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Analysis of real estate values and economic indicators in extraordinary situations

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Keywords

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Abstract

State of emergency (OHAL); It includes situations such as natural disasters, pandemic, economic crisis. In the world and Turkiye, the 17 November 2019 epidemic, the 24 February 2022 war and the 6 February 2023 earthquake caused extreme differences in economic indicators. As a result of social mobility, social, cultural, economic and geographical changes occur. The extraordinary situations are; it also causes an abnormal increase/decrease in real estate values. In this study, it is aimed to reveal the differences between economic indicators and real estate values. As economic indicators; Consumer Price Index (CPI), Producer Price Index (PPI), exchange rate, commodity, precious metals, energy resources and car prices were taken into consideration and analyzed with real estate values and economic analyzes were carried out. Considering the increase rates between 2018-2023, it is seen that the rate tends to increase as the value of the asset increases.

1. Introduction

The state of emergency (OHAL), briefly referred to as the State of Emergency, includes extraordinary situations, and measures to be taken throughout the country or region are implemented during the state of emergency. In the State of Emergency Law No. 2935 (1983), these situations are stated as follows;

- Natural disaster, dangerous epidemics or severe economic depression,
- The emergence of serious signs of widespread acts of violence aimed at destroying the free democratic order established by the Constitution or fundamental rights and freedoms, or serious disruption of public order due to acts of violence,

After the state of emergency is declared, decisions regarding the extraordinary administration procedures are taken and implemented. Under the state of emergency; Criteria are determined on how to limit or stop fundamental rights and freedoms, which are valid separately for money, property and work obligations to be imposed on citizens and for each type of state of emergency. The provisions of how and in what form the necessary measures for the State of Emergency will be taken, what powers will be given to public service officials, and what changes will be made in the status of officials are explained.

Most natural disasters are caused by meteorological reasons. The most important meteorological natural

disasters in our country; hail, flood, overflow, frost, forest fires, drought, heavy rain, strong wind, lightning, avalanche, snow and storms. Disasters such as sudden earthquakes, volcanic eruptions, and fires, all of which are states of emergency (AFAD, 2023).

Pandemic, war and earthquake extraordinary situations in the world and in our country in recent years; It has affected people socially, culturally and economically. Pandemia cases started to be seen on 17 November 2019 in the world and COVID-19 originated December 2019 in Wuhan City, China. It spread very quickly to all continents by human means. It was officially announced that it was first seen in Turkiye on March 11, 2020. In this process, it has been tried to prevent the spread of the virus by taking decisions to stay home from time to time. With the support of the World Health Organization, companies and research institutes started vaccine development studies and vaccines such as Pfizer-BioNTech and Sinovac were developed for virus protection (Kusak & Kucukali, 2023; Unel & Yalpir, 2023).

Wars in different parts of the World outbreak. Finally, the invasion of Ukraine by Russia on February 24, 2022. War forces people to migrate and causes changes in population and demographic structure in both abandoned and settled areas.

According to Kandilli Observatory's (2023) the data, two earthquakes occurred on 06 February 2023 at intervals of 9 hours. One of them was a very strong earthquake with an instrumental magnitude of $M_I=7.4$

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(Mw=7.7) at 4.17 local time, in the Sofalaca Neighborhood (37.1757 N 37.085 E) of the Şehitkamil district of Gaziantep province. The other was a very strong earthquake with an instrumental magnitude of $M_I=7.5$ ($M_w=7.6$) occurred at 13:24 local time in Ekinözü district of Kahramanmaraş province (38.0818 N - 37.1773 E). The earthquake was felt in a wide region covering 11 provinces in Southeastern Anatolia, Eastern Anatolia, Central Anatolia and Mediterranean Regions. In the earthquake, in which a significant number of lives were lost, the biggest damage in terms of the Turkish economy in terms of 54.9% was 1.073.9 billion ₺/56.9 billion \$ worth of residences, 242.5 billion ₺/12.9 billion \$ public infrastructure and service buildings. (222.4 billion ₺/11.8 billion \$ damage occurred) related to industry, energy, communication, tourism, health and education sectors, small tradesmen and places of worship (SSB, 2023).

The extraordinary situations experienced in the years 2020-2023 cause social, cultural, economic and geographical differences in the society. Changing people's preferences and behaviours means the interaction of their whole lives. These, in turn, affect the real estate value and change the sales and rental values in the form of a sudden increase or decrease.

2. Material and Method

The field of study is Türkiye, and the economic values of the extraordinary situations that occur in the world and in the country are examined (Figure 1).

