Czech University of Life Sciences Prague

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Bachelor Thesis

Analysis of Real Estate Market in Spain during COVID-19 Crisis

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Declaration

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Analysis of Real Estate Market in Spain during COVID-19 Crisis

Abstract

Due to the COVID-19 breakdown, there are lot of modifications in the modern world. Pandemic influence on the real estate market and there are some changes in prices and willingness of renters. This thesis will analyse the real estate market in Spain. The current information will be provided about prices, different types of properties and the role of foreign investors in this market. The real impact of the Covid-19 epidemic will be investigated on the Spanish property market and how property owners have managed to adapt to the current realities. Their expectations in the near future and what measures they have taken to overcome the economic crisis. This survey is aimed to establish the main trends and tendencies in the property market.

Keywords: real estate, Spain market, COVID-19, crisis, expectations, preferences, degree of influence, rent, investment.

Analýza trhu s nemovitostmi ve Španělsku během krize COVID-19.

Abstrakt

Po vypuknutí COVID-19 dochází v dnešním světě k mnoha změnám. Pandemie ovlivnila trh s nemovitostmi a došlo k určitým změnám v cenách a ochotě nájemců. Tato práce se zabývá analýzou trhu s nemovitostmi ve Španělsku. Budou prezentovány aktuální informace o cenách, různých typech nemovitostí a roli zahraničních investorů na tomto trhu. Bude zkoumán skutečný dopad epidemie Covid-19 na španělský trh s nemovitostmi a to, jak se majitelé nemovitostí dokázali přizpůsobit současné realitě. Jejich očekávání pro nejbližší budoucnost a opatření, která přijali k překonání hospodářské krize. Cílem této studie je identifikovat hlavní trendy a zákonitosti na trhu s nemovitostmi.

Klíčová slova: nemovitost, španělský trh, COVID-19, krize, očekávání, preference, míra ovlivnění, pronájem, investice.

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1 Introduction

Real estate market is an important factor to observe, because this knowledge give opportunity to dispose of property. A private person or state could invest in new houses, commercial buildings, roadways, bridges, and any construction activity. It shows a growth in the economy and increases the efficiency of the economic output. The ongoing integration of the European Union, notably the free movement of persons and capital as well as the single European currency, has made its contribution to the growing trend for foreign nationals to acquire real estate abroad, above all in southern Europe. European countries such as France, Spain, Italy, and Portugal are among those most favoured by foreign buyers who seek a mild climate, a more relaxed lifestyle, and entertaining surroundings.

However, real estate market could be risky investment as sufficiency depends on some external factors, current economic situation and as consequence - people's ability to buy properties. Great Recession in Spain is the outcome of housing bubble. The economic crisis in Spain caused a drop in the cost of apartments and cottages – on average by 20-30%, compared 2008 (when house prices have been growing for 10 years) with 2013. (Charecky, 2021) That is why it is essential to understand current situation and prospects of real estate in a specific country and region. When it is time to invest and when it is time to sell properties as soon as possible.

The current situation in 2021 is difficult because of the global pandemic COVID-19. In December 2019 was dedicated the first cases of coronavirus. This pandemic influence on all aspects of life – the real estate is one of them. I want to show changes in Spanish property market and highlight the main vectors of development of the real estate market in the future. In my practical part, I will analyse result of my survey (analysis of respondent's answers).

2 Objectives and Methodology

2.1 **Objectives**

The main objectives of the thesis are divided into several parts. The first one is theoretical, which consist of scientific research of different type of real estate. This part shows the current situation in Spain with real estate market since the appearance of the COVID-19. It is reflected changes in prices on the commercial real estate market and housing. The thesis shows the impact of foreigners on real estate. It also helps to understand actual problems of tenants.

The second part is the practical one. The main goal is to evaluate the quantitative and qualitative answers of the respondents, who has real estate in Spain. Finally, it will be identified the main difficulties in purchasing real estate in Spain 2021. The respondents reflect their current situation with real estate and share with their expectations about future

2.2 Methodology

The thesis has two parts: theoretical and practical. The theoretical part is based on an analysis of literary research, data collected from scientific sources such as books, journals, analytical studies, etc. This part outlines the basic theoretical knowledge of the real estate market, the types of real estate and in particular the knowledge of the Spanish real estate market. Moreover, the theoretical part outlines the main challenges faced by the Spanish real estate market during the Covid-19 epidemic.

The practical part includes research based on a survey and qualitative research. A questionnaire consists of 16 questions. It contains questions with grading scales to get ahead of the impact of a particular phenomenon, general questions and questions with pre-presented answer options. The distribution of the questionnaire took place mainly through social networks and instant messengers (Instagram, Facebook, Watts App and others). All questions are conditionally divided into three blocks: personal questions, questions about changes in the Spanish real estate market and questions about the prospects. The survey itself involved 80 Spanish residents who own one or more types of real estate. This part explores the main real estate trends in relation to COVID-19, the difficulties faced by property owners, their expectations and preferences. The survey also analyses how successfully property owners have been able to adapt to current

real estate market conditions. At the same time, quantitative research involves descriptive statistical analysis. The work will be done by calculating mode, median, mean, standard deviation. In the end, this research will show the current situation in the real estate market in Spain.

Formulas which will be used:

$$\sigma = \sqrt{\frac{\sum (x_i - \mu)^2}{n}} \tag{1}$$

Formula № 1 Standard Deviation

$$\bar{x} = \frac{\sum x}{n} \tag{2}$$

Formula № 2 Mean

$$M_0 = l + \left(\frac{f_1 - f_0}{2f_1 - f_0 - f_2}\right)h$$
(3)

Formula № 3 Median

3 Literature Review

3.1 What is real estate market

Real estate market analysis is the result of processes aimed at studying and documenting many factors that determine the demand for a certain type of real estate, the supply of competing real estate and the geographical boundaries of the trading zone. The supply and demand analysis for a geographical location are performed within time, which is relevant to the real estate asset and is relevant to risk management and decision-making regarding real estate. (Thrall, 2002)

Obviously, the real estate market has its own risks. In this case, "risk" is a deviation of the study, and the result can be presented in the form of profitability for a certain period. Economists are investigating the problems associated with the emergence of risk in the real estate industry. However, many studies have found that this market is predictable. After a growth, prices fall. Overall - real estate is a predictable asset class, as opposed to investing in stocks or bonds for example. (Wheaton, Torto, CRE and Sivitanides, 2001)

Research papers have explored the results of different perceptions of traders' expectations for real estate development and the repetitive behaviour of residential tariffs and rents for non-residential real estate. These models track the impact of all kinds of price expectations in the real estate market on the behaviour of suppliers and customers. (Quigley, 2002)

3.1.1 **Types of real estate**

People recognized four types of real estate. There are residential real estate, commercial real estate, industrial real estate and pieces of land.

