Analysis of the housing market in the coastal belt of the West Pomeranian Voivodeship

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ABSTRACT
Purpose - The aim was to present the housing real estate market's situation in the coastal zone and define forms of further development of the coastal real estate market.
Design/methodology/approach - The research methodology was based on statistical methods; the changes in both prices and the number of transactions over time were examined. Graphical and tabular-descriptive techniques were used to present the research results.
Findings - The unit price of residential premises in the coastal strip is determined primarily by the location rent. The location is the most important factor that affects the prices of holiday and weekend apartments.
Research implications - The research results became a contribution to the commencement of wider research on the impact of location on the real estate market in Poland.

Keywords:	housing market; house prices; Poland; coastal real estate
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INTRODUCTION

Over the last few years, dynamic development of the real estate market in Poland can be observed, both in the residential and commercial real estate market. Investments in tourist real estate are sometimes treated as a second home or as a capital investment to be rented out to tourists. In the case of this type of investment we are dealing with passive income, relatively low risk and long-term benefits, however with a considerable own contribution or creditworthiness requirement and at the same time long-term credit obligations (Wolski & Załęczna, 2007). As regards investments in tourist real estate, we can distinguish five main investment areas: the north-western corner of Poland (Świnoujście, Kołobrzeg), the Pomeranian region (Władysławowo, Sopot, Gdynia), the area of the Masurian Lake District (Mrągowo, Mikołajki), the south-western corner (Karpacz, Szklarska Poręba) and the southern corner of Poland (Zakopane, Szczawnica). The north-western corner of Poland is an area of land adjacent to the sea coast, which is distinguished by its tourist and natural values. The development of the coastal belt has a direct impact on the attractiveness of seaside towns, and thus on their economic condition. These areas are significant for investors interested in housing and other investments.

The aim of the research, the results of which are presented in this article, was to present the situation on the premises market in the coastal strip and to determine forms of further development of the coastal real estate market. The research was limited to a quantitative analysis of transactions of purchase of flats in the coastal strip, as well as to the examination of changes in the unit prices of these flats over the last years. The analysis was carried out based on data for the years 2015-2019. The research methodology was based on statistical methods, the study of changes over time of both prices and the number of transactions made was carried out.

LITERATURE REVIEW

The demand for studies analysing the real estate market did not appear in Poland until the 1990s, after the political transformation. The transition from a centrally planned economy to a free-market economy resulted in the emergence of a free market in real estate trade. During the socialist period, the real estate market functioned to a very limited extent and the principles of a free-market economy were practically not in force (Zydroń, 2011).

The real estate market is subject to constant change, implied among other things by the phases of the business cycle, the state of the national and international economy, the wealth of the citizens or the availability of financial capital. These changes create new opportunities as well as various risks. The demand in the real estate market depends, among other things, on the situation in the capital markets, while the supply of real estate depends on the situation in the construction markets (Hopfer & Cellmer, 1997).

In the literature on the real estate market, many authors similarly define the term 'market', emphasising, however, its different aspects. The following are the most frequently cited definitions of the real estate market.

The real estate market is the totality of processes of offering and exchanging real estate, involving the transfer of ownership rights and/or rights to use real estate and the conditions in which these processes are carried out (Kałkowski, 2001). Relationships between market participants have varied content; they also include the confrontation of revealed intentions and the bidding mechanism (Kucharska-Stasiak, 2006). The real estate market perceived as a process makes it possible to study the pace and direction of its development depending on the factors determining this development. The real estate market as a system prompts us to look for the strength of connections between the components of the system (Foryś, 2011). Foryś emphasizes that the real estate market is a part of the social and economic space coexisting with each other and interdependent (Foryś, 2011). It is a system composed of four separate elements - subsystems, i.e. real estate trading, real estate investment, financing and property management (Bryx, 2008). It constitutes a set of rules, conventions and relationships that together form a system in which real estate is used and the rights to it are transacted (Załęczna, 2010). The real estate market is a cybernetic system that, on the one hand, is influenced by the changes taking place in the economy and, on the other hand, through various channels can affect the economic development of regions or the country as a whole (Trojanek, 2008).

