
The Impact of Professional and Economic Activity on the Development of Apartments' Market

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Abstarct:

Purpose: The aim is to examine to what extent does the professional activity of the population and the economic activity of entrepreneurs affect the development of the apartments' market. The subject of the study are local real estate markets – the sector of commercial investments – residential seaside apartments.

Design/Methodology/Approach: We analysed data about real estate markets of Polish communes located in Central Pomerania. The values of the analysed indicators were calculated using Excel program and the results were presented in the form of Tables and Figures in Microsoft Excel and ArcMap.

Findings: The results show that there is a relationship between the professional activity of the population and the economic activity of entrepreneurs in the tourist communes and the development of the primary and secondary real estate markets. The analysis shows that economic effects of tourism development can influence the income of the commune, an increase in local revenue achieved by entities that manage tourism, high professional activity of the population and economic activity of entrepreneurs as well as the diversification of the economy thus allowing to obtain independence from the economic instability.

Practical Implications: The most important practical implication is the statements that there is a need to make new investments in seaside towns in which the tourist market is developing.

Originality/Value: The analysis shows that economic effects of tourism development can influence the income of the commune with an increase in the local revenue achieved by entities that manage tourism.

Keywords: Economy, tourism, market of apartments, economic activity, entrepreneurship.

JEL Codes: R3, R11, R12.

Paper type: Research article.

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1. Introduction

The issues of the real estate market are particularly important in the case of tourism areas. This market, however, has still not been researched enough, is complicated and to a large extent can be characterized as being somewhat opaque. The real estate market, due to its diverse nature, is interpreted in many different ways. This can be indicated by a significant number of undertaken attempts to place it in the economy and to determine its essence. Many authors have been examining the real estate market in great detail, however the main issue among the general considerations is not diving deep enough into the complexity of the market. The market, by performing residential or investment functions stimulates other markets to operate. When identifying the real estate market it is important to determine the parallel relations between its participants, because it is a very extensive system in which participants conduct activities adequate to their intended goals (Domian *et al.*, 2015; Wolniak *et al.*, 2019; Warren-Myers, 2012).

The real estate market plays an important role in business and is closely connected to the economy that surrounds it. Changes in the economy have a direct impact on the real estate market, and the market being a part of the economy, has an impact on macroeconomic variables (Khar and Thomsett, 2005; Shui, 2014; Booth and Marcato, 2004; Kucharska-Stasiak, 2006; Olkiewicz *et al.*, 2019; D'Arcy and Talatvull, 2009). Modern real estate markets respond more flexibly to macroeconomic changes. These reactions are driven not only by changes in the real estate sector, but mainly by macroeconomic and microeconomic data received from other markets (Yai-Hungh and Chun-Kei, 2006; Wolniak and Skotnicka-Zasadzień, 2018; Renigier-Biłozor and Wiśniewski, 2014).

The aim of this article is to examine to what extent does the professional activity of the population and the economic activity of entrepreneurs affect the development of the apartments' market.

2. Literature Review

Every type of property is subordinated to the operating market environment. The definition of the real estate market is important for property management (including commercial real estate) and the prevention of risks that may result in achieving lower than anticipated income before proceeding with the investment. According to the definition in the Cambridge dictionary the real estate market is a purchase and sale of land and buildings. Other authors describe the term as an area of shaping relationships between entities (market participants) and objects (real estate) whilst assuming that it is a multivariate area of events of different nature, in which the process of transferring rights to real estate takes place (development of prices, number of concluded transactions etc.) (Topintzi *et al.*, 2008; Xu *et al.*, 2010; Radzewicz and Wiśniewski, 2011; Hamilton, 2011).

The real estate market carries out essential functions both in the economic system as well as in everyday life, which can be divided into two different groups – residential and investment functions. These functions determine markets to achieve efficient operation, however, to a large extent they do not work efficiently. Evidence of this can be seen by some market anomalies, while one of the reasons is information deficiencies (Dong and Sing, 2017; Morrie and Jostov, 2018; Brzezicka and Wiśniewski, 2014; Kim and Shao, 2017). The real estate market performs economic and social functions, which can be properly maintained under market economy conditions. Among them we can distinguish (Zhi and Tien, 2017; Kucharska-Stasiak, 1997; Haran *et al.*, 2016):

