# SŁUPSK COMMUNE AS A CASE STUDY OF ACCESSION OF PROPERTY DUE TO ITS DIVISION AND CONSTRUCTION OF NEW TECHNICAL INFRASTRUCTURE

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Abstract. Construction of technical infrastructure and divisions of real estate as a rule cause an increase of real estate value. The size of its increase depends on many factors. The aim of this article is an attempt at determining these factors and a size of accession of property basing on an example of Słupsk commune located in Pomerania district. Research concerns years 2006–2010. In this article the author does research on the accession of property due to division of real estate and construction of technical infrastructure and analyzes only these factors whose impact was possible to determine basing on data received from the Słupsk commune's office. The author takes into account: location, functions in local master plan, standard of technical infrastructure, property size, number of properties after division. The research area do not contain properties that in local master plan were located on grounds destined to agricultural or forest purposes or for lack of such a plan were used in agricultural or forest purposes.

**Key words:** the increase of property value, construction of the infrastructure, division of real estate, the commune

#### INTRODUCTION

The accession of property may take place among other things as a result of division and construction of technical infrastructure. The size of its increase depends on many factors. This article is an attempt at determining these factors and a size of the increase of the real estate value that takes place as a result of the real estate division and building the technical infrastructure basing on an example of the commune of Słupsk in years 2006–2010. The study was carried out basing on data received from the Słupsk commune's office. The research area do not contain properties that in local master plan were located on grounds destined to agricultural or forest purposes or for lack of such a plan were used in agricultural or forest purposes.

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#### THE ACCESSION OF PROPERTY

According to Rozporządzenie Rady Ministrów z dnia 7 grudnia... [Dz.U. z 2004 r., nr 268, poz. 2663 z późń. zm.] the accession of property is determined by real estate valuers. There are many factors that have an impact on the increase of real estate value. The most important are:

- real estate location,
- the extent of technical infrastructure equipment,
- the property destination in local master plan,
- price level in property surroundings,
- price level of similar properties,
- the property size and shape,
- others.

In this article the author does research on the accession of property due to division of real estate and construction of technical infrastructure and analyzes only these factors whose impact was possible to determine basing on data received from the Słupsk commune's office. The author takes into account: location, functions in local master plan, standard of technical infrastructure, property size, number of properties after division.

#### THE PROPERTY DIVISION

The division of the real estate consists in demarcating from hitherto existing parcel two or more parcels which then can be an autonomous subject of turnover. There are many surveying and administrative procedures during division of the real estate [Rozporządzenie Rady Ministrów z dnia 21 września... Dz.U. z 2004 r., nr 207, poz. 2109 z późń. zm.]. Newly created parcels must be given numbers, their surface and legal position must be determined – regardless of whether it is a civil law division conducted under legal process or through administrative powers [Kopyra 2006]. Divisions may take place at the request of an owner, perpetual usufruct user or an office, if it is connected with execution of public purposes and if a plot belongs to a commune and was not given in perpetual usufruct [Bojar 2008, Durzyńska 2009, Godlewski et. al. 2004, Źróbek et. al].

Currently binding regulations concerning division of the real estate are included mainly in Ustawa z dnia 17 maja 1989 r.... [Dz.U. z 2010 r. nr 193, poz. 1287], Ustawa z dnia 21 sierpnia 1997 r.... [Dz.U. z 2004 r. nr 261, poz. 2603 z późn. zm], Ustawa z dnia 27 marca 2003 r.... [Dz.U. nr 80, poz. 717 z późn. zm.].

The rules of real estate division are specified in Ustawa z dnia 21 sierpnia 1997 r.... [Dz.U. z 2004 r., nr 261, poz. 2603 z późń. zm.], Ustawa z dnia 27 marca 2003 r.... [Dz.U. nr 80, poz. 717 z późń. zm.]. In this act, a positive opinion of requested real estate division is dependent on compliance of this request with decisions included in local master plan concerning both its destination and possibilities to its managing after the division. For lack of the local master plan, if property is on the area used to purposes different than agricultural and forest according to decisions included in real estate cadastre, an opinion of requested real estate division is given basing on distinct regulations

or basing on conditions determined in decision about zoning conditions [Cymerman et. al. 2008a]. As a result of the real estate division, the increase of its value may take place, what is connected with a better structure of newly created parcels [Dydenko 2008].

