

# USE OF INVESTMENT AREAS IN SPECIAL ECONOMIC ZONES IN POLAND IN THE CONTEXT OF PLANNED LEGISLATION CHANGES

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## Abstract

Boundaries of Special Economic Zones (SEZs) in Poland change constantly and preferential conditions, including attractive investment land sites, become important factors underlining a decision to choose the location of an enterprise.

Not all land allocated to investment projects within special economic zones in Poland has been developed and, in the context of planned amendments to the law regulating SEZs, it is worth asking whether the extent to which the zones are developed will change once the new law becomes effective. This is an important question because much of the investment land offered by SEZs is composed of land plots ready to be developed.

The aim of this paper has been to diagnose and assess the current level and changes in the development of investment areas within special economic zones in Poland. Attention was paid to potential consequences of the planned amendments in the Act on the Principles of Supporting New Investments to the management of areas enclosed in SEZs.

The research data were obtained from the Ministry of Development, published in Reports on the Implementation of the Act on Special Economic Zones (covering the years 2009-2016), and from the Polish Investment and Trade Agency (PAIH).

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## 1. Introduction

Although the history of special economic zones (SEZs) in Poland is shorter than in some countries, Polish literature contains several analyses dedicated to SEZs even prior to their establishment in Poland, e.g. DURSKE (1988). A few years afterwards, the following problems began to be raised by Polish researchers: objectives of setting up SEZs (BAZYDŁO, SMĘTKOWSKI 2000, KORENIK 1998, KOZACZKA 2008; OFIARSKA 2000; SIUDAK 2007; SZTYBER 2005), the role of zones in regional development (AMBROZIAK 2009; GROSSE 2004; JARCZEWSKI 2007; KRYŃSKA et al. 2002; LIZIŃSKA, KISIEL 2008; MIŁASZEWICZ 2011; NELEC, PRUSEK 2006; PASTUSIAK, KELLER 2016), or the impact of zones on their environs (FILIPIAK et al. 2005; JARCZEWSKI 2007).

Studies undertaken in developing countries have focused on such issues as: the role of zones as a catalyst of transformation processes (GE 1999; JOHANSSON, NILSSON 1997; LITWACK, QIAN 1997) and a factor influencing economic development (AGARWAL 2007; CURTIS et al. 2006; HAYWOOD 2004). Some other research questions include the debatable use of certain areas (especially ones which could be

useful for agricultural production) to promote industrialization in developing countries (CHAUDHURI, YABUUCHI 2010).

The future of special economic zones in Poland raises numerous discussions. Zones have never paved the way to provide economically weaker regions with equal conditions and chances for development (GODLEWSKA-MAJKOWSKA 2009). Opinions are formulated, for instance, that SEZs have proven to be an insufficient instrument to support the growth of the weakest regions, which lack proper transportation infrastructure, have a poorly developed market of sub-suppliers and an even weaker labor market, and which have failed to attract new investors. Consequently, special economic zones have begun to be treated as a universal mechanism to facilitate the execution of an investment, irrespective of its location (TRZCIŃSKI et al. 2016, p. 58).

The key questions in managing the development of SEZs are whether they fulfil their functions, what effects they generate, and what reservations are raised about their functioning. However, the potential effects of public aid implementation are complex and multidirectional, which stems from various connections and relations between enterprises within SEZs and the state as well as the economic environment. While striving to determine and measure these effects, it is particularly significant to identify directions of financial flows between subjects receiving public support and the state budget as well as the public sector. It is equally important to analyse other relations between enterprises which receive support and their social and economic surroundings (KISIEL, LIZIŃSKA 2013).

