in terms of being a man or a woman in terms of being exposed to mobbing.” H_1 : *The exposure of the participants to mobbing differs according to their genders.*” hypothesis was rejected.

Table 4. The Averages of the Participants Perceptions of Mobbing by Age Group

	Group	N	Cover	ss	F	p	Difference
Restricting Self - Exhibition and Communication Opportunities	18-24	37	1,537	0.563	4,152	0.023	1 >3
	25-34	72	1,451	0.473			
	35 and above	21	1,249	0.314			
Social to relationships Attack	18-24	37	1,235	0.451	1,119	0.335	x
	25-34	72	1,163	0.394			
	35 and above	21	1,220	0.471			
Social reputation Attack	18-24	37	1,353	0.445	3,251	0.063	x
	25-34	72	1,258	0.326			
	35 and above	21	1,245	0.230			
Attack on Quality of Life and Occupational Status	18-24	37	1,435	0.686	0.353	0.431	x
	25-34	72	1,395	0.579			
	35 and above	21	1,345	0.503 _			
To health directly Attack	18-24	37	1,250	0.5 85	3,963	0.033	1 >3
	25-34	72	1,139	0.343			
	35 and above	21	1,063	0.141			
General mobbing level	18-24	37	1,248	0.465	3,027	0.047	1>3
	25-34	72	1,185	0.327			
	35 and above	21	1,144	0.241			

In Table 4, the participants participating in the research; A significant difference was found in the restriction of self-disclosure and communication opportunities according to the age group variable. ($F=4.152$; $p=0.023<0.05$). The self-disclosure and limitation of communication opportunities scores of employees aged between 18-24 differ more significantly from the scores of those

in the age group 35 and over (1.249 ± 0.314). A significant difference was found in the mean scores of direct attacks on health according to the age group variable. ($F=3.963$; $p=0.033 < 0.05$). The direct attack scores on health (1.250 ± 0.585) of the employees whose age group is between 18-24 differ more significantly from the scores of the employees whose age group is 35 and over (1.063 ± 0.141). A significant difference was found in the average of the general mobbing level scores according to the age group variable. ($F=3.027$; $p=0.047 < 0.05$). The direct attack scores on health of the employees whose age group is between 18-24 (1.248 ± 0.465) differ more significantly from the scores of the employees whose age group is 35 and over (1.114 ± 0.241). It has been observed that individuals whose age range is 18-25 are more exposed to the behaviors of “Restriction of Self-Expression and Communication Opportunities”, “Direct Attack on Health” and “General Mobbing Level” compared to the individuals working in the other age range. This finding was “ H_2 : The mobbing exposure of the participants differs according to age groups.” This supports Hypothesis 2.

Table 5. The Averages of the Participants ‘ Perceptions of Mobbing by Marital Status

	Group	N	Cover	ss	t	p
Self don't show and communication of possibilities extraction	Married	68	1,453	0.415	-0.458	0.083
	Single	62	1,588	0.521		
Social to relationships attack	Married	68	1,268	0.499	0.973	0.455
	Single	62	1,151	0.376		
Social reputation attack	Married	68	1,243	0.481	0.106	1,115
	Single	62	1,236	0.435 _		
Life quality and vocational to the situation attack	Married	68	1,382	0.467	0.628	0.579
	Single	62	1,334	0.627 _		
to health directly attack	Married	68	1,247	0.293	-0.923	0.098
	Single	62	1,196	0.648		
General mobbing level	Married	68	1,421	0.347	-0.737	0.333 _
	Single	62	1,571	0.361		

According to Table 5, there was no significant relationship between being married or single in terms of exposure to mobbing. " H_3 : The participants' exposure to mobbing varies according to their marital status." hypothesis was rejected.

Table 6. The Averages of Participants Mobbing Perceptions by Educational Status

	Group	N	Cover	ss	F	p	Difference
Self-Expression and Communication Opportunities	Primary education	24	1,524	0.682	2,484	0.028	4> 2
	High school	56	1,252	0.414			
	Associate degree	23	1,543	0.590			
	Licence	27	1,731	0.634			
Attack on Social Relationships	Primary education	24	1,331	0.503	0.471	0.841	
	High school	56	1,239	0.433			
	Associate degree	23	1,253	0.518			
	Licence	27	1,269	0.473			
Attack on Social Reputation	Primary education	24	1,419	0.488	1,726	0.254	
	High school	56	1,252	0.314			
	Associate degree	23	1,311	0.553			
	Licence	27	1,494	0.567			
Attack on Quality of Life and Occupational Status	Primary education	24	1,298	0.612	4,255	0.038	4> 2
	High school	56	1,232	0.459			
	Associate degree	23	1,517	0.623			
	Licence	27	1,635	0.584			
Direct Attack on Health	Primary education	24	1,197	0.612	1,248	0.591	
	High school	56	1,113	0.428			
	Associate degree	23	1,153	0.294			
	Licence	27	1,179	0.382			
General Mobbing Level	Primary education	24	1,432	0.649	2,520	0.049	4>2
	High school	56	1,393	0.411			
	Associate degree	23	1,436	0.482			
	Licence	27	1,515	0.593			

In Table 6, a significant difference was found in the mean scores of the participants' self-disclosure and limitation of communication opportunities, according to the variable of educational status ($F=2.484$; $p=0.0228<0.05$). The self-disclosure and limitation of communication opportunities scores of the undergraduate participants (1.731 ± 0.634) differ more significantly from the scores of the participants with high school education (1.252 ± 0.414). A significant difference was found in the mean scores of attacks on quality of life and occupational status according to the variable of educational status ($F=3,255$; $p=0.038<0.05$). The quality of life and occupational status attack scores of the participants with undergraduate education status ($1,635\pm 0.584$) differ more significantly from the scores of the participants with high school education ($1,232\pm 0,459$). A significant difference was found in the mean scores of the general mobbing level according to the educational status variable ($F=2,520$; $p=0.049<0.05$). The quality of life and occupational status attack scores of the participants with undergraduate education status (1.515 ± 0.593) differ more significantly from the scores of participants with high school education (1.393 ± 0.411). However, there was no significant difference in the perceptions of the participants towards other variables ($p>0.05$).

Observed that the participants with undergraduate education were more exposed to the behaviors of "Restriction of Self-Exhibition and Communication Opportunities", "Assault on Quality of Life and Occupational Status" and «General Mobbing Level» compared to individuals at other education levels. This finding *supports* Hypothesis 4 as" H_4 : *The mobbing exposure of the participants differs according to their educational status*".