- *The exchange function* – it allows for the distribution of property rights and the secondary allocation of a purpose of a given area in accordance with the focus chosen by investors and current users. In the case of a developed market, competition between buyers and sellers causes the property to be used properly. A buyer who administers the property most efficiently and is able to pay a set price wins the competition. Actions aimed at the best use of the real estate generates its greatest value. Phrases like top and best use of real estate is often used in foreign literature. By design, such use identifies the most profitable, competitive use of the real estate (Dunn, 2010; Newell, 2016). Only then the property is properly supported, financially profitable, makes a contribution to objectives pursued for the community development and also benefits the owner (Tsai *et al.*, 2015).
- *The information function* – the exchange value of various real estate is expressed in the price, information about which is present in the market. This allows to shape prospects in regards to the value of a real estate as well as in the minds of market entities i.e., the owner, investor or property manager. The utilization of market information to determine the value of a real estate is important for the proper functioning of the real estate market (Wong, 2019).
- *The function of correcting the use of space* - with low income from the build-up space the owner tries to acquire solutions to maximize the value of the property. When buildings have a lower value than the land, then the process of constructing new building occurs. When the demand for space drops significantly then modification or construction of new facilities is not profitable (Gupta and Tiwari, 2016).

The real estate market has two sides: material and financial. Each of these sides has two sub-sides: the primary and the secondary market. The former market is a real estate market that incorporates all of the offers for sale and purchase of newly constructed independent residential and commercial premises, cooperative residential and commercial premises as well as single-family houses that have not yet been traded (Wong *et al.*, 2017; Agboola and Scofield, 2018; Katzler, 2016). The secondary market, on the other hand, is a real estate market that incorporates all of the offers for sale and purchase of newly constructed independent residential and

commercial premises, cooperative residential and commercial premises as well as single-family houses that have already been traded (Olaleye and Abebara, 2019; Abere *et al.*, 2018).

3. Methodology

The subject of study in this article is the real estate market, with the main aim to examine to what extent does the professional activity of the population and the economic activity of entrepreneurs affect the development of the apartments' market. The subject of the study are local real estate markets – the sector of commercial investments – residential seaside apartments. The spatial scope of analyses covered selected Polish communes located in Central Pomerania. The following communes were considered in the study (Figure 1):

- Będzino rural commune, Mielno urban commune – Koszalin province;
- Darłowo urban commune, Darłowo rural commune, Postomino rural commune – Sławonopowiat;
- Ustka urban commune, Ustka rural commune, Smołdzino rural commune, Słupskopowiat;
- Łeba urban commune – Lęborkpowiat.

The analyses were carried out using the method of analysis and synthesis of the collected research material. The values of the analysed indicators were calculated in the Microsoft Excel program and the results were presented in the form of Tables and Figures in Microsoft Excel and ArcMap.

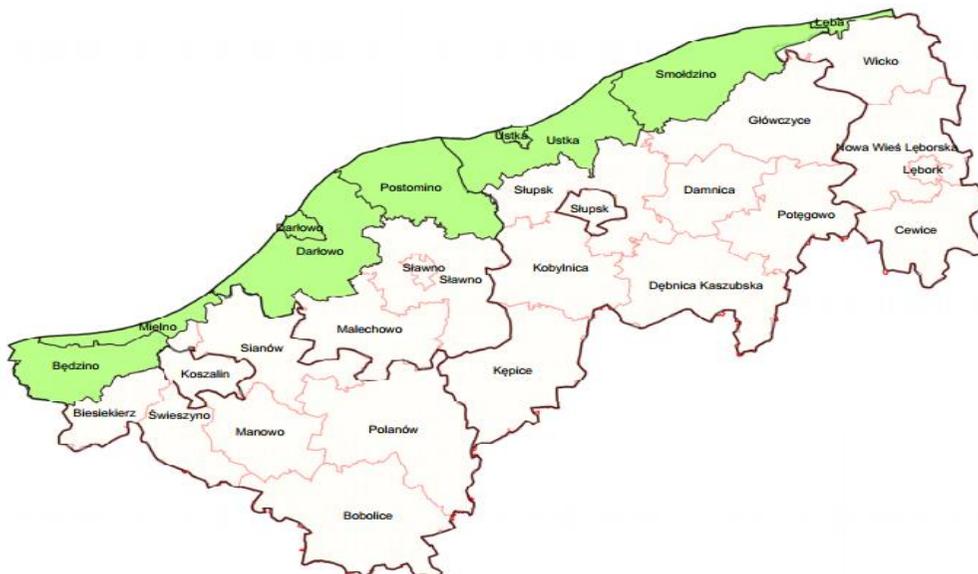
3.1 The Research Hypothesis

The local real estate markets of apartments in Central Pomerania are more developed in communities characterized by higher professional activity of the population and economic activity of the entrepreneurs. Data for the analyses were obtained from the Central Statistical Office and the Register of Real Estate Prices and Values from the following provinces: Koszalin, Sławno, Słupsk and Lębork. The time scope of the analyses covered the years 2014-2018 (1st quarter of 2018).

