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Romanian Housing Market before and during the COVID-19 Pandemic

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Abstract

This research aims to study the sustainability of the development of the housing market before and during the Covid-19 pandemic in Romania. In this regard, the evolution of house prices in relation to their market fundamentals was analyzed, and the price-to-income and price-to-rent ratios and the Hodrick-Prescott filter were calculated. The estimated indicators show that since 2016, the residential property market has entered a new phase of expansion of the real estate cycle, but most likely the turning point will be determined by the intensity of the Covid-19 outbreak. Until the moment of the analysis, the data indicate that the pandemic outbreak did have a mildly negative effect on the housing market in Romania, by decreasing households' intention to purchase a home, the number of new home listings and real estate transactions, mainly in the first weeks of the pandemic. The housing prices remained relatively constant during the state of emergency, but after the gradual relaxation, they began to decline slightly in major cities. Due to the uncertainty regarding the future, the long-term impact of the Covid-19 outbreak on the residential market is unknown, but it will certainly depend on the intensity of the pandemic and the measures taken by the authorities to support the economy.

Keywords: Covid-19 outbreak, housing market, housing prices, Romania, pandemic.

JEL Classification: R2, R21, R31, I15

1. Introduction

The Covid-19 outbreak, labelled as a black swan event and likened to the economic scene of World War Two (Nicola et al., 2020), had and continues to have a detrimental effect on global healthcare systems and, undoubtedly, on the world's economies. The unprecedented social distancing measures adopted by the authorities have reconfigured the value of housing for each individual. Housing has always been a sensitive subject, due to the functions it can perform simultaneously:

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consumption, long-term investment, store of wealth, and collateral for lending. For this reason, the residential market has been the basis of the worst economic and financial crises around the world, highlighting the close link between the dynamics of real estate prices and the financial and macroeconomic stability of a country (IMF, 2019). The financial crisis of 2007-2008, generated by the exponential rise in house prices as a result of financial liberalization, simultaneously affected all economic sectors in most countries of the world. Thus, the housing market has become more sensitive to macroeconomic conditions and therefore, is expected to be significantly impacted by the economic downturn generated by Covid-19 pandemic (Allen-Coghlan & McQuinn, 2020).

As in most countries, the residential real estate market in Romania has been severely affected by the financial crisis, because of the unsustainable growth in housing prices, accompanied by large increases in construction volume and credit. Following the crisis, the activity of the real estate market in Romania underwent a strong correction that affected all economic sectors. Therefore, the real estate market is considered an important source of risk for financial stability and has come under the close monitoring of national and European authorities. Besides, since 2016, Romania has started a new phase of expansion of the housing market activity (NBR, 2017). For these reasons, the dynamics of the residential property market in Romania must be carefully analyzed in the current context of the pandemic to prevent possible negative effects on national macroeconomic stability.

The Romanian government introduced the first travel restrictions starting with March 9, and on March 16 instituted the state of emergency that shut down a substantial portion of the economy, but on May 18 was introduced the state of alert, and gradually the restrictions were relaxed. As a consequence of the Covid-19 outbreak, the National Bank of Romania (NBR) (2020, p. 52) draws attention to the increase in risks generated by the real estate market to financial stability, which are determined by: (i) the decline in investment and trading amid the rise in investors' risk aversion, (ii) the sharp contraction in demand due to lower-income and heightened uncertainty related to future pay, (iii) the increase in credit risk for housing loans and exposures to companies in the construction and real estate sectors, and (iv) the higher liquidity and solvency risk owing to the drop in receipts, as well as to the construction and real estate firms witnessing a reduction and even a shutdown in the activity. Although these factors have been partly offset by the government support programs, the risks persist.

2. Problem Statement

Due to the novelty of the events, few studies investigate the impact of the Covid-19 outbreak on the housing market, and those that exist mainly examine the situation of the real estate markets in the USA (D'Lima et al., 2020; Liu & Su, 2020; Yörük, 2020), China (Huang et al., 2020), Japan (Narro & Katafuchi, 2020), Italy (Del Giudice et al., 2020), Ireland (Allen-Coghlan & McQuinn, 2020) and Turkey (Tanrıvermiş, 2020). The common conclusion of these studies is that the residential real estate markets were severely affected during the Great Lockdown by the considerable decrease in housing demand, new home listing and volume of housing transactions.