According to the analyses carried out by TRZCIŃSKI et al. (2016, p. 3-4), where the effectiveness of SEZs in the area of employment was assessed, special economic zones do not reduce unemployment. The results suggest the lack of consistent and statistically significant differences between the group of towns/municipalities with SEZs<sup>1</sup> and statistically selected municipalities from the control group<sup>2</sup>. Likewise, no evidence was found that the presence of SEZs translated into the level of salaries earned by employees or revenues of municipalities. However, the number of employed persons in municipalities with SEZs is considerably higher than in the control. Nevertheless, the cited authors themselves admitted that – despite being extremely detailed – their report was not a comprehensive assessment of the instrument that special economic zones constitute. Complete evaluation of the effects produced by SEZs would require conducting research on a much larger scale, regarding both the subject-matter and the object of investigations.

In their analyses, PASTUSIAK and KELLER (2016, p. 176) relied on a model constructed on the basis of 28 years of the functioning of special economic zones (13 years of historical data and 15 years of predicted information), and confirmed the benefits derived from SEZs. The main source of financial surplus are the remunerations paid to employees by companies seated in SEZs, exports of these companies, and the demand for production means purchased on the domestic market. This analysis suggests that the Polish economy has achieved positive economic effects from the establishment of special economic zones.

An assessment of the effectiveness of public support in special economic zones in Poland, from the viewpoint of the state budget, was made by KISIEL et al. (2013), who showed that this aid was economically viable. Depending on an analytical variant (with one exception), 1 PLN of public (and non-public) aid generated from 1.2 to 4.2 PLN of revenue to the state budget (and revenues for companies managing SEZs<sup>3</sup>). Thus, the financial effects of public and non-public support in the widest scope of the analysis<sup>4</sup> enabled the attainment of an outcome which trebled the public aid provided.

<sup>1</sup> The units (municipalities and towns) which satisfied the conditions: no SEZ in their borders prior to 2005, a SEZ set up in the area of a town / municipality between 2005-2014, the SEZ remained in a town / municipality between 2005-2014, actual investment projects started in the established sub-zones of SEZs (i.e. higher than zero value of investment inputs among the companies operating on the territory of a given municipality between 2005 and 2010); the selected units had to be adjustable to the control group. The research covered a total of 101 towns / municipalities (TRZCIŃSKI et al. 2016, pp. 11-12).

<sup>2</sup> Units (municipalities and towns) where no SEZ subzones have ever been set up, and which were statistically comparable (demographic make-up, economic features, etc.) to the analyzed units (TRZCIŃSKI et al. 2016, p. 12).

<sup>3</sup> The legislator recognizes the important task of SEZ managing companies in supporting the development of economic activity in the special economic zones they manage, and hence Article 25 paragraph 2 of the Act on Special Economic Zones provides the possibility of obtaining a tax allowance consisting in a corporate income tax exemption, but only deducted from the expenditure into the development of the zone (INFORMACJA ...2017, p. 36).

<sup>4</sup> Covering all available data on the inputs and effects, i.e. public and non-public aid, immediate and indirect effects, net flows from VAT, the financial result achieved by the managing companies.

CHIDLOW et al. (2009) confirm that special economic zones, in both the short- and long-term, contribute to the strengthening of economic foundations on which regions rest. The authors of the World Bank Report (SPECIAL ...2008) underline that privileged areas can function worldwide, also in the form of special economic zones, but their development, relative to their importance for the economy of a given country, will depend, *inter alia*, on the flexibility of law and institutional efficiency. The question of how special economic zones are managed, including the inclusion of investment areas into zones, has long been causing controversies. The Supreme Audit Office in Poland has expressed reservations as well. The performed auditing of documents, aiming to determine the justifications given in applications to expand the borders of SEZs, how these applications were processed and whether decisions to enlarge SEZs were compliant with the objectives specified in the Act on Special Economic Zones and with the development plan of a zone in question, showed that motions to expand SEZs were mainly initiated by investors, who most often received support from the local governments. The enlargement of special economic zones did not always occur in the region for which a given zone had been set up (INFORMACJA O WYNIKACH ...2010, p. 27).