In the study the ranking method was used to verify the adopted hypothesis. By assigning ranks to communes based on indicators, results can be obtained that will select the most developed communes. The development of local real estate markets was assessed based on 4 variables:

- the number of transactions;
- the value of transactions;
- an average transaction price;
- an average price for a square meter of usable floor space of an apartment.

Figure 1. The seaside communes covered by the scope of spatial analyses



The professional activity of the population and economic activity of entrepreneurs was assessed based on 3 variables:

- the number of business entities per 1,000 people;
- the number of newly registered business entities per 1,000 people;
- the number of registered unemployed people per 1,000 people.

4. Research Results

From the data received from the Register of Prices and Values (20,895) a number of residential real estate transactions were selected (2,252). Premises that were owned by the State Treasury, local government authorities or those that did not have a residential unit status or on which rebates were granted during the market transaction (1,112) (Table 1) were rejected.

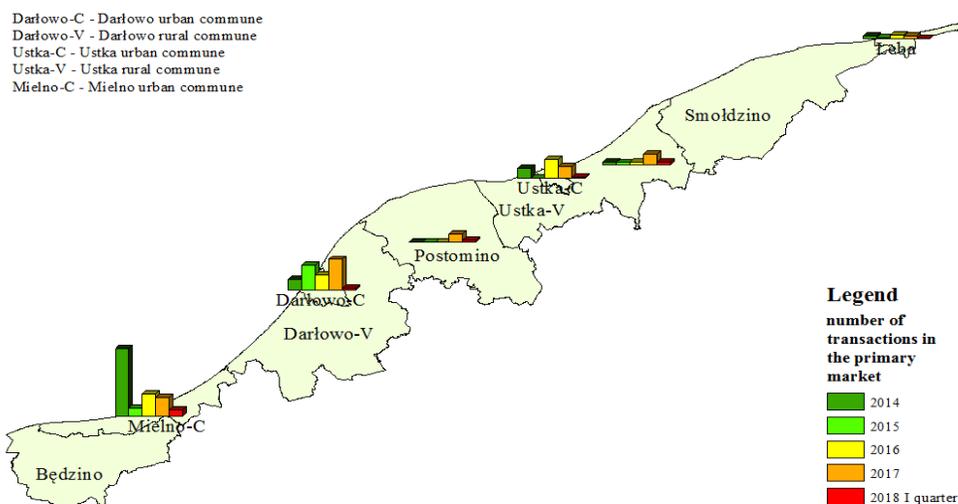
Table 1. Selection stages

District	Total number of transactions	Number of transactions after selection (housing properties)	Number of rejected transactions (non-market)	Number of apartments	The share of apartments in the total number of district transactions
koszaliński	5 546	646	156	490	8%
sławieński	3 811	725	430	295	8%

słupski	7 890	766	448	318	4%
łęborski	3 648	115	78	37	1%
Total	20 895	2 252	1 112	1 140	5%

From the analysis of the transactions it can be observed that 767 sales were concluded in the primary market (Figure 2), with the largest number of transactions recorded in Mielno (334), representing 44% of all considered figures. Such a large number was possible because 183 transactions were recorded in 2014.

Figure 2. Number of apartment transactions in the primary market



From the analysis of the transactions concluded in the secondary market (Figure 3) it can be noted that 373 were made in the analysed period, with the largest number of transactions recorded in Mielno (156), representing 42% of the total number, which is a similar percentage to the primary market. The largest number of sales contracts in this commune occurred between 2015-2017, resulting in domination among the entire area covered by the analysis and indicated a high level of interest in the market. The city of Ustka was placed second with 136 transactions (36%) where the largest number of apartments sold in 2014.