The real estate market is heterogeneous and, depending on the criterion adopted, its various cross-sections are distinguished (Gdakowicz, 2015). Taking into account the types of real estate, it is possible to consider the market in terms of its cross-section, distinguishing: the residential real estate market, the commercial real estate market, the industrial real estate market, the agricultural real estate market and the special purpose real estate market (Sitek, 2019). The residential real estate market is the best developed, as by far the largest number of residential units are traded under civil law (Budner & Pawlicka, 2020). Real estate transactions do not involve a

commodity (a dwelling), but rather a right to property (Zakrzewska-Półtorak, 2019). The owner then changes, but the property continues to remain in the same place. Trading in residential real estate thus involves trading in selected property rights: the right to ownership of real estate (so-called full ownership or mortgage ownership), the cooperative ownership right to residential premises and the right to a single-family house in a housing cooperative.

There are several concepts and definitions in the literature highlighting the importance of various aspects of the housing market, there are many studies and analyses of specific processes and mechanisms (Powichrowska & Prokopiuk, 2019; Mach, 2019; Jania, 2019; Bartkowiak & Strączkowski, 2019; Klus, 2019), but it is difficult to formulate a coherent and comprehensive definition of the basic element, namely the housing market. The residential real estate market is a market of local character (Musiał, 2018). The specific features of this market condition the purchase behaviour of potential buyers operating in it. Thus, the determinants, as well as the motives of the decision-making process, have an individual essence (Gorzeń-Mitka & Grabiec, 2015). Thus, the choice of residential property is entirely personal and modifiable - the possibility of changing the dwelling (Lis, 2008). When addressing the topic of residential real estate, it is important to clarify the definition of a dwelling. A dwelling is a unit created through reconstruction or construction, and thus becomes a place used for residential purposes (Bryx, 2006). The biggest influence on the price of a property, including dwellings with a residential function, is its physical condition: area, number of rooms, standard, degree of wear and tear, etc. (Goodman, 1978). Next to these, its location is of the greatest importance (Kestens et al., 2002; Clapp, 2003). According to the economic theory of demand/supply, the conscious customer making a choice is guided by maximising benefits while minimising losses (Palmquist, 1984), and thus, having a choice of identical flats at identical prices, he/she will choose the one which is located in a better place. What 'better place' means largely remains relative and dependent on buyer perception (Jacobs,2011).

Nevertheless, based on a sufficiently large sample, it is possible to identify areas that are more attractive to the general public and the features that characterise them.

Among the most frequently mentioned location characteristics in the literature that influence the attractiveness of a place of residence are the distance to the centre or the distance from the forest to the woods (Richardson et al., 1990; Poudyal et al., 2009). Positive perceptions of close access to green areas are revealed in publications by Tajim (2003), Morancho (2003), Fennema (1996) et al. (Lutzenhiser et al., 2001; Bolitzer et al., 2000).

A location feature in Poland that has a strong influence on the demand/supply of real estate is its location in the coastal zone. Properties located in this zone are very popular among domestic and foreign investors. These properties are often treated as a capital investment, less frequently as a place of permanent residence for the buyer.

RESEARCH METHODOLOGY

The research was empirical and involved the analysis of the number of transactions involving residential premises. The basis for the analysis was the information on transactions, mainly on prices and their locational attributes, obtained based on the existing database of the Register of Prices and Values of Real Estate in the District Starosties in Kamień Pomorski and Gryfice. Data previously collected by the Central Statistical Office (CSO) were also used. Information about the surroundings of the local real estate markets was obtained in the communal offices and district starosties of the research area. The transactions came from the secondary market from 2015-2019. In total, information was collected on 386 transactions concerning residential premises.

