

Evaluation of the Impact of the Covid-19 (Coronavirus) Pandemic on Business Activities in Selected Sectors

Covid-19 (Koronavirüs) Salgınının İşletmelerin Faaliyet Sektörlerine Etkisinin Değerlendirmeleri

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Abstract

This study evaluates the effects of the COVID-19 epidemic, which emerged in 2019 and continued to be effective in 2020, and 2021, on business activities in 12 sectors selected by random sampling in Turkey. While selecting the sectors, various criteria such as intense export and import activities, high production and consumption rates, and high number of employment were used. The COVID-19 pandemic has greatly affected Turkey economically, socially and has changed the supply-demand balance between the producer and the consumer by changing the consumption habits. Various situations such as curfews, travel restrictions, and breaks in social events, which are carried out to prevent the epidemic, have changed the demands of the consumers. On the other hand, various other situations, such as the remote work of the labor market, the change in the physical working system of the employees as a result of the distance rules, and the interruption of production by some enterprises, cause the manufacturer to experience changes in supply. At this point, the government aimed to limit the negative effects of the COVID-19 epidemic with various applications such as financial expansion programs, wage subsidies, and financial supports. Within the scope of this study, the pre- and post-epidemic situations of selected business sectors operating in the Turkish economy are examined by giving statistics.

Keywords: COVID-19 Outbreak, Outbreak Effects, Effects on Business Activities, Economic Crisis.

Covid-19 (Koronavirüs) Salgınının İşletmelerin Faaliyet Sektörlerine Etkisinin Değerlendirmeleri Özet

Bu çalışmada 2019 yılında ortaya çıkan ve 2020,2021 yıllarında etkisini sürdürmeye devam eden COVID-19 salgınının, Türkiye'de faaliyet gösteren seçilmiş 12 işletme sektörüne etkileri değerlendirilmiştir. COVID-19 salgını ülkemizi ekonomik, sosyal ve toplumsal açıdan oldukça etkilemiş tüketim alışkanlıklarını etkileyerek üretici ve tüketici arasındaki arz-talep dengesini değiştirmiştir. Salgını önlemek amaçlı yürütülen dışarı çıkma yasakları, seyahat kısıtlamaları, sosyal etkinliklere verilen ara gibi çeşitli durumlar tüketicinin taleplerinde değişim yaşatırken, işgücü piyasasının uzaktan

çalışması, mesafe kuralları sonucunda çalışanların fiziki çalışma sisteminin değişmesi, bazı işletmelerin üretime ara vermesi gibi çeşitli durumlar ise üreticinin arz konusunda değişimler yaşamasına sebep olmuştur. Bu noktada devlet, mali genişleme programları, ücret sübvansiyonları, finansman destekleri gibi çeşitli uygulamalar ile COVID-19 salgının olumsuz etkilerini sınırlamayı amaçlamıştır. Bu çalışma kapsamında Türkiye ekonomisinde faaliyet gösteren seçilmiş işletme sektörlerinin salgın öncesi ve sonrası yaşadığı durumlar istatistikler verilerek incelenmiştir.

Anahtar Kelimeler: COVID-19 Salgını, Salgın Etkileri, Salgının Sektörel Etkileri, Ekonomik Kriz., COVID-19 Salgını, Salgın Etkileri, Salgının Sektörel Etkileri, Ekonomik Kriz.

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1. Introduction

The COVID-19 epidemic, which took place in the world during the period covering the years 2019-2020 and 2021, affected the entire world as well as the Turkish economy and thus the activities of the businesses. These effects were caused by the measures taken by the government to prevent the epidemic, causing the social and societal habits of the people to change. The consumption habits of the consumers have changed, and the changing consumption habits have affected the production processes of the enterprises. While there has been a significant decrease in the production of some products indirectly, the pandemic as also caused severe changes in the expenditures of the consumers. The situation of the epidemic crisis shows that there are chain effects between government policies, the production sector, and consumers.

Turkey was caught in the COVID-19 epidemic with a growth rate below the expectations, high unemployment level, deterioration in the financial balance and high inflation rates. In addition, the effects of the economic crisis that started in 2018 further aggravated the situation for businesses. At this point, businesses have embarked on a search for new resources and new strategic policies.

The study, which was prepared to contribute to this process, evaluated the effects of the COVID-19 epidemic on business activities in selected sectors in Turkey. Due to the continuation of the epidemic at the time of preparation of the study, final results regarding its macro-level effects could not be reached, and it was aimed to evaluate the dimensions and effects of the crisis only in selected sectors. The number of previous studies on this subject is few, and they have discussed the crisis as an effect on one or more sectors. Unlike the previous ones, this study examines the effects of the crisis on more than one sector and explains the effects on each sector with graphs and tables. In this context, this study aims to contribute to the literature.

2. Literature Review on the COVID-19 Outbreak and Its Impact on Business Sectors

İnce and Tor Kadioğlu (2020)'s aim to reveal the changes in consumption habits during the COVID-19 epidemic in their article titled 'The Effect of Consumers' Increasing Stocking Desire with the

Covid19 (Corona) Virus on Online Purchasing Behavior', which has reached the findings that there is an increase in online purchasing behavior of consumers. They make determinations about which products the consumers buy more and which online shopping sites they prefer. It is among the findings that the changing habits of the consumers will continue when the epidemic risk disappears, and therefore the changes between the production and consumption chain will be permanent.

Demir vd. (2020)'s In the article named 'Evaluation of the precursors, effects and consequences of the Coronavirus (Covid-19) Epidemic on Tourism in Turkey' , aims to analyze the effects of the COVID-19 epidemic on the tourism sector in Turkey and evaluate the results. It has been stated that businesses in the tourism sector are trying to overcome the crisis with various human resources practices such as reducing the number of existing employees and taking paid and unpaid leave due to the cessation of their commercial activities and services. In this article, it is put forward that tourism enterprises did not have enough experience in crisis management; therefore, they could not make applicable planning and they left the epidemic to its course. In this process, it is among the findings that consumption habits have changed as the consumers behave more carefully and selectively while paying attention to their health conditions.