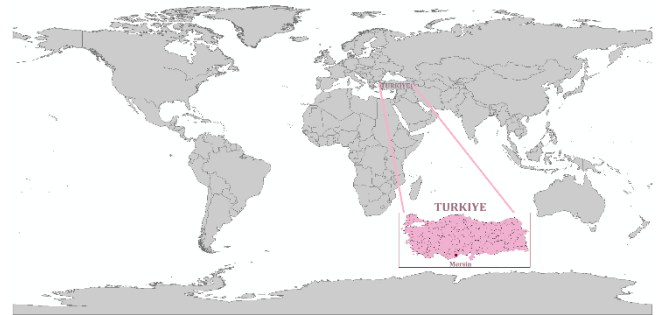


Figure 1. The study area

Data consist of economic indicators, cars and real estate values. Economic indicators are Consumer Price Index (CPI), Producer Price Index (PPI), exchange rate, commodity, precious metals, energy resources and car prices were taken into consideration and analysed with real estate values (Figure 2). The data between the years 2019-2023, when the states of emergency occurred, were collected and analysed.

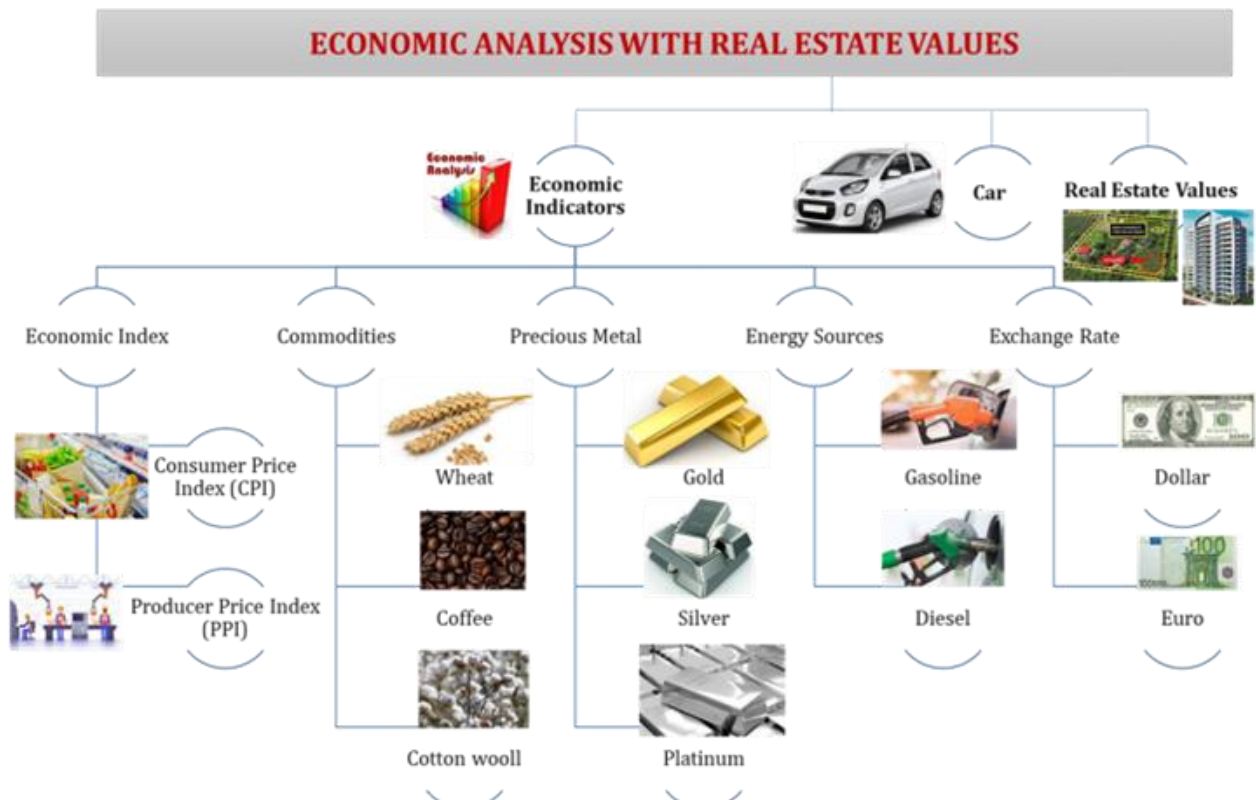


Figure 2. Economic indicators and Real estate values

Economic analysis is to evaluate costs and benefits to check the viability of an event, a project, investment opportunity, or any other situations. In other words, it involves identifying, comparing, and evaluating, costs and benefits (Vaidya, 2023).