Reviewing the history of SEZs perceived as a public aid mechanism in Poland, it can be concluded that the development of SEZs proceeded in two phases: the phase of a strategic approach to the localization of zones<sup>5</sup>, and the phase of adaptation with respect to the localization of zones<sup>6</sup>.

Based on an analysis of correlations between the number of localizations of SEZs and the level of attractiveness, WALKIEWICZ (2017, pp. 265-266) verified the hypothesis that most sub-zones are located in the most attractive regions. The goals for which zones had been established were therefore only partly achieved. Not even the high level of regional aid in the zones was able to attract investors to poorer regions. An increasing contribution is being made by private businesses, which act as an important lobbyist in favor of setting up new sub-zones in areas which suit investors.

The SEZ areas are now situated in various provinces in Poland, sometimes in centres of cities and sometimes on small land parcels, secluded and distant from most of a given zone's area (TRZCIŃSKI et al. 2016, p. 57). This could be one of the reasons why not all areas included in SEZs have been developed. An additional factor which will influence the management of investment areas in the nearest years are new laws, such as the Draft Act on the Principles for Supporting Investments. According to the justification of the Draft, the new solutions will entail complete abandonment of territorial restrictions when applying for tax exemptions, while preserving the existing rules of land allocation purposes, setting up a time period of tax exemption eligibility depending on the intensity of public aid in the region allowed by the European Union, and strengthening the role of management companies in the investor service system (UZASADNIENIE... 2018). The significance of the above amendment lies in its potential impact on the attractiveness of investment areas located in zones, where some expenses have already been made to provide infrastructural utilities and to promote the zones.

### 3. Data and Methods

The objective of this study has been to make a diagnosis and an assessment of the level and changes in the development of investment areas within special economic zones in Poland. The main aim was achieved through the following detailed goals:

1. Diagnosis of the current development level of the whole area encompassed by special economic zones.
2. Assessment of differences between SEZs in the share of developed land, on the basis of issued licenses to operate in SEZs, to the total land allocated for development. Characterization and evaluation of changes in the land coverage of the Polish special economic zones in 2009-2016.
3. Analysis and evaluation of the current investment offers (greenfield and brownfield land sites) in the zones.

<sup>5</sup> According to the Act on Special Economic Zones of 20 October 1994 (Dz. U. 1994, No. 123, item 600), the original purposes of creating SEZs, were: to develop specific branches of economic activity, to develop new technical and technological solutions, and to implement them in the domestic economy, to improve the competitiveness of products and services, to increase export, to activate the existing industrial assets and economic infrastructure, and to manage unused natural resources while adhering to the principles of sustainable nature. Consequently, the first zones were located in areas where there used to be relatively well-developed industry in the past.

<sup>6</sup> Since 2000, special economic zones have been evolving in a slightly different direction, manifested in the polarization of the scale of attracted investments by particular zones (TRZCIŃSKI et al. 2016, p. 56).

4. Evaluation of changes and the cumulative value of total expenditure into the development of infrastructure and promotion of special economic zones.

Due to the prospective changes in legal regulations pertaining to the support of new investments in Poland, another research aim was to identify the potential effects of legal solutions included in the Draft Act on the Principles for Supporting Investments on the level of land development in SEZs.

The time span of the analyses was determined in line with the availability of current data (2016) and changes in legal regulations governing the operation of special economic zones in connection with the amendment to the Act on Special Economic Zones of 30 May 2008 (2009)<sup>7</sup>. Thus, the article uses data provided by the Ministry of Development in their 2009-2016 reports "Information on the implementation of the Act on Special Economic Zones", as well as the data on investment offers in special economic zones provided by the Polish Investment and Trade Agency (valid as of the end of February 2018).

In this article, due to the necessity to analyze not only the data about the level of development in areas covered by SEZs but also other pertinent information, the author decided to carry out analyses on the level of each zone based on the data available from the reports. This analytical approach was enforced by the complexity of factors which determine the level of land development in individual special economic zones. Thus, the focus was on the identification of dynamics and characteristic changes as well as the current land development, assessed on the basis of available data. At the same time, attention was paid to how the planned legal regulations may affect the level of land development in areas covered by SEZs.