The value of transaction on the primary market amounted to PLN 212,848. Having assessed the value of concluded transactions it can be observed that the transactions in Mielno (PLN 102,902.000) made up nearly half of the total value of transactions. From the annual transaction value list it can be noted that Mielno achieved the highest sum in 2014 (Figure 4) with the 3rd and 4th quarter constituting the largest amount of turnover in that year. Łeba achieved 45 times less value for the same year. For Darłowo, Postomino and the Ustka rural commune the highest transaction value was reached in 2017.

Figure 3. Number of apartment transactions in the secondary market

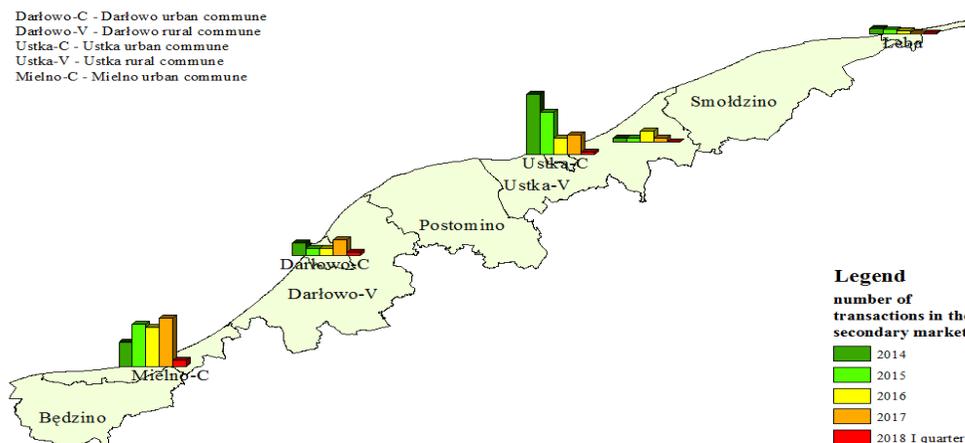
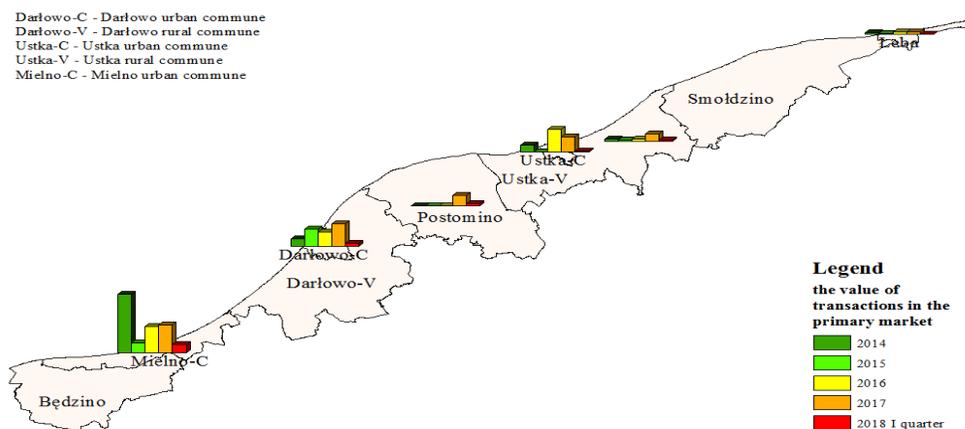


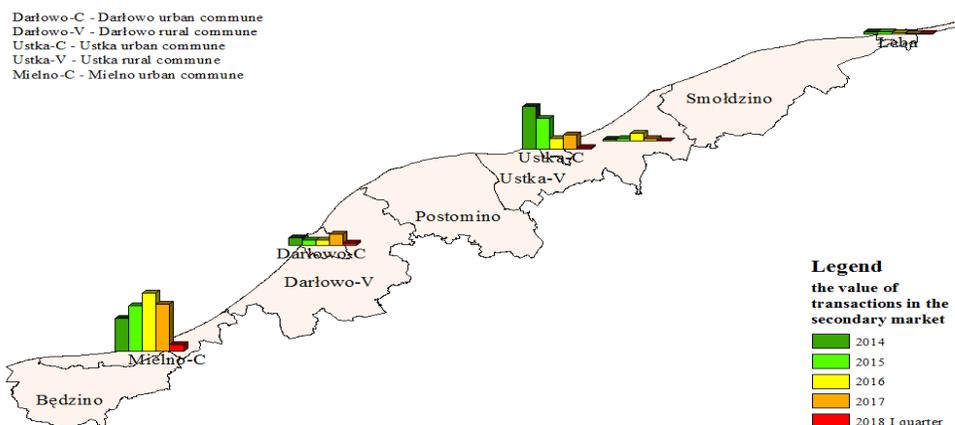
Figure 4. The value of transactions of apartments in the primary market (PLN)



From the analysis of the secondary market (Figure 5) it can be observed that in a structural comparison as much as 56% of the total transaction value (PLN 70,305.000) (chart 27) was attained by the Mielno commune. Almost half of this value falls for the Ustka commune (PLN 36,183.000), while 9% for Darłowo (PLN 11,407.000).

