



Possible impacts of COVID-19 outbreak on real estate sector and possible changes to adopt: A situation analysis and general assessment on Turkish perspective



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ABSTRACT

In this study, the possible effects and impacts of the COVID-19 outbreak on real estate development and management processes were examined by making an evaluation and an insight on administrative and media records. Crises and global effects of pandemics were described as an unforeseen event which have negatively affect project development in the real estate sector, sales operations of existing real estate, costs estimates, values and rates of return of existing real estate sector in general. The inception of new policy and precaution measures, especially travel bans and restrictions on domestic and foreign tourists impacts the tourism sector and causes its revenue to decrease, the narrowing of the volume of transactions in real estate such as retail facilities, office and residence transactions, increased vacancy rate in hotels, the additional measures taken due to the pandemic causes the significant increase in operating costs, decrease of rent collection creates losses due to declining in demand, net operating income and investment value also tends to decline. Change in business orientations, working and living conditions necessitates a review of planning, project development, marketing strategies, use and management processes of settlements. This study has It is observed that Turkish the government wants to revive the real estate markets only with the increase of sales of existing residences and businesses and tourism-oriented measures (such as a hygiene certificate), but it is clear that the measures taken for radical change in the long run are still inadequate. It should be emphasized that there is not yet enough work done to estimate how long the impact will continue and what is its financial burden will be in the years after March 2020, when the first case of the outbreak has been reported.

1. Introduction

Population growth, food demand, plague outbreak and war risks were brought up in 1798 with T.R. Malthus's theory of "Population Principles" in economic theory (Malthus, 1798), although there have been outbreaks that have been effective in multiple countries in the intervening time, none of which have undoubtedly been as effective as COVID-19. The COVID-19 outbreak is on its way to becoming a permanent part of human life and activities as it has been announced by WHO in recent times (UNCTAD, 2020; Wang & Tang, 2020). The pandemic is not only a concept related to health sector, it also brings up changes that may affect all sectors and professions. In other words, it is tried to draw the limits of a new normal, forever, and within this framework, what should be done for human settlements, urban space, planning, housing and other real estate investments are still appeared to be on the

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discussion agenda (Ling et al., 2020). There is a health risk effect on almost every sector and activities and yet there is a serious pressure on economic activities. The COVID-19 outbreak seen as an unpredictable phenomenon, has a different characteristic than past crises which has been experienced in world time history (Ponis & Ntalla, 2016; Çeti & Ünlüönen, 2019), pandemic has disrupted the economic sectors and the economic system and especially in developing economies had faced a crisis environment and had to face serious risk of a greater loss in their economies (Nicola et al., 2020).

Construction, real estate, tourism, and finance sectors had been categorized as leading and locomotive sectors in the Turkish economy. Despite the financial instability observed in the construction and real estate sectors, which had serious supply surplus in the pre-pandemic period, the conditions of tourism and financial sectors were seen quite well (Tanrıvermiş 2016, 2019). In order to reduce both supply surplus and burden caused by the crisis, the government enacted important regulations aimed at issuing low-interest rates and long-term housing loans from public banks, performing land registry transactions via online, switching to flexible working order in public and private sectors, prohibiting layoffs and short time work allowances during the pandemic period, reducing land registry fees and preventing financial bankruptcies. The contraction in economy in the period of March 2020 has emerged prominently in the real estate sector, and monetary policy tools for reducing negative effects have been implemented in intact. As the second wave of the crisis, which was expected, there was an increase in the number of residential sales, but since beginning of process, the perception of real estate in general and housing in particular has varied. In this study, a brief evaluation of macro-economic data on real estate sector in Turkey and the real estate markets during and after the first wave of COVID-19 have evaluated and suggestions that could shed light on its future have outlined and need for detailed fieldwork have emphasized.

2. Methods

In this study, data on macro-economic change and the real estate sector as secondary data were used to provide the base of analysis and generalization of the prevailing situation. Due to the prevailing situation, during and after the pandemic, which prohibits the smooth carrying out of physical surveys in many countries and also including Turkey in particular, the evaluation and collection of data were mainly done through the reviews of the contents on the main stream news and media, advertisement, comments and through this possible effects of the pandemic impacts in the real estate market and sector have revealed.