TÜRMOB (2020) report entitled "The Impact of the Corona Epidemic on the Turkish Economy: Evaluations and Recommendations Report' , aims to explain the current economic situation analysis and the changes created by the epidemic. It is stated that Turkey chose to cover the costs of the crisis mainly through the budget and these supports were insufficient. It has been stated that small businesses operating in other sectors, apart from investment and consumption expenditures in the health and food sectors, have come to the point of closure due to the contraction in demand. According to the report's findings, consumption-based policies should be removed from being the only target. Moreover, it is said that new social and economic policies should be adopted to increase social welfare and limit the destructive activities of humans on nature.

Çalışkan and Dayıoğlu Erul (2021)'s article titled 'Economic Measures Taken in Turkey and the Importance of Public Policies in the Recovery of the Coronavirus Crisis', the economic demonstrates the economic steps taken in the exits from the COVID-19 crisis. The relationship between government policies and the COVID-19 crisis, the changing role of the state, and public policy intended to make recommendations. It is stated that the state's interventions are necessary in the economic crisis that emerged during the epidemic and in the measures to be taken in the process of exiting this crisis and in meeting the costs of the measures. It is asserted that the economic measures carried out in Turkey are applied to three segments: the household, the real sector, and the financial sector.

Gezici vd. (2021)'s article 'Digitization in Food Retailing in Turkey and A Qualitative Research to Determine the Effects of COVID-19 on Digitization', aims to indicate the increase in the demand for services in digital platforms during the COVID-19 Pandemic. Also the effects of this change on the food retail industry. It is among the findings that the businesses that have previously provided the digital infrastructure respond to the online shopping demands of consumers more easily adapt to the pandemic period than other businesses, however the share of online shopping in food retailing will not

increase much in the future, therefore both physical and online stores will operate together in the sector.

Aydın and Güner (2020) aim to analyze and evaluate Turkey's agricultural policies and food prices during the COVID-19 in their article titled 'The Impact of the COVID-19 Epidemic on the Agricultural Sector and Food Security: An Evaluation on Turkey'. It is among their findings that Turkey increased its import activities for agricultural and grain products in that period and could not reduce food prices despite the decrease in food prices on a global scale.

Tayar vd's (2020) in the study titled "The Effects of the Covid-19 Crisis on the Sectors in Turkey: Borsa Istanbul Sector Indices Research", aims to examine the sectoral effects and causes of the COVID-19 epidemic in Turkey. It is among the findings that electricity, transportation, financial, industrial, and technology sector indices have negative effects during the epidemic period in Turkey and that the risks and possible losses may be reduced. If the people who invest in these sectors adapt their portfolios in according to the conditions.

3. Purpose and Method of Research

This section contains information about the purpose and method of the research.

3.1. Purpose of The Research

The aim of this study is to examine how the selected business sectors operating in the Turkish economy has been affected by the economic crisis during and after the epidemic with various statistical data.

3.2. Research Method

In the determined time interval of the selected sectors; The collection and interpretation of various data such as expenditures, production data, export and import figures, sales volume rates, revenues, cost indices, capacity utilization rates, confidence indices, and price indices are designed in a descriptive analysis pattern.

4. Sectoral Effects of the Economic Crisis Due to Covid-19

During the COVID-19 epidemic, due to the curfews taken by the states to prevent the epidemic, travels have decreased, holiday plans have been canceled, businesses have reduced the number of employees, production factors have reduced their capacity to produce goods and services, and consumers' demands for goods and services other than their essential needs have decreased. After these developments, the economic balance in Turkey have changed, and the economic crisis has affected the activities of the enterprises. In this direction, since the field of activity of each enterprise is unique, each sector has been affected at different levels; chain effects have been experienced, while positive and negative effects have been seen together in some sectors.

4.1. Impact on Health Sector

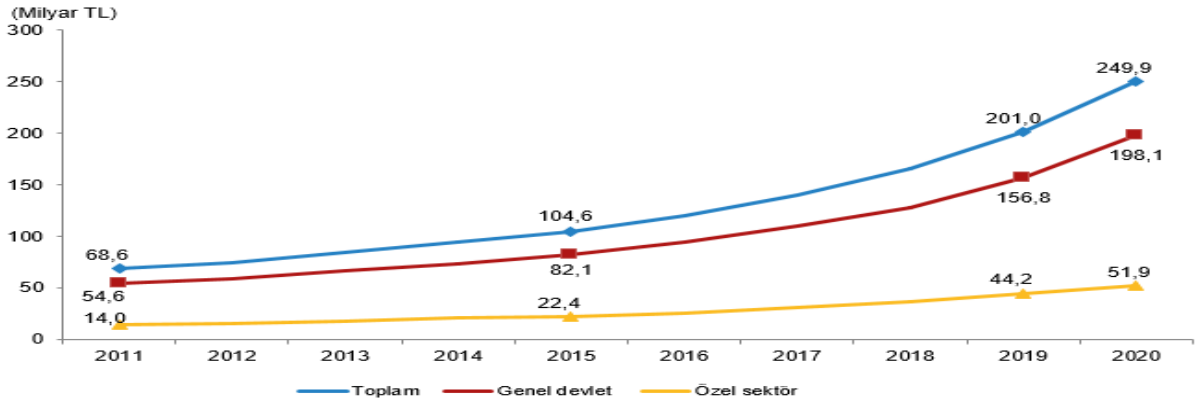
With the emergence of the COVID-19 epidemic process, the years 2019-2020-2021 went down in history as extraordinary global years. It led to an increase in the need for health workers, services,

health products, and auxiliary resources. In order to respond quickly to the sudden situation faced by the health sector, the Ministry of Health's Coronavirus Scientific Committee was established on January 10, 2020, within the scope of combating COVID-19 (www.saglik.gov.tr, 15.05.2022).