#### CONSTRUCTION OF TECHNICAL INFRASTRUCTURE

The construction of technical infrastructure consists in building roads and constructing under, on or over the ground infrastructure (pipes and devices) belonging to water supply, heating, electric, gas or telecommunications system. This definition of technical infrastructure construction is included in article 143, paragraph 2 of Ustawa z dnia 21 sierpnia 1997 r.... [Dz.U. z 2004 r., nr 261, poz. 2603 z późń. zm.].

The real estate value before and after technical infrastructure construction is determined according to the property condition before and after technical infrastructure construction and according to prices in the day of making the decision on arranging the adjacent payment [Cymerman et. al. 2008b]. The most often it is a date of an official report on receiving technical infrastructure or conveyance of roads.

Value of parcels components shall not be taken into account while determining real estate value before and after technical infrastructure construction [Rozporządzenie Rady Ministrów... Dz.U. z 2004 r. nr 207, poz. 2105 z późn. zm.]. However it is necessary to take into account the distance between the property and the technical infrastructure and conditions of their connection [Szacowanie nieruchomości 2006].

#### THE RESEARCH AREA

The subject of the research is the area comprises a rural commune of Słupsk located in the northwest part of Pomerania province, in Słupsk district. The commune borders: with the commune of Ustka from north, with the commune of Smołdzino from northeast, with the communes Główczyce and Daminca from east and with the commune of Dębnica Kaszubska from southeast. From west it borders with the commune of Postomino that belongs to Sławno district in west Pomerania province.

The commune is 260 058 hectares in size and about 15 000 inhabitants live in its borders (condition from the end of year 2010) in 34 villages spread relatively evenly on the commune's area. The biggest villages are: Jezierzyce, Redzikowo and Siemianice. They are inhabited by about 31% of the commune's population. There are thirty two villages in Słupsk commune: Bierkowo, Bukówka, Bydlino, Bruskowo Wielkie, Bruskowo Małe, Gać-Redęcin, Gałęzinowo, Głobino, Grąsino, Jezierzyce, Jezierzyce-Osiedle, Karżcino, Krępa Słupska, Krzemienica, Kukowo, Kusowo, Lubuczewo, Redzikowo, Redzikowo-Osiedle, Rogawica, Siemianice, Stanięcino, Strzelino, Strzelinko, Swołowo, Warblewo, Wieszyno, Wiklino, Wielichowo, Włynkowo, Włynkówko, Wrzeście. The commune's office is in Słupsk, a city that does not belong to Słupsk commune.

#### THE ACCESSION OF PROPERTY DUE TO THE REAL ESTATE DIVISION

The Słupsk commune's office has given following data concerning divisions of real estate in years 2006–2010: number of divisions, location, parcel's number, parcel's size, real estate value before and after division, number of newly created parcels, a date of property appraisal and their aims. 88 divisions took place in Słupsk commune in analyzed period of time. The most of it (18 divisions) took place in 2008, the least (6 divisions) – in 2006, what is presented in Table 1. The average increase of value of 1 m<sup>2</sup> of a parcel after a division in years 2006–2010 amounted to 2.99 zł, being included between 1.93 (year 2006) and 3.69 (year 2010) and systematically grows. The biggest accession took place in divisions of parcels with size up to one hectare. The following dependence can be seen: the smaller parcel, the bigger increase of real estate value. Here goes an example: year 2006, Siemianice, two parcels, the first with no. 270/3 and 0,9791 ha in size – the value of 1 m<sup>2</sup> rose by 4.15 zł, the second with no. 241/1 and 1,5900 ha in size – the value of 1 m<sup>2</sup> rose by 1.36 zł. There are considerably smaller increases when it comes to parcels with a few hectares in size, for instance after the division of the parcel with 5.169 ha in size, in 2009, in Karzcino the value of 1 m<sup>2</sup> rose only by 0.46 zł. In analyzed period of time among parcels, 70% of them are in size up to 1 ha, about 20% are in size from 1 to 3 ha and about 10% – others.