Residential real estate could be divided into two types: the first one is new constructions and the second is resale homes. People can live like one family for long-term; vacation homes; share property between two neighbors.

Commercial real estate means that owner want to have profit from these buildings. It can be hotels, cinemas, malls, etc. Owners have several options here: rent out their properties or doing business.

Industrial real estate is about manufacturing buildings. They often used for storage and production. The location of this type of property is far from center; the construction varies and depends on type of the manufacture.

Pieces of land include fields for farmers or ranch. This type also refers to agricultural sphere and it is popular in places with good climate. (Rohde, 2021)

3.2 Economic situation in Spain during COVID-19.

COVID-19 has boosted housing demand in less densely populated areas. It happens due to two factors: people cannot find suitable housing in the city centre (as it is not possible or hardly to build new apartments or houses), and housing prices are rising; at the same time, during the pandemic, people did not have to go to work or study, so all aspects were carried out online whenever possible. Many firms have decided to continue working remotely; therefore, people do not tend to settle in the centre or large cities. According to statistics, 80% of provincial capitals experienced a drop in sales in 2020. (Alves and San Juan, 2021)

3.2.1 The impact of the COVID-19 on the commercial real estate market

Retail real estate sales were especially low in areas where the highest dynamic of retail trade is usually observed. In a similar way, sales in prestigious regions, which are mostly in the focus of large settlements, as a whole decreased by 47.9% over the year, having especially significantly decreased in the second quarter (68.5%). (Fernández Cerezo, Lamas, Roibás and Vegas, 2021)

The worst situation in the commercial market with areas in the shopping centers. The decline of rent in 2020 was nearly 10%. The rent of the office was diminishing also. It was affected by new rules, which were created because of COVID-19. (Fernández Cerezo, Lamas, Roibás and Vegas, 2021) People had to work remotely, the quarantine enforced people stay home. From 2020, people have been buying more things online – clothes, cosmetics, furniture. Even grocery stores had to create online platforms. It leads to new logistic decisions, where commercial buildings became more in demand in the provinces.

According to the statistic in the figure 1, the growth for office leasing is increasing in 2021. It is about 12.5% in Europe that shows the huge gap between 2020 (where the percentage was

negative -40%). The growth in 2021 is even more than in other years, represented in the figure (2016 - 1%, 2017 - 10%, 2018 - 4%, 2019 - 1%)

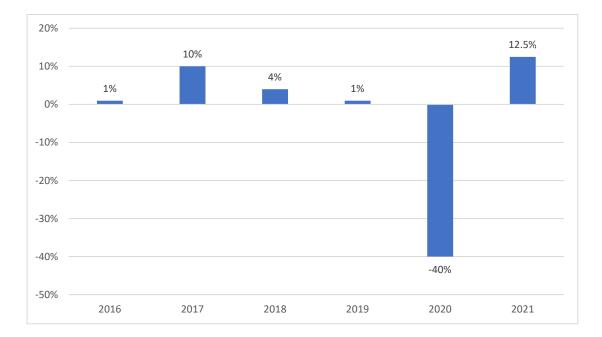


Figure 1 Office leasing, Europe

Source: "Impact of the COVID-19 pandemic on the Spanish commercial real estate market"

3.2.2 The impact of the COVID-19 on the housing market

The pandemic has affected investment in the housing sector. This impact saw a 17% drop in demand in 2020. At the same time, the building permit fell proportionally. Investments are presumed to be affected by economic uncertainty as the pandemic delayed the completion of new construction at the end of 2020. (Alves and San Juan, 2021)

The number of people employed in the construction sector in 2008 was more than double that of 2020. However, the percentage of real estate in GDP in Spain is above the European average. However, investment incentives have been sparse in Spanish fiscal policy. Incentives lean more towards saving the fixed capital of the housing stock. With the right investment incentive, this should lead to an increase in the housing stock. However, this can lead to a decrease in the real price, which is dangerous for the Spanish economy. An example of an investment incentive:

Personal income tax deduction when buying a new home, or a temporary VAT reduction. The rise in prices slowed down from 2019 to 2020, in some places there was even a decline. Remote work has raised the demand for the importance of having a large, bright home. These houses are not concentrated in the capitals, but in the provinces. How long this trend will last is still unknown, but falling property prices in the centre of Spain distinguish the dynamo from other countries. (María Raya, 2020)

3.3 Impact of foreign real estate investment on house prices

It was analysed, that numbers of foreigners, which live permanently in Spain, has been increasing from 2008 until 2019 years. They began to live in this country during the global crisis. Mostly, foreigners prefer to buy real estate near Mediterranean coast, however others parts of Spain are desirable also. Location depends on purpose of this real estate. The difference between types of real estate are mentioned above. (Álvarez, Blanco and García-Posada, 2020)

Wealthy citizens of the European Union acquire real estate. The main buyers of 2019 are mainly Swedes, Belgians and French. Until 2007, the largest buyers were from the UK. However, during the crisis, their share has noticeably decreased. The housing stock was acquired by foreigners who were non-residents of Spain, more often in the following places in Spain:

- Alicante 3%
- Malaga 2.1%
- Balearic Islands 1.3%

As for about resident foreigners, they buy more likely real estate in the province of Spain. It happens, because these people want to buy flats and houses for living there, when non-residents invest in buildings. (Álvarez, Blanco and García-Posada, 2020)

In 2018, foreign homebuyers bought over 65,500 homes. It is important to note, that byers which are including in this statistic, are not only from the Middle East, but also from Asia and Russia. Any non-EU federal bringing more than €500,000 to venture is automatically acknowledged a Spanish residency permit. (DELMENDO, 2021)

3.4 Flats and Houses prices for sale in Spain

There are two environmental characteristics, which affect prices. The first one is the **internal physical characteristic**. It tells us about specific features and characteristics such as size, number of rooms and bathrooms, uniqueness of the properties, etc. Overall, it represent indestructible nature of real estate. The second characteristic is the **external environment**, which is understood as the quality of the neighborhood and of the location. (Din, Hoesli and Bender, 2001)