5. Discussion

For the purpose of the analysis, a ranking system was created in which 9 points were awarded for the first place (commune with the highest indicator) and one point for the last place (commune with the lowest indicator). The classification of a commune in the ranking was determined on the basis of the sum of partial points accumulated for particular variables. The analyses results for the primary market are presented in Table 2.

Figure 5. The value of transactions of apartments in the secondary market (PLN)**Table 2.** The development of the apartment market - the primary market

Commune	Number of transactions	Value of transactions (PLN)	Average transaction price (PLN)	Average price for a square meter of usable floor space of an apartment (PLN)	Sum of rankings	Place in the ranking system
Mielno (c)	334 (9)	102902000 (9)	308 (7)	8 378 (9)	34	1
Ustka (c)	108 (7)	34781000 (7)	322 (8)	6 784 (7)	29	2
Darłowo (c)	225 (8)	50672000 (8)	225 (6)	5 224 (5)	27	3
Postomino (v)	26 (5)	9488000 (5)	365 (9)	8 311 (8)	27	3
Ustka (v)	51 (6)	10905000 (6)	214 (5)	5 917 (6)	23	5
Łeba (c)	23 (4)	4100000 (4)	178 (4)	4 720 (4)	16	6
Smółdzino (v)	Lt. (1)	Lt. (1)	Lt. (1)	Lt. (1)	4	7
Będzino (c)	Lt. (1)	Lt. (1)	Lt. (1)	Lt. (1)	4	7
Darłowo (v)	Lt. (1)	Lt. (1)	Lt. (1)	Lt. (1)	4	7

Note: Lt. –lack of transaction.

From the analysis of the variables in the ranking system it can be observed that the first place went to the urban commune of Mielno (34 points). The second place is achieved by the urban commune Ustka (29 points). Darłowo and Postomino communes are both placed at the 3rd place (27 points). Communes in which no transaction was made were automatically places at the last place. Comparison of the primary and secondary markets shows that the order of communes changes slightly due to the lack of transactions in Postomino (Table 3). The study showed that in the secondary market the most developed commune is the urban commune Mielno (36

points). The city of Ustka is placed second (30 points) and the city of Darłowo 3rd (28 points). The fourth place went to four communes due to the lack of transactions.

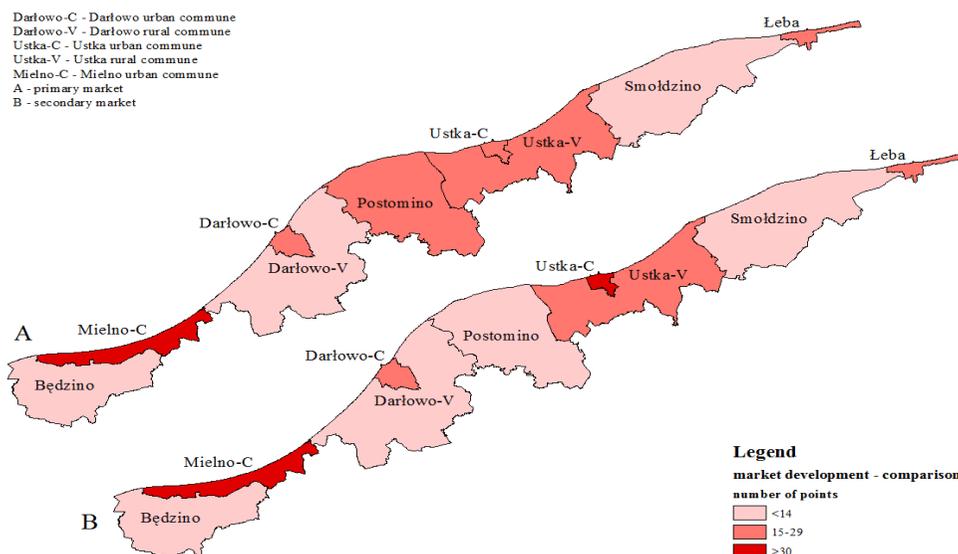
When comparing the primary and secondary market, one can notice the dominance of Mielno in both of them (Figure 6). The Ustka rural commune shows a higher level of development on the secondary market in the accepted indicators. Postomino is classified in the 15-29 range on the primary market, while on the secondary market, due to the lack of transactions, was placed in the <14 point range.