3. Results and discussion

3.1. Macro-economic outlook and evaluation of change in real estate sector in Turkey

The share of agricultural, forest and fishing activities in GDP has been systematically declining and this share has been ranging between 5 and 6% in recent years. It has been observed that the share of industrial sector in the economy remains constant and the share of the services and hospitality sector is significantly bulging (TURKSTAT, 2020). It is observed that the share of the construction sector in GDP is between 7 and 9% and that the number of new projects has decreased due to surplus supply and that the share of real estate activities has declined to 5.4%, but the share of real estate activities is comparatively stable.

With the structural reforms made before the global crisis and the measures implemented during the crisis, Turkey's economy was least affected by the global financial crisis, which was effectively manifested in 2007–2012. The growth rate, which was 4.5% in the first quarter (Q1) of 2020, is expected to fall in the following quarter, especially with the effect of flexible working order, curfew, and new normal practices, which came into effect after March 15, 2020 (Fig. 1).

The unemployment rate has increased in the last two years, with youth unemployment rate (26.7%) in the country almost doubling the average unemployment rate (13.5%) (TURKSTAT, 2020). On the other hand, opportunities of well-educated young people to develop jobs and employment are expected to increase due to pandemic. In Turkey, around 2.2 million people are employed

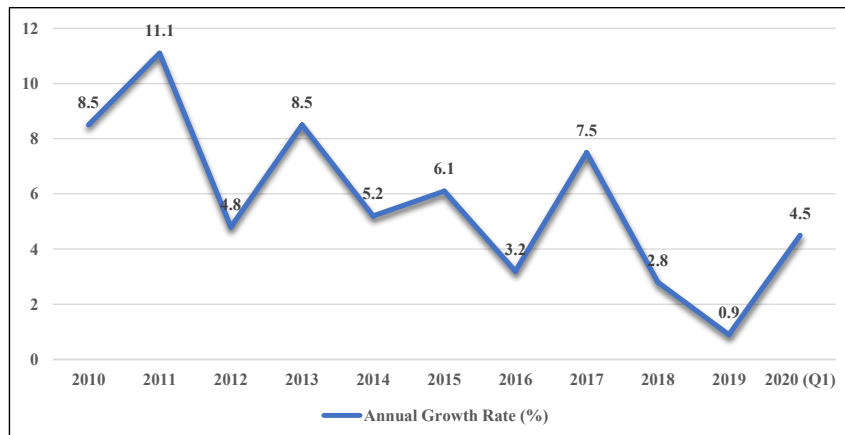


Fig. 1. Annual growth rate in Turkish economy (%) (TURKSTAT, 2020).

Table 1

Foreign investment in Turkey (MoT, 2020).

Source: MoT, 2020.

Indicators (Million Dollars)	2019	2019 first quarter	2020 first quarter	2019–2020 change (%)
International Direct Investment (Entry net liability formation)	8419	2493	2157	– 13.48
Capital	5242	391	507	29.67
Investment	5611	936	672	– 28.21
Liquidation	369	545	165	– 69.72
Other Capital (Net)	– 1663	71	53	– 25.35
Real Estate (Net)	4840	453	564	24.50

in the construction sector, employment has shrunk due to the decline in construction activities and similar situation applies to the tourism and commercial real estate market.

The impact of COVID-19 on the economy is clearly observed in the growth, unemployment rate and confidence indices in the economy. During the pandemic period of six months, dismissal of individuals in working life has been banned and assistance has been started to given to the employees under ‘short-time working allowance’ by the Ministry of Labor and Social Security. There is a significant decrease observed in fixed capital and foreign investments in Turkey. The fall in January 2020 was further deepened by the existence of the pandemic crisis. In the post-2010 period, the real estate foreign direct investment (FDI) inflows increased from \$2 billion to \$5–6 billion, and the share of real estate-based investments in total foreign investments were significantly increased (Table 1).

There is a contraction in many sectors and a decline in all indices due to the impact of March on April. Among indicators, effects of COVID-19 are clearly observed; confidence indices of the economy have a special place. The optimism in May and the June boom in the selected indices be an indication of continued positive development (Table 2). The global economy and developments in Turkey do not allow the drawing of optimistic statements. In particular, the Turkish economy is negatively affected by the current economic and social instability and the difficulty in predicting how long this effect will last.