According to Geographic Information System (GIS), the most important factor, which influence on real estate is **location**. This system provides analysis, which manages making better decisions. GIS can be applied equally as a significant mechanism in many areas of real estate. In the discussion of GIS also real estate there is a large number of these, however, defined from more uniform issues for the purpose of which this geospatial technique is applied - this study of property, the study of bargaining, and visual research. (Magnotta, 2021)

As it was previously mentioned, the prices for sale vary in different areas. In the table 1 is given the information about average prices between properties in a specific area of Spain for August 2021 (measured by the "Spainhouses.net"). Melilla is the most expensive one. The area with the average price there is $4,400,000 \in$. The average price by square meter for Melilla is $4,000 \in$. On the other hand, the cheapest area is Estremadura – $120,337 \in$. The average price by square meter for Square price by square price by square meter for Square price by square meter for Square price by square meter for Square price by square price by square price by square price pric

ther areas	
	Average prices
stremadura	120,337€
ioja	134,991€
ragon	144,352€
astile and Leon	154,418€
sturias	154,954€
astile-La Mancha	160,086€
Iurcia	202,482€
avarre	216,783€
antabria	222,698€
alicia	249,755€
asque Country	293,090€
alencia	306,957€
anary Islands	307,304€
euta	320,000€
atalonia	634,698€
ladrid	664,464€
ndalusia	675,761€
alearic Islands	1,348,613€
lelilla	4,400,000€

Table 1 Average prices between propertiesSource: spainhouses.net

According to the **Market view**, the situation on August 2021 is following average price is $446,306 \in$ (is calculated based on all properties in Spain). The price per meter is calculated based totally on all homes whose areas are installed in Spain (the "Spainhouses.net" take into account here 89,173 properties). This price is equal to $1,617 \in$. The **Market trend** shows how prices change during time. The vertical axe represents the average price in euro, the horizontal axe represents years from 2011 until 2021. The trend was unstable during 2013-15 years. The maximum average price was fixed on April 2021.

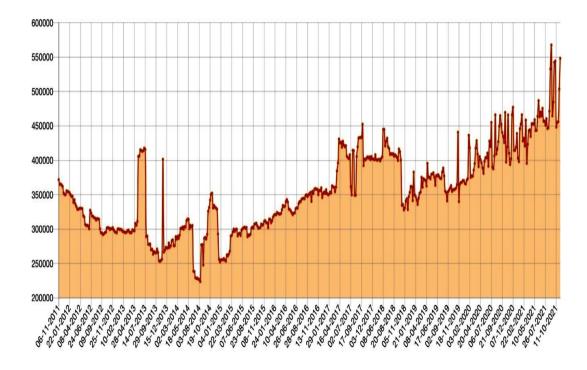


Figure 2 Market view Source: spainhouses.net

3.5 Rental tenants during the coronavirus pandemic

The current situation affects people, who rent their accommodation as well. There are many external factors, which influence on people's ability to pay rent. As it was mentioned above, people begin to rent houses and flats far from centers. Availability to go to work, school or supermarket is not essential during COVID-19; because of remote services, people have other priorities. However, demand on properties in less populated areas has been growing and the rent in centers still high. People, who struggling with difficulties because of corona, need to receive help from Spain government.

The following measures have been taken by the government to support tenants. Evictions in Spain have been suspended since April 1, 2020. This decision was valid for 6 months. The contracts were automatically renewed; the rent could not be higher than the previously assigned one. However, such measures could lead to insufficient of property owners. As they could receive the same profit from rent, the state of Spain opened interest-free microloans for a certain

group of the population, who suffered from COVID-19. In addition, landlords were divided into two groups: small and large owners. Small owners receive all payments for their rent. As for large owners, they can choose between the following options: reduce the tenant's rent by up to 50% or restructure within three years. If the tenant's debt is reduced by 50%, this applies to the period of the warning and the next monthly payments. (What Spain is doing to help rental tenants during the coronavirus pandemic, 2021)

The figure 3 shows the most expensive places to rent a room in Spain. The leader in this position is Barcelona. The average rent price per months for room is €453.91.



Figure 3 Where are the most expensive places to rent a room in Spain? Source: spainhouses.net



The information in the figure 4 is given about the cheapest places to rent a room in Spain. The smallest rent is in Ciudad Real €157,24.

Figure 4 Cheapest places to rent a room in Spain Source: spainhouses.net

4 Practical Part

4.1 **Research description**

This research is based on the analysis of the survey results. The survey consists of 16 questions. Projective techniques are used to identify the expectations of respondents regarding the real estate market in Spain. In general, the survey can be conditionally divided into three blocks: 1) personal questions (about the respondent, type of property, work during quarantine, etc.); 2) questions about changes in the real estate market (falling real estate prices, rising or falling incomes, questions about difficulties, etc.); 3) questions about the prospects (how long does it take to recover, is the situation favorable for investment in real estate, etc.). A feature of this survey is the respondent's ability to assess the degree of influence of Covid-19 on a rating scale. The rating scale applies to several questions. This helps to analyze the real situation in the real estate market in Spain more accurately and in detail.

This survey helps not only analyze the current situation in the real estate market in Spain, but also understand the main trends and prospects for the development of the market. The author cannot claim the absolute accuracy of the research results, since sociological research always has an error. Moreover, the author cannot claim that each respondent in the sample answers as honestly and objectively as possible. Nevertheless, the most favorable conditions were created for the survey. The anonymity of the respondents was ensured and they were not put in a strict time frame. Moreover, in the research descriptive statistical analysis is used. In the practical part, the author calculates such statistically important parameters as median, mean, mode and standard deviation.

4.1.1 **Respondent sample**

The choice of respondents was made according to two mandatory criteria: the presence of Spanish citizenship and the presence of one of the types of real estate presented in the theoretical part. There was not established age selection criteria, since this factor does not affect the results of the survey. However, the questionnaire included a question about the age of the respondents solely in order to reveal the average age of the sample.