#### 4. Empirical results

According to the data available at the end of 2016, special economic zones in Poland comprised areas located in 179 towns and 287 municipalities, and covered 21 462.6 ha in total (INFORMACJA O REALIZACJI..., 2017, p. 5). Relative to 2015, the total area of SEZs increased by 1,625.7 ha, which resulted from the inclusion<sup>8</sup> of 2 141.1 ha and exclusion of 516.2 ha, as well as the correction of the coverage (0.83 ha). In 2016, borders of 12 special economic zones were altered. Among the areas included in 2016, privately owned land constituted nearly 26.6% (565.1 ha). The remaining land, which was designated the status of being in a special economic zone in 2016 (1 571.75 ha), had previously been publically owned ground.

In 2016, the following SEZs were enlarged the most: Warmia-Mazury (31.5%), Kraków (22.5%) and Wałbrzych SEZs (21.7%). The area covered by two zones, i.e. the Kamienna Góra and Suwałska SEZs, did not change, and one zone, the Legnica SEZ, decreased in area by nearly 24% compared to 2015.

Changes in the area of zones, which arise from the inclusion of new land into zones and, on the other hand, caused by alterations in the economic activity conducted by companies or the development of infrastructure, affect the extent to which special economic zones are developed (Tab. 1). Developed land plots include areas covered by the premises of enterprises which are licenced to operate in special economic zones as well as ones without such permits<sup>9</sup>, and land occupied by infrastructure.

<sup>7</sup> It was necessary to issue new regulations to determine development plans of individual zones and new orders ceding rights to issue licenses and to audit entrepreneurs in the scope of satisfying the conditions under which the licenses to operate in SEZs have been issued to SEZ managing companies

(INFORMACJA O REALIZACJI...2010, p. 5). Also, the maximum size of a SEZ was increased from 12,000 to 20,000 ha.

<sup>8</sup> Pursuant to Art. 5 paragraph 1 of the Act on Special Economic Zones, land plots included into zones can be the property of the managing body, State Treasury, company wholly owned by the Treasury, local government, municipal consortium, or being under a usufruct of the SEZ managing company or a company wholly owned by the Treasury, i.e. publically owned land. Criteria for the inclusion of such land into SEZs are defined in the concept of the development of SEZs (KONCEPCJA... 2009), approved by the Council of Ministers on 27 January 2009. A special economic zone can also incorporate land owned or held under a usufruct by other subjects, i.e. privately owned land, provided it satisfies at least one of the criteria specified in the Regulation of the Council of Ministers of 10 December 2008 regarding detailed criteria to be satisfied by land to be incorporated into a special economic zone (Dz. U. of 2015, item 1473).

<sup>9</sup> Because they had lost a permit or could not obtain one because of the nature of their economic activity.



Table 1

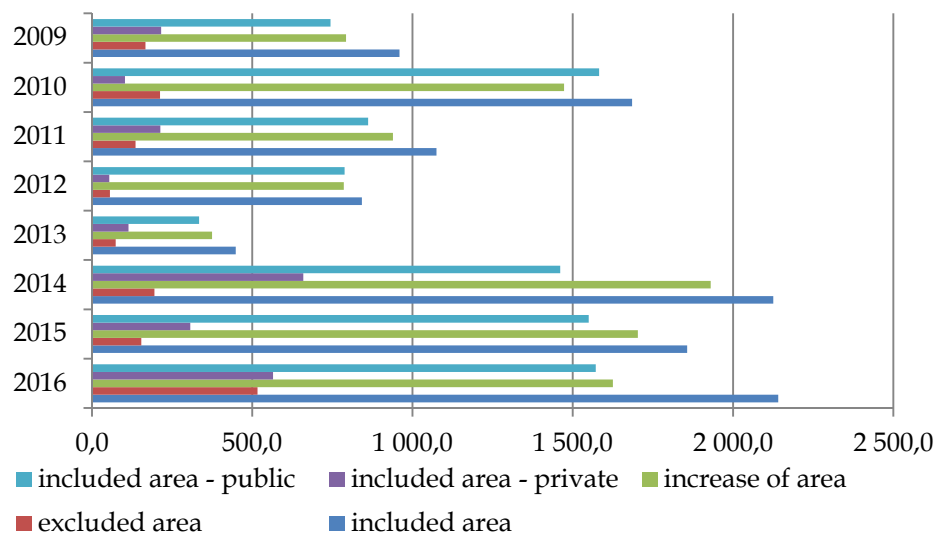
The level of developed areas of zones (as of December 31, 2016)