3.2. Assessment of possible effects of the Covid-19 outbreak on real estate markets

The effect of the pandemic on the real estate market was discussed in terms of number or volume of transactions, use of credit and real estate values. First, it is an obligation to register the property in land registry in accordance with the Turkish legal system in order to obtain the validity of the real estate purchase and sale and other related property transactions. According to the legislation, 560 kinds of land related transactions were recorded to be carried out at the land registry offices; Sales, sales and mortgage, transfer, mortgage facility and enforcement facility were identified to take a greater share of transaction among others. The share of the five selected transactions from the total number of transactions carried out at the land registry offices varies between 56% and 60% during last 3 years. It has been observed that real estate sales tended to increase in the last decade, but as in March 2020, there was a substantial decrease in sales as compared to the last year, the recovery process was experienced in April and May 2020, and in June 2020 as a result of a reduction in interest rates of residential and housing loans which causes an explosion on real estate sales (Table 3).

In Turkey, until the end of April 2020, there were 353,847 recorded sales transactions (including sales and mortgages) were realized. The biggest share in the emergence of these figures because numbers of measures taken by the government including strict control of the situation. It was recognized that May 2020 will be the month of recovery and June as peak month on real estate sales. However, compared to the same period in 2018 and 2019, there is a loss of 42% and 33% respectively. However, the month of June failed to reach the sales target as per the June 2018, an increase of about 42% were observed as compared to the same month in 2019. As of March 23, 2020, there were 44,000 losses caused by the pandemic crisis, the same trend continued in April and in May 2020, and the economic measures taken in June were directly reflected in the figures (Fig. 2). The reason for the decline observed in the period of March–April 2020 is that the demand for real estate investment is almost at a standstill and the introduction of application and necessity of using web-based applications in land registry and deed transactions. In the following process, all transactions were

Table 2

An overview of macroeconomic indices.

Source: TURKSTAT, 2020.

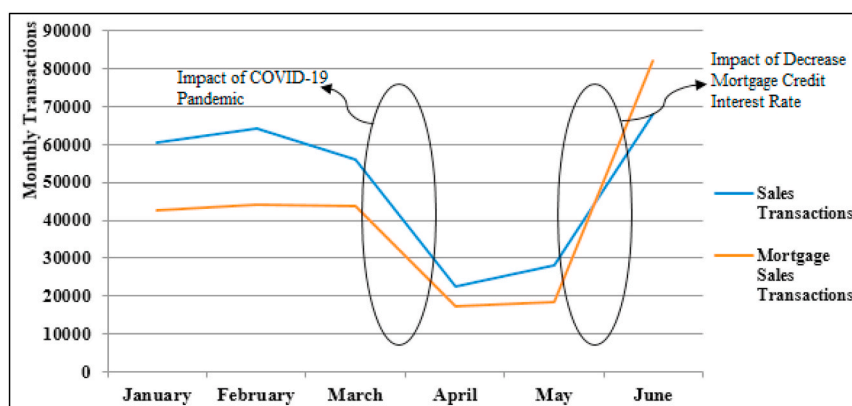
Indices	Months					
	January	February	March	April	May	June
Economic Confidence Index	97.1	97.5	91.8	51.3	61.7	73.5
Consumer confidence Index	58.8	57.3	58.2	54.9	59.5	62.6
General Economic Status Expectation	77.4	75.9	75.6	74.8	81.8	85.5
Expectation of Unemployment rate	56.8	53.8	57.6	53.8	55.3	62.1
Real Sector Confidence Interval	106.4	106.7	98.6	62.3	73.5	89.8

Table 3

Development of real estate sales in land registry offices.

Source: TKGM, 2020.