In the treatment process, meeting the need for diagnostic kits, drugs and medical supplies in the early period, and the production of local respirators, the vaccination program and the domestic vaccine studies were completed (Nal, 2020).

During the pandemic, emergency measures and incentive packages were put into practice in order to supply and develop equipment to be used in both disease prevention and treatment processes and to reduce foreign dependency on drug and vaccine production (Covid-19 Pandemic Evaluation Report, 2020). The abovementioned emergency measures and incentive packages led to an increase led to an increase in expenditures in the health sector compared to previous years. Data on health expenditures in Turkey between the years 2011-2020 are given in Table 1 below.

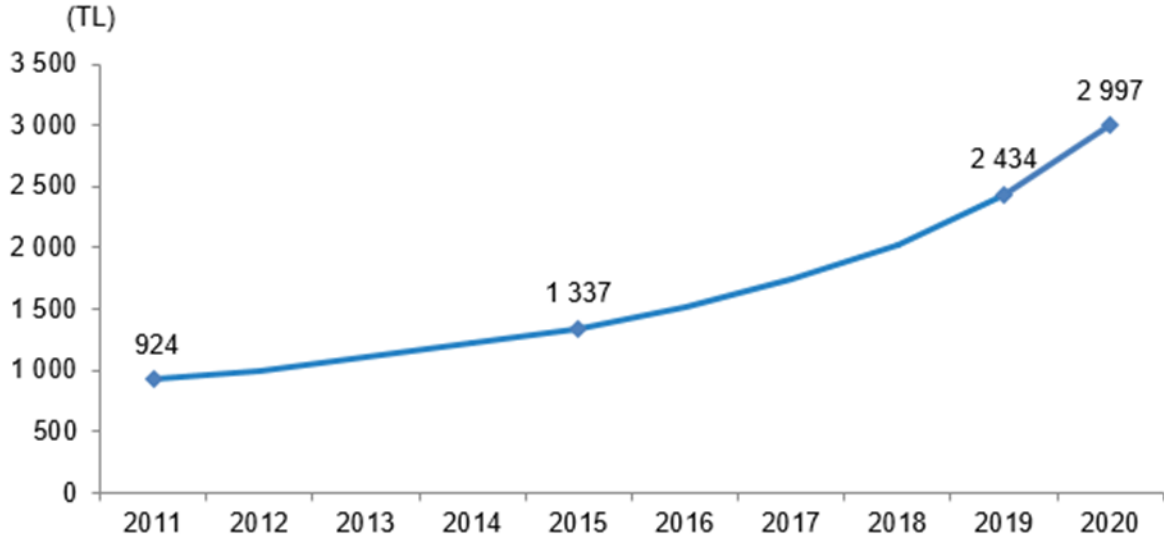
Table1: Health Expenditures in Turkey Between 2011-2020



Source: (TÜİK, Health Spending Statistics, 2021).

According to the table, health expenditures in 2020 increased by 24.3% compared to the previous year and reached 249 billion 932 million TL. In addition, public health expenditures increased by 26.3% and reached 198 billion 62 million TL, while private sector health expenditures increased by 17.3% to 51 billion 869 million TL. Data on health expenditures per capita between 2011 and 2020 are given in Table 2.

Table2: Health Expenditures per Capita in Turkey Between 2011-2020



Source: (TÜİK, Health Spending Statistics, 2021).

The health expenditure per capita was 2 thousand 434 TL in 2019. With the outbreak of the Covid-19 epidemic, it increased by 23.1 % to 2 thousand 997 TL in 2020.

4.2. Effect on Pharmaceutical Industry

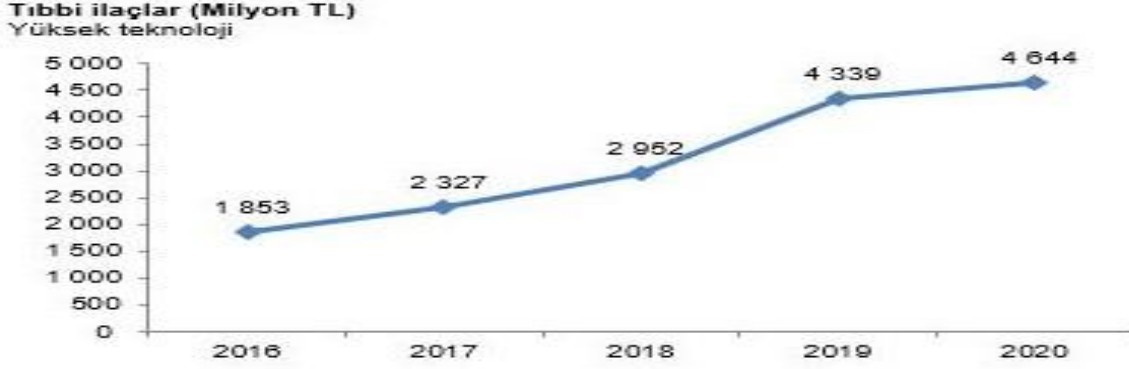
Between 2019-2020-2021, an unprecedented level of health struggle started due to the COVID-19 epidemic, which affected all areas of life all over the world, the pharmaceutical industry, which was one of the crucial parts of those efforts. The pharmaceutical industry played a role in both drug development activities for the treatment of COVID-19 and vaccine development activities to prevent the epidemic during the epidemic and had a positive impact on the struggle to control the epidemic with the vaccines that were finally created and started to be applied (Şen vd.,2020).

During the COVID-19 the pharmaceutical industry research and development activities cooperated with the states in the production and supply of drugs. Thus, it is safe to infer that the pharmaceutical industry was positively affected by the crisis, by the crisis; although, the natural flow between the suppliers and costumers in the market is distrupted (Steele vd., 2020).