Table 7. Exhibitors Mobbing Your Perceptions Work Drying See Averages

	Group	N	Cover	ss	t	p
Restricting Self - Exhibition and Communication Opportunities	Public Institution	55	1,518	0.513	0.384	0.965
	Special Organisation	75	1,483	0.489		
Attack on Social Relations	Public Institution	55	1,233	0.518	1,131	0.667
	Special Organisation	75	1,184	0.343		
Attack on Social Reputation	Public institution	55	1,231	0.382	-0.419	0.504
	Special Organisation	75	1,258	0.443		
Attack on Quality of Life and Occupational Status	Public Institution	55	1,359	0.479	-0.932	0.535
	Special Organisation	75	1,393	0.494		
Direct Attack on Health	Public Institution	55	1,137	0.221	-0.835	0.230
	Special Organisation	75	1,249	0.484		
General Mobbing Level	Public Institution	55	1,442	0.343	-0.367	0.944
	Special Organisation	75	1,318	0.391		

According to Table 7, it is seen that the public and private sector employees participating in the research have close averages in terms of their exposure to mobbing attacks. In addition, in terms of sub-dimensions of mobbing, $p > 0.05$ was found in the level of exposure of public and private sector employees to attacks. In this context, " H_5 : The mobbing exposure of the participants differs according to their working status in the public and private sectors." hypothesis was rejected. In other words, no significant difference was found between the public and private sectors in terms of exposure to mobbing.

Table 8. Averages of Participants Perceptions of Mobbing by Year of Service in the Institution

	Group	N	Cover	ss	F	p
Of self-expression and communication opportunities	From 1 year Little	16	1,545	0.423	0.318	0.731
	1-10 year	77	1,689	0.474		
	11-15 year	23	1,532	0.436		
	16-20 years	14	1,581	0.495		
Social to relationships attack	From 1 year Little	16	1,294	0.473	0.242	1,100
	1-10 year	77	1,323	0.439		
	11-15 year	23	1,214	0.405		
	16-20 years	14	1,197	0.370		
Social reputation attack	From 1 year Little	16	1,284	0.479	0.275	0.745
	1-10 year	77	1,304	0.419		
	11-15 year	23	1,253	0.348		
	16-20 years	14	1,294	0.504		
Life quality and vocational to the situationAttack	From 1 year Little	16	1,321	0.485	0.353	0.839
	1-10 year	77	1,384	0.506		
	11-15 year	23	1,361	0.413		
	16-20 years	14	1,359	0.609		
To health directly Attack	From 1 year Little	16	1,208	0.479	1,143	0.532
	1-10 year	77	1,159	0.435		
	11-15 year	23	1,103	0.285		
	16-20 years	14	1,235	0.603		
General mobbing level	From 1 year Little	16	1,289	0.498	0.458	0.977
	1-10 year	77	1,314	0.463		
	11-15 year	23	1,253	0.412		
	16-20 years	14	1,306	0.576		

According to Table 8, no difference was observed in terms of exposure to mobbing attacks according to the factor of years of service of the participants in the research. In addition, in terms of sub-dimensions of mobbing, the level of exposure to attacks according to the variable of years of service in the institution was found to be $p > 0.05$. In this context, " H_6 : The mobbing exposure of the participants varies according to the years of service in the institution." The 6th hypothesis is rejected. In other words, no significant difference was found in terms of exposure to mobbing in terms of years of service.

Table 9. The Averages of Participants Perceptions of Mobbing by Institution Title

	Group	N	Cover	ss	F	p
Self don't show and communication of possibilities Restriction	Top level manager	12	1,197	0.351	1,359	0.249
	Middle level manager	54	1,566	0.442		
	Employee	117	1,508	0.528		
	Officer	23	1,546	0.602		
	Other	45	1,511	0.480		
Social to relationships attack	Top level manager	12	1,100	0.234	0.583	0.676
	Middle level manager	54	1,167	0.338		
	Employee	117	1,236	0.452		
	Officer	23	1,261	0.492		
	Other	45	1,196	0.366		
Social reputation attack	Top level manager	12	1,294	0.678	0.750	0.559
	Middle level manager	54	1,198	0.285		
	Employee	117	1,297	0.407		
	Officer	23	1,270	0.455		
	Other	45	1,215	0.383		
Life quality and vocational attack of the situation	Top level manager	12	1,222	0.376	0.760	0.552
	Middle level manager	54	1,430	0.575		
	Employee	117	1,326	0.434		
	Officer	23	1,348	0.496		
	Other	45	1,395	0.460		

To health directly attack	Top level manager	12	1,033	0.115	1,117	0.349
	Middle level manager	54	1,104	0.266		
	Employee	117	1,198	0.555		
	Officer	23	1,096	0.233		
	Other	45	1,084	0.247		
General mobbing level	Top level manager	12	1,206	0.365	0.371	0.829
	Intermediate level manager	54	1,320	0.317		
	Employee	117	1,337	0.394		
	Officer	23	1,332	0.418		
	Other	45	1,307	0.327		

According to Table 9, no difference was observed in terms of the level of exposure to mobbing attacks according to the institution title of the participants participating in the research. In addition, in terms of sub-dimensions of mobbing, the level of exposure to attacks according to the title variable in the institution was found to be $p > 0.05$. In this context, " H_7 : *The mobbing exposure of the participants differs according to the title of the institution.*" The 7th hypothesis is rejected. In other words, no significant difference was found between the title of the institution and exposure to mobbing.

4. Conclusion and Recommendations

Logistics, one of the most important building blocks of world trade, is in a very important position for global market owners. With the existence of logistics, technology continues to develop and opens up new areas for innovation and new production. Between 10% and 15% of world trade can be described as logistics costs (Dinçel, 2014). A possible disruption and decrease in service power will negatively affect a wide trade structure on a chain basis. At this point, the performance of the employees is important. The psychological and physical problems experienced by the employees will negatively affect both the employees and the business in the sector. At this point, mobbing experienced by employees is an example of this situation.

The human resources of the institutions progress in direct proportion to the value of the company. It is important to find a solution to the psychological violence suffered by employees, both by law and by in-house regulations or bylaws. For a healthy workforce, the rights of employees who are exposed to bullying must be protected. At this point, both the employees and the top management of the company should be given training in certain frameworks and audits should be carried out at the same time.

In this study, Leymann's mobbing typology scale was used. This scale was published in the "Mobbing Psychological Harassment in the Workplace" publication by Davenport, Schwartz, and Eliot (2014). The general reliability of the mobbing scale applied to the shipyard workers was found to be highly reliable as $\alpha=0.932$. The data obtained in the research were analyzed using the SPSS 27.0 program. While evaluating the data, descriptive statistical methods (Number, Percentage, Mean, Standard deviation) were used. The difference t-test was used to compare the quantitative data, and the Oneway Anova test was used to compare the parameters between groups in case of more than two groups.

As a result of the statistical study, it was determined that there were significant differences according to education level and age. Participants with undergraduate education level were exposed to "Restriction of Self-Exhibition and Communication Opportunities", "Assault on Quality of Life and Occupational Status" and "General Mobbing Level" behaviors more than participants with other education levels, and participants between the ages of 18-25 stated that It was determined that he was exposed to the behaviors of "Restriction of Demonstration and Communication Opportunities", "Direct Attack on Health" and "General Mobbing Level" more than the participants in other age groups. The human resources of the institutions progress in direct proportion to the value of the company. It is important to find a solution to the psychological violence suffered by employees, both by law and by in-house regulations or bylaws. For a healthy workforce, the rights of employees who are exposed to bullying must be protected. At this point, both the employees and the top management of the company should be given training in certain frameworks and audits should be carried out at the same time.