Zone	Area (ha)			Share of developed land (%)
	Area of zone	Developed land	Undeveloped land	
Kamienna Góra	373.8	231.3	142.5	61.9
Katowice	2 614.4	1617.7	996.6	61.9
Kostrzyńsko-Słubicka	1 936.9	1 086.8	850.1	56.1
Kraków	866.8	602.0	264.8	69.4
Legnica	1 341.1	347.4	993.8	25.9
Łódź	1 416.8	1 050.8	366.0	74.2
Mielec	1 643.1	1 148.7	494.4	69.9
Pomorska	2 246.3	1 495.4	750.9	66.6
Słupska	910.1	310.1	600.0	34.1
Starachowicka	664.1	404.7	259.4	60.9
Suwalska	635.1	390.9	244.1	61.5
Tarnobrzeg	1 868.2	1 323.2	545.0	70.8
Wałbrzych	3 554.9	1 838.8	1 716.1	51.7
Warmia-Mazury	1 390.7	945.5	445.2	68.0

Source: INFORMACJA O REALIZACJI USTAWY O SPECJALNYCH STREFACH EKONOMICZNYCH Stan na 31 grudnia 2016 r. (2017). Ministerstwo Rozwoju, Warszawa.

At the end of 2016, nearly 60% of the total area of special economic zones in Poland had been developed. The highest development was achieved in two SEZs: Łódź (74.2%) and Tarnobrzeg (70.8%), while the least developed was the Legnica SEZ (25.9%). It has already been demonstrated that the percentage of developed land in special economic zones depends not only on the total area of land sold to entrepreneurs to be developed but also on the area of land included or excluded in a given year. The land excluded from a SEZ may have been counted in the preceding years as developed land. Possible reasons for exclusion of a land plot could be the loss of a permit to operate in a SEZ by a company located on it, or the fact that it was covered by some infrastructure. Thus, the level of land development in a zone will not substantiate a simple assessment of the zone at a given moment, but it will only visualize the ratio of developed area to the zone's entire area at the end of the analyzed time period. However, such data may implicate to what extent the zone's management, through the undertaken actions, are able to contribute to the development of land included in the SEZ they supervise. Another implication could be that the resolution to found an SEZ may not have been amended for a long time and the land resources offered for investment have been exhausted. The degree of land development within a special economic zone might also depend on the incorporation of land plots that have not yet attracted any investors.

As the data in Figure 1 demonstrate, over the last three years of the analyzed period (2009-2016) there was a considerable increase in the total area of SEZs (by 5 258.02 ha). Despite this enlargement, a relatively large area (516.25 ha) was excluded from the special economic zones in 2016. The structure of grounds included into the zones was distinctly dominated by publically owned land plots. Their total area in the analyzed time period (8 892.08 ha) was four-fold higher than the total area of privately owned land (2 230.67 ha). The highest ratio of privately owned land parcels to public grounds incorporated into SEZs (24.1%) was observed in 2016. In the earlier years, it did not exceed ten to twenty per cent. Aside the ratio of land included into versus excluded from SEZs, the level of development of such zones is affected by the interest land plots attract at the stage of their inclusion. It is not uncommon that new land plots are incorporated into zones namely because such an interest in a specific location has been expressed by a potential investor, which means that once this site is incorporated into a zone, it instantly improves the zone's level of development. However, not all land parcels that are added to SEZs have investors interested in their development at this stage.