Yörük (2020) found that by mid-April, certain housing markets from the USA experienced more than 60% drop in new home listings and pending home sales relative to the same period in the previous year. In China, the empirical evidence of Huang et al. (2020) showed that the Covid-19 epidemic had a small negative effect on housing prices but a large negative effect on transaction volume. Time on the market was also found to have increased in China (Huang et al., 2020). Allen-Coghlan and McQuinn (2020) indicated that Irish house prices are set to fall over the next 18 months as a result of the Covid-19 downturn, due to the decline in household disposable income and the sharp fall-off in mortgage market activity. In Italy, the drop in the number of real estate transactions is a certainty because of the pandemic but it will not be accompanied by an equal drop in prices, at least not in the short term (Del Giudice et al., 2020). In Turkey, it was also observed a significant decline of real estate sales in the period March-May 2020, but since June, the market has recovered slightly (Tanrıvermiş, 2020).

As studies in the field of residential markets in Romania are generally few, mainly because of the low real estate market transparency and the lack of detailed data, this article fills this research gap from two perspectives. Firstly, the study characterizes the development of the housing market since the years preceding the financial crisis from the point of view of market fundamentals to highlight the particularities of the Romanian residential market. Secondly, the article presents a first view on the effect of Covid-19 shut down and re-opening orders on Romanian residential real estate markets.

3. Research Questions/Aims of the research

This research aims to examine the sustainability of the development of the housing market in Romania before and during the Covid-19 pandemic, taking into account the particularities of the behavior of housing demand and supply in relation to housing prices. There is a widely held view that the current pandemic influences economies as a combined supply and demand shock (Allen-Coghlan & McQuinn, 2020). For that purpose, in a first step, the deviations of house prices from their equilibrium level were studied to identify the possible overvaluations or undervaluations of the market. In the second stage, the evolution of house prices and their market fundamentals since the beginning of the pandemic in Romania were studied to outline the possible perspectives of the housing market.

4. Research Methods

In this study, data on housing price, demand and supply as secondary data were used to provide the base of analysis and generalization of the prevailing situation in Romania before and during the Covid-19 pandemic. The data were collected from the databases of Eurostat, National Institute of Statistics (NIS), National Bank of Romania (NBR), ANCPI Agency and Imobiliare.ro. The price-to-income and price-to-rent ratios and Hodrick-Prescott (HP) filter were calculated to explain the sustainability of the housing price development. The price-to-income ratio is a measure of affordability, while the price-to-rent ratio reflects the relative cost of owning and renting. The one-sided Hodrick-Prescott filter provides information about the price fluctuations in comparison to its stochastic trend and cyclical component.

5. Findings

5.1. Behavior of the Romanian housing market before the Covid-19 pandemic

In the period of the recession of Romania, marked by the transition from the planned economy to a market-based one, the communist housing legacies remained broadly unchallenged, but the post-2000 economic growth has stimulated the developing of the housing market (Soaita & Dewilde, 2019). Against the background of economic and financial development, the excessive growth of lending together with the unprecedented inflows of capital from abroad have contributed to the formation of a significant real estate bubble, characterized by speculative investments and unsustainable housing price increases (Bálint, 2020). Romania registered the fastest growth rate in housing prices in the region (Bálint, 2020), and the new housing construction exploded. According to the NIS data, in 2008, the number of new housing, built from own funds, was 143% higher than in 2004. Then, as sources of financing from abroad decreased appreciably due to financial turmoil, the real estate market collapsed and, as a result, the construction sector entered a period of decline. In 2009, the average real trading prices of housing fell by 27% compared to 2008 and continued to decline until 2014 (Figure 1). The number of real estate transactions reduced by 27% in 2009 compared to the previous year, while the real gross fixed investment in housing by 14% (EMF, 2019). Overall, the real house prices fell by 70% from 2008 to 2014, which represents a notable decrease among EU member states.

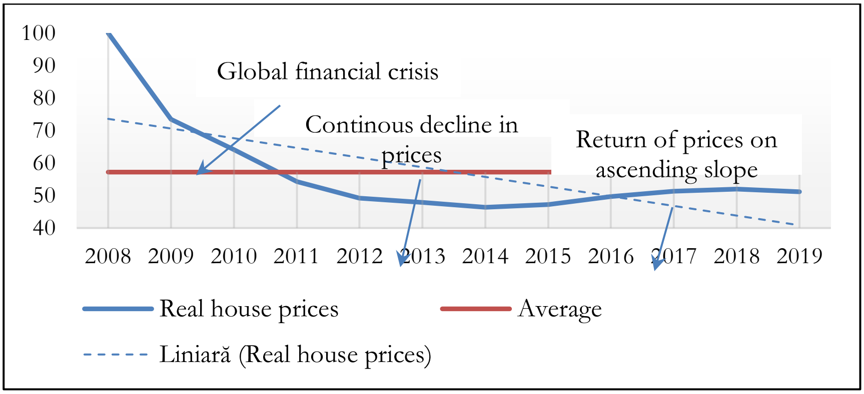

Figure 1. Romanian real house prices vs. long-run trend and average (2008=100)
Source: author's projection based on Eurostat data