Table 3. The development of the apartment market - the secondary market

Commune	Number of transactions	Value of transactions (PLN)	Average transaction price (PLN)	Average price for a square meter of usable floor space of an apartment (PLN)	Sum of rankings	Place in the ranking system
Mielno (c)	156 (9)	70305000 (9)	451 (9)	8686 (9)	36	1
Ustka (c)	136 (8)	36183000 (8)	266 (8)	5408 (6)	30	2
Darłowo (c)	44 (7)	11407000 (7)	259 (7)	5881 (7)	28	3
Ustka (v)	23 (6)	5015000 (6)	218 (6)	5910 (8)	26	4
Łeba (c)	14 (5)	2469000 (5)	176 (5)	4561 (5)	20	5
Będzino (v)	Lt. (1)	Lt. (1)	Lt. (1)	Lt. (1)	4	6
Darłowo (v)	Lt. (1)	Lt. (1)	Lt. (1)	Lt. (1)	4	6
Postomino(v)	Lt. (1)	Lt. (1)	Lt. (1)	Lt. (1)	4	6
Smoldzino(v)	Lt. (1)	Lt. (1)	Lt. (1)	Lt. (1)	4	6

Note: Lt. – lack of transaction.

Figure 6. The development of the researched real estate markets.



The rest of the communes, apart from point values, did not change their classification in the accepted ranges. The analysis with the ranking system was used to evaluate the number of business entities per 1,000 people (Table 4) and the number of newly registered business entities per 1,000 people (Table 5) in the surveyed communes.

Table 4. *The number of business entities per 1,000 people - classification results*

Commune	2014	2015	2016	2017	2018	Sum of rankings	Place in the rank system
Łeba (c)	348,0 (9)	343,4 (9)	342,3 (9)	348,4 (9)	350,5 (9)	45	1
Mielno (c)	285,5 (8)	290,1 (8)	295,1 (8)	295,3 (8)	306,4 (8)	40	2
Darłowo(c)	140,1 (7)	137,7 (7)	139,3 (7)	139,3 (7)	141,4 (7)	35	3
Ustka (c)	135,2 (6)	133,3 (6)	135,6 (6)	138,1 (6)	138,0 (6)	30	4
Ustka (v)	103,5 (5)	105,0 (5)	105,8 (5)	107,9 (5)	117,2 (5)	25	5
Będzino(v)	93,6 (4)	95,1 (3)	98,0 (4)	100,8 (4)	102,4 (3)	18	6
Darłowo(v)	91,3 (3)	95,5(4)	96,8 (3)	98,3 (3)	103,9 (4)	17	7
Postomino(v)	85,1 (2)	84,4 (2)	83,4 (2)	83,5 (2)	85,8 (2)	10	8
Smółdzino(v)	79,7 (1)	80,2 (1)	79,1 (1)	82,8 (1)	80,6 (1)	5	9

The most developed commune in terms of business entities is Łeba (45 points). The second place went to Mielno (40 points), while the city of Darłowo was placed 3rd (35 points). The smallest number of economic entities is in Smółdzino. From the analysis of the number of newly registered business entities per 1,000 people it can be observed that city communes do not dominate entirely in the ranking system i.e. the Ustka city commune is only in the 7th place (12 points) (Table 6). The first place went to Mielno (45 points), Łeba is classified 2nd (40 points) and Darłowo 3rd (29 Points). Smółdzino obtained the least amount of points and was placed last in each of the years. Selected commutes were also analysed in terms of the number of registered unemployed per 1,000 people. The number of the unemployed has clearly decreased over the years (Table 7). The lowest number of unemployed per 1,000 people are in the Ustka city Commune (1st place – 45 point).