The pharmaceutical industry in Turkey has been adversely affected by the pandemic process in terms of economic growth. While the growth in the total revenue of the Turkish Pharmaceutical Industry was 31.7% in 2019, it was determined as 17.7% in 2020, and its total revenue was recorded as 47.9 billion TL. For instance, the number of pharmaceutical drug boxes sold decreased by 7% to 2.2 billion boxes. The decrease in the number of prescriptions, which started in March 2020, declined to the lowest level of the last ten years as of May of the same year and reached 20 million prescriptions. Although this number increased in June of the same year, the total number of prescriptions written in 2020 decreased by 15% compared to the previous year and reached 342 million prescriptions (turkrating.com, 31.12.2021).

The restrictions applied during the fight against the pandemic, the sensitivity of people during the epidemic, and the COVID-19 epidemic, which attracted attention in health services, caused a loss of turnover in the pharmaceutical industry and a decrease in prescriptions. Data on the production of pharmaceutical products between 2016 and 2020 is given in Table 3 below.

Table3: Medical Drug Production Data Between 2016-2020



Source: (TÜİK, Annual Industrial Product (PRODCOM) Statistics, 2021).

The production of medical drugs, which has risen continuously since 2016, increased much more with the COVID-19 epidemic between the years 2019-2020 and reached a production of 4 billion 644 million 346 thousand 447 TL in 2020. While there is an increase in drug production, a decrease in sales demonstrates that the COVID-19 epidemic has adversely affected the pharmaceutical industry.

4.3. Impact on Food and Beverage Industry

With the onset of the COVID-19 epidemic in Turkey, there was a great demand for food and beverage products, moreover the stocking trend of consumers increased. During that period, almost all expenditures were abandoned and the indispensability of food increased the demand for the sector. In addition, the rise of e-commerce with digitalization has led consumers to online food shopping. This dynamism has provided opportunities to the food and beverage industry in the short term (Levent, 2020).

With the COVID-19 outbreak, consumer demands have increased for packaged products with a long shelf life, basic food products, and products enriched with vitamins, minerals, and protein, which strengthen the immune system. Moreover, during that period, the perception of food hygiene and food safety gained importance, and the awareness of accessing healthy food developed in society. The export and import figures of the food and beverage sector as of November 2019-2020-2021 are given in Table 4 below.

Table 4: Export and Import Figures in the Food and Beverage Industry in Turkey as of November 2019-2020-2021

Years	Export	Import
2019	1.996.469.447	1.304.870.472
2020	1.919.901.803	1.427.774.220
2021	2.550.370.884	1.962.405.855

Source: (TGDF, Foreign Trade Data of Turkish Food and Beverage Sectors, 2021).

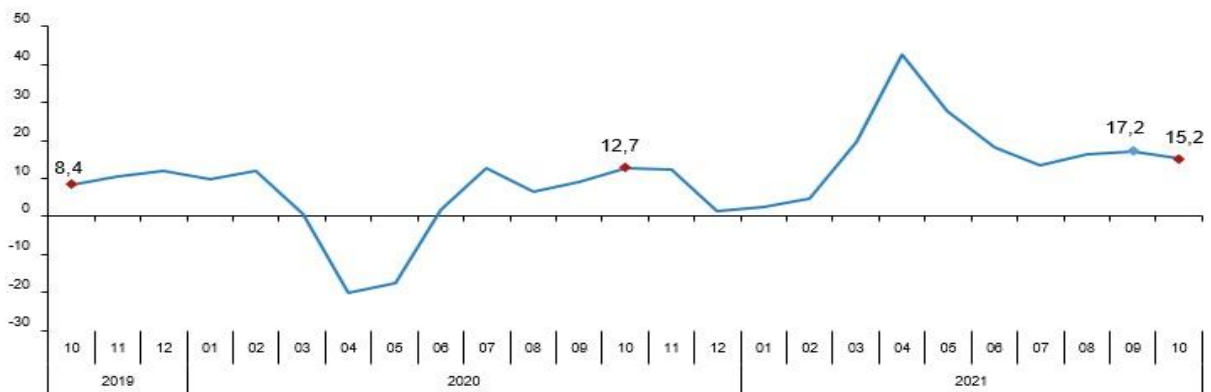
When the above data is examined, a significant increase can be observed although there is a decrease in the transition from 2019 to 2020 in Turkey's food exports, it showed a great increase in 2021. Furthermore, the upward trend in imports continues in all three years. In short, these data show that the COVID-19 outbreak has positively affected the food and beverage industry.

4.4. Impact on the Retail Industry

The retail sector has become one of the leading sectors of the Turkish economy, with its revenue reaching 1.4 trillion TL in 2020 and, at the same time, an average of 17% growth rate for the last five years. Retailing, which ranks fourth among the sectors in terms of turnover, constitutes approximately 20% of the gross national product. It provides employment to 2.5 million people with a share of approximately 10% of total employment (Perakendeciliğin Geleceği Raporu, 2021).

With the Covid-19 epidemic, significant changes in logistics and supply chain of enterprises have occurred in response to the increasing demand of costumers, especially especially in terms of hygiene and food health. In addition, with the increase in the demand for basic food, necessities and domestic consumption the pandemic process, sales rates in the retail sector have increased significantly. According to TUIK data, the amount of retail sales increased by 11.9% in November 2020 compared to the previous year and the earnings of the sector increased by approximately 15.9% in 2020. The annual rate of change in retail sales volume is given in Table 5 below.

Table 5: Retail Volume Annual Change Rate (%), October 2021



Source: (TÜİK, Retail Indices, 2021).