Years	January	February	1–15 March	16–31 March	April	May	June	Annual Total
2018	147,708	145,839	165,435		155,185	198,352	178,648	2,038,169
2019	121,525	127,127	145,162		134,390	149,000	106,670	1,822,722
2020	103,976	109,236	58,238	42,335	40,062	47,024	155,041	551,912

**Fig. 2.** Change in housing sales during COVID-19 in Turkey.

carried out on the web and online. The booming of transactions experienced in June because all transactions are made online as well as decrease interest rates on housing loans and mortgages. Currently, all transactions are conducted under web-based system, owners seem to have accumulated knowledge of web-based applications and the process has returned to its normal course. According to the figures of 2019, per capita income from GDP was \$ 9177. When the 2018 rate is applied to this (9127×0.2237) amounting to 2163.08 Turkish Liras (July 02, 2020 CBRT Effective Sales), 14,851 TL or approximately 15,000 TL housing and rent expenditures are made. The share allocated for housing and rent is at the highest level among household expenditures.

The total number of annual residential sales in Turkey were ranging between 1.2 and 1.4 million units and it is observed that 20%–40% of sales consists of mortgage (through borrowing) housing acquisition, excluding the January–June 2020 period (Table 4). Approximately half of the annual sales consist of new residences and remaining part consists of second-hand sales. In the real estate sector, where 1.1–1.4 million houses are sold annually, the ownership ratio of the households is around 56%, the number of households with more than one house is increasing and horizontal mobility is also observed. The low percentages of mortgage-backed housing acquisition in housing sales have taken the strain off and the effects of interest rate cut have caused a boom, especially in June 2020.

The number of mortgage sales in 2020 has reached the point where all time makes a difference. As per analysis, the loan interest rates, which decreased in the beginning of June 2020, enabled the sales-mortgage transactions to reach high figures in the purchase of legal entities and a revival started in purchase of investment properties (Fig. 3).

The ratio of housing loan to total loan volume in the economy was 31% in 2013, increased to 36% in 2019 and around 40% as end of June 2020 (BDDK, 2020). Within this framework, indicators such as construction cost indices (IME), inflation rates (domestic producers price indices such as Yi-ÜFE and consumer price indices TÜFE) and housing price indices (housing price index (KFE)), new house price index (YKFE), old house price index (YOKFE) and real rent (CBT, 2020; TURKSTAT, 2020) were evaluated by analyzing the trend (Fig. 4).

The values of examined seven indices were increased, but the figure determining the return period of the capital invested in real rent. Profit margin, which is the main purpose of residential production by private organizations and the return of the capital to be as short as possible, such significant criteria of losses are clearly understood from Fig. 4. Three different house price indices have a head-to-head view with producers price indices, and the increase in housing value is seen at the same level as the inflation rate. However,

Table 4

Housing sales by methods.

Source: TURKSTAT, 2020; TKGM, 2020.

Years	Mortgage sales	Mortgage free sales	Total	Share of mortgage housing (%)
2018	276,820	1,098,578	1,375,398	20.13
2019	332,508	1,016,221	1,348,729	24.65
2020	249,069	302,843	551,912	45.12

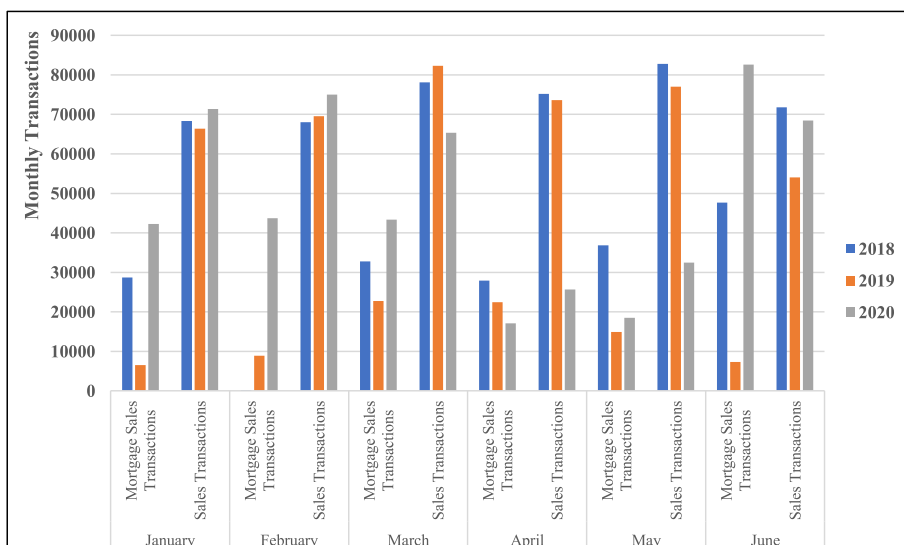


Fig. 3. Distribution of mortgage sales and other sales by year.