Table 1. Number of divisions in Słupsk commune and average increase of  $1 \text{m}^2$  value after division in 2006-2010

Year	Number of divisions	Average increase of real estate value after division $-1 \text{ m}^2$	
2006	6	1.93 zł	
2007	18	2.77 zł	
2008	27	2.98 zł	
2009	22	3.59 zł	
2010	15	3.69 zł	
2006–2010	88	2.99 ヹ	

Source: the author's own study based on data received from the Słupsk commune's office

#### LOCATION AND THE REAL ESTATE DIVISION

Another factor that was taken into account is the impact of the location of real estate on the number of real estate divisions what is presented in Table 2 and the Figure 1. The biggest number of divisions took place in Siemianice and Włynkówko (13 divisions in each village), next are Bierkowo (with 10 divisions), Głobino (with 8) and Włynkowo (with 7). In another villages, number of divisions is between 1 and 6. Siemianice is the biggest village in Słupsk commune. Almost 2 000 inhabitants live there, which is over 13% of the commune population. This village is equipped in good technical infrastructure and has a good location near the route A6 Szczecin–Gdańsk. Włynkówko with the

same number of divisions characterizes similar location. The average increase of 1m<sup>2</sup> value after division amounted to 3.40 zł in Siemianice and 3.25 zł in Włynkówko. Comparing these numbers with the average of the whole commune enables to state that they are insignificantly bigger. The biggest increase of value of 1m<sup>2</sup> after division (rejecting single divisions in individual villages) was in Włynkowo (4.76 zł) – the village equipped with good technical infrastructure and located near Włynkówko. The smallest increase was in Kępno and amounted to 1.08 zł, what is a result of big size of divided parcels. It is worth to notice, that in analysed period of time, there were none divisions in the eastern edges of the commune. It may be explained by their poor management in comparison with the rest villages.

Table 2. Number of divisions and average increase of value of 1 m<sup>2</sup> after division in villages of Słupsk commune in 2006–2010

Specification	Number of parcels/average change of price of 1m <sup>2</sup> [zł]				
Village/Year	2006	2007	2008	2009	2010
Bierkowo	1/0.23	1/2.88	3/2.29	3/3.55	2/1.48
Bruskowo Małe	0	1/36.5*	3/2.85	1/0.94	1/0.38
Bydlino	0	0	0	1/9.20	0
Gałęzinowo	0	0	1/0.64	0	0
Głobino	0	1/2.38	5/3.87	1/3.52	1/5.43
Karżcino	0	0	0	1/0.46	0
Krępa Słupska	1/4.16	2/2.9	0	0	
Lubuczewo	0	0	0	1/2.48	1/3.32
Niewierowo	0	1/4.84	0	0	0
Siemianice	3/1.86	4/2.15	2/4.42	2/4.42	2/4.13
Stanięcino	0	0	2/2.53	0	0
Strzelinko	0	1/3.20	2/2.03	0	1/2.09
Strzelino	1/3.91	1/2.55	1/1.98	0	0
Swochowo	0	0	2/1.64	1/6.15	2/5.24
Wielichowo	0	1/0.25	0	1/4.17	0
Wiklino	0	0	0	2/1.53	0
Włynkowo	0	0	1/4.88	3/4.20	3/5.02
Włynkówko	1/1.58	4/3.60	5/2.72	2/6.41	1/1.96
Wrzeście	0	1/0.31	0	2/1.08	0
Wrzeście-Kępno	0	0	0	0	0