The spatial scope of research was determined by selecting local markets of dwellings of similar functional and spatial values in the direct vicinity of the coastal zone. The spatial scope of research included selected towns of the coastal zone (Kamieński and Gryfice poviats), i.e: Pobierowo, Pogorzelica, Dziwnów, Dziwnówek, Łukęcin, Międzywodzie, Międzyzdroje, which are of particular interest for holidays and weekends. In terms of processing the collected data, inductive and deductive reasoning methods, descriptive and monographic methods and statistical methods were used. The methodology of the research was based on statistical methods, and changes in time of both prices and the number of transactions were studied. For the presentation of the research results graphic and tabular-descriptive techniques were used. In the article, the term unit price was used which should be understood as the price of 1 m^2 of a residential unit.

RESULTS & DISCUSSION

The study of changes over time was based on the analysis of the dynamics of the average annual price of 1 m^2 of a dwelling from the secondary market in 2015-2019. Based on the assumption that price is the best measure of market development (Kamershen et al., 1980, p. 48) and that price and quantity cannot be considered separately (Begg, 2000, p. 76), the analysis of the dynamics of the average price of 1 m^2 of a dwelling was preceded by the

presentation of detailed series of the number of transactions concluded (Fig. 1).
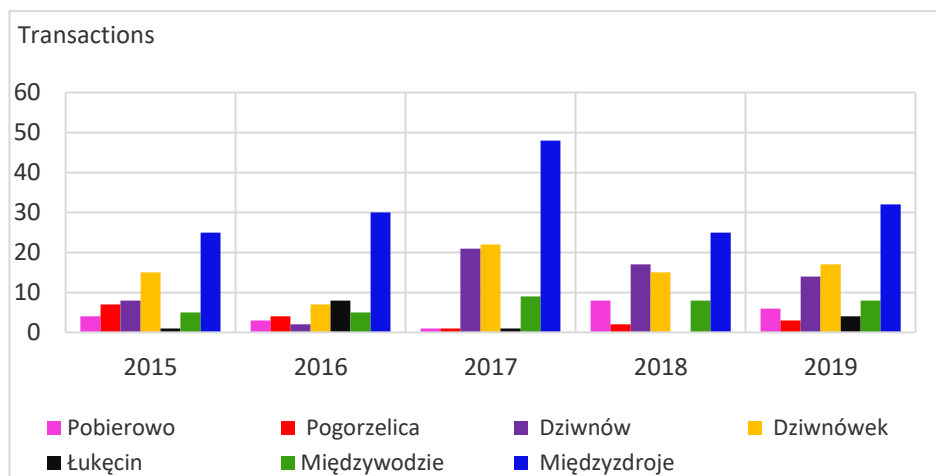
Figure 1. Dynamics of the number of transactions of residential units in 2015-2019 in selected towns of the coastal belt
Source: own elaboration.

Analysing the secondary market for residential units in selected coastal localities in 2015-2019, one should note a large variation in the number of transactions concluded without a clear development trend throughout the research period. Residential units were the most popular in 2017, which is in line with the general trend in the domestic market. According to data from the Central Statistical Office (CSO), across Poland in 2017, turnover of residential units accounted for 92.3% of the turnover of units by volume and 92.7% in the category of sold floor space. In terms of the form of turnover, the structure of transactions for the purchase/sale of residential premises has been similar for years. In 2017, open market sales in Poland accounted for 93.3% of the number and 97.5% of the value of all residential purchase/sale transactions (CSO, 2018, p. 42-43).

Analysing the data in terms of the number of transactions concluded spatially, one should note increased demand for residential units throughout the period under study in the town of Międzyzdroje, where the number of all transactions concluded in 2015-2019 accounted for 41.42% of the total transactions concluded (Fig. 2). The highest number of transactions for the purchase of residential units was made in Międzyzdroje in 2017 and 2019. Perhaps this situation is a reflection of the limited supply in this market, as a total of only 11 residential units were completed in 2016 and 2017, and so the lack of new space in the primary market affected the activity of buyers in the secondary market. The research shows that the local housing market is

primarily a primary market, well recognised by developers. Growing demand, especially since 2017, flexibly meets supply and so already in 2019, 456 residential units were completed in the municipality of Międzyzdroje. Thus, for every 1,000 inhabitants, 71 new units were put into use. This value is much higher than the value for the West Pomeranian Voivodeship and much higher than the average for Poland as a whole (CSO, 2019). Międzyzdroje is a well-known seaside resort of great interest to both Polish and foreign tourists. The locational attributes of attractiveness make these areas very popular and dwellings are purchased for investment or holiday/weekend purposes.