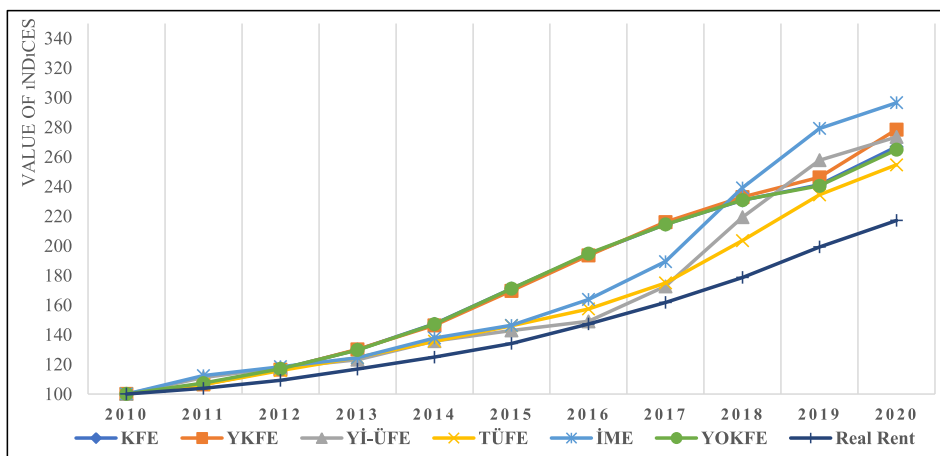


Fig. 4. Inflation, construction cost and housing prices relations in Turkey.

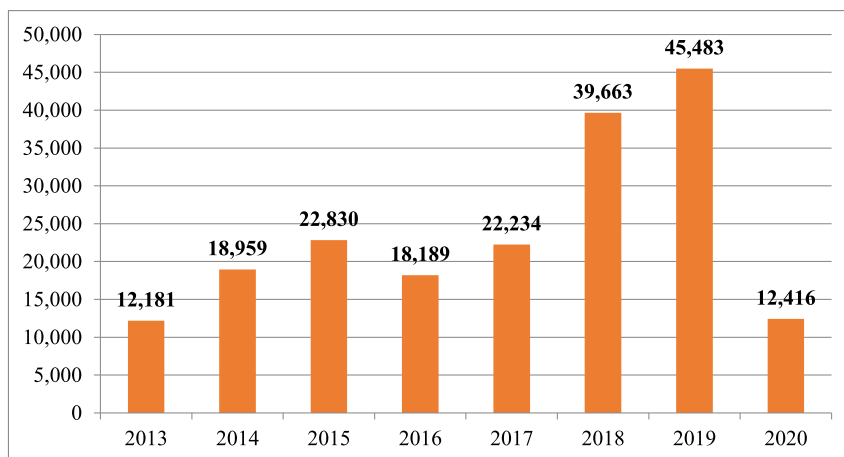


Fig. 5. Real estate sales to foreigners in Turkey (June 2020).

the increase in the cost price has risen above the price of the housing sales and the rental index has shown a very weak development. In addition to the decreasing trend of foreign capital, it has been determined that there is a decrease in the quality of foreign investors (Fig. 5).

Due to travel restrictions in the period January–July 2020, there has been a decline in individual foreign investments. The largest decrease in the pandemic process has been a decline in the acquisition of real estate of foreigners in the provinces of Istanbul, Antalya and Ankara. However, most of the real estate acquired at present are of high-functioning and qualified building stock, including residential properties, and the cost of acquisition in the Turkish real estate market has been cheaper due to the value of foreign currency to rise in 2–3 times compared to the national currency, and foreign demand has increased significantly as compared in the post-2017 period (Fig. 5).