3. Results

Indexes (PPI and CPI), commodities, precious metals, energy resources and exchange rate data were collected from economic indicators. Price changes occur in all

commercial production and consumer goods in line with supply/demand. As a result of these, overall economic indicators are obtained. The annual percentage change of PPI and CPI (TUIK, 2023) is highest in September 2018 and December 2021. In the monthly change, it was observed that it was the highest in all months of 2022 (Figure 3).

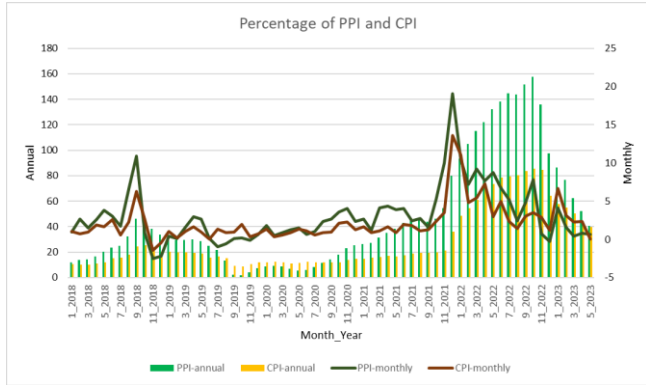


Figure 3. Percentage Change of PPI and CPI

The price changes of wheat, coffee and cotton thought of as a commodity between 2018-2023 were examined. In addition, the percentage changes in the purchase prices of gold, silver and platinum as precious metals were found. The price changes of gasoline and diesel from energy sources were investigated. Most of this data changes every second. For this study, average annual values were collected (Figure 4) (IMF, 2023; TCMB, 2023).

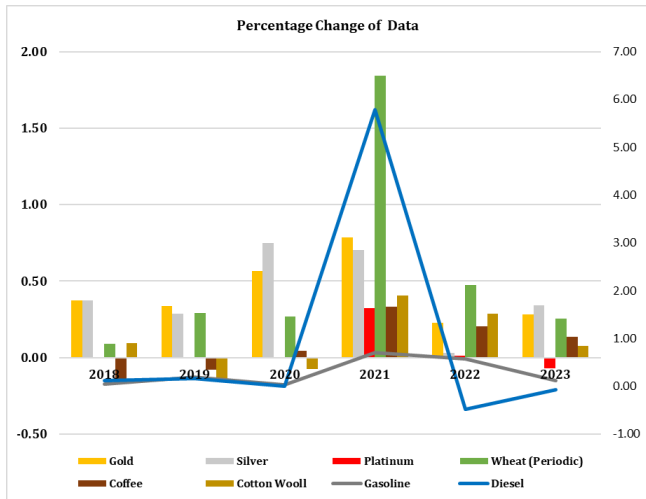


Figure 4. Percentage Changes of the others data

The values of the Turkish Lira against a unit of currency of a country, namely the US Dollar and the European Currency Euro buying/selling values (TCMB, 2023) were discussed as the exchange rate. While the purchase and sale values continue parallel to each other, the highest increase rate is seen in September 2018 and 2022. In this dataset, there was only a decrease in September 2019 (Figure 5).

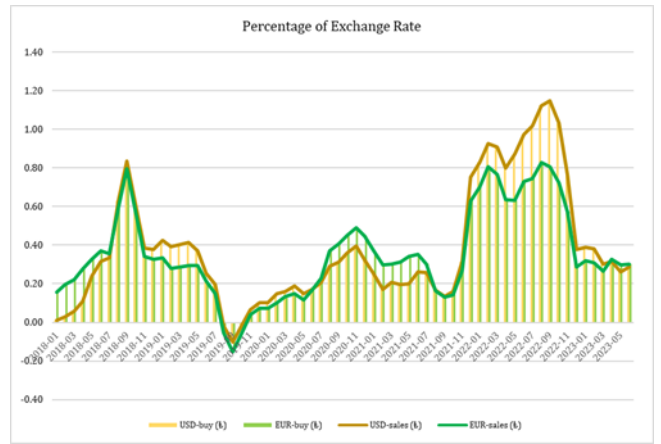


Figure 5. Percentage of exchange rate

There are also significant differences in the prices of automobiles (Car, 2023) (Figure 6) and real estate (Figure 7), which are influenced by economic indicators. In this study, these price differences according to years were analyzed. It is seen that it was increased a lot in January-June 2022 (the first six months of 2022) (Figure 6).