Source: the author's own study based on data received from the Słupsk commune's office

<sup>\*</sup>Rejected on account of a increase value that is dozen times bigger than average

#### NUMBER OF PARCELS AFTER DIVISION AND THE ACCESSION OF PROPERTY

An analyze of data received from the Słupsk commune enables to state that there is connection between the increase of real estate value and the number of divisions. Between 2006 and 2010 the biggest increase took place during division one parcel into seven (the price rose by 4.15 zł for 1m²), then during division into four parcels (3.80 zł for 1m²), what is presented in Table 3. The smallest increase was noted during division into 2 parcels (2.17 zł for 1m²) and division into 3 parcels (2.89 zł for 1m²), in the rest cases the increase of 1m² value was between 3.06 zł and 3.34 zł. The average value after all divisions in analyzes period of time amounts to 2.99 zł for 1 m². The following dependence may be noticed, the bigger number of parcels is created as a result of the property division, the bigger is increase of the real estate value.

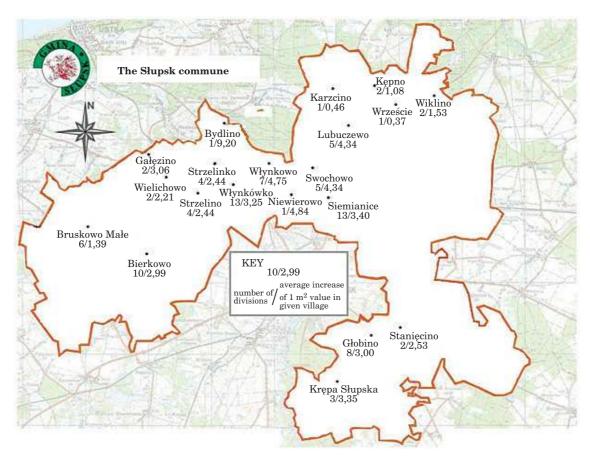


Fig. 1. Location of divisions and average increase of  $1~\mathrm{m}^2$  value in given village after division in Słupsk commune in 2006-2010

Source: the author's own study based on data received from the Słupsk commune's office

Table 3. Average increase of real estat	e value and average property	y size depending on number
of parcels after division		

Number of parcels after division	Number of cases	Average parcel size after division [ha]	Average increase of 1m <sup>2</sup> value after division [zt]
2	20	0.3509	2.17
3	11	0.1971	2.89
4	13	0.2975	3.80
5	8	0.1974	3.30
6	8	0.2312	3.33
7	7	0.1596	4.15
8	4	0.1099	3.06
9	6	0.4471	3.25
11	4	0.1556	3.34
12,14,15,16,18*	1	_	_

Source: the author's own study based on data received from the Słupsk commune's office \*Rejected on account of a increase value that is dozen times bigger than average

In Słupsk commune in years 2006–2010 the most often parcels were divided into two (25% of all divisions) and into four (16% of all divisions). Statistically the biggest parcels were created as a result of division into nine parcels (average size of such a parcel is 0.4471 ha) and into two parcels (average size is 0.3509 ha). The smallest parcels were created as a result of division into eight parcels (average size of such a parcel is 0.1099 ha) and into seven parcels (average size is 0.1596 ha). The average size of parcels after division in the rest cases amounted to 0.2292 ha.

# THE ACCESSION OF PROPERTY DUE TO CONSTRUCTION OF THE TECHNICAL INFRASTRUCTURE

In analyzed period of time in Słupsk commune there were 14 decisions concerning the accession of property, what is presented in Table 4. No decision was made in years 2006–2007, eight decisions were made in 2008, two decisions – in 2009 and four – in 2010. The increase of real estate value in 2008 and 2009 was connected with engineering a road and concerned Krępa Słupska. In 2010 two cases of constructing infrastructure took place in Włynkówko and two – in Krępa Słupska (Tab. 5). The average increase of 1m² value was the highest in 2010 (and amounted to 8.33 zł), just a little lower was in 2008 (8.13 zł). The lowest increase was in 2009 and amounted to 7.10 zł. Sizes of real estate are similar and are included in range 667–1171 m², only one parcel is bigger – its size amounts to 2225 m². The average size of real estate amounted to 984.57 ha. It can be state that in years 2008–2010 in Słupsk commune the average increase of 1m² value due to construction of the technical infrastructure amounted to 7.85 zł.