3.3. Possible changes and opportunities in post-pandemic in real estate markets

From studies it has been found that there has been an increase in the demand for land for production and settlement in rural areas. In addition to the large land area demand, there is an increase in the demand for land to establish settlements, farmhouses, and hobby gardens. The major impacts of the pandemic crisis are observed in tourism and hospitality industry has impacted with a big loss of revenue. With a total capacity of 1.7 million beds in 12,844 facilities, the country has welcomed 32.4–45.1 million tourists annually over the past three years (TURKSTAT, 2020). The losses of 18–20% of this were experienced in the first four months of 2020. Tourists now prefer alternative measures such as zero-contact holidays, short-term rental, apartment and villa rentals instead of large accommodation facilities such as hotels, and this situation will lead to increase into informality. Another sector that is experiencing challenges and affected by the crisis caused by the outbreak is the retail and shopping malls sector.

There are 458 shopping malls in Turkey as in 2019 and Nine other new shopping malls are expected to open in 2020. The outbreak is expected to cause a decrease in investment value due to an increase in vacancy rates in offices, business centers and plazas and a decrease in rental revenues. Since the database for office investments by provinces is not well established, there is no clear data on the distribution of A, B, C group types of offices within provinces to predict the net occupancy rates. In the pre-COVID-19 period, landlords are forced to accept periods of deferral or rent-free use to ensure adequate occupancy due to surplus office supply and to protect existing tenants. The new rental agreements require owners to offer more flexible rental models and allow shorter-term commitments to achieve adequate occupancy. The fact that existing tenants do not assume to the long-term lease liabilities and prefer short-term lease transactions due to their inability to predict the future risk factors and outcomes will be a significant effect and source of risk for the owners of the properties and investors. To overcome the current situation, it is necessary to expand the use of tools such as lease, sell and lease back and lease certificates. After the crisis, there will be a need for the transformation of offices in big cities to other uses (such as hospitals, administrative buildings) and radical changes regarding the use of office spaces. It is expected that there will be an increase in demand for smaller office buildings and home-office spaces, where the majority of its employees are in flexible order, the use of virtual office and space use is more preferred, instead of building large tower, headquarters and regional directorate buildings.

4. Conclusions

According to survey results, it is expected that there will be a change in the planning and construction decisions of settlements and investment approaches after the pandemic. It is often argued that during and after the outbreak, Malthus's population theory (1798) took effect, that there would be changes in the measurement of production, profitability, and utility. It is expected that new approaches to the economy of solidarity and space in the urban area will be developed and new professions and business areas will emerge rapidly. The housing market will be stable, but the change in commercial real estate markets will accelerate. Many people will be ambivalent between allocating their equity to new fixed investments and opting for deposits, foreign exchange, gold, and other related securities investments, and will be able to turn to short-term investments. This will lead to a decline in investment and production, weakening growth and inability to increase employment. For real estate and property owners and users, there may be changes in credit usage, rental and contracts.

It has seen that adaptation of various types of technologies seems prominent in the structure of facility-real estate and asset management with Prop-tech, IoT, blockchain, teleconferencing, land registry and BIM, BIM-CAFM (Wang & Tang, 2020). Automated tools in real estate's studies will help to planning, tracking, and completing relocation activities smoothly. People and real estate business should be ready for future disruptions through innovative technology. In this context, the expectation of an increase in smart buildings and technologies that provide less contact in buildings and structures are expected to be common. There are diminishing stores in cities, increased storage areas in the city and a rapidly growing e-commerce marketing. The declining space of public and private institutions' administrative spaces, decreasing of office demand, increasing in home office or flexible working phenomena may take the form of shrinking companies, utilizing technology, and decreasing employment. Digitalization is inevitable in business and home life. New regulations will compel all sectors and especially banks, insurance companies, private pension system and other institutions to be structured in the field of real estate and asset management.

In the light of analysis, it is imperative that civil and professional organizations, relevant public institutions and universities in Turkey in general are required to work on the status and future of real estate and construction sectors after COVID-19. It is expected that there will be an increase in the importance of expertise, technology, and research-consultancy. Many professions may lose their importance in the future and new jobs or professional fields may emerge. For this reason, it is imperative to change the structure of professional organizations and internationalization from the local-national scale. Currently, extensive field work is carried out by the

Department of Real Estate Development and Management in Ankara University for real estate development, residential, commercial real estate market and facilities as well as real estate management areas, and by this way, it is aimed to predict future developments.

Declaration of competing interest

None.

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