Table 5. *The number of newly registered business entities per 1,000 people - classification results*

Commune	2014	2015	2016	2017	2018	Sum of rankings	Place in the ranking system
Mielno (c)	32 (9)	27 (9)	29 (9)	26 (9)	30 (9)	45	1
Łeba (c)	20 (8)	20 (8)	22 (8)	20 (8)	16 (8)	40	2
Darłowo (c)	13 (7)	11 (6)	13 (7)	13 (5)	13 (4)	29	3
Darłowo (v)	11 (6)	13 (7)	11 (5)	10 (1)	15 (5)	24	4
Postomino (v)	9 (3)	8 (1)	10 (2)	13 (5)	15 (7)	18	5
Ustka (v)	9 (3)	8 (1)	10 (2)	13 (5)	15 (5)	16	6
Ustka (c)	8 (2)	8 (1)	11 (6)	10 (1)	9 (2)	12	7
Będzino (v)	9 (3)	8 (1)	10 (2)	10 (1)	9 (2)	9	8
Smółdzino (v)	6 (1)	8 (1)	7 (1)	10 (1)	8 (1)	5	9

Table 6. *The number of register unemployed per 1,000 people - classification results*

Commune	2014r	2015r	2016r	2017r	2018r	Sum of rankings	Place in the rank system
Ustka (c)	41 (9)	36 (9)	31 (9)	21 (9)	16 (9)	45	1
Ustka (v)	51 (8)	44 (8)	39 (7)	29(7)	18 (8)	38	2
Smółdzino(v)	73 (2)	55 (5)	37 (8)	23 (8)	22 (7)	30	3
Łeba (c)	59 (6)	52 (6)	41 (6)	35 (6)	35 (5)	29	4
Mielno (c)	59 (6)	51 (7)	45 (5)	40 (5)	32 (6)	29	4
Postomino(v)	67 (5)	61 (4)	51 (4)	50 (1)	43 (1)	15	6
Będzino (v)	76 (1)	67 (1)	56 (3)	43 (4)	38 (4)	13	7
Darłowo (c)	71 (3)	67 (1)	57 (2)	46 (3)	43 (1)	10	8
Darłowo (v)	71 (3)	67 (1)	58 (1)	48 (2)	43 (1)	8	9

The Ustka rural commune is placed 2nd in term of the obtained points (38 points). The 3rd place went to Smółdzino rural commune (30 points). The last place is taken by the Darłowo rural commune with the largest number of registered unemployed per 1,000 people. From the variables on the basis of which communes were compared using the ranking system (e.g. the number of business entities per 1,000 people, the number of newly registered business entities per 1,000 people, the number of registered unemployed per 1,000 people) the average was calculated and a new ranking was created (Table 8).

Table 7. *Professional activity of the population and economic activity of entrepreneurs*

Commune	Average number of business entities per 1,000 people	Average number of newly registered business per 1,000 people	Average number of registered unemployed per 1,000 people	Sum of rankings	Classification in the ranking system
Łeba (c)	346,5 (9)	19 (8)	44 (6)	23	1
Mielno (c)	294,5 (8)	29 (9)	46 (5)	22	2
Ustka (c)	136,0 (6)	9 (2)	29 (9)	17	3
Ustka (v)	107,9 (5)	11 (4)	36 (8)	17	3
Darłowo (c)	139,6 (7)	13 (7)	57 (1)	15	5
Darłowo (v)	97,2 (3)	12 (6)	57 (1)	10	6
Postomino (v)	84,4 (2)	11 (4)	55 (4)	10	6
Smółdzino (v)	80,5 (1)	8 (1)	42 (7)	9	8
Będzino (v)	98,0 (4)	9 (2)	56 (3)	9	8

Łebais placed the highest in the ranking of professional activity of the population and economic activity of entrepreneurs (23 points), the second place went to the urban commune of Mielno (22 points), the city Ustka and the rural commune of Ustka are 3rd (17 points each). Smółdzino and Będzino both are placed the lowest (9 points each).

The ranking of the professional activity of the population and economic activity of entrepreneurs was compared with the values obtained from the ranking of the primary and secondary market development to verify the hypothesis (Table 8). Mielno and the city of Ustka that are placed in the first and second places in the

market development ranking are also high in the ranking of average indicators (respectively in 2nd and 3rd places).

