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EVALUATION OF THE RESIDENTIAL REAL ESTATE MARKET IN THE OLSZTYN COMMUNITY

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Summary. The study presents an analysis of the housing preferences of the inhabitants of Olsztyn to determine relevant features that were related to residential real estate and the structure of the demand on the market. The methods and principles of were also described, using housing subsidies and the processes of loan granting. Changes in the demographic structure, average monthly gross salary, mortgage interest rates and housing prices were also investigated. Data showing the structure and dynamics of housing resources are also presented. The research results were based on statistical data from the Central Statistical Office in Olsztyn, data from bank reports and statements, as well as own survey designed to investigate the housing preferences of the population of Olsztyn. This research also analyzed the influence of factors on the demand for residential real estate in Olsztyn, and there was a positive assessment for the development of the real estate market. An analysis of the preference surveys revealed specific market behavior of buyers that supported the processes of market expansion. The demand for new flats resulted in an increase in the development investments of housing policy in the Olsztyn community.

Introduction: Nowadays, it is not difficult to notice the fast growth rate of the real estate market in the Polish economy. This market is constantly enlarged by the development of land with new residential buildings, public buildings, such as offices or schools, and commercial, industrial or recreational premises. Over the last few years, the real estate rental system and its sale have developed quite strongly. Such development has been caused by the main need of the society for private property and income. Another task of

real estate is to meet the strong need for security and stability, which increase the purchasing interest in the market.

Aim: The main purpose of this research was to assess the real estate market in Olsztyn for a 4-year period (2016-2019), taking into account the impact of factors on the dynamics of growth in this sector of the economy. This study also investigated the preferences of the residents of Olsztyn in the individual features of the housing premises.

Material and methods: The research was based on the statistical data obtained from the Central Statistical Office in Olsztyn and other available sources. These data included the number of real estates, the volume of their sale and factors influencing the development of the real estate market. A survey examining the preferences of the residents regarding the characteristics of the property and the impact of individual features on the value of the property was also included. The data of the research included a 4-year period, that is from 2016 to 2019. The analyzed scope of the research was local in nature and included the area of the city of Olsztyn, the capital of the Warmińsko-Mazurskie Voivodeship. In April 2020, the aim of a survey conducted among the residents of the city of Olsztyn was to examine the preferences of potential buyers of residential real estate. The survey was divided into three parts. The first part (questions 1-4) described the profile of the respondent, that is, where he or she currently lives, whether he owns the property, whether he intends to invest in the real estate market, and what, in his opinion, is the reason for buying a flat. The second part (questions 4-20) was focused on examining the opinions of the respondents in terms of their willingness to use government programs to facilitate the purchase of a flat, the best methods of financing real estate, the most important factors influencing the choice of real estate, price importance, location, technical condition, and architecture of the property. The survey results were presented in descriptive, tabular and graphical forms.

Research results: Olsztyn is the capital of the Warmian-Masurian Voivodeship. It is located in the central part of the Olsztyn poviat. It is a city operating with poviat rights. The city is situated on the Łyna River and was founded in 1334. According to the data of the Statistical Office, Olsztyn has an area about 88 km². Approximately 172362 people live in the voivodeship capital. There are 15 lakes in Olsztyn, and forests cover about 21 % of the city. Also, Olsztyn is a major educational and cultural center, and it attracts many people. The city of Olsztyn can be divided into 23 housing estates.

One of the factors affecting the demand for housing is the price of a given property. If the price for a given good decreases the demand will be higher, however, if the price increases the demand will decrease or the demand for flats with small areas will increase. In the case of the real estate

market, if the demand outweighs the supply, developers will set the prices, usually raising them because there are less houses available on the market than there are people willing to buy them. On the other hand, when the supply outweighs the demand, that is when there are more housing units in quantity than potential buyers, developers will compete with each other in terms of price, and eventually reducing it. Table 1 shows the average prices of a flat in Olsztyn.

Table 1 – Average prices of residential premises in Olsztyn (PLN)

Area of the dwelling	Years			
	2016	2017	2018	2019
up to 40 m2	4 366	4 383	4 430	4 816
from 40.01 to 60 m2	4 415	4 375	4 465	4 810
from 60.01 to 80 m2	4 382	4 322	4 536	4 657
from 80.01 m2	4 403	3 902	4 249	4 220
Total	4 339	4 307	4 455	4 692