References

Acar, E. (2013). "*Duygusal Taciz Ve İlkokul-Ortaokul Öğretmenlerinin Motivasyonlarına Etkisine Yönelik Bir Alan Araştırması*". Yayımlanmamış Yüksek Lisans Tezi, Gazi Üniversitesi Sosyal Bilimler Enstitüsü, ss.9

Akdemir, F.,(2015), *İşletmelerde Uygulanan Mobbingin (Psikolojik Şiddet) Örgütsel Bağlılığa Etkisi*, Yüksek Lisans Tezi , Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara, ss.32-33

Carlson, N. V., Healy, S. D., & Templeton, C. N. (2018). Mobbing. *Current Biology*, 28(18), R1081-R1082.

Curio, E., Ernst, U., & Vieth, W. (1978). Cultural transmission of enemy recognition: one function of mobbing. *Science*, 202(4370), 899-901.

Dabu, B., & Draghici, A. (2013). Mobbing and bullying in business organizations and consequences on human health. *Scientific Bulletin–Economic Sciences*, 12(1), 63-71.

Dambach, K. E. (2009). *Mobbing in der Schulklasse* (Vol. 15). Ernst Reinhardt Verlag.

Davenport, N., Schwartz, R. D., & Elliot, G. P. (2002). Mobbing. Emotional abuse in the American workplace. Ames, Io: Civil Society Pub, 5(24-36), 140-162

Davenport, N. Z., Elliott, G. E., & Schwartz, R. D. (2014). Mobbing işyerinde psikolojik taciz. İstanbul: Ray Yayıncılık.

Diñçel, S. (2014). Lojistik Sektöründe Girişimcilik: Örnek Bir Firma İncelemesi. Yayınlanmamış Yüksek Lisans Tezi. İstanbul: İstanbul Aydın Üniversitesi

Diñçel, S. (2019). Girişimcilik. İstanbul: Togan Yayınevi.

Diñçel, S. (2019). İşletme Yönetimi ve Lojistik. İstanbul: Togan Yayınevi.

Duffy, M., & Sperry, L. (2007). Workplace mobbing: Individual and family health consequences. *The family journal*, 15(4), 398-404.

Duffy, M., & Sperry, L. (2011). Mobbing: Causes, consequences, and solutions. Oxford University Press.

Esser, A. (2001). Mobbing–n. Esser.

Görgülü, N. (2013), “*Mobbingin (Bezdiri) Sağlık Çalışanları Üzerine Etkisi*”. Yüksek Lisans Tezi, Okan Üniversitesi Sağlık Bilimleri Enstitüsü, İstanbul

Groeblinghoff, D., & Becker, M. (1996). A case study of mobbing and the clinical treatment of mobbing victims. *European Journal of Work and Organizational Psychology*, 5(2), 277-294.

International Labour Organization (ILO). (2021). The cost of violence/stress at work and the benefits of a violence/stress-free working environment Retrieved December 7, 2022, from <http://www.ilo.org/public/english/protection/safework/whpwb/econo/costs.pdf> [Google Scholar]

Karatuna, I., Tınaz, P., (2010) İşyerinde Psikolojik Taciz, Türkiye İşçi Sendikaları Konfederasyonu Yayınları, ss.58

Kolodej, C. (2012). *Mobbing*. Sfbs.

Levinson, H. (2009). “*Organizational character*”. In Consulting psychology: Selected articles by Harry Levinson, Edited by: Levinson, H., Freedman, A. M. and Bradt, K. H. 65–77. Washington, DC: American Psychological Association.

Leymann, H. (1996). The content and development of mobbing at work. *European journal of work and organizational psychology*, 5(2), 165-184.

Leymann, H. (2013). Mobbing: Psychoterror am Arbeitsplatz und wie man sich dagegen wehren kann. Rowohlt Verlag GmbH.

Lorenz, K. (1998). Sobre la agresión: el pretendido mal. Siglo xxi.

Mercanlıoğlu, Ç. (2010). *Çalışma Hayatında Psikolojik Tacizin(Mobbing) Nedenleri, Sonuçları ve Türkiyede’ki Hukuksal Gelişimi* Organizasyon ve Yönetim Bilimleri Dergisi, Cilt: 2 , Sayı: 2 , ss.39-40

Pavey, C. R., & Smyth, A. K. (1998). Effects of avian mobbing on roost use and diet of powerful owls, *Ninox strenua*. *Animal Behaviour*, 55(2), 313-318.

Resch, M., & Schubinski, M. (1996). Mobbing–prevention and management in organizations. *European journal of work and organizational psychology*, 5(2), 295-307.

Šoljan, I., Josipović-Jelić, Ž., & Jelić Kiš, A. (2008). Workplace mobbing. *Arhiv za higijenu rada i toksikologiju*, 59(1), 37-42.

Şahin D.,(2015). *Örgütlerde Mobbing ve Bir Alan Araştırması*, Yüksek Lisans Tezi, Cumhuriyet Üniversitesi Sosyal Bilimler Enstitüsü, Sivas, ss.47

Taştan, N. (2015), “*Mobbing (Psikolojik Şiddet) Algısı, Tükenmişlik Sendromu ve İşten Ayrılma Niyeti Arasındaki İlişki : Banka Çalışanları Üzerinde Bir Araştırma*” , Yüksek Lisans Tezi, Beykent Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul

Teuschel, P. (2010). *Mobbing*. Schattauer.

Tınaz, P. (2006). İşyerinde Psikolojik Taciz Mobbing. *Çalışma ve toplum*, 4(11), 13-28.

Vandekerckhove, W., & Commers, M. R. (2003). Downward workplace mobbing: a sign of the times?. *Journal of business Ethics*, 45, 41-50.

Weber, A., Hörmann, G., & Köllner, V. (2007). Mobbing--a work related risk factor of service-based society?. *Gesundheitswesen (Bundesverband der Ärzte des Öffentlichen Gesundheitsdienstes (Germany))*, 69(5), 267-276.

Zapf, D., & Einarsen, S. (2005). Mobbing at Work: Escalated Conflicts in Organizations.

Zhao, R., Zhou, A., & Mao, K. (2016, January). Automatic detection of cyberbullying on social networks based on bullying features. In *Proceedings of the 17th international conference on distributed computing and networking* (pp. 1-6).