The percentage structure of the number of transactions of purchase/sale of residential units in particular localities is presented in Figure 2.
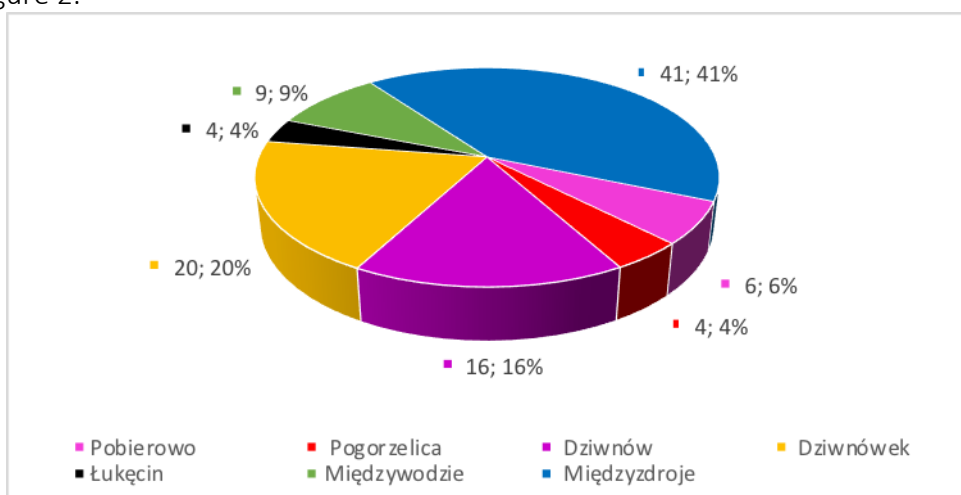
Figure 2. The number and share of completed residential sales transactions in selected municipalities of the coastal belt in 2015-2019
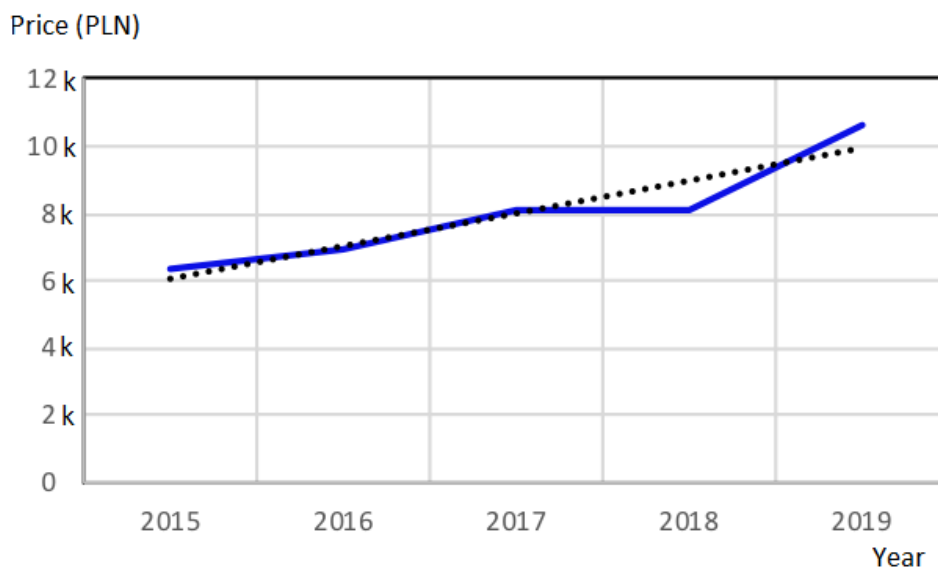Source: own study.