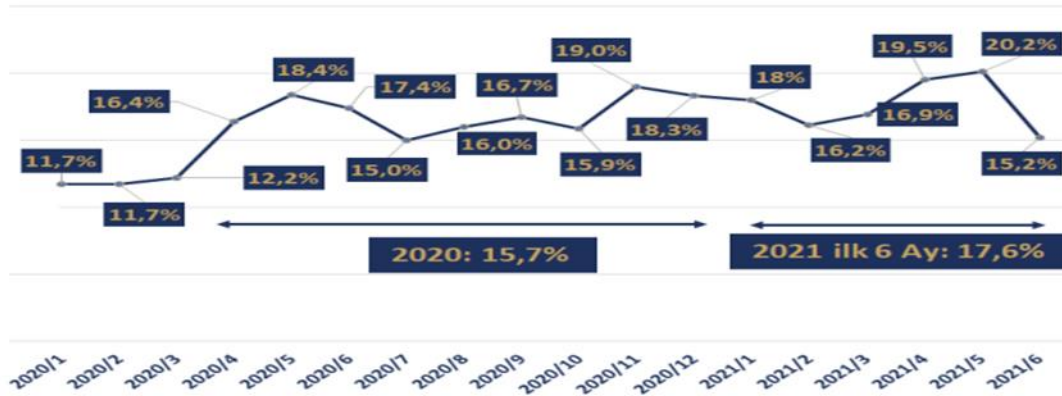
According to the data above, the amount of sales in the retail sector' sales increased by 4.3% in October 2020 compared to the same month of the previous year and reached 12.7%. In October 2021, the sales volume ratio increased by 2.5% compared to the same month of the previous year and reached 15.2%, which shows that the COVID-19 pandemic has positively affected the retail sector.

4.5. Impact on the E-Commerce Industry

During the COVID-19 pandemic, curfews imposed to prevent the spread of the disease, led to innovations in the business operation hours OR Office working hours and changed the operating conditions of restaurants, cafes, and shopping malls have channelized consumers to meet their needs through digital sales platforms.

The demand for e-commerce and sales gains have increased significantly during that period. The reason for this increase can be listed as people's ability to access many products very quickly, contactless payment opportunities a wide variety of products, and not needing to leave home. The increase in consumers' demands indicates that the E-Commerce sector will attract more attention after the pandemic (Toplu Yılmaz & Bayram, 2020).The distribution of the ratio of E-Commerce to general trade in 2021 by months is given in table 6 below.

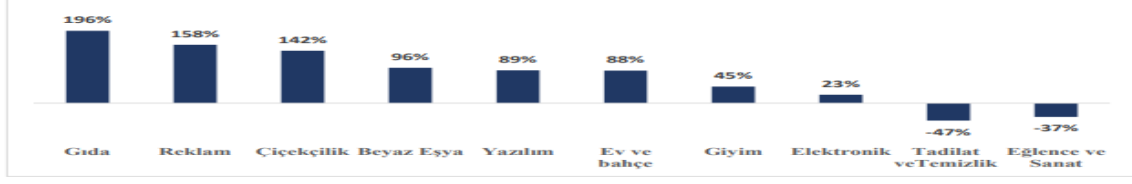
Table 6: Ratio of E-Commerce to General Commerce



Source: (eticaret.gov.tr, 31.12.2021).

In the graph above, the ratio of e-commerce to overall trade is recorded as 17.6% in the first two quarters of 2021. In 2021, the month with the highest rate was May, with 20.2%. With the start of gradual normalization during the COVID-19 pandemic, this ratio decreased to 15.2% in June. Table 7 shows the change in e-commerce activities in the first six months of 2021 compared to the same period of the previous year by sectors.

Table 7: Change in E-Commerce Volume by Sectors Compared to the Same Period of the Previous Year



Source: (eticaret.gov.tr, 31.12.2021).

In the first six months of e-commerce, the sectors that showed the highest increase in online transactions are given below in order: food sector with 196% growth, advertising sector with 158% growth, floriculture sector with 142% growth, white goods sector with 96% growth, software sector with 89% growth, and home and garden goods sector with 88% growth. On the other hand, the remodeling and cleaning (-47%) and entertainment and arts (-37%) sectors contracts compared to the previous year.

4.6. Impact on the Tourism Sector

2019-2020 is considered as a lost year for the tourism sector as it is stated by the World Health Organization. It is observed that the pause experienced by the tourism sector, which occupied a vast place in the economies of the states, and naturally affects the general economy of the countries.

For the first time in history, the COVID-19 pandemic led to the closure of Turkey's borders to air travel, the ban on domestic travel, the imposition of quarantine on those coming from abroad for a certain period of time, and the restriction of travel abroad. During that period, it can be said that the tourism sector fell behind its expected level in terms of economic income. In order for Turkey to increase its tourism revenues, it needs to reduce the number of cases and create the image of a reliable country in terms of the pandemic (Demir vd. 2020).

Due to the decrease in personal incomes as a result of the economic crisis during the COVID-19 pandemic, the demand for the tourism sector was negatively affected compared to previous periods. However, in 2021, when the pandemic was brought under control and restrictions were relaxed, the demand for tourism activities increased compared to the previous two years, which people stayed at home for longer periods. Data on revenues from the tourism sector in Turkey are presented in Table 8 below.

Table 8: Tourism Income in Turkey for the Years 2020-2021

Year	Quarter	Tourism Income (Thousand \$)	Rate of Change (%)	Number of Persons	Rate of Change (%)	Average Per Person (\$)	Average Spend Per Night (\$)
2020	Annual	12 059 320	-65,1	15 826 266	-69,5	762	61
	I	4 101 206	-11,4	5 639 413	-15,1	727	70
	II ¹	-	-	-	-	-	-
	III	4 044 356	-71,2	5 604 155	-74,1	722	61
	IV	3 913 758	-50,4	4 582 698	-57,7	854	54
2021	I	2 452 213	-40,2	2 600 468	-53,9	943	56
	II ²	3 003 628	-	4 066 210	-	739	57
	III	11 395 117	181,8	13 640 672	143,4	835	74

Source: (TÜİK, Tourism Statistics, 2021).