4.1.2 Survey notes

It should be noted that in this study, a survey is conducted only among Spanish citizens for a number of reasons. Of course, as described in the theoretical part, in Spain there is a percentage of foreigners among property owners. Nevertheless, it was considered quite difficult to include a survey of foreign citizens as part of the diploma work, since a separate specific survey is required to study this area. In this regard, so that the analysis of the survey results does not lose its significance and objectivity, the author considered it appropriate not to include in the sample foreign citizens who own Spanish real estate.

4.2 **Interpreting survey results**

The survey was conducted using Google Forms. Then all the data was uploaded to Excel in order to perform statistical analysis and make diagrams. The survey was disseminated using social networks and instant messengers. The survey was disseminated using Instagram, Facebook, Watts App and others. Friends and acquaintances helped the author especially by sending a survey among their relatives. Thanks to such measures, various age groups took part in the survey. In total, **80 people** responded to the survey. They are all Spanish citizens. The survey was conducted in **August 2021**.

4.2.1 Analysis of respondents' answers:

As it was noted above, the survey was conducted among Spanish citizens who own a certain type of real estate. As we can see in the diagram below (figure 5), approximately the same number of men and women were accepted in the survey: men accounted for 55%, and women accounted for 43.8%.

A unique feature of the sample is that it is **representative among all age groups**: most of the respondents were 18 24 years old, then 25-34 years old, 35-44 years old, 45-54 years old, and finally over 54. This is reflected in the histogram below (figure 6).

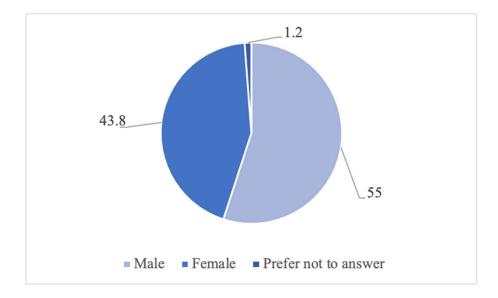


Figure 5 Current gender identity Source: (Authors own work; Google Forms; Excel, 2021)

As it was already indicated, the main criterion for selecting respondents was the property criterion, that is, ownership of a certain type of real estate (residential real estate, commercial real estate, industrial real estate, pieces of land). Based on the results of the survey, the following percentages were received among the types of property owned by the respondents (figure 7).

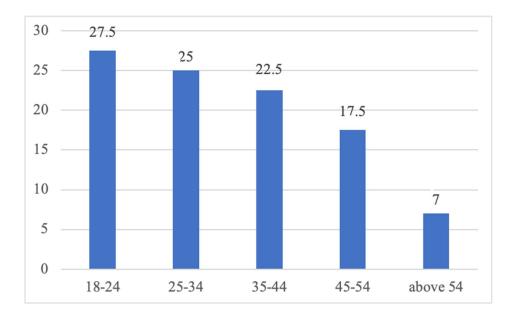


Figure 6 Age group Source: (Authors own work; Google Forms; Excel, 2021)

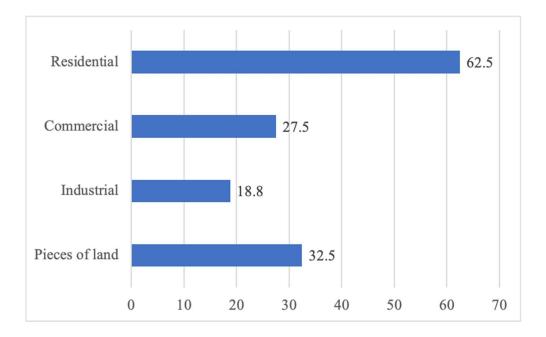


Figure 7 Types of real estate Source: (Authors own work; Google Forms; Excel, 2021)

It is important to note that the sum of all the percentages shown in the diagram is more than 100%. This is due to the fact that some of the respondents own several types of real estate in Spain. Consequently, it was advisable not to limit the respondents to the choice of only one type of real estate. This survey is dominated by the opinion of residential real estate owners. Residential real estate ownership was 62.5%. The next most popular answer is ownership of pieces of land (32.5%). The opinion of the owners of commercial real estate is also presented in the survey (27.5%). The least popular real estate was industrial real estate, but its owners accounted for a significant weight (18.8%). As a rule, respondents chose residential and any other type of real estate.

4.2.2. Changes in the Spanish property market due to the pandemic: personal view and degree of influence

At the beginning of the study, respondents were asked a general question about how they rate the impact of Covid-19 on their property. This question is more abstract and has a psychological character, since it is based on the subjective feelings of the respondents. This question is needed in order to find out the personal attitude of the respondents to the current situation. On a scale with a percentage (figure 8), which is presented below, you can see that the epidemic did not affect only 12.5% of real estate. The remaining **77.5% were affected by Covid-19** to varying degrees. One third of the assessments of influence is made up of the answer "influenced slightly". Nevertheless, more than half of the respondents felt the impact of the epidemic largely: "influenced perceptibly" - 23.8%, " influenced quite strongly " - 23.8%, "influenced extremely seriously" - 7.5%. Thus, Covid-19 affected almost 90% of real estate in Spain and had a significant impact on most of it. **The average score on this question was 2.8%**. It takes an intermediate position between the two answers: "influenced slightly" and "influenced perceptibly". Therefore, it can be concluded that the Covid-19 epidemic has, on average, had a perceptible impact on the properties of the respondents. **Mode in this question equals 2**.

For statistics, the standard deviation was used. The standard deviation is used to estimate the spread of values from their mean. σ is the standard deviation, xi is the value of an individual sample value, μ is the arithmetic mean of the sample, n is the sample size. This formula applies when all sample values are analysed. **The standard deviation is 1.152104053**.

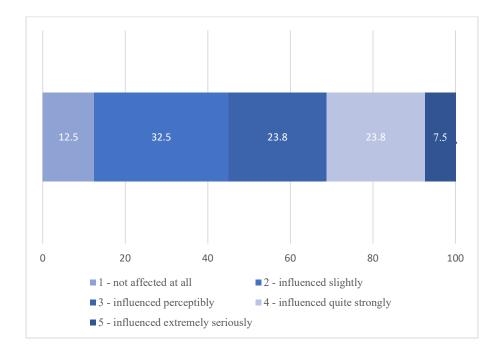


Figure 8 Influence of COVID-19

Source: (Authors own work; Google Forms; Excel, 2021)

Almost all respondents were affected by the Covid-19 epidemic. 69 people noted that their property was affected by the pandemic. This is 86.3% of the respondents. In this matter, there is an amazing trend: **Covid-19 had not only a negative, but also a positive impact**. 53.8% of those surveyed answered that the epidemic had a negative impact on their property. Nevertheless, as many as 26 people, which is more than 1/4 of the respondents, noted the positive and stimulating impact of the pandemic on their real estate. The author supposes that the positive impact of Covid-19 may be due to the fact that the virus made people urgently **look for new ways of development**, new opportunities for existence. Thanks to the forced adjustment, 32.5% of people experienced the stimulating effect of the pandemic on their real estate. The results are shown in the pie chart above (figure 9).