The residential real estate market started to recover in 2015 when was registered a house price increase of 2% (in real terms) from the previous year, which continued to increase for four successive years, thanks to improving economic conditions. However, prices did not return to pre-crisis values, which is an evidence of price overvaluation in the pre-crisis period and a trend of price correction relative to the long-term market fundamentals. Figure 1 seems to suggest that Romanian real house prices have been above their long-run average and their long-run trend until the end of 2011, which indicates that the Romanian housing market might have been overvalued before the financial crisis. Although the real house prices since 2011 are, on average, by 7.3% below the long-run average, with the recovery of the real estate market in 2015, prices significantly exceed the long-run trend.

5.2. Evidence of unsustainable housing price movements

Figure 2 plots price-to-income and price-to-rent ratios compared to their long-run averages and trends. As seen from the figure, both ratios seem to signal overvaluation of the residential real estate prices during the years prior to the financial crisis of 2008. The deviations from the long-term averages of the price-to-income and price-to-rent were very pronounced, being about 60-70% higher than their long-term averages in the years before the crisis. In 2008, real house prices were twice as high as gross disposable income per capita and rental prices. Philiponnet and Turrini (2017) and Ionascu et al. (2018) identified similar values for the positive deviations from the long-run averages in Romania before the crisis, signaling the overrated housing prices relative to the levels of disposable income and rents.

a) price-to-income ratio b) price-to-rent ratio

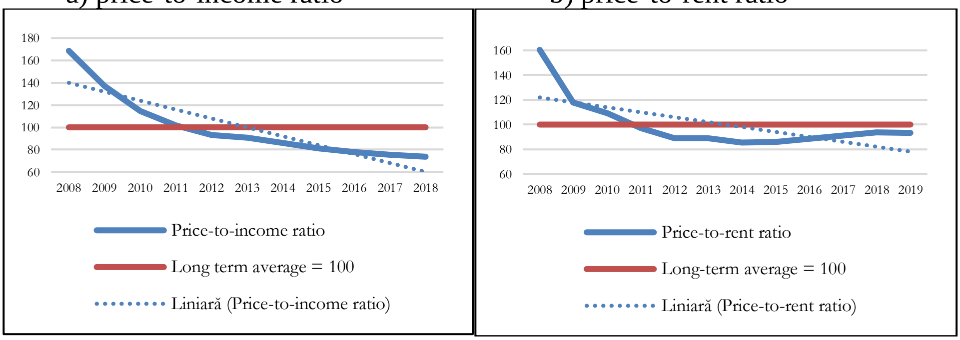

Figure 2. Housing price-to-income and housing price-to-rent vs. their long-run averages and trends in Romania
Source: author's calculation based on Eurostat data

Following the crisis, the price-to-income and the price-to-rent ratios decreased by 45% by 2011, reaching lower levels than their long-run averages, which maintained so until 2019. While the price-to-income ratio has been on a continuous downward slope since the beginning of the crisis, the price-to-rent ratio has risen annually slightly by 3% beginning with 2016. Figure 3 presents the development of real household disposable income and real rents versus real house prices. After an extended period of negative or stagnant development between 2009 and 2014, real household disposable income continued to grow, while the real rents remained at a relatively constant level. Between 2014 and 2018, the real household disposable income per capita increased by 30% (on the average, by 6% per annum), while the housing prices with 12% (on the average, by 3% per annum). The figure shows that housing prices did not keep the pace with the increase in income during this period and that the disposable income increased considerably more than prices since 2015. This implies that an increase in household disposable income is not fully captured by the real housing prices and that other factors may contribute to the widening gap between housing prices and disposable income in recent years.