According to the above data, tourism revenues in 2020-2021 increased by 181.8% in the third quarter of July, August and September compared to the same period of the previous year and reached 11 billion 395 million 117 thousand dollars. This shows that the negative effects of the outbreak of the COVID-19 pandemic in 2019 were relatively decreased.

4.7. Impact on the Automotive Sector

The automotive sector has experienced a number of problems with the onset of the pandemic. These problems include the closure of factories, suspension of production, disruption of the complex production system that requires a large number of workers due to the distance rule, and the impossibility of working outside the factory. In addition to decreasing sales rates and revenue losses after the decrease in demand due to the economic crisis after the pandemic, supply chain effects, and financing risk.

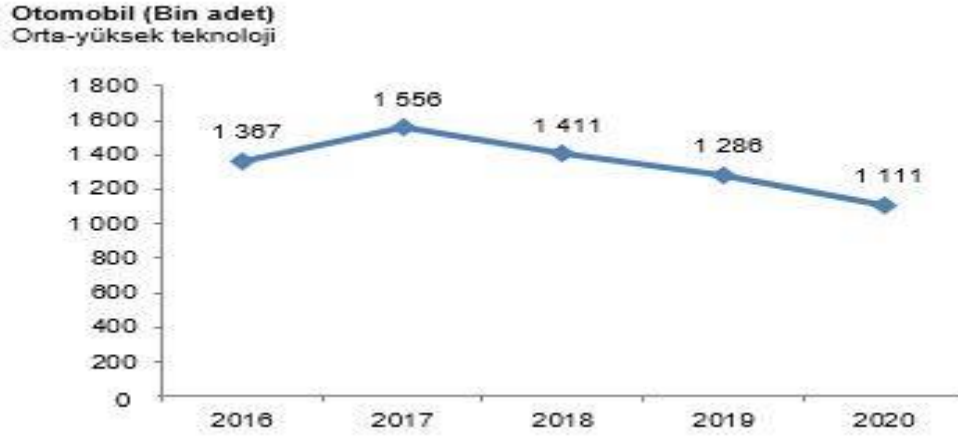
Since the demand for automobiles is deferrable, it is expected that the sector will be able to resume production and regain the production and sales rates of previous periods once the pandemic is under control. In addition, it is predicted that the sector will be able to overcome the effects of the crisis for various reasons, such as the potential transfer of supply centers to Turkey, which provides input at

¹ Since the survey could not be conducted at the border gates due to COVID-19, 2020 II. Data for the quarter could not be published.

² 2021 Year II. The rate of change for the quarter could not be calculated.

lower costs compared to Far East countries. In addition to the use of individual vehicles due to the risk of transmission of the pandemic in the society (T.C. Sanayi ve Teknoloji Bakanlığı, Otomotiv Sektörü Analiz Raporu ve Kılavuzu, 2021). The automotive sector production figures for 2016-2020 are given in Table 9 below.

Table9:Automotive Industry Production Numbers Between 2016-



2020

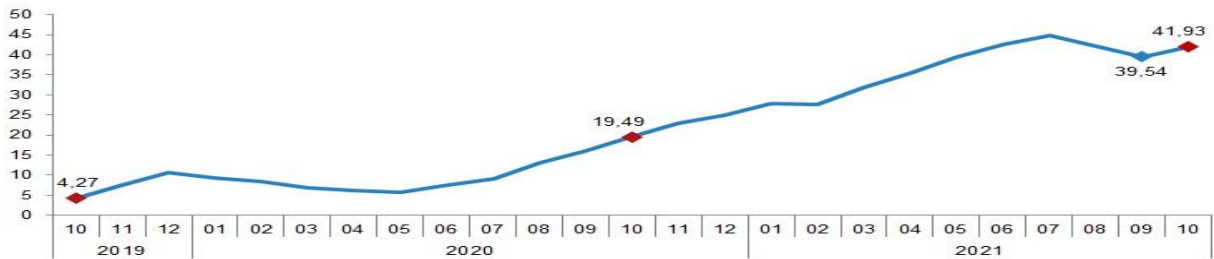
Source: (TÜİK, Annual Industrial Product (PRODCOM) Statistics, 2021).

According to the data above, there has been a decline in the number of automotive production in Turkey in recent years. As of 2020, automobile production decreased to 1 million 110 thousand 711 units. This shows that the COVID-19 pandemic has negatively affected the sector.

4.8. Impact on the Construction Industry

The impact of the COVID-19 pandemic on the construction sector is mainly similar to the impact on other sectors. Problems in the supply of materials and labor, shortages of semi-finished and finished goods stocks, delays in the completion of constructions due to loss of productivity, and additional costs and losses arising from the economic crisis after the pandemic can be listed as negative impacts on the sector. Data on the Construction Cost Index for 2019-2020-2021 are given in Table 10.

Table 10: Construction Cost Index



Source: (TÜİK, Construction Cost Index, 2021).

When the data above are analyzed, it can be observed that construction costs showed a continuous increase between 2019-2020-2021 and the construction cost index increased by 4.75% in October 2021 compared to September and 41.93% compared to October 2020, which shows the negative effects of the Covid-19 pandemic on the sector.

4.9. Impact on the Textile Industry

The textile sector in Turkey thought that these developments could benefit it as a result of the closure of enterprises in China with the pandemic period and the disruptions in the logistics system. Those expectations were realized for a while; however, after the disruption of the supply of textile chemicals and raw materials, the textile sector in Turkey also started to slow down (TÜRMOB, 2020). It is expected that the problems experienced in the textile sector will continue due to the prolonged Covid-19 outbreak, the economic crisis that followed, the contractions in the markets. Turkey's textile and raw material export and import data for the years 2017-2018-2019 are given in Table 11 below.