Table 4. Number of decisions made as a result of construction of the technical infrastructure in Słupsk commune in years 2008–2010

Year	Number of decisions	The increase of 1 m <sup>2</sup> value [zt]
2008	8	8.13
2009	2	7.10
2010	4	8.33
2008-2010	14	7.85

Source: the author's own study based on data received from the Słupsk commune's office

Table 5. The accession of property in given villages of Słupsk commune due to construction of infrastructure in years 2008–2010

Village, number of a parcel, year	Size [m <sup>2</sup> ]	Parcel value before construction of infrastructure [zt]	Parcel value after construction of infrastructure [zł]	The increase of 1 m <sup>2</sup> value [zł]
Krępa Słupska 194/14, 2008	907	46366.00	53740.00	8.13
Krępa Słupska 194/12, 2008	888	45.395	52.614	8.13
Krępa Słupska 194/11, 2008	944	48.257	55.932	8.11
Krępa Słupska 194/9, 2008	1170	59.810	69.323	8.13
Krępa Słupska 194/16, 2008	1001	51.171	59.309	8.13
Krępa Słupska 194/23, 2008	1171	59.862	69.382	8.13
Krępa Słupska 194/35, 2008	650	33.228	38.513	8.13
Krępa Słupska 194/38, 2008	667	34.097	39.520	8.13
Krępa Słupska 194/32, 2009	713	36.285	41.347	7.10
Krępa Słupska 194/28, 2009	986	50.177	7.001	7.10
Krępa Słupska 194/33, 2010	688	33.987	40.206	9.04
Krępa Słupska 194/31, 2010	2225	13.230	129.028	7.10
Włynówko 116/14, 2010	896	53.267	60.955	8.58
Włynówko 116/19, 2010	878	52.197	59.730	8.58

Source: the author's own study based on data received from the Słupsk commune's office

#### RECAPITULATION AND CONCLUSIONS

- 1. In analyzed period of time in Słupsk commune as a result of divisions and construction of technical infrastructure the accession of property took place.
- 2. Average increase of 1 m<sup>2</sup> value due to divisions of real estate amounted to 2.99 zł and due to construction of technical infrastructure amounted to 7.85 zł.
- 3. Average increase of real estate value being a result of the property division was the biggest in cases of small parcels. Average value of parcels with less than 1 ha in

size increased by 4–5 zł for 1 m<sup>2</sup>, while average value of parcels with a few or more hectares in size increased by about 1 zł for 1 m<sup>2</sup>. An analyse of the number of parcels created in the result of the property division enables to state that the biggest increase took place by division into seven parcels (4.15 zł for 1 m<sup>2</sup>), then by division into four parcels (3.80 zł for 1 m<sup>2</sup>). The smallest increase appeared by divisions into two parcels (2.17 zł for 1 m<sup>2</sup>) and into three parcels (2.89 zł for 1 m<sup>2</sup>).

4. The biggest number of divisions could be observed in Siemianice (13 divisions) and Włynkówko (13 divisions). These villages are located very favourably near to route A6 Szczecin–Gdańsk and are equipped with good technical infrastructure. The rest of divisions are spread quite evenly on the whole commune's area besides eastern edges where divisions did not take place what may be explained by their poor management in comparison with the rest of villages.

#### **REFERENCES**

Bojar Z., 2008, Podziały nieruchomości. Komentarz, Gall s.c., Katowice.

Cymerman R., Jesiotr G., Jesiotr M., 2008a. Gospodarka nieruchomościami, Wydawnictwo Uczelniane Politechniki Koszalińskiej, Koszalin.