Source: Own elaboration based on data from GUS'u

Table 1 presents the average prices per square meter of real estate of different areas. Also, Table 1 shows that the 40 m2 and from 40.01 m2 to 60 m2 were the most expensive apartments. Between 2016 and 2019, the total price increased by 8.13 %. Apartments with over 80m² had the cheapest price per square meter. An increase in prices over the analyzed period might indicate an increase in buyers' interest in the real estate and an increase in their income. The prices were also influenced by the location, technical condition of the flat, access to recreational facilities or green areas. There were various housing estates in Olsztyn in which the price value would be changed, depending on the distance to the city center, the characteristics of the area and access to the desired facilities. Figure 1 shows a price map, in relation to the location of apartments in different regions of the city of Olsztyn.
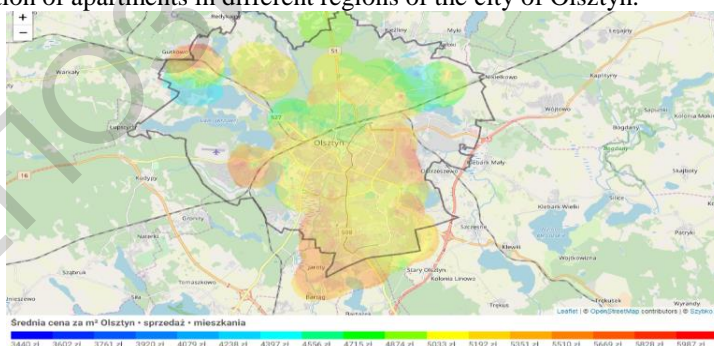

Figure 1 – Map of real estate prices in Olsztyn
Source: Ceny.szybko.pl

According to the figure, the highest value was observed in housing estates, such as Jaroty, Bartąg and Gutkowo. These are locations where the number of newly built apartments have been constantly growing. The price per square meter could be more than 5600 PLN because there has been a greater demand for new, unused apartments. There was also a high price for apartments in the city center. This was due to the fact that the real estates in the city center attracted offices, shopping malls, recreational facilities and schools. Living in the city center is quite convenient, because the residents are in proximity to most facilities and they do not need to waste time traveling. In addition, access to highly developed transport infrastructures, such as the numerous bus and tram lines, have facilitated travelling around the city, and resulted in an increase in the value of the real estate property. The cheapest real estates have been within the vicinity of the Polish Army barracks and Zator housing estate. This might be due to the reduced popularity of these housing estates and the presence of outdated architectural style of the buildings. To sum up, due to the limited supply of land in the city center, residents have appreciated the space on its outskirts, which has made such a location more attractive to investors and have allowed them to the raise real estate prices.

Housing preferences in the city of Olsztyn

Each property buyer has his own individual preferences regarding the purchase of an apartment or a house. For developers, identifying these preferrable features are very important when planning an investment. If the proposed housing resources on the real estate market meet the specific requirements of residents, the more people will want to buy them, which will be financially beneficial for investors. Figure 2 shows the age of the respondents.
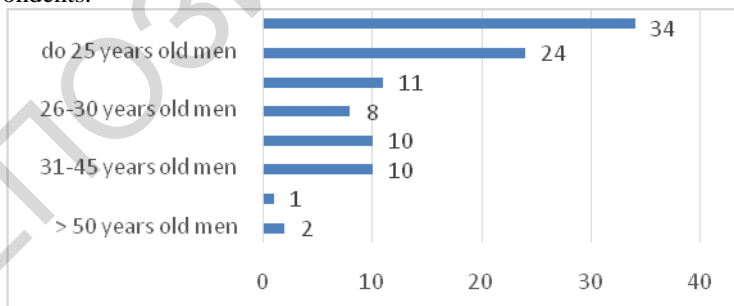

Figure 2 – Age and gender of respondents

Source: own study based on research

Most people were in the age group up to 25 years old, that is, young people of working age were dominant group. People aged 31 to 45 com-

prised a smaller market segment, for example, parents looking for housing for their own children. Figure 3 shows the respondents' financial situation.
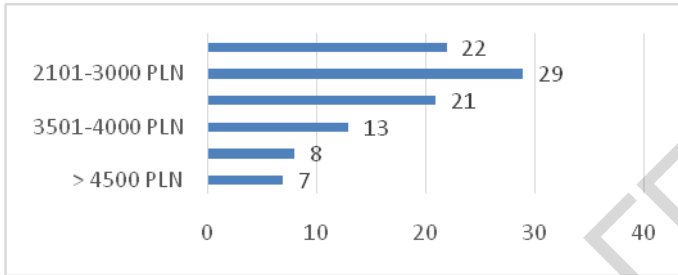