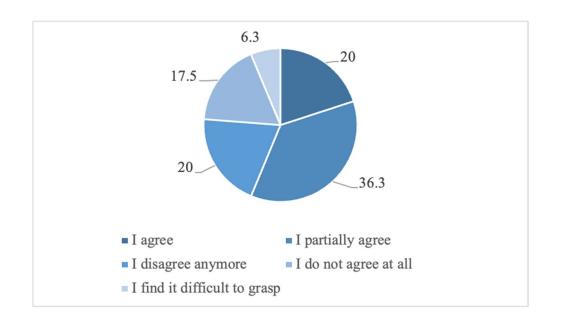


Figure 9 The impact on property Source: (Authors own work; Google Forms; Excel, 2021)

As it was noted in the study, the epidemic has affected almost all property owners. In this regard, there was a need for people to adapt to new realities. Therefore, it was necessary to ask the residents whether they could adapt to the new conditions. It was decided to ask the respondents how true the statement "I was able to adapt to the current trends in the real estate market, which were caused by the pandemic" is for them. Thanks to such a question, it is

possible to draw a conclusion not only about whether the respondent was able to adapt to the new conditions, but also to learn about the degree of this adaptation.

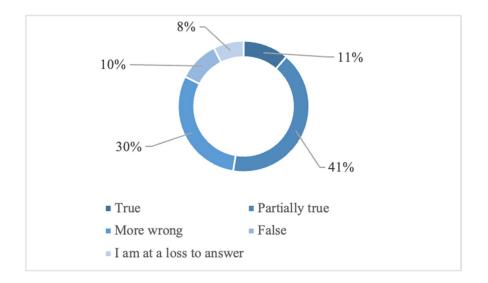


Figure 10 Indication of expression Source: (Authors own work; Google Forms; Excel, 2021)

The ring chart above (figure 10) shows the survey results. **Only 17.5% of respondents either did not adapt at all** to the current conditions, or could not give an answer. The remaining 66 people have adapted to a greater or lesser extent to the realities caused by Covid-19. There is an interesting point in these results. In the last survey, only 32.5% of people noted the fact that the epidemic had a stimulating effect. However, in the question about adaptation, the percentage of people who took actions to adapt is much higher (82.6%). This pattern indicates that significantly more property owners, willingly or not, have developed and adapted their properties to new conditions. This is also a kind **of stimulating effect of the pandemic**, although it is viewed in a negative context by some respondents. Thus, 9 people (11.3%) were able to fully adapt to the new conditions, 33 people (41.3%) were able to adapt for the most part, 24 people (30%) adapted, but not to the best degree.

The pie chart below (figure 11) shows the income of respondents during the pandemic up to the time of the survey. As can be seen, the majority of people experienced a decrease in income (56.3%), just over a fifth of respondents did not notice a change in income (22.5%) and as much

as 11.3% had no income at all. However, there were also those who, despite the difficult epidemiological situation, managed to increase their income (10%).

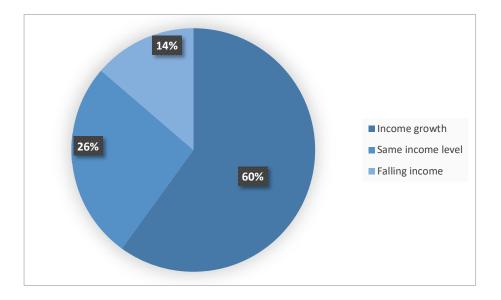


Figure 11 During the COVID-19, property brought... Source: (Authors own work; Google Forms; Excel, 2021)

4.2.3. Respondents' perceptions and expectations of the Spanish property market

After finding out the respondents' views on exactly how Covid-19 affected their properties, I decided that the study needed to be more specific. For this purpose, a list of the **main negative impacts on the real estate market** was provided and respondents were asked to choose the most common threats. Below are two histograms (tables 2-3): the first shows the number of responses and the second shows the percentage of responses. The surprising trend in this question was that the respondents saw decreasing consumer confidence and lack of sufficient information as the main threats. They are two interlinked, as lower trust directly leads to lower consumption, while a lack of sufficient information hinders informed decision-making, which also leads to lower consumption. In my opinion, the popularity of these answers is because both answers are largely **based on consumer psychology**. Property owners can empathize with these threats, putting themselves in the consumer's shoes largely and feeling their experiences. Overall, these two responses were chosen by 39 and 42 respondents (representing 15% and 16% of the total number of responses, of which there are 263 in total). The next two most

popular threats are predominantly related to the economy. These are the likelihood of a global recession (33 responses, 13%) and supply chain problems (29 responses, 11%). These are two objective threats, as the world's unpreparedness for pandemics; lockdowns and so on has inevitably led to a decline in certain economic indicators. The third most common are problems with the financing of the real estate sector on the Spanish market and problems with the declining productivity of human resources. Both positions received 26 responses and 10% each, respectively. Cybersecurity (22 responses, 8%) and the issue of financial difficulties in the form of insufficient liquidity (25 responses, 9%) were the least frequently cited threats to the real estate market by respondents.

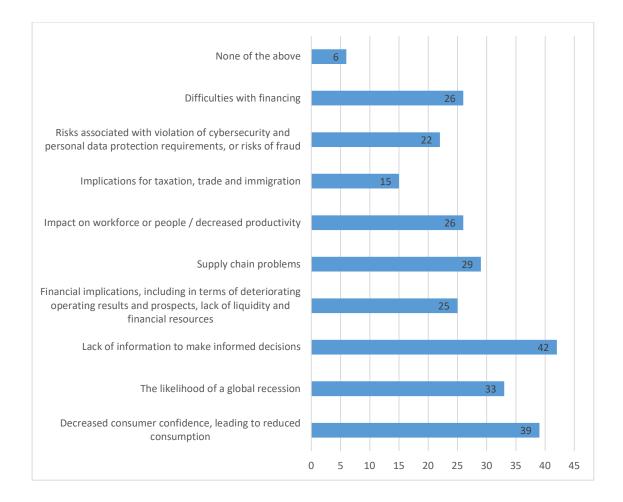


Table 2 Which threats are most likely?Source: (Authors own work; Google Forms; Excel, 2021)

Respondents then highlighted threats in the form of implications for taxation, trade and immigration. Here, 15 responses were received, accounting for 6%. 2% of respondents felt that none of the threats presented were relevant. What is clear from this question is that most of the problems are almost equally relevant to the property market in Spain according to respondents.