CHAPTER IX

WAQF INSTITUTION AND GENERAL STRUCTURE OF WAQFS IN THE OTTOMAN EMPIRE

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1. Introduction

Whether they are nomadic or settled there have been people in need of help and support in every society. One of the situations brought about by people living together is that not everyone is on equal terms. Living in a society often results in unequal conditions among individuals, leading to the emergence of people in need and the necessity for help and support. Throughout history, this has given rise to various charitable acts and demonstrations of influence, one of which is the establishment of waqfs. To properly define and understand waqfs and their significance, it is important to examine their meaning. While interpretations and provisions regarding waqfs may vary, they all share the common view that waqfs are acts driven by faith and do not seek personal benefit.

From the earliest times to the present day, the feeling of pity and helping a section of the society has turned into various charitable works as well as a show of influence. Benefacting by waqfs is one of these actions. In order to correctly define and interpret waqfs and to understand the world of mind, it is necessary to first look at what it means. Although there are various interpretations and provisions about waqfs, the common opinion in all of them is that it is a form of behavior shaped within the framework of faith and not benefiting.

It is not known when waqfs and waqf-like institutions appeared. However, it is known that there is an intense Islamic influence in the waqf works that have survived to the present day. Because the belief in charity in Islam has been instrumental in people entering the competition to do good. The fact that waqfs differ in terms of quality and quantity has not prevented charitable work and has been an area where people from all segments of society have been involved. The Ottoman Empire also has a very rich accumulation in this respect. In particular, waqfs made by members of the Ottoman dynasty and its surroundings are an element that keeps the society together and increases respectabilities, loyalty and trust in the state.

2. Waqf in History

The word “waqf”, whose primary meaning is to stop, move, is defined as the work of spending a donated property or property on charitable works on the condition that it is not sold (Büyük Osmanlıca – Türkçe Sözlük, 1959: 745). The legal meaning of the waqf as a result of its legal personality causes various opinions to emerge about its origin and interpretation (Akgündüz, 1996: 76). The origins and interpretation of waqfs, which are charitable endowments, have been subject to diverse opinions due to the uncertainty surrounding their appearance in history. The reason for this is the uncertainty about when the first waqfs or waqf-like institutions emerged in the world (Çağatay, 1983: 18). Although waqfs are placed on an Islamic basis, it is not correct to say that they emerged directly with Islam (Köprülü, 1938: 10). At this point Mehmet Genç put forward a comment about the origin of waqfs as “*waqfs are neither Ottoman nor Islamic inventions*” (Genç, 2014: 10). Another comment about waqfs is; before Islam, waqfs emerged with the aim of providing public service rather than their legal nature (Berki, 1956: 9). Although waqfs are rooted in Islamic influence, it would be incorrect to attribute their direct emergence to Islam. It has been suggested that waqfs existed before Islam, with the aim of serving the public rather than possessing a legal nature. Waqfs have exemplified social responsibility in Islamic regions and different countries, serving as a means for people to extend help to those in need and improve the welfare of their communities.

Waqfs have set the best example of social responsibility with their common features both in the Islamic geography and in different countries. Because the main purpose of the waqfs has been to reach out to people in need and to undertake a task to increase the welfare of that region.

Evidence of waqfs can be traced back to ancient Mesopotamia, Arab territories and Central Asia. Although the nature of these waqfs may have been driven by personal motives to gain social standing and influence, they demonstrate a desire to leave a lasting impact. Although we base the main purpose of waqfs on social responsibility, it is possible to say that the desire to leave a mark behind the individual points of view.

Turkish tribes didn't have settled life for centuries. Because of this the nomadic lifestyle of the Turks obliges them to investigate their own history through other documents. While specific information about waqfs among the Turkish tribes is scarce, estimations can be made based on available documents. For instance, the waqf attributed to Hittite King Hattusilis, dated around 1280-1290 BC, is considered the earliest Turkish waqf (Öztürk, 1983: 30). Similarly, clay tablets discovered in Mesopotamia and the Arab territories reveal dedications of land for the construction of temples.

When we look at Mesopotamia and the Arab geography, clay tablets similar to the waqfs belonging to the Babylonians were found. One of these tablets is a land dedicated to Sarrim and the goddess Sullat by someone who lived in the Sumu-al-lii period (Öztürk, 1983: 37). According to what is written on the clay tablet, this piece of land was dedicated to the construction of a temple on it.

Before the advent of Islam, the Hejaz region in the Arab geography held great importance during the Age of Ignorance. During the Age of Ignorance, there were various fairs held in this region during the pilgrimage period. Fairs were held in this region during the pilgrimage period, where taxes were collected to support the poor and fulfill water-related needs. During these periods, taxes are collected to feed the poor. There were two kinds of tax which collected on pilgrimage periods. The first of these *is the alms given by the pilgrims* for the poor called rifade and the second *is the taxes collected to meet the need for water in the name of complaint* (Çağatay, 1971: 119). During pilgrimage periods rich people was helping poor people and also they were having reputations. However, it cannot be concluded that waqf institutions existed during this period, as waqfs require a corporate identity, continuity, settled communities, and recognized properties. Therefore, it is inappropriate to label any religious facility constructed in different times and societies as a waqf.

When we look at the geographies and nations mentioned above, it does not seem possible to talk about the existence of the waqf institution yet. Because the aid and donations made are entirely due to the desire to increase the position and influence of people in society. Although it is not in a specific system, as Imam

Shafii points out, it can be accepted as a correct determination to say that there was no waqf in Arabia before Islam (Köprülü, 1938: 3). Because in order to talk about the existence of waqfs, they must have a corporate identity and continuity. For this, a settled community, private property, a piece of land sufficient for a family, and more securities must be widely recognized. This shows that it is not correct to call the facility built for religious purposes in every age and society a waqf (Öztürk, 1983: 32).

Islam recognizes all prophets from Adam to Muhammad, and waqfs associated with temples, wells, and other structures indicate the historical existence of waqfs. Therefore, in the case of waqfs, temples, wells and waqfs show the actual existence of the waqf. These waqfs trace their origins back to Prophet Ibrahim and are known as Halilürrahman Waqfs. (Berki, 1956: 9). Although the term “waqf” is not directly mentioned in the Qur’an, the concept and institutional form of waqfs are based on the teachings of Prophet Muhammad. Therefore, although it is obvious that it would be wrong to base the waqf on the religious and moral principles of Islam (Köprülü, 1938: 3–10), it would be more accurate to define it as a legal institution specific to Islamic countries (Köprülü, 1951: 494). Based on this definition, the existence of the waqf in Islam emerges as public and private evidence (Akgündüz, 1996: 56). Public evidence is shown directly from the verses in the Qur’an. The specific evidences are explained through the Sunnah and hadiths of the Prophet Muhammad. Special evidence also points to the concept of charity. Charity; it is explained as charity that brings continuous goodness (Akman, 2018: 195). A related hadith is narrated by Ömer Hilmi Efendi as follows:

“... When a person dies, all his good behaviours are stopped except for three things that he has done. Firstly his charity, secondly his knowledge and thirdly is righteous son who pray for him...” (Ömer Hilmi Efendi, 1997: 9-10).

Based on this hadith, a righteous son who constantly prays, knowledge and charity constitutes the subject of charity and becomes the special evidence of the waqf.