Figure 3 – Income level of respondents
Source: own study based on research

The level of income of the respondents ranged mainly from 2100 to 3500 PLN per month. This means that most of the respondents had income equal to or slightly higher than the national average. Furthermore, approximately 15 % of the respondents earned income above the national average, that is, more than 4000 PLN. Such results allow us to conclude that almost all the market transactions, related to the purchase of apartments, were financed by external institutions, such as the banking institutions. With this kind of salary, it will be the most favorable option to pay for the loans, thanks to the staggered installments and long repayment period. Figure 4 shows the main reasons for purchasing a residential property.
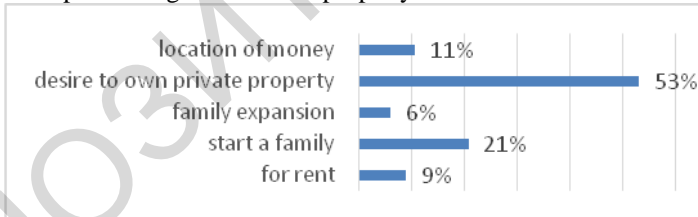

Figure 4 – Main reasons for buying an apartment
Source: own study based on research

It shows that 53 % of the respondents suggested that the most important reason for purchasing real estate was to have their own private property. The second reason given was to start a family. This attitude of buyers promotes the development of the real estate market. The nature of the demand for housing was typically consumption-related, although there were also responses in which the respondents were directed to purchase for investment purposes. The place of residence of the respondents is presented in Figure 5.
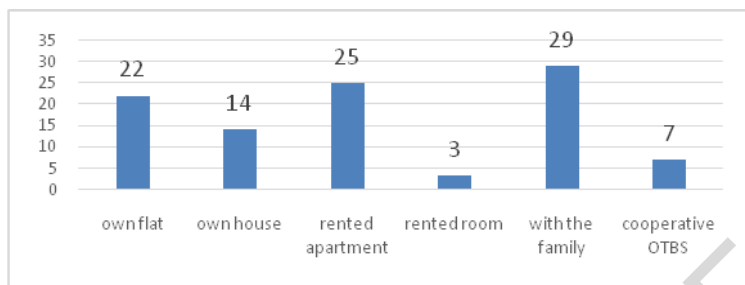
Figure 5 – Place of residence of the respondents

Source: own study based on research

When asked about the respondents' housing situation, most of them declared that they were living with their family. This result confirms the significant presence of young people who could only plan to buy an apartment. This suggests that there was a great demand for new apartments in Olsztyn. Private property, in the form of an apartment or house, was owned by 36 residents. These were people usually looking for larger apartments than the existing ones or focused on buying the real estate with a view to rental income. A great popularity of rental properties was observed during the period of the 4-year study. It was found that that at least 7 % of the respondents had taken apartments owned by the Olsztyn Communal Building Society (OTBS). Figure 6 shows the preferences of the real estate market according to the respondents.
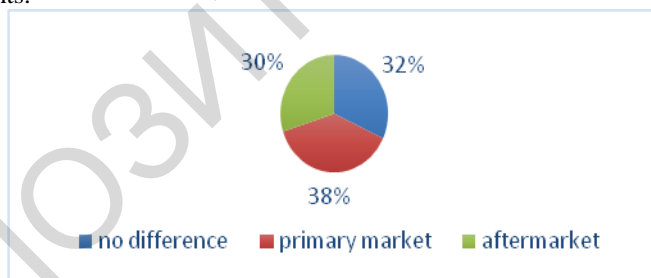

Figure 6 – Real estate market preference

Source: own study based on research

According to the majority of interviewers, flats should be sought on the primary market, where they are put into use in a shell condition. Table 2 presents the preferences of the respondents regarding the type and area of real estate that would be purchased.

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Table 2 – Housing preferences by property type and area

Specification	area m^2	%	
semi-detached house	35-45	1	3
	55-70	2	
terraced house	45-55	1	3
	55-70	1	
	>70	1	
detached house	35-45	1	40
	55-70	18	
	>70	21	
apartment in a block of flats	do 35	1	13
	35-45	1	
	45-55	5	
	55-70	5	
	>70	2	
apartments in a tenement house	35-45	1	3
	55-70	2	
apartments in new construction	35-45	4	38
	45-55	14	
	55-70	15	
	>70	5	

The preferences of the respondents regarding the type of real estate showed that a majority of them would prefer detached house and apartments in new construction. This seems to confirm the previous assumption, indicating that a majority of buyers would prefer new flats, which resulted in a constant increase in their number in the market. Furthermore, 13 % of respondents suggested that they would prefer to live in an apartment building. In such a case, apartments located in tenement house and semi-detached houses would be less popular. As far as the size, is concerned, there is a predominant interest in properties with an area between 55m² and 70m². Figure 7 shows the features of the location that were important for the respondents.
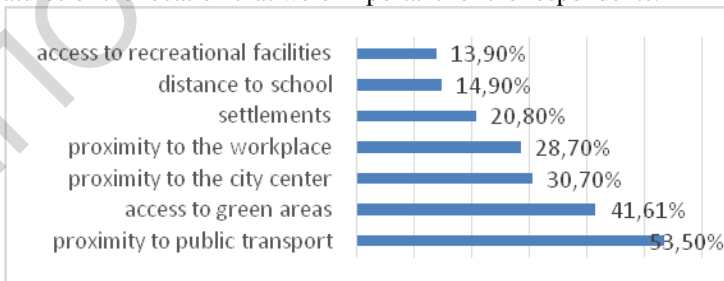