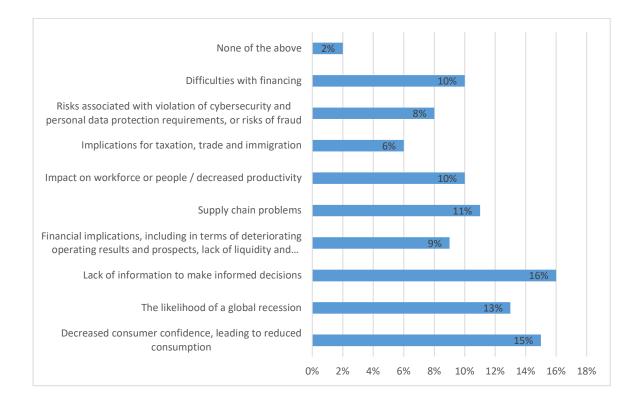


Table 3 Which threats are most likely? (in %)Source: (Authors own work; Google Forms; Excel, 2021)

Despite the fact that respondents see quite a few negative effects of Covid-19 in the Spanish real estate sector, most respondents believe in the best and expect that **in late 2021 and in 2022**, **the profitability of real estate will increase**. 60% of respondents expect income to rise, 26.3% expect income to be at the same level and 13.7% are pessimistic, they expect income to fall even further. The results are shown in the chart below (figure 12).

In order to understand the respondents' view of the property market in the near future, it was decided to ask them if they agreed with the statement: "The current time is favorable for the purchase of any type of real estate". By expressing a degree of agreement or disagreement, respondents revealed their views on whether the property market in Spain is promising and

whether the current conditions are favorable for the purchase of real estate. What is surprising is that only 20% of respondents consider it a good decision to buy a property at the moment. This may seem a slight divergence from the previous question as 60% of respondents expect income growth. However, this may be justified by the fact that most respondents are afraid to take risks and make decisions when there is not enough information. 36.3% of respondents partly agree that it is currently profitable to buy property in Spain.

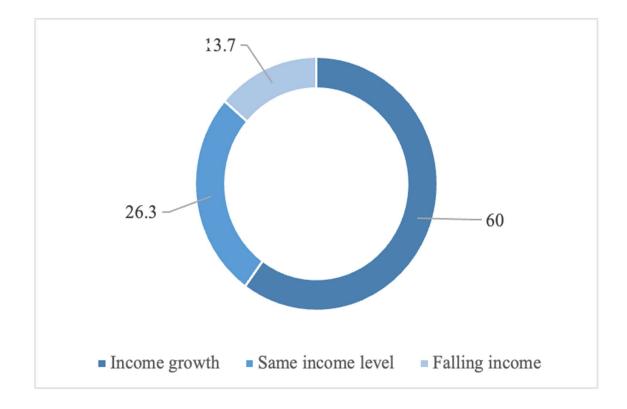


Figure 12 Expectations for the profitability Source: (Authors own work; Google Forms; Excel, 2021)

As the survey shows, these are precisely the people who expect an increase in income. Apparently, they chose this answer because they cannot be sure of stability. The remaining 53.7% of respondents either disagreed more (20%), disagreed completely (17.5%) or could not give an answer (6.2%). The data is shown in the diagram below (figure 13).

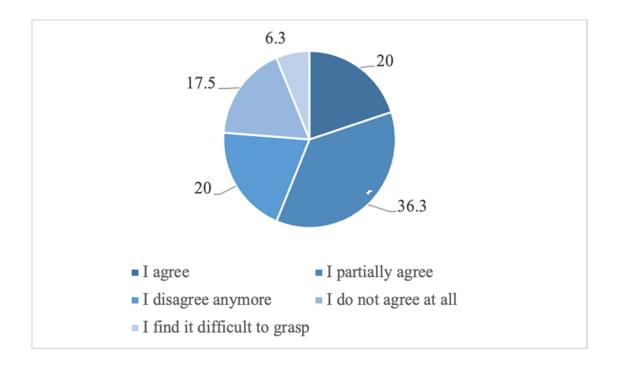


Figure 13 Time for the purchase Source: (Authors own work; Google Forms; Excel, 2021)

The results of the previous question, in which the most popular answer was "partly agree", can also be linked to the fact that respondents consider **some types of property more attractive for investment at the moment and others less**. To the question "What segment of real estate do you consider the most attractive for investment today?" a large proportion of respondents answered "Residential real estate" (46.3%). This may be due to the fact that, in principle, residential real estate is always in demand, even though prices may rise or fall. Commercial real estate is the next most attractive investment. It was chosen by 30% of respondents. It is likely that the commercial real estate field has many development paths and strategies through which one can always adjust to external conditions. Moreover, commercial real estate is often linked to the service market, and in today's world, the service market is in high demand. Less popular are industrial real estate (11.3%) and pieces of land (12.5%). Perhaps these two types of real estate seem to be more ambitious and risky (figure 14).