**Fig. 1.** Changes in the area of land in zones in 2009-2016 (ha). *Source:* own study based on *INFORMACJA O REALIZACJI USTAWY O SPECJALNYCH STREFACH* - for the years 2009-2016.

As mentioned previously, developed land parcels in special economic zones are not only the ones occupied by entrepreneurs who have permits to operate in SEZs. Therefore, attention was also paid to the ratio of the land used by entrepreneurs with permits to the total area of developed land in each SEZ (Tab. 2). The data collected at the end of 2016 prove that the share of land developed by companies with licenses to operate in SEZs to total developed land was 69.0% on average. However, there were big differences in this ratio among the analyzed special economic zones, from 45.5% in the Mielec SEZ to 87.6% in the Wałbrzych SEZ. These discrepancies can be due to specific characteristics of the procedures applied to the issuing of licenses and their elimination from legal transactions<sup>10</sup>; on the other hand, differences may stem from the potential for growth that zones in specific locations offer to investors.

**Table 2**

Developed area in zones and occupied by entrepreneurs who have permits to operate in SEZs

Zone	Area (ha)		Share of developed land by companies with licenses to operate in SEZs to total developed land
	Developed land	Area occupied by entrepreneurs who have permits to operate in SEZs	
Kamienna Góra	231.3	152.8	66.1
Katowice	1617.7	941.4	58.2
Kostrzyńsko-Słubicka	1 086.8	812.1	74.7
Kraków	602.0	484.7	80.5
Legnica	347.4	295.7	85.1
Łódź	1 050.8	844.6	80.4
Mielec	1 148.7	522.3	45.5
Pomorska	1 495.4	1184.1	79.2
Słupsk	3101	224.4	72.4
Starachowicka	404.7	205.6	50.8
Suwalska	390.9	242.2	62.0

<sup>10</sup> withdrawn, expired, declared null and void, or repealed. Withdrawal and expiry of a permit can be an ex officio decision or in response to an application filed by the interested entrepreneur. Moreover, a license expires when its validity date passes. A permit is declared null and void for example when new circumstances or new evidence emerge which existed at a date of issuing the decision but were unknown to the organ issuing the decision, or when a decision was issued as a consequence of a breach of law.

<b>Tarnobrzeg</b>	1 323.2	770.3	58,2
<b>Wałbrzych</b>	1 838.8	1610.1	87,6
<b>Warmia-Mazury</b>	945.5	540.3	57,1
<b>Total</b>	12 793.4	8830.9	69,0

Source: own study based on *INFORMACJA O REALIZACJI USTAWY O SPECJALNYCH STREFACH EKONOMICZNYCH Stan na 31 grudnia 2016 r.* (2017). Ministerstwo Rozwoju, Warszawa.

Bearing in mind relationships between the developed area within special economic zones with both the number of issued licenses and the ones eliminated from legal transactions, an analysis was also made regarding the exclusion of licenses. Since the special economic zones were set up in Poland until the end of 2016, 3 687 permits were issued, of which 1 424 were eliminated from legal transactions, 746 were withdrawn (20.2% of the total number of issued permits), 669 expired (18.1%), 7 were declared null and void and 2 were repealed. Some companies that have lost their licenses continue to operate in SEZs. The land plots they occupy are excluded from the zones by regulations amending the boundaries of thereof.