The Period of the Four Caliphs which began with the death of the Prophet Muhammad and the Islamic states established afterwards began to change the quality and quantity of waqf. The spoils of war and Islamic cultural influences contributed to an increase in waqf constructions. In addition, the race to expose the wealth of the rich has begun to make waqfs more prominent in terms of diversity. Furthermore, there was a competition among the wealthy to showcase their wealth through waqfs. Therefore, waqfs can be seen as an economic policy infused with moral motives (Kozak, 1983: 8-60).

After The Period of the Four Caliphs many dynasties occurred and they built Islamic buildings. One of them was Umayyad Dynasty. It is accepted that the first waqf work during the Umayyad period one of the Islamic states, was the Umayya Mosque (Çağatay, 1971: 18). This mosque was founded in Damascus by the Umayyad caliph Walid son of Abd al-Malik. During the Umayyad period, an *office was also established to supervise the waqfs called Divan al-Ahbas*. During this period, Abu Yusuf with the title of *kaz'il kuzat* was the one who established the waqf on Islamic waqfs as the official kadis. The Abbasids also continued the tradition of waqf. An authority called *Divan al-Birr* was established to supervise the waqfs. In addition, according to the Abbasid waqf dated H.307, it is stated that an agricultural land was endowed in Egypt during this period (Yediyıldız, 2012: 480-484). Thus, waqfs began to gain corporate identity gradually.

3. Waqf in the Ottoman Empire

The Turkmen movements that started against the Mongols in 1261 prepared the ground for the establishment of the Turkmen principalities. The Ottoman Principality was one of them (İnalçık, 2002: 67). In 1299 Ottoman Empire declared his independence and started to expanding border. Expanding borders were mean of high population and need more social welfare. Waqfs were the most important means about social welfare. The Ottoman Empire, established as a result of Turkmen movements against the Mongols, played a significant role in social, economic, and political life through its waqfs. For this Ottomans divided the conquered lands into three according to Islamic rules: land, haraji, öşri and emiri. These waqfs fulfilled official, religious, social, and educational purposes by utilizing lands separated from Arazi-i emiriyye, which were reserved for waqf and property use and strictly protected by religious law. The waqf and property lands separated from the Arazi-i emiriyye were reserved for official, religious, social and scientific services, and the dismemberment, sale and gifting of these lands were strictly prohibited (Uzunçarşılı, 1988: 504-505). During the waqf period of the Ottoman Empire (1299-1500), the first waqf monument was the İznik Madrasah which was built by Orhan Gazi in 1311 (Kazıcı, 2003: 87). Sultaniye Madrasah was opened during the time of Çelebi Mehmet, Mevlevihane in Edirne during the time of Murad II, Sahn-ı Seman Madrasah during the time of Fatih Sultan Mehmed (Uzunçarşılı, 1988: 523).

From its waqf to its last periods, the Ottoman Empire undertook an important task in social, economic and political life with its waqfs. Over time, although waqfs seem more ordinary in terms of quality and quantity next to a

certain segment of the population, they have become an institution supported by the public. For this reason, documents subject to certain provisions are encountered for the inspection of waqfs, their healthier functioning and the correct use of the property or property endowed. Official documents outlining the conditions of endowments, regulated these waqfs. These documents, which are arranged according to the Shari'a provisions and carry the requirements of the waqf are called *vakfiye*. The most classical definition of waqfs is made as "the hujjati şer'iyye of the waqf that is considered to be the *takrir of the waqf and the registration of the kadi*" (Ömer Hilmi Efendi, 1997: 15). In other words, it is the document that becomes official with the consent and registration of the kadi. For the registration of a waqf there are stages that must be passed. Ekrem Hakkı Ayverdi describes these stages as follows:

"In a waqf, first of all the waqf and the mawkuף are written; Then, the menba's who will provide the irad, that is, the galle, which is called *asl-ı vakf*, the imams or imams who have the hujjate that means duty in the mawkuף building, the service members such as hatib, devirhan, sermahfil, kayyum, serabkeş, muallim, muid, tabib, kehhal, architect, müremmetçi must be shown by the cabis according to the fact that the will that provides the cabi or galle is in a separate place. On top of these, the trustee also performs his duties and duties by the kadi of the locality... Muslims know in the world and in the universe that even a grain of wheat is the property of Allah. Almighty Allah gives more to what he wishes and less to what he wishes... However, these conditions do not mean that the middle class close to the poor who are not rich do not make foundations. They also made middle foundations, which are perhaps more acceptable. Giving feed to birds, giving Eid clothes to those in prison, paying off debts and getting them out of prison, reading salavat and the Qur'an on holy nights, etc., have many precedents in every conceivable matter..." (Ayverdi, 1983: 74-75).

After the above stages, it is understood that the subject of the waqf has a wide range and people from all walks of life. The existence of waqfs that are called the people's mutual charitable works which are more needs-oriented but where the construction or allocation of buildings is not in question, draws attention (Kunter, 1938: 111). In places such as masjids and zawiyahs which were mostly formed in neighborhoods the people made more middle waqfs but imperial waqfs, established by the sultans and influential individuals, played a crucial role in social welfare, as they had vast resources and grand structures such as külliyes, complex buildings encompassing mosques, madrasas, hospitals, and other facilities. These waqfs often provided employment opportunities,

education, and healthcare services to the public. In contrast, neighbourhood-based waqfs were smaller in scale and typically established around mosques and zawiya, religious institutions with social functions. These waqfs catered to the immediate needs of the community, such as maintaining mosques, aiding the poor, and organizing religious ceremonies.

The biggest difference of the Ottoman Empire from the previous civilizations was that it developed the waqf tradition and had the feature of a waqf civilization with its buildings. The waqf tradition of the Ottoman Empire left an indelible mark on its civilization, as evidenced by the remarkable architectural works that still inspire admiration today. The endowment of valuable properties and the establishment of grand waqfs by influential figures not only shaped the physical landscape but also contributed to the cultural and social development of the empire. Evliya Çelebi made the best observation about this *with the words*, “I have visited eighteen sultanates and kingdoms in fifty years and I have never seen so many charitable institutions in any of them” (Zillioğlu, 1984: 244).

4. Types of Waqfs in the Ottoman Empire

Various types of waqfs existed within the Ottoman Empire, characterized by their establishment purposes, types of endowed properties, and income sources. Waqfs; it differs according to the type, quality, continuity and personality of the property endowed. We can also group waqfs by volume. So much so that while large-scale waqfs with both buildings and revenues were mostly established by the palace and its surroundings, it is known that more modest waqfs were formed around the masjid and zawiya. In addition, the sources of income of waqfs can be securities and real estate. Waqfs have functioned as an institution that provides both public services and makes the place where it is located public. Waqf is often an act in which a building is allocated and various needs are met with its revenues or charitable works are carried out with the in-kind and financial assistance of the people.