Figure 7 – Features of the location that were important for the respondents

* Percentages do not add up to 100 % because more than one answer could be chosen.

Source: own study based on research

It shows that the most popular locations for apartments were those with access to green areas (41.6 %) and proximity to public transport (53.5 %). Other respondents chose locations that were located on the outskirts of Olsztyn, such as Gutkowo, Dywity and Redykajny. The price and the access to specific facilities were are the factors, which could influence the respondents' choice of an apartment. The choice of a location for apartment has been associated primarily with the conditions that will meet the specific requirements of buyers. At least about 53.5 % of the responses indicated that the main factor determining the choice of the location of an apartment was access to public transport, which would make travelling around the city much easier for them. Another important factor was access to green areas, suggesting that new housing investments would have to be built mainly near forests, lakes or parks. For the remaining responses, the important features of the location were the distance to work or school, which would make it easier for them to fulfill their duties rather than wasting time on additional travelling around the city.

Figure 8 presents the most important, according to the respondents, features of flats that affected the assessment of their technical condition.
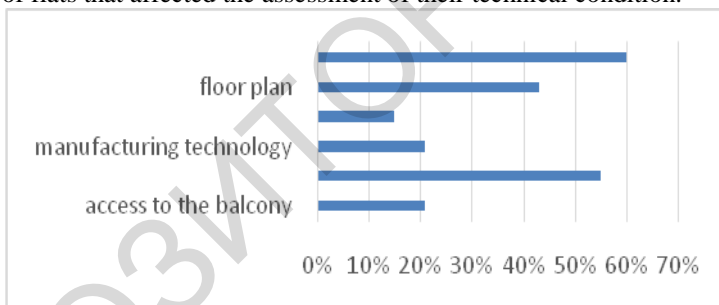

Figure 8 – Important features of the apartment, according to the interviewers
Source: own study based on research

It shows that the most important features were the finishing standard, the condition of the installation and the layout of the rooms. Figure 9 presents the growth rate of the number of housing resources in Olsztyn.
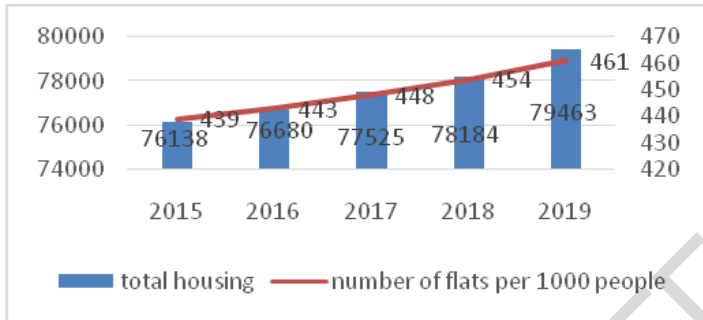
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Figure 9 – Number of housing resources in Olsztyn

Source: own study based on research

The largest number of flats was observed in 2019, and amounted to about 80 000 residents. When analyzing flats per 1000 people, a housing deficit could be noticed. This deficit was due to the difference between the population in a given region and the number of available housing properties. Despite the large supply, residents still have difficulties accessing the real estate.

Summary. Olsztyn, as a city of Warmia and Mazury region, is one of the places where you can see the biggest housing boom. This means that residents have been motivated to invest their money in the real estate. Such motivation is due to the low interest rates offered by banks. Another reason for the increase in housing resources in Olsztyn has been the constant demand of residents for real estate that has allowed them to meet their basic social functions. The conclusions based on the analysis of the collected data are as follows: an upward trend in transaction prices of housing stock during the 4-year study period, correlation of location and price, main buyers' preferences regarding the purchase of flats, constantly increasing number of housing resources in Olsztyn, positive development of the residential real estate market during the analyzed period.

The favorable economic situation in the regional development market resulted from the high demand for new flats in the primary market. The low interest rates on bank deposits have encouraged residents to look for other forms of investment and the simplest one has been the housing market, buying a flat. Both primary and secondary markets are interrelated, although customers would prefer to buy new flats, treating them as an investment in the future.

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