### 5. Prospects of using the area covered by special economic zones

With the current development of the total area of special economic zones in Poland, which is around 60%, some 8669.2 ha of land still remain to be developed under investment projects. Predictably, possible tax exemptions, which, according to the provisions of the Draft Act on the Principles of Supporting New Investments, can be granted for 15 years, will not discourage investors from planning new projects. This, in turn, should contribute to the gradual development of the free land within special economic zones (PROJEKT...2017). Some limitations can be seen in certain other provisions of the aforementioned draft, mainly the obligation to conduct separate tax outcome calculations by companies which operate on the basis of more than one license<sup>11</sup>. Moreover, some earlier analyses (ZIELIŃSKA-SZCZEPKOWSKA 2013, p. 44) implicate that the rate of return of the capital invested in special economic zones is often longer than 8 years. Thus, entrepreneurs may not be able to take full advantage of the tax exemption they will be eligible to, which resembles the current situation.

It is also worth adding that each of the 14 SEZs in Poland has a different offer addressed to investors. Furthermore, there is a wide range of land plots for investment available outside SEZs. According to the information made available on the webpages of the Polish Investment and Trade Agency in Poland, there were 459 investment land sites offered in special economic zones in the second half of 2017 (Tab. 3). Most (83 – 18.1%) were available in the Wałbrzych SEZ, while the smallest number was in the Kamienna Góra SEZ (11 offers – 2.4%).

**Table 3**

Offers of investment areas in special economic zones in Poland located in the PAIH database and the area of undeveloped land

Zone	<i>Greenfield and brownfield offers*</i>		<i>Undeveloped areas**</i>	
	Total number of offers with area >2 ha	Share of zone offers (%)	Area (ha)	Share of zone area in total area (%)
<b>Kamienna Góra</b>	11	2.4	142.5	1.6
<b>Katowice</b>	64	13.9	996.6	11.5
<b>Kostrzyńsko-Słubicka</b>	27	5.9	850.1	9.8
<b>Kraków</b>	12	2,6	264,8	3,1

<sup>11</sup> The proposed provisions assume the imposition of the obligation to calculate tax results separately for each support decision received. From 1 January 2019, this regulation will also apply to entrepreneurs using two or more permits to operate in SEZs obtained under the current law. Some concerns are also raised by the provision of the exclusion of the right to exemption from a taxpayer who is granted the tax exemption and performs legal actions, including ones not covered by the tax exemption decision, to be released if the taxpayer using the exemption performs legal acts, including non-release activities, whose main purpose is to avoid or evade taxation.

Legnica	24	5,2	993,8	11,5
Łódź	31	6,8	366,0	4,2
Mielec	46	10,0	494,4	5,7
Pomorska	29	6,3	750,9	8,7
Słupsk	21	4,6	600,0	6,9
Suwalska	15	3,3	259,4	3,0
Starachowicka	32	7,0	244,1	2,8
Tarnobrzeg	39	8,5	545,0	6,3
Wałbrzych	83	18,1	1 716,1	19,8
Warmia-Mazury	25	5,4	445,2	5,1
<b>Total</b>	<b>459</b>	<b>100,0</b>	<b>8 669,2</b>	<b>100,0</b>

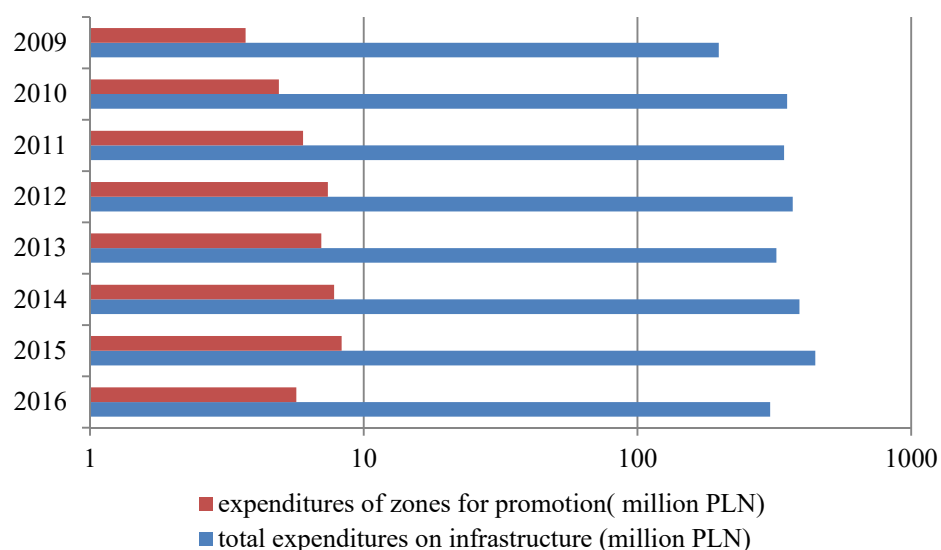
\* as of the second half of 2017, \*\* as of the end of 2016