Table 11: Textile and Raw Material Export and Import Data (\$)

Years	Export	Import
2017	323.319.665	289.159.333
2018	342.409.596	310.595.557
2019	330.755.475	305.066.284

Source: (Ticaret Bakanlığı İhracat Genel Müdürlüğü, 2019).

As it is stated in the above data, the increase in exports in 2018 compared to 2017 was replaced by a decline in 2019 due to the COVID-19 outbreak. The increase in imports in 2018 compared to 2017 declined in 2019 due to the COVID-19 outbreak, which shows that the pandemic was negatively affected the textile sector.

4.10. Effect on Manufacturing Industry Sector

As a result of the measures taken during the COVID-19 pandemic, as a result of the measures taken during the Covid-19 pandemic, demands decreased; therefore, export orders slowed down and there occurred supply chain, raw material, and logistics problems. Moreover, there was a large scale contraction, and in production and a significant part of the enterprises operating in the manufacturing industry suspended their activities.

The contractions in production in many sectors producing durable consumer goods and intermediate goods were replaced by a rapid recovery process once the pandemic was brought under control. In addition, China's difficulties in providing supply chain support to almost the entire world forced many manufacturing enterprises around the world to seek alternative supply channels. Some economists estimate that abovementioned situation will positively affect Turkey. The Capacity Utilization Rate of the Manufacturing Industry for the last three months of 2018-2019-2020 and 2021 is given in Table 12 below.

Table 12: Manufacturing Industry Capacity Utilization Rates for the Last 3 Months of 2018-2019-2020 and 2021

Years	OCTOBER	NOVEMBER	DECEMBER
2018	75,4	74,1	74,1
2019	76,4	77,2	77,0
2020	75,4	75,8	75,6
2021	78,0	78,1	78,7

Source: (Central Bank of the Republic of Turkey, Manufacturing Industry Capacity Utilization Rate, 2021).

Although the capacity utilization rate in the manufacturing industry decreased in December 2020 compared to December 2019, it increased by 0.6% in December 2021 compared to December 2020, and reached 78.7%. This shows that the pandemic process had negative effects on the sector in 2019 but had positive effects in 2020.

4.11. Impact on the Financial Services Industry

While the COVID-19 pandemic poses a significant health hazard all over the world, it also has a significant impact on the economies of states. The measures implemented to prevent the expansion of the pandemic have negatively affected the financial services sector, and many other sectors. In order to prevent the harmful consequences of the developments due to the COVID-19 pandemic on the Turkish economy, the Central Bank has taken the following measures Source: (Central Bank of the Republic of Turkey, Measures Taken Against the Economic and Financial Effects of the Coronavirus, 2021):

- Providing banks with flexibility in Turkish Lira and foreign currency liquidity management,
- Ensuring uninterrupted credit flow to the real sector and supporting exporters,
- Supporting the cash flow of exporters through rediscount credit arrangements,
- To strengthen the monetary transmission mechanism by supporting liquidity in the Government Domestic Debt Securities (GDDS) market.

November-December 2019-2020-2021 data on the Financial Services Confidence Index published by the Central Bank of the Republic of Turkey are given in Table 13.

Table 13: Financial Services Confidence Index Data for November and December 2019-2020-2021

	2019	2020	2021
November	167,0	161,0	170,1
December	157,2	154,6	171,9

Source: (Central Bank of the Republic of Turkey, Financial Services Statistics and Financial Services Confidence Index, 2021).

An analysis of the Financial Services Confidence Index results reveals that the data for the same month of the last three years have positively affected the confidence in financial services as a result of government policies. Although this rate decreased from 2019, when the COVID-19 pandemic first broke out, to 2020, it started to increase in 2021. Announcing the December 2021 confidence index rate as 171.9, the Central Bank showed that the upward trend continued. According to the Financial Services Statistics Report published by the Central Bank of the Republic of Turkey, data on the sector's operating income (Balance Values) for October 2019-2020-2021 are given in Table 14 below.

Table 14: October Financial Incomes (Balance Values) for the Years 2019-2020-2021

	2019	2020	2021
October	47,9	66,0	93,3

Source: (Central Bank of the Republic of Turkey, Financial Services Statistics and Financial Services Confidence Index, 2021).

As a result of analyzation of the data on the sector's operating income (Balance Values) of financial services for October 2019-2020-2021, it is seen that the income was in the 47.9 band in 2019. End sentence here and continue: When the effects of the COVID-19 pandemic were felt, the ratio increased in 2020 and 2021, and when the effects of the pandemic eased in 2021it was recorded as 93.3.

4.12. Impact on the Agriculture Sector

The negative effects of the COVID-19 pandemic have been experienced in the agriculture sector similar to other sectors. However, this context are different from other sectors due to the unique characteristics of the agricultural sector and agricultural products. These symptoms are; the dependence of agricultural production activities on natural conditions more than other sectors and the necessity of carrying out the activities carried out at specific times. The elasticity of supply and demand of agricultural products is low due to various reasons such as the duration of crop and animal production, the fact that agricultural products are compulsory consumption goods in the eyes of consumers and the rapid saturation in the consumption of these goods. Therefore, the contractions in

agricultural production and food consumption caused by the COVID-19 pandemic are expected to be lower compared to other sectors.

In addition, the obligation to carry out agricultural activities in a timely manner grants agricultural workers exemption from the curfews and quarantines. Practices implemented in this direction will prevent a decrease in agricultural production and even increase it.

Due to the pandemic, online platforms have gained importance in accessing food not only in Turkey but also in worldwide. In parallel, technological software development studies on the food supply chain are expected to accelerate after the pandemic. Table 15 presents data on the Producer Price Index (PPI) for agricultural products for November 2021.