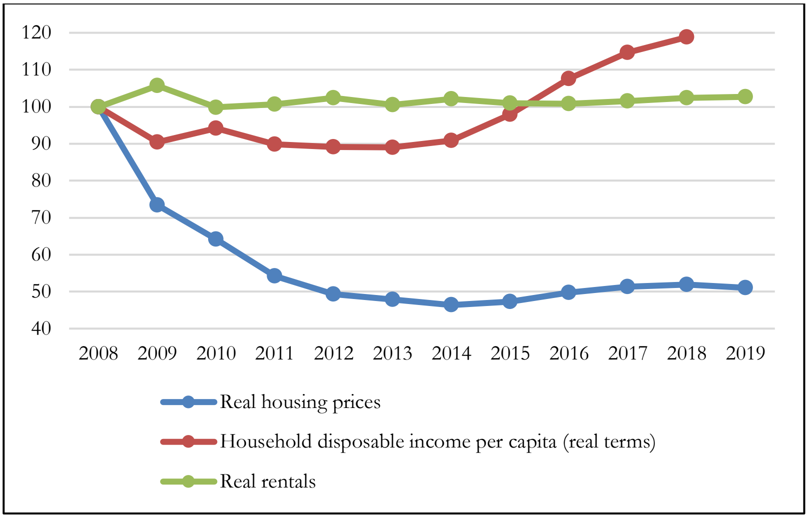

Figure 3. Real housing prices vs. disposable income and rents (2008=100)
Source: author's projection based on Eurostat data

The slight increase in Romanian housing prices since 2015 has been amplified by high demand, compared to the existing housing supply that is very limited. According to Eurostat data, 46.3% of Romanian population was living in overcrowded dwellings in 2018, compared to the EU average of 17.1%, and more than half of the existing dwellings is old, being built during the period 1946-1980. The demand for housing was also driven by the population's access to housing lending through the "First Home" program and by lowering interest rates on loans. After the crisis, the rate of charge on loans to households for house purchases was on a continuous downward slope until the end of 2017, when interest rates began to rise from one month to another.

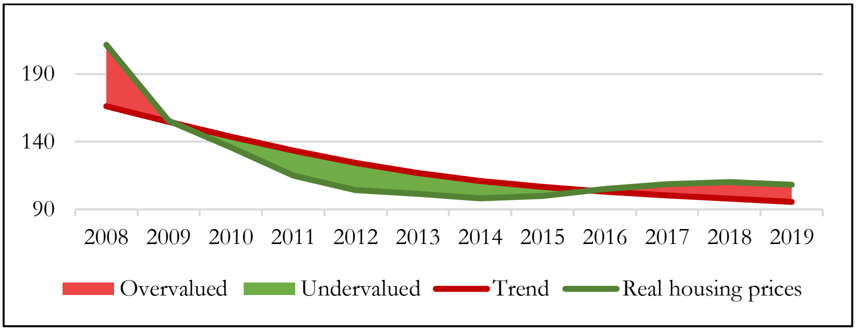

Figure 4. House price deviation from the HP filter
Source: author's calculation based on Eurostat data

The calculated HP filter reflects the same trends as price-to-income and price-to-rent ratios of pre-financial crisis price overvaluation by around 40% and of price undervaluation in post-financial crisis, on average by 14%, followed since 2015 by a stressed sharp rise in price of up to 20%, compared with its stochastic trend and cyclic component (Figure 4).

The emergence of the housing bubble in the early 2000s led to further house price inflation and a higher sensitivity of real estate markets to macroeconomic conditions. This implies that housing markets are set to be substantially impacted by the economic downturn due to Covid-19 (Allen-Coghlan & McQuinn, 2020).

5.3. Behavior of the Romanian housing market during the Covid-19 pandemic

The effects of the Covid-19 pandemic on the demand and supply of the real estate market were observed from the very beginning of March when Romanian authorities imposed the first restrictions to limit the spread of the new coronavirus. In the first weeks of the emergency state, the demand for the housing purchase and the number of homes listed for sale fell sharply, as, between March 9-29, the demand decreased by 70% and the number of apartments and houses put up for sale by 60%, while the housing prices remained unchanged, compared to the beginning of the month, in six major cities (Analizeimobiliare.ro, 2020). This dramatic decline in supply and demand in the housing market is mainly explained by the government's shutdown orders that restricted the operation of businesses and limited interactions among people. Against the background of the uncertainty generated by the coronavirus crisis, probably more buyers postponed the purchase of real estate until the economic outlook becomes clearer. Consequently, in April 2020, real estate transactions fell by 44% compared to March and by 33% compared to the same period of previous year, according to ANCPI (2020).

Given the particular nature of the restrictions imposed by authorities, the impact on the domestic labor market has been particularly severe, affecting the purchasing power of households. Unemployment, which in late February 2020 had been at 4.3%, in June had reached 5.3%, with many businesses in the retail, accommodation and food service activities, manufacturing and construction sectors being forced to suspend or terminate the employment contracts of the more than one million employees. According to estimations of Almeida et al. (2020), throughout 2020, on average, households' disposable income in the EU would fall by -5.9% due to the Covid-19 crisis without discretionary policy measures, and by -3.6% with policy intervention, pointing that the impact is likely to be highly regressive, with the poorest households' being the most severely hit. Inevitably, this will have a significant impact on individual's abilities to pay rent, mortgages and various household expenditures (Nicola et al., 2020), given that in 2019, 8.6% of the Romanian population lived in households that spent 40% or more of their disposable income on housing, but the proportion was highest for tenants with market price rents (39.8%).