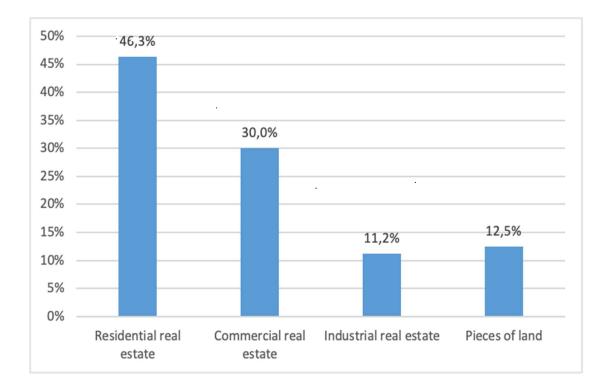


Figure 14 The most attractive real estate for investment today Source: (Authors own work; Google Forms; Excel, 2021)

Since there are different types of property, the following survey was divided for owners of different types of property. First, it was decided to ask owners of commercial real estate, industrial real estate, and pieces of land what measures they are taking against the backdrop of the Covid-19 epidemic. The survey showed that the majority of respondents are taking measures to control and reduce expenses (23%). Perhaps it can be said that this is the most basic and affordable measure to control finances and real estate. The next most popular measures were changes in financial plans and postponing or abandoning investments. These measures are largely related to each other, as investing is part of a financial plan. They each accounted for 18% of the responses. Respondents then chose changes to the M&A strategy (15%) and making adjustments to guidance documents (10%). Perhaps these two measures were not as popular as they relate less to everyday life and more to professional activities. 13% of those surveyed did not consider any measures in relation to Covid-19 and another 3% did not choose any of the listed measures. The results are shown in the diagram below (figure 15).

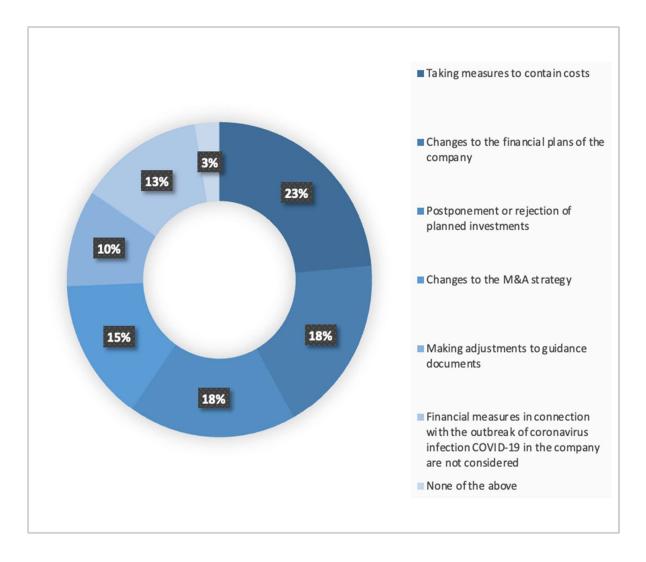


Figure 15 Financial measures

Source: (Authors own work; Google Forms; Excel, 2021)

As for residential real estate, it is interesting to know the respondents' opinion on the potential size of the average market decline in the selling price of housing in the primary market. **According to respondents' forecasts**, the average size of decrease in selling price of housing will not change (20% of answers), will be over 10% (25% of answers), will be 5-10% (40% of answers), will be up to 5% (15% of answers). The results are presented on the scale below (figure 16).

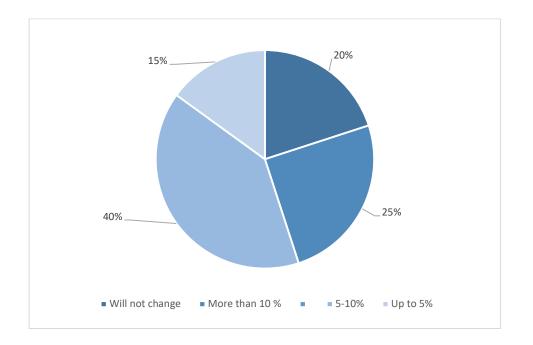


Figure 16 The potential size of the average market decline in the selling price of housing in the primary market

Source: (Authors own work; Google Forms; Excel, 2021)

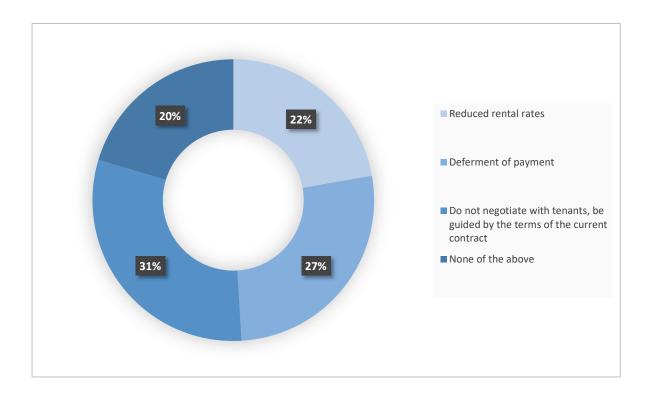
The epidemiological situation affecting the Spanish economy has certainly affected the property rental sector as well. As a consequence, it is curious to know whether the owners of commercial real estate, industrial real estate and pieces of land have taken any action in this regard. **The question of economic benefit and morality come together here**. Almost a third of the respondents (31%) have not made any changes to their leasehold, citing the terms of the contract. 22% of the landlords have reduced the price of the rent, and 27% have allowed deferred payment. Another 20% did not opt for any of the above. The results are reflected in the ring chart below (figure 17).

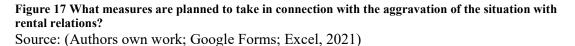
4.2.4. Degree of negative impact of Covid-19 and willingness of respondents to go further

In order to assess the extent of the damage caused by the epidemic to the Spanish property market, respondents were asked to imagine **two hypothetical situations**:

1) If the COVID-19 outbreak ended today, how long will it take to get your company/firm back to normal operation?

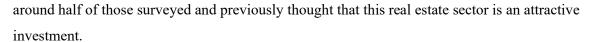
2) If the COVID-19 outbreak ended today, would you buy a residential real estate in near future?





Through such questions, it is possible to assess how much the epidemic has affected property owners and how willing they are to make economically risky decisions. The survey showed that more than half of the respondents would need between 3 and 12 months to recover (3-6 months - 24%; 6-12 months - 30%). Exactly one quarter of those surveyed would need more than one year, which is significant. In addition, exactly one-fourth would need less than one month to get things back to their original state. The lowest number of responses was in the 1-3 month option - 7%. The data are shown in figure 21. In general, these data show that the majority of respondents have been able to adapt to the current realities and are prepared to work actively to get their property in order in the near future (figure 18).