Cymerman R., Kowalczyk C., Telega T., 2008b. Opłaty adiacenckie, EDUCATERRA, Olsztyn.

Durzyńska M., 2009. Rozgraniczenie i podział nieruchomości, wyd. 1, LexisNexis, Warszawa.

Dydenko J., 2008. Gospodarka nieruchomościami. Zbiór przepisów, Oficyna, Warszawa.

Gmina Słupsk, http://pl.wikipedia.org/Wiki/Gmina Słupsk, dostęp: 05.05.2012 r.

Godlewski R., Łaczmańska M i in. 2004. Nieruchomości. Zagadnienia prawne. Red. H. Kisilowska, wyd. LexisNexis, Warszawa.

Kopyra J., 2008, Podziały nieruchomości gruntowej na podstawie ustawy o gospodarce nieruchomościami, C.H. BECK, Warszawa.

Rozporządzenie Rady Ministrów z dnia 21 września 2004 r. w sprawie wyceny nieruchomości i sporządzania operatu szacunkowego. Dz.U. z 2004 nr 207 poz. 2109 z późn. zm.

Rozporządzenie Rady Ministrów z dnia 7 grudnia 2004 r. w sprawie sposobu i trybu dokonywania podziałów nieruchomości. Dz.U. z 2004 nr 268 poz. 2663 z późn. zm.

Szacowanie nieruchomości, 2006. Red. J. Dydenko, Dom Wydawniczy ABC, Warszawa.

Urząd Gminy Słupsk, http://slupsk.ug.gov.pl/, dostęp: 05.05.2012 r.

Ustawa z dnia 17 maja 1989 r.– Prawo geodezyjne i kartograficzne Dz.U. z 2010 r. nr 193 poz. 1287.

Ustawa z dnia 21 sierpnia 1997r. o gospodarce nieruchomościami. Dz.U. z 2004 r. nr 261, poz. 2603 z późn. zm.

Ustawa z dnia 27 marca 2003 r. o planowaniu i zagospodarowaniu przestrzennym. Dz.U. nr 80, poz. 717 z późn. zm.

Wierzbowski B., 2008. Gospodarka nieruchomościami, LexisNexis, Warszawa.

Źróbek R., Źróbek S., Kuryj J., 2006. Gospodarka nieruchomościami z komentarzem do wybranych procedur, Gall, Katowice.

## WZROST WARTOŚCI NIERUCHOMOŚCI NA SKUTEK ICH PODZIAŁÓW I BUDOWY URZĄDZEŃ INFRASTRUKTURY TECHNICZNEJ NA PRZYKŁADZIE GMINY SŁUPSK

Streszczenie. Budowa urządzeń infrastruktury technicznej przez gminę oraz podziały nieruchomości z reguły wpływają na wzrost wartości nieruchomości. Wielkość tego wzrostu może zależeć od wielu czynników. Celem artykułu jest próba określenia tych czynników oraz wielkości wartości wzrostu na przykładzie gminy Słupsk, położonej w województwie zachodniopomorskim. Badaniami objęto lata 2006–2010. Badając wzrost wartości nieruchomości na skutek ich podziału i budowy urządzeń infrastruktury technicznej, analizowano tylko te czynniki, których wpływ można było określić na podstawie danych pozyskanych z Urzędu Gminy Słupsk. W badaniu uwzględniono: położenie, funkcje w miejscowym planie zagospodarowania przestrzennego (MPZP), wyposażenie w urządzenia infrastruktury technicznej, wielkość działki, liczbę działek po podziale. Z obszaru badań wyłączono nieruchomości, które w MPZP były położone na terenach przeznaczonych na cele rolne lub leśne, a w przypadku jego braku były wykorzystywane na cele rolne lub leśne,

**Słowa kluczowe:** budowa urządzeń infrastruktury, podział nieruchomości, wzrost wartości nieruchomości, gmina

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