Table 15: Agricultural Producer Price Index (PPI) and Change Rates by Sector and Main Groups for November 2021

	Index	Monthly Change Rate (%)	Rate of Change Compared to December of the Previous Year (%)	Rate of Change Compared to the Same Month of the Previous Year (%)	Rate of change by Twelve-Month Averages (%)
Agriculture-PPI	242,00	4,57	21,22	24,35	22,36
Agriculture and Hunting Products and Related Services	238,68	4,29	19,22	22,45	21,47
Annual Herbal Products	253,12	8,34	32,26	33,43	22,20
Perennial Herbal Products	206,43	-1,81	-8,79	-1,14	21,32
Live Animals and Animal Products	240,14	2,37	23,10	24,46	20,63

Forestry Products and Related Services	391,45	12,09	117,71	108,04	60,71
Fishing and Other Fishing Products	246,53	5,73	26,59	30,95	25,90

Source: (TUIK, Agricultural Products Producer Price Index, 2021).

In November 2021, there was an increase of 4.57% compared to October, 21.22% compared to December 2020, 24.35% compared to November 2020 and 22.36% compared to the twelve-month averages. In terms of subgroups of the sector, agricultural and hunting products and related services increased by 4.29% compared to the previous month. Fish and other fishery products increased by 5.73% compared to the previous month, and forestry products and related services increased by 12.09% compared to the previous month. Likewise, live animals and animal products increased by 2.37% compared to the previous month, while one-year crops increased by 8.34%. However, there was a decrease of 1.81% in perennial crops. In November 2021, data on sub-groups in the Producer Price Index (PPI) for agricultural products are given in Table 16.

Table 16: Agricultural Producer Price Index (PPI) and Change Rates by Subgroups for November 2021



Source: (TUIK, Agricultural Products Producer Price Index, 2021).

The subgroups with low annual increases were paddy with 4.67% and grapes with 5.07%. On the other hand, the subgroups with high annual increases were fiber crops with 105.21%, cereals (except rice), legumes and oilseeds with 43.03%, live poultry and eggs with 36.63%. Compared to November 2020, the subgroup with the highest decrease was citrus fruits with 14.19%.

5. Conclusion

The COVID-19 pandemic has had a negative impact on Turkey's economy and has negatively affected many businesses and their activities on a sectoral basis. However, positive effects can also be seen in some sectors. The reason why the pandemic does not have the same impact in every sector is that some needs of consumers can be postponed and some cannot be postponed. However, it is a fact that even if the pandemic risk is completely eliminated, it may leave some permanent effects on consumer behavior. For instance, some of these are that consumers prefer online shopping rather than going to crowded places for shopping, they feel obliged to carry disinfectants and similar hygiene products, which were not considered essential needs before, to protect themselves from the epidemic. Moreover, the pandemic leads an increase in consumers' tendencies to stock some products and it also causes a decrease in demand for goods and services other than compulsory ones. All these events have had an economic impact on businesses that supply goods and services in Turkey.

The health sector responded quickly and effectively to the unexpected COVID-19 pandemic, resulting in an increase in spending compared to previous years. It can be concluded that the health sector has been negatively affected due to increased health expenditures compared to previous years. The pharmaceutical industry played an important role in the developing new drugs for treatment and vaccine studies during this period; however, the sensitivity of people to their health due to the pandemic caused a loss of income in the sector. It can be concluded that the pharmaceutical industry sector was negatively affected due to the decrease in drug sales. The food and beverage sector faced intense demand from consumers due to the quarantine period during the pandemic, and at the same time, the increase in e-commerce led to an increase in the sector's sales revenues. Thus, It can be stated that the food and beverage sector was positively affected due to increased export and import figures. Moreover, during the pandemic, the retail sector experienced an increase in sales rates due to the increased demand for basic needs, food and household supplies, which shows that the sector was positively affected due to the increased sales volume. The sale rates of the E-Commerce sector increased during the pandemic and quarantine periods owing to the consumers who prefer online shopping. It can be concluded that the sector was positively affected due to the increase in the ratio of e-commerce to general trade. The tourism sector did not receive the expected demand due to the decisions taken to prevent the pandemic, which had an unexpected impact on both sector revenues and the Turkish economy. It can be concluded that the tourism sector was negatively affected by this process due to the loss of income. Since the automotive and construction sectors are deferrable in terms of consumer demands, the pandemic led to decreases in sales rates. Thus, It can be said that those sectors were negatively affected by this process due to the decrease in the number of production in the automotive sector and the increase in cost indices in the construction sector. The textile sector experienced contractions in markets and sales volumes due to supply systems disruptions and the economic crisis during the pandemic. For the textile sector, it can be inferred that it was negatively affected due to decreasing export and import figures. Although the manufacturing industry was negatively affected due to the suspension of the activities of the enterprises and the contractions in production during the pandemic, although it entered a recovery process in the later period. Since the capacity utilization rate decreased in 2019 but increased in 2020-2021, it can be

concluded that the manufacturing industry was negatively affected by this process in the first period and positively in the following periods, which taken to prevent the pandemic affected the financial sector as well as other sectors, and some measures were taken by the Central Bank. When the financial services confidence index is analyzed, although there was a decline in 2019-2020, it started to increase in 2021. For this reason, it can be concluded that the financial sector was negatively affected in the first period and positively in the following period. The agricultural sector experienced less negative impacts than other sectors, as agricultural products are essential consumption goods. It can be concluded that the sector was negatively affected by the increases in the producer price index.

In Turkey, the measures to address the crisis started with monetary policies, then it was shifted to fiscal policy-based measures, and finally, direct income transfer mechanisms were introduced. During that period, various policies such as support for production, support for citizens, support for employment, sectoral incentives and postponement of financial liabilities were put into practice. The negative effects of the pandemic on businesses have relatively decreased during the periods when the crisis subsided; however, the effects of the pandemic will continue to be felt for a long time.

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