As for the purchase of residential real estate in the near future, if Covid-19 comes to an end, the majority of respondents would take the risk of buying a new property (55%). Overall,



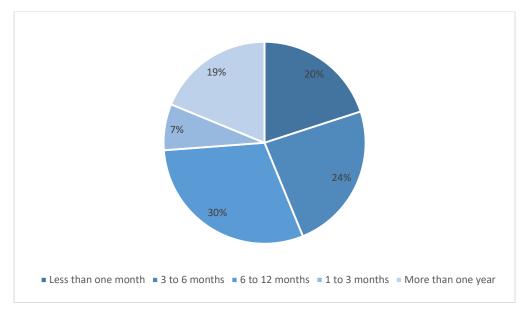
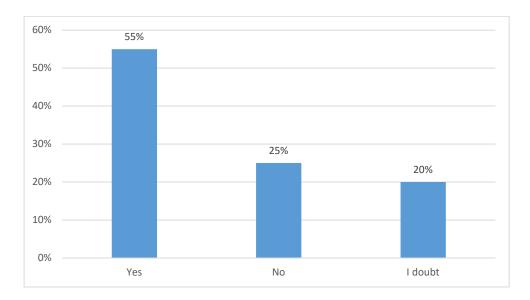
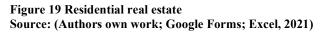


Figure 18 Normal operation Source: (Authors own work; Google Forms; Excel, 2021

However, 25% would not buy residential real estate, and another 20% cannot make a decision in a hypothetical situation. The data is shown in Figure 20.





5 Conclusion

The main objective of the thesis was to evaluate the real estate market since the appearance of the COVID-19. The comprehensive literature review shows current prices on real estate in different parts of Spain. The author wrote about situation with rental tenants during pandemic, the role of foreigners in investment in the real estate market and economic situation in Spain in the current situation. I dedicated, that demand on the real estate in small towns has been growing up. Pandemic has changed people's habits and needs. It was reflected in the real estate market also.

The following main conclusions can be drawn from the survey results. Firstly, Covid-19 has affected most of Spanish property owners. Referring to the author's calculations, the average estimate in the question of the degree of influence of Covid-19 on real estate was 2.8%. It takes an intermediate position between the two answers: "influenced slightly" and "influenced perceptibly". Therefore, it can be concluded that the Covid-19 epidemic has, on average, had a perceptible impact on the properties of the respondents. Mode in this question equals 2. The standard deviation is 1.152104053.

This impact has been of a different nature, in particular cases it has even been stimulating. Secondly, it cannot be said that the epidemic has created a completely stagnant situation in the property market. A large proportion of respondents have more or less managed to adapt to the new realities. Thirdly, we can definitely say that this economic situation has had a psychological impact on property owners in particular. A significant proportion of respondents are afraid of change and risks. Nevertheless, the majority expects the real estate market will be developing and ready to invest in different sectors, especially in residential real estate. Every property owner takes completely different measures to cope with economic problems: some based more on perceptions than others on real economic indicators.

Overall, the Spanish property market is recovering, adapting and evolving with time. It cannot be said that the epidemic is completely disruptive. Real estate still remains as one of the top attractive market for investment. It is stable and safe, even during global changes.

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7 Appendix

Questionnaire on the topic:

Analysis of the real estate market in Spain during COVID-19 crisis

- 1. What is your current gender identity?
- Male
- Female
- Prefer not to answer
- 2. What is your age group?
- Under 18
- 18-24
- 25-34
- 35-44
- 45-54
- Above 54
- 3. What type of real estate do you own?
- Residential real estate (new constructions, resale homes)
- Commercial real estate (hotels, cinemas, malls, etc.)
- Industrial real estate (manufacturing buildings)
- Pieces of land (fields for farmers, ranch)
- 4. Rate on a 5-point scale how much COVID-19 influenced your property
- 1 not affected at all
- 2 influenced slightly
- 3 influenced perceptibly
- 4 influenced quite strongly
- 5 influenced extremely seriously
- 5. The impact on my property I can describe as...
- Positive and stimulating

- Negative and inhibitory
- Neutral

6. Indicate how true this expression is for you: "I was able to adapt to the current trends in the real estate market, which were caused by the pandemic."

- True
- Partially true
- More wrong
- False
- I am at a loss to answer
- 7. During the COVID-19 period, your property brought you:
- More income
- Same income as before
- Less income
- There was no income at all

8. In your opinion, which of the listed threats related to COVID-19 are most likely for property owners? (Select one or more options)

- Decreased consumer confidence, leading to reduced consumption
- The likelihood of a global recession
- Lack of information to make informed decisions
- Financial implications, including in terms of deteriorating operating results and prospects, lack of liquidity and financial resources
- Supply chain problems
- Impact on workforce or people / decreased productivity
- Implications for taxation, trade and immigration
- Risks associated with violation of cybersecurity and personal data protection requirements, or risks of fraud
- Difficulties with financing
- None of the above

9. What are your expectations for the profitability of real estate in the second half of 2021 and 2022?

- Income growth
- Same income level
- Falling income

10. Do you agree with the statement: "The current time is favourable for the purchase of any type of real estate"?

- I agree
- I partially agree
- I disagree anymore
- I do not agree at all
- I find it difficult to grasp

11. What segment of real estate do you consider the most attractive for investment today?

- Residential real estate
- Commercial real estate
- Industrial real estate
- Pieces of land

12. Which of the following financial measures are you considering in response to the COVID-19 outbreak? (For owners of commercial real estate, industrial real estate, pieces of land)

- Taking measures to contain costs
- Changes to the financial plans of the company
- · Postponement or rejection of planned investments
- Changes to the M&A strategy
- Making adjustments to guidance documents
- Financial measures in connection with the outbreak of coronavirus infection COVID-19 in the company are not considered
- None of the above

13. The potential size of the average market decline in the selling price of housing in the primary market will be, according to your estimates

- Will not change
- More than 10%
- 5-10%

• Up to 5%

14. What measures do you plan to take in connection with the aggravation of the situation with rental relations? (For owners of commercial real estate, industrial real estate, pieces of land)

- Reduced rental rates
- Deferment of payment
- Do not negotiate with tenants; be guided by the terms of the current contract
- None of the above

15. If the COVID-19 outbreak ended today, how long will it take to get your company / firm back to normal operation? (For owners of commercial real estate, industrial real estate, pieces of land)

- Less than one month
- 3 to 6 months
- 6 to 12 months
- 1 to 3 months
- More than one year

16. If the COVID-19 outbreak ended today, would you buy a residential real estate in the near future?

- Yes
- No
- I doubt