Because of social distancing precautions and uncertainty, both housing demand and supply, represented by builders and developers, had to reconsider their plans. The construction industry was slightly affected by the pandemic during the state of emergency, according to NIS data. About 15% of all employees laid off due to the pandemic were employed in the construction industry. Starting with February 2020, the volume of residential buildings decreased slightly, on average, by 5% monthly, until June, but compared to the corresponding periods of last year, the volume of construction works of residential buildings was net superior. As a result, in the first half of 2020, 29,765 dwellings were brought into use, growing by 2,561 units compared to the first half of 2019, increasing also the share of the number of housing built from private funds (NIS, 2020).

With the gradual resumption of activities, through the successive relaxation of restrictions imposed on the population for preventive purposes, the housing market reacted positively, so that both demand and supply of properties gradually recovered. While the demand and supply of housing reacted immediately to administrative closures, the effects on prices were delayed. The prices remained relatively constant during the state of emergency, but with the gradual relaxation, the listing prices for new and old apartments in the major Romanian cities began to decline slightly from one month to another, on average by 1-2% (Figure 5).

a) old apartments b) new apartments

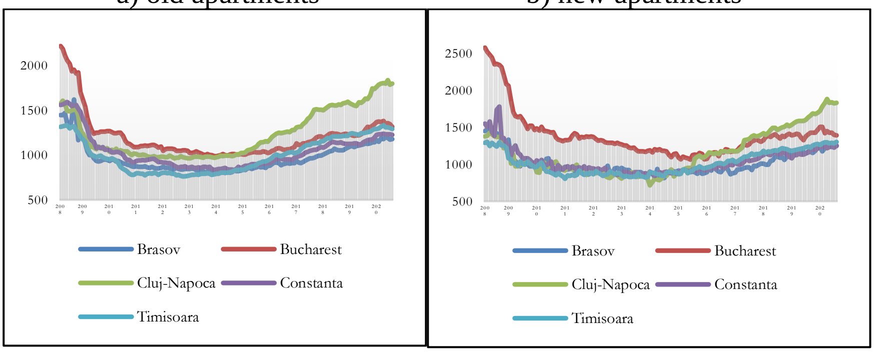

Figure 5. The monthly evolution of prices for new and old apartments in major cities in Romania, 2008 – 2020

Source: author's projection based on Imobiliare.ro data

Such effects on housing markets have occurred in most countries affected by the pandemic crisis, regardless of the intensity of virus spread or timing of the introduction of state level policies to combat the pandemic.

Although the data show that the Covid-19 epidemic did have a mildly negative effect on the housing market in Romania, the long-term impact of the pandemic on the real estate market will depend on the duration of the crisis and the effects of measures taken by authorities, such as job protection and income.

6. Conclusions

This research aimed to study the sustainability of the development of the housing market in Romania before and during the Covid-19 pandemic, taking into account the particularities of the behavior of housing demand and supply.

The post-2000 economic growth has stimulated the developing of the housing market in Romania. The economic and financial development, along with the excessive growth of lending and high inflows of capitals have contributed to the formation of a significant real estate bubble, characterized by speculative investments and unsustainable housing price increases. Following the crisis, house prices suffered a strong negative correction, which fell by 70% between 2008 and 2014 (in real terms). The market has recovered slightly since 2015, and beginning with 2016, under the demand pressure, it entered a new phase of expansion.

The effects of the Covid-19 pandemic on the housing demand and supply were observed from the very first weeks of the state of emergency when the population's interest in housing purchase and the number of homes listed for sale fell sharply. Social distancing precautions have reduced house views, while the economic uncertainty determined more buyers to postpone the purchase of a real estate, which led to a considerable decrease in the number of real estate transactions. While the demand and supply of housing reacted immediately to administrative closures, the effects on prices were delayed. The prices remained relatively constant during the state of emergency, but after the gradual relaxation, they began to decline slightly.

Although the data shows that the Covid-19 outbreak did have a mildly negative effect on the housing market in Romania, mainly at the beginning of the pandemic, the long-term impact will depend on the duration of the crisis and the effects of measures taken by authorities. For this reason, the real estate market must be closely monitored to identify on time the possible negative effects of the pandemic. Thus, this research topic remains open for further analysis to document the housing policy.

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