4.1. Waqfs According to Portability

According to Islamic law, it is essential that the property or goods are real estate for the continuity of the waqf (Öztürk, 1983: 82). Therefore, imarets and bazaars constitute the source of income for real estate waqfs (Tabakoğlu, 2003: 29).

The greatest contribution of the Ottoman Empire to the waqf system was the cash waqfs. Interest is forbidden in Islam. The danger of *riba* for cash-based

and securities-based waqfs has been a controversial issue. However, with the arrangement made, this issue has been accepted as permissible. The way the cash waqf operates provides credit support at a certain interest rate to the person in need but this interest income is used in accordance with the needs of the waqf and in accordance with its purpose. In this respect it is possible to say that cash waqfs were the first financing and credit provider of the Ottoman Empire (Güner, 2019: 253). It is known that the first waqf that showed the feature of a cash waqf was made during the time of Fatih Sultan Mehmet. The purpose of the establishment of this waqf is to meet the meat food of the janissaries (Tabakoğlu, 2003: 29). Another cash waqf established outside of Istanbul is located in Edirne. This waqf was established in 1432 with ten thousand coins endowed by a philanthropist named Yağcı Hacı Muslihuddin (Güner, 2019: 256).

4.2. Waqfs According to Charity

According to its the charitable waqfs are foundations that benefit everyone, regardless of the belief and financial status of the foundation and are established for public needs. One of these waqfs is charitable waqfs. Charitable waqfs are an intermediary institution in the provision of social assistance and solidarity in terms of their nature, as well as helping to see the maintenance and repair works of structures such as neighborhoods, masjids and fountains. The services provided in charitable waqfs are offered directly and uninterruptedly to the public. Another waqf established for this purpose is the mite waqfs. With the income obtained from the mites, the expenses of charitable waqfs are covered and the continuity of the service is ensured (Öztürk, 1983: 82-83).

In addition to the waqfs established and operated by the people with a common spirituality, there are also waqfs established by families on their own behalf. These waqfs are called zürri (the family waqf) waqfs. The purpose of these waqfs is not only to engage in charitable works but also to leave property to their descendants. In terms of the nature of this waqf, it can be defined as leaving the remaining property to its descendants by the bani of the waqf in order not to divide it (Kazıcı, 2003: 135). There are also comments that these waqfs increased in the last period of the Ottoman Empire with the intention of getting rid of confiscation.

Some waqfs have been established with the aim of financial support for situations such as disease, war, natural disasters. Although its working principle is similar to cash waqfs, this waqf was established more for precautionary

purposes. These waqfs are called avariz waqfs. There is no religious distinction in Avariz waqfs. Sometimes it was an aid fund in disasters affecting a region, and sometimes it functioned for the purposes of treatment, dowry of girls, and helping tradesmen. In this respect, it is known that there are many avariz waqfs and he also helped Hilal-i Ahmer (Akgündüz, 1996: 288; Kazıcı, 2003: 138 and Öztürk, 1983: 86).

4.3. Waqfs According to Ownership

Anyone who has the capacity to make a waqf has the right to carry out any transaction they want on their securities and real estate. Having an income-generating property and the waqf of the property only for the sake of God constitutes the subject of sahih waqfs. Some waqfs belong to the state but there are lands operated by the sultan or by someone else with his consent. These lands are defined as irsadi waqfs. The use of Miri land revenues for the needs of the society and the allocation of public spaces are under the provision of the irsadi waqfs (Akgündüz, 1996: 524; Kazıcı, 2003: 138-139 and Öztürk, 1983: 88-91). The difference between sahih waqfs and irsadi waqfs is that there is no negative purpose in sahih waqfs while there is a negative purpose in irsadi waqfs.

4.4. Waqfs According to Administration

Before the Awqaf Ministry, waqfs were built and operated within the framework of Shari'a provisions. Waqf administrators, known as mutawallis, were appointed to manage the day-to-day operations of individual waqfs. These administrators were chosen based on their integrity, expertise, and commitment to fulfilling the objectives of the waqf. They were responsible for maintaining the waqf properties, collecting and managing the income generated, and ensuring the distribution of funds to the designated beneficiaries.

With the establishment of the Awqaf Ministry, the waqfs were divided into four in terms of administration. The first of these is mazbut waqfs. Its administration is directly dependent on supervision and is divided into three parts. These; Selatin waqfs which were operated by the supervising deputies on behalf of the Ottoman sultans and members of the dynasty, the waqfs whose administration was transferred to the supervision with the termination of the lineage, and the waqfs whose administration was seized by being managed by the salaries of the officials who continued to exist despite the fact that there were no trustees left (Akgündüz, 1996: 367; Kazıcı, 2003: 141 and Öztürk, 1983: 91-94).

In the second group, there are waqfs whose administration does not depend on supervision. These waqfs are also divided into two. They are mülhak waqfs managed by their own trustees and müstesna waqfs managed entirely by their own private representatives. Müstesna waqfs are foundations whose administration is not subject to supervision. Müstesna waqfs refer to the lands donated to people who have been granted various privileges and have been successful in various works. These waqfs are called eizze and guzat waqfs. Abdülkadir Geylani Waqf, Hacı Bayram-ı Veli Waqf, Gazi Evranos Bey Foundation, Gazi Mihail Bey Waqf are exemplary waqfs (Akgündüz, 1996: 369; Kazıcı, 2003: 144 and Öztürk, 1983: 103-104).

4.5. Waqfs Based on Leasing

In the late period of the Ottoman Empire, especially with the nineteenth century, the function of the waqfs deviation from the purpose of establishment and deterioration in the form of administration began to occur. The difficulty of auditability and the management of waqfs by unqualified people have led to a decrease in the income of waqfs. Legal solutions were tried to be developed to control the continuity of waqfs and their revenues and expenses. These ways are; icare-i vahideli waqfs, icare-i vahide-i kadimeli waqfs, muqataalı waqfs and icareteyn waqfs are grouped. Muqataa waqfs and commercial waqfs have been the most prominent waqfs on the way to legal solutions. Today, immovable properties are rented annually in muqataa waqfs that resemble the right of benefit. In İcareteynli waqfs, an advance payment is made as much as the price of a rented property and collections are made by taking the rental price in two different ways, monthly or yearly (Cin: 2003: 65 and Kazıcı, 2003: 146).

Waqfs are an institution that can be classified in many ways in terms of its subject and administration. Because it is not right to consider and evaluate waqfs from a single angle. The reason for this is that the social responsibility, spiritual satisfaction, influence indicator and similar feelings and thoughts put forward by the waqfs are supported by all segments. So much so that making a waqf has been realized not only to meet human needs but also to protect nature. For example; Edmondo De Amicis described this situation in his trip to Istanbul in 1874 ... *doves are for lovers, swallows protect the roofs they nest on from fire, storks go on pilgrimage to Mecca every year, kingfishers carry people's souls to heaven. That is why people protect and nurture these birds with both gratitude and the love of God.* (Amicis, 2009: 107).