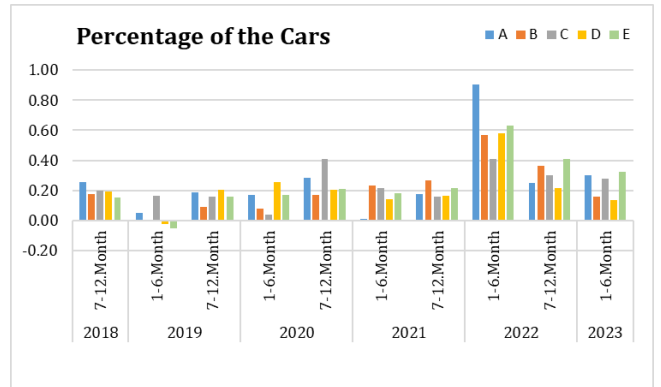


Figure 6. The change of A-E brand cars's prices

The data pertaining to real estate were collected in Mersin province, Yenişehir district, Çiftlikköy District (Figure 7).

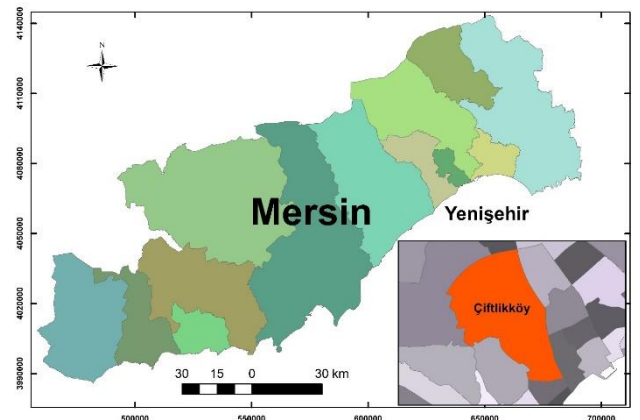


Figure 7. Çiftlikköy Neighborhood, Mersin/Yenişehir

The residences and plots are considered as the type of real estate. The data set was created by collecting the values of those with the same characteristics as possible (Real Estate, 2023). The residences have features such as

a gross area of 110 m², 2+1 rooms, and individual natural gas (combi boiler). On the other hand, the plots are created for housing or housing + commercial construction by applying the zoning plan to the land. The plots values were also collected separately. It has been determined that it has increased approximately 3.50 times in 2022 (Figure 8).

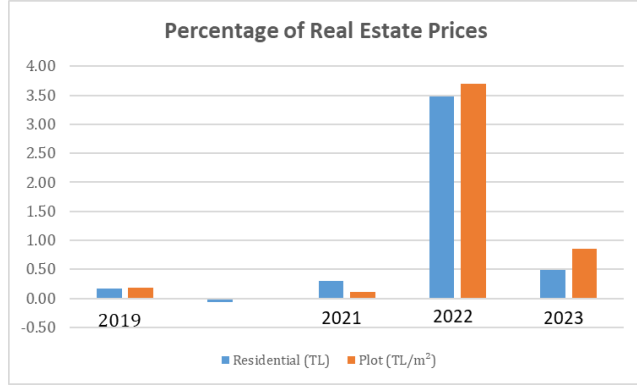


Figure 8. The residences and plots values changes

The economic value of real estate has been increasing over the years. Although most of the literature is residential (Bozdağ, & Ertunç, 2020; Ertaş & Bahadır, 2017; Ulvi & Özkan, 2019); there are different studies on value of plot (Unel & Yalpir, 2023), commercial real estate (Yüksel, et al., 2022), public institution assets (Ünel, et al., 2023).

4. Conclusion

In this study, changes of economic indicators, car and real estate values were analyzed. To investigate the effects of extraordinary situations experienced since 2018 on assets, the value changes between the years 2018-2023 were found and graphs were prepared. It has been determined that economic indicators, cars and real estate values' increase rates are different.

Turkiye economy is affected by both the crises in the world and the internal crises. It is seen that the effects of the world-wide pandemic and the Russian-Ukrainian War are experienced in Turkiye in the following months. After the 6 February 2023 earthquakes, it is observed that the upward movement in the values of real estate, cars and other assets continues.

In future studies, it is designed to analyze Gross National Product, interest rates, inflation, and unemployment rates from macro-economic indicators. In addition, it is planned to renew the analyzes with data such as Manufacturing Industry Price Index, total exports, total imports, number of housing sales, and the total number of automobile sales and continue to investigate the effects.

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