Table 8. *The development of the real estate markets vs. the professional activity of the population and the economic activity of entrepreneurs*

Commune	Place in the ranking of the real estate market development for apartments in the primary market	Place in the ranking of the real estate market development for apartments in the secondary market	Place in the ranking of the professional activity of the population and economic activity of entrepreneurs
Mielno (c)	1	1	2
Ustka (c)	2	2	3
Darłowo (c)	3	3	5
Postomino (v)	3	6	6
Ustka (v)	5	4	3
Łeba (c)	6	5	1
Darłowo (v)	7	6	6
Smółdzino (v)	7	6	8
Będzino (v)	7	6	8

Spearman's rank correlation coefficient (all the correlation coefficients are calculated at the level of a statistical significance $\alpha = 0.05$) between the placement in the ranking of the real estate market development of apartments for the primary market and the placement in the ranking of professional activity of the population and economic activity of entrepreneurs is 0.61. The correlation coefficient between the placement in the ranking of the real estate market of apartments for the secondary market and the placement in the ranking of the professional activity of the population and economic activity of entrepreneurs is 0.76.

The research indicates that there is a correlation between the professional activity of the population as well as the economic activity of entrepreneurs and the development of the real estate market, with the relation being stronger for the secondary market. Thus, the research results confirm the hypothesis: The local real estate markets of apartments in Central Pomerania are more developed in communes with a higher professional activity of the population and a higher economic activity of entrepreneurs. Łeba, which is placed first in the averages ranking was placed lower in the market development ranking – for the primary market is placed 6th and for the secondary market 5th. The communes that are placed last in the averages ranking, Smółdzino and Będzino, are also placed last in the ranking of market development for both the primary and secondary market.

The situation on the markets reflects the hypothesis. The local real estate markets that constitute apartments in Central Pomerania are more developed in communes that are characterized by higher professional activity of the population and higher economic activity of entrepreneurs, which is reflected by Mielno, the city of Ustka, Smółdzino, Będzino and the rural commune of Darłowo. The city of Darłowo is placed in the same 3rd place both on the primary and secondary market, and yet it can be characterized by a relatively low professional activity of its population and

low economic activity of entrepreneurs in comparison to other communes (5th place). The similar situation is with Postomino, which with the exception of the 3rd place on the primary market, is placed last in the development ranking for the secondary market and the penultimate in the ranking of professional activity of the population and economic activity of entrepreneurs. The largest difference between the occupied place in the market development rankings and the ranking of the average indicators is characterized by the city of Łeba, which took successfully: 6th place on the primary market, 5th place on the secondary market and 1st place in the ranking of professional activity of the population and economic activity of entrepreneurs. The professional activity of the population and economic activity of entrepreneurs in this commune does not reflect the results in the form of the developed estate markets.

6. Conclusions

The study conducted shows that there is a relationship between the professional activity of the population and the economic activity of entrepreneurs in the tourist communes and the development of both the primary and secondary real estate markets. The hypothesis was verified positively. The analysis of the collected data shows that economic effects of tourism development can influence the income of the commune, an increase in local revenue achieved by entities that manage tourism, high professional activity of the population and economic activity of entrepreneurs as well as the diversification of the economy thus allowing to obtain independence from the economic instability.

When such situation occurs, there is a need to expand the tourist infrastructure, which is evident by the number of transactions of new apartments in the primary market. With the development of seaside communes for the needs of tourist sector, not only new buildings are constructed but also spatial changes occur (tourism infrastructure, the aim of which is to adapt the existing space to the needs of tourism). The effects of spatial changes in tourism development are, among others, the expansion of the already existing spatial systems, the creation of new areas that are specifically intended for tourism services or the development of settlement in the seaside communes. The real estate market develops at a faster rate the higher the professional activity of the population and entrepreneurs (resulting from the development of tourism in a given area). If there are not to many new investments and access to the primary market is limited, investors will search for apartments on the secondary market. This is the case of the studied communes, which results from a higher correlation between the professional activity of the population and economic activity of entrepreneurs in the examined communes and the development of the secondary apartment market (in comparison to the primary apartment market).

The most important social implication of the conducted research is the statements that there is a need to make new investments in seaside towns in which the tourist market is developing. If there is a lack of large investments in the primary market,

investor will focus their attention on the secondary market, which leads to higher prices and, in the long term, can hinder the development of the tourist market.

The underlying limitation of the presented research is the fact that only nine communes were surveyed. The research results have implications for the development of the tourist areas regardless of where they are located. Nevertheless, the research area should be extended in the future. For the operationalization of variables connected to the development of the real estate market and measurement of the professional activity of the population and economic activity of entrepreneurs, typical indicators used for this purpose were applied. However, other operationalization of variables can be made when choosing somewhat different indicators to measure the examined concept.

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