5. Administrative Structure of Waqfs in the Ottoman Empire

The Ottoman Empire was cosmopolitan in nature. This has affected the administrative and institutional structure of waqfs as well as many systems. In the early periods of the Empire, divans were established for the supervision of the waqfs established in Anatolia and appointed *kadis with the title of bi'l-Evkafi'r-Rumiyye to the head of them*. The first person to supervise waqfs with this title was Sinan Pasha who served during the time of Orhan Bey. The purpose of the establishment of waqfs is primarily to win the hearts of God without any negative expectation and to leave a mark when they pass away from this world. In order to protect this purpose and intention, there are waqfs arranged in the light of the Shari'a provisions and with the approval of the kadis. In terms of administration, there are three types of foundations in waqfs. The first one is the Ahdas-ı Mebrure Waqfs for the waqf buildings in Egypt, the second is the Evkaf-ı Karariyye Waqfs established for the emancipation of the Haremeyn and the captivated Muslims and the last one is the Evkaf-ı Ehliyye Waqfs, which are family waqfs (Kazıcı, 2003: 108-109).

The administration of waqfs in the Ottoman Empire was carried out by a hierarchical structure. The highest authority was the Shaykh al-Islam, who oversaw religious and legal matters, including waqf affairs. Beneath the Shaykh al-Islam were the judges (kadis) responsible for resolving legal disputes related to waqfs and enforcing the provisions outlined in the vakfiye.

The Ottoman Empire's waqf system also incorporated mechanisms for accountability and oversight. Inspections and audits were conducted periodically to assess the proper functioning of waqfs and prevent any misuse or mismanagement of resources. The administrative structures and legal framework surrounding waqfs provided a level of stability and continuity, ensuring the longevity and effectiveness of these charitable institutions.

In some cases, waqf properties were confiscated by the state or subject to new laws that restricted their operation. These developments had a profound impact on the sustainability and functionality of waqfs, as their traditional autonomy and religious character were diminished.

The audit of the waqfs was audited by the Awqaf Accounting administration until 1713 and their accounts were kept. In 1758, legal arrangements were made for Haremeyn waqfs and mukataa waqfs and the authority of auction, sale and attachment of the properties belonging to these foundations was transferred to the ledger office (Tabakoğlu, 2003: 334 and Tabakoğlu, 2016: 381).

With the nineteenth century, the deterioration of institutions, corruption and bribery began to put the state in difficulty. In particular, the fact that waqfs are managed by non-qualified people and become a profession has led the state to go to legal arrangements in this field. The Evkaf-ı Hümayun Ministry was established in 1826 with the aim of managing the waqfs from a single source and subjecting them to strict supervision. However, with the establishment of the supervision, the transfer of the waqf's revenues directly to the state treasury caused the waqfs to be unable to fulfill the duties and responsibilities they had undertaken (Tabakoğlu, 2016:381 and Tabakoğlu, 2015: 334-335).

During the 19th and 20th centuries, the Ottoman Empire experienced political, economic, and social transformations that had a profound impact on waqf institutions. The empire's territorial losses and the introduction of new legal systems influenced the administration and management of waqfs. Western legal concepts and practices began to replace traditional Islamic principles, leading to a decline in the power and autonomy of waqfs.

The decline of the Ottoman Empire in the 19th and early 20th centuries had significant implications for the waqf system. With the emergence of modern nation-states and the implementation of secular legal systems, the traditional waqf framework underwent significant changes. The authority and control over waqfs shifted from religious institutions to state bodies, leading to increased state regulation and oversight.

6. Conclusion

When, where and by whom waqfs emerged in terms of their origin has been a controversial issue. Because the existence of waqfs and similar institutions in different geographies and civilizations is known. However, it is not accepted correctly to define every building or works as a waqf. In addition, it is seen that waqfs are much more prominent in the Islamic geography and then in the states that have adopted Islam. Therefore, instead of interpreting waqfs as Islamic inventions, it seems more acceptable to say that the functionality of waqfs increases with Islam by placing them in a certain legal framework. Faith appears as an element that strengthens charitable works. Man's desire to gain the appreciation and love of the God by virtue of his faith has given him the courage to a waqf. However, it should not be forgotten that this courage sometimes turns into a show of strength and is a job to increase prestige in society. Both belief in the hereafter and worldly expectations have led to an increase in waqfs. So much so that when we look at the Ottoman Empire, it is seen that it shows the feature

of civilization of waqf. The waqfs made by the members of the dynasty and its surroundings have become an element that symbolizes the power of the state.

Furthermore, the waqf system in the Ottoman Empire was not only limited to urban areas but also extended to rural regions. Agricultural lands were often designated as waqf properties, providing a sustainable source of income for ongoing charitable activities. These agricultural waqfs supported farming communities, provided employment opportunities, and ensured the production of food and other agricultural goods for local consumption.

However, in the following periods, the problems arising from domestic and foreign policy have affected the function of the waqfs and made it necessary to make certain arrangements. Administratively, it has become necessary to supervise the waqfs and to regulate some of their provisions. The failure to achieve the expected success from the Awqaf Ministry, which was established for this purpose, has put the waqfs in financial difficulties. However, despite these challenges, waqfs have continued to exist and adapt in the modern era. Efforts have been made to revive and modernize the waqf system, aligning it with contemporary legal frameworks and addressing emerging social needs. The role of waqfs in promoting education, healthcare, and social welfare remains significant, and their potential for contributing to societal development continues to be recognized.

The concept of waqf has a rich historical background and finds its roots in diverse societies and religious traditions. In Islamic regions, waqfs have served as a means to address societal inequalities and promote acts of charity. In the Ottoman Empire, waqfs played a vital role in various aspects of life, from social welfare to education and healthcare. The establishment of waqfs by influential individuals and the state contributed to the empire's architectural, cultural, and social legacy. Understanding the history and significance of waqfs provides valuable insights into the evolution of charitable practices and the societal context in which they emerged.

While the historical context sheds light on the development and significance of waqfs, it is essential to continue exploring their evolution and contemporary perspectives. Contemporary studies on waqfs have focused on their potential for social impact and sustainable development.

In recent years, there has been a resurgence of interest in reviving and modernizing the waqf institution to address current societal challenges. Scholars and policymakers have recognized the potential of waqfs to contribute to economic development, poverty alleviation, and the provision of social services.

Contemporary waqfs are exploring new areas of focus, such as renewable energy projects, microfinance initiatives, and educational scholarships. These initiatives demonstrate an adaptation of the waqf concept to address contemporary needs and promote sustainable development.

Additionally, there has been an increasing emphasis on transparency, governance, and accountability in waqf management. Efforts are being made to ensure that waqf assets are managed effectively and ethically, and that their benefits reach the intended beneficiaries.