The dynamics of changes in the average unit prices of dwellings between 2015 and 2019 shows a great variation (Tab. 1). The highest prices occurred in 2016 and 2019 while the lowest in 2015. It is only since 2018 that an evident increase in prices can be observed in each of the surveyed localities. In 2018, the country as a whole recorded the fastest increase in the price of dwellings in the last five years (6.5% compared to 3.8% in 2017) and so prices rose in both the primary market (by 5.5%) and the secondary market (by 7.6%). Between 2015 and 2018, however, the price gap narrowed significantly (from 42.3% to 24.9%). Compared to 2015, prices of dwellings increased by 12.7%, of which on the primary market - by 10.0% and on the secondary market - by 15.2% (GUS, 2019).

Table 1. Average price of 1 m² of residential unit (PLN) in selected towns of the coastal belt in 2015-2019

Town/Year	2015	2016	2017	2018	2019
Pobierowo	5593	7740	6720	6014	7463
Pogorzelica	7202	7568	7950	5697	7918
Dziwnów	4127	9252	6347	6316	8520
Dziwnówek	8874	4322	7063	9135	8454
Łukęcin	6296	8483	1835		6745
Międzywodzie	7410	3561	6688	6158	7602
Międzyzdroje	6393	6920	8152	8071	10635

Source: own study.

Average unit prices spatially indicate that in 2015-2019 the highest prices were achieved by residential units in the town of Międzyzdroje, while in 2019 the unit price of a residential unit was PLN 10635, relatively high in Dziwnówek PLN 9135 in 2018 and the lowest prices were in 2018 in Łukęcin PLN 1835. Changes in average unit prices in the examined localities show no clear trend, except in the locality of Międzyzdroje, where the unit price of a residential unit shows a clear developmental trend and ranges from PLN 6393 in 2015 to PLN 10635 in 2019. (Fig. 3).

Figure 3. Dynamics of the average annual price of 1 m² of a dwelling (PLN) in Miedzyzdroje in 2015-2019

Source: own study.

The lack of a clear price trend in particular localities suggests that changes over time do not consist of a systematic, unambiguous increase or decrease due to the constant influence of main causes on this phenomenon. Therefore, the results obtained allow concluding that the number of transactions and the price level are influenced by various factors of economic, political or social nature.

Price developments in particular years coincide with the number of transactions, indicating that price increases depend on greater demand, as revealed by a higher number of housing unit sales transactions. High prices of residential units, e.g. in 2019 from 6745 PLN/1m^2 in Łukęcin to 10635 PLN/1m^2 in Międzyzdoje, influenced the low number of concluded transactions respectively: Łukęcin 4, and Międzyzdroje 32 transactions (cf. Tab. 1 and Fig. 1). The research has therefore shown a dependence of the number of transactions on unit prices. The lower the prices, the greater the demand for dwellings, which is reflected in a higher number of transactions.

CONCLUSION

The research shows that the unit price of dwellings in the coastal strip is determined mainly by the rent of location, and location is the most important factor which significantly shapes the prices of holiday and weekend dwellings. When comparing the parameters researched in particular localities, it has been noticed that Międzyzdroje stands out among the others. The highest number of transactions and the highest prices of residential units were noted. Increased demand was caused by the specific location of the town. Particularly the tourist and leisure character of this locality, its location, attractions, geographic and infrastructural advantages cause that flats are especially eagerly purchased there.

The number of transactions and price levels are influenced by a variety of factors, and the area that may be considered the most dynamic is a locality with a relatively high number of transactions and high prices of residential units. Research has shown that Międzyzdroje is such a town. The purchase of residential units in fashionable seaside resorts is an increasingly popular way of investing in Poland. It is the native equivalent of the American "second home", although in Polish conditions it serves both the leisure needs of the owner and investment purposes for short-term rentals.

Research has shown that there is a significant correlation between the number of residential sales transactions and unit prices. Price development in particular years coincides with the number of concluded transactions, showing the dependence of price increase on greater demand

revealed by a higher number of concluded transactions of flats sale and purchase. High prices of residential units, e.g. in 2019 from 6745 PLN/1m2 in Łukęcin to 10635 PLN/1m2 in Międzyzdoje, influenced the low number of concluded transactions respectively: Łukęcin- 4 and Międzyzdroje 32 transactions.

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