Furthermore, the digital age has opened new possibilities for waqfs, with the emergence of online platforms facilitating waqf contributions and the use of blockchain technology for transparent and secure management of waqf assets. The waqf system in the Ottoman Empire was a complex and multifaceted institution that played a central role in social welfare, education, and the overall development of the empire. It encompassed a wide range of waqf types, from grand imperial waqfs to neighbourhood-based initiatives, and spanned both urban and rural areas. The administration and regulation of waqfs ensured their effective operation and provided a framework for accountability. While the decline of the Ottoman Empire brought challenges to the waqf system, efforts to revive and adapt it continue in the present day, emphasizing the enduring significance of waqfs as charitable institutions.

Colonial powers, particularly in the Middle East and North Africa, imposed their legal systems and exerted control over waqf properties. This resulted in the centralization of waqf administration and the appointment of government officials to oversee their management. The shift from a community-based approach to a state-controlled model affected the functioning and objectives of waqfs.

Furthermore, the economic and social changes brought about by industrialization and urbanization had a profound impact on the role and relevance of waqfs. As societies modernized, the traditional functions of waqfs, such as providing social welfare and educational services, faced challenges from emerging state institutions and welfare systems. The need for waqfs to adapt and find new ways to address societal needs became apparent.

In contemporary times, efforts have been made to revitalize and modernize waqf institutions to align them with current social and economic contexts. Many countries with Muslim-majority populations have implemented legal reforms to enhance the efficiency and transparency of waqf management. Additionally, there has been a growing interest in leveraging waqfs for economic development and promoting social entrepreneurship.

The revival of waqfs has also gained attention in the context of sustainable development and social impact. Waqfs have the potential to address pressing societal challenges, such as poverty alleviation, healthcare provision, and environmental conservation. By incorporating innovative approaches and collaborations with other sectors, waqfs can contribute to sustainable development goals and create positive social change.

In conclusion, the concept and practice of waqf have undergone significant transformations throughout history. From their origins as charitable endowments rooted in faith to their development as complex institutions in the Ottoman Empire, waqfs have played a crucial role in addressing societal needs. However, the challenges and changes brought about by modernization and colonial influences have impacted waqf institutions. Nevertheless, efforts are being made to adapt and revitalize waqfs in contemporary times, recognizing their potential to contribute to sustainable development and social impact. By understanding the historical and evolving nature of waqfs, societies can continue to harness their potential for the betterment of communities and the promotion of social welfare.

References

- Akgündüz, Ahmet (1996). *İslam Hukukunda ve Osmanlı Tatbikatında Vakıf Müessesesi*. 2.Baskı. İstanbul: Osmanlı Araştırmaları Vakfı (OSAV).
- Akman, Ahmet (2018). “*Eski Vakıflar Hukuku Bağlamında Vakıf Müessesesi ve Günümüzdeki Etkileri*”. Selçuk Üniversitesi Hukuk Fakültesi Dergisi, 26(22), 189-224.
- Amicis, Edmondo De (2009). İstanbul (Constantinopoli). Sevinç Tezcan Yanar (çev.). İstanbul: Pegasus Yayınları.
- Ayverdi, Ekrem Hakkı (1983). “*Tatbikatta Vakıflar*”. 1. Vakıf Haftası. Ankara,74-75.
- Berki, Ali Himmet (1965). “*Vakıfların Tarihi, Mahiyeti, İnkişafı ve Tekamülü Cemiyet ve Fertlere Sağladığı Faideler*”. Vakıflar Dergisi, (6), 9-13.
- Büyük Osmanlıca-Türkçe Sözlük (1959). “*Vakıf*”. İstanbul: İnkılap Kitapevi. 745.
- Cin, Halil (2003). “*Osmanlı Devleti ’nde Vakıf Hukuku*”. Cumhuriyetin 80. Yılında Uluslararası Vakıf Sempozyumu. Ankara, 49-70.
- Çağatay, Neşet (1971). *İslam Öncesi Arap Tarihi ve Cahiliye Çağı*. 3. Baskı, Ankara: Ankara Üniversitesi İlahiyat Fakültesi Yayınları.
- Çağatay, Neşet (1983). “*Vakıf ve Tarihi Gelişimi*”. 1. Vakıf Haftası. Ankara, 18-20.

Genç, Mehmet (2014). “*Klasik Osmanlı Sosyal-İktisadi Sistemi ve Vakıflar*”. Vakıflar Dergisi. (42), 9-18.

Güner, Mehmet Fatih (2019). “*Osmanlı Dönemi Para Vakıfları ve Günümüz Finansal Piyasalarında Para Vakıflarının Yeri*”. Çukurova Üniversitesi İİBF Dergisi. 23(2), 249-269.

İnalçık, Halil (2002). “*Osmanlı Devleti’ nin Kuruluşu*”. Türkler. C.9. Ankara: Yeni Türkiye Yayınları. 66-88.

Kazıcı, Ziya (2003). *Osmanlı Vakıf Medeniyeti*. İstanbul: Bilge Yayınları.

Kozak, İbrahim Erol (1983). *Bir Sosyal Siyaset Müessesesi Olarak Vakıf*. 1. Baskı, İstanbul: Akabe Yayınları.

Köprülü, Bülent. “*Tarihte Vakıflar*”. Ankara Üniversitesi Hukuk Fakültesi Dergisi. 8(3), 479-518.

Köprülü, Fuad (1938). “*Vakıf Müessesesi ve Vakıf Vesikalarının Tarihi Ehemmiyeti*”. Vakıflar Dergisi. (1), 1-6.

Kunter, Halim Baki (1938). “*Türk Vakıfları ve Vakfiyeleri Üzerine Mücmel Bir Etüd*”. Vakıflar Dergisi. (1), 103-129.

Ömer Hilmi Efendi (1977). *İthaf-ül Ahlaf Fi Ahkam-ül Evkaf*. Ankara: VGM Yayınları.

Öztürk, Nazif (1983). *Menşei ve Tarihi Gelişimi Açısından Vakıflar*.1. Baskı. Ankara: VGM Yayınları.

Tabakoğlu, Ahmet (2003). “*Klasik Dönem Osmanlı Vakıf Sistemi*”. Cumhuriyetin 80. Yılında Uluslararası Vakıf Sempozyumu. Ankara, 25-32.

Tabakoğlu, Ahmet (2015). *Türkiye İktisat Tarihi*. 13. Baskı. İstanbul: Dergâh Yayınları.

Tabakoğlu, Ahmet (2016). *İslam İktisadına Giriş*. 4. Baskı. İstanbul: Dergâh Yayınları.

Uzunçarşılı, İsmail Hakkı (1988). *Osmanlı Tarihi*. C.1. 5. Baskı. Ankara: Türk Tarih Kurumu Basımevi.

Yediyıldız, Bahaeddin (2012). “*Vakıf*”. İslam Ansiklopedisi. C. 42. İstanbul: TDV Yayınları. 479-486.

Zillioğlu, Mehmet (1984). *Evliya Çelebi Seyahatnamesi*. Tevfik Temelkuran, Necati Aktaş ve Mümin Çevik (sad.), C. 1. İstanbul: Üçdal Neşriyat.