Source: own study based on PAIH [PITA] (BAZA OFERT INWESTYCYJNYCH) and Ministry of Development (INFORMACJA...2017).

While making a comparison of investment offers with the undeveloped land in the zones, attention was drawn to the Legnica SEZ, which is one of the 3 zones with the highest percentage of free land but has only 24 offers (out of 459) promoted by the Polish Investment and Trade Agency. A reverse situation was noted in the Mielec SEZ, where the share in the number of offers was nearly twice as high as the share of undeveloped land. On the one hand, this can be due to the specific character of the said offers, including the size of land plots, but another reason could be the requirements that the Polish Investment and Trade Agency sets for investment offers it will promote.

It should be noticed, too, that not all areas located within SEZs sufficiently satisfy the expectations and needs of investors, for example some may have an inconvenient location or inadequate access to infrastructure. In total, 154 offers (as of the end of February 2018) of greenfield investment land plots with complete utilities, access to media and infrastructure were available via the Polish Investment and Trade Agency. Of this number, 56 offers were investment land parcels located within SEZs. There were also 17 offers for brownfield land, of which 7 lay in the zones. Hence, the wide range of sites offered outside SEZs, additionally supported by the possibility of obtaining tax exemption as well as other aid provided by the relevant authorities, can have a limiting effect on the level of land development within special economic zones.

The prospective use of undeveloped land in the special economic zones in the light of the amended act on supporting new investments, planned to become effective in near future, gains importance because of the value of inputs which have been dedicated to the development of infrastructure and to the promotion of investment land sites in the zones (Fig. 2).



**Fig. 2.** Total expenditures on infrastructure development and expenditures of zones for promotion.

Source: own study based on *INFORMACJA O REALIZACJI USTAWY O SPECJALNYCH STREFACH* - for the years 2009-2016.



Since the early days of special economic zones in Poland until the end of 2016, a total of 4 351.8 million PLN was expended to provide them with infrastructure. Of this sum, 63% was spent in 2009-2016. The contribution of SEZ managing companies to the infrastructural investments equaled 35.5%. The remaining expenses were financed by municipalities, companies managing utilities and amenities as well as the General Directorate for National Roads and Motorways (GDDKiA). The zones have also expended certain amounts of money to promotional campaigns (87.96 m PLN in total, of which 50.77 m PLN in 2009-2016). Thus, it is crucial that the existing resources of investment land located within the current boundaries of special economic zones be used adequately, and this can be achieved owing to the sites being prepared for development as well as their adequate promotion.

## 6. Conclusions

The offer of land sites for investments within special economic zones in Poland is among the most important sets of offers addressed to investors in our country. The SEZ offers of land sites with complete utilities promoted by the PAIH at the end of February 2018 made up 36.4% of the total number of investment offers. It was noticed, however, that not all land in the SEZs in Poland was developed over the analyzed time period (2009-2016). On the one hand, this was a consequence of incorporating new land into the zones, although some of these plots, at the stage of inclusion, had an investor who had declared interest in their development in order to undertake an economic activity on preferential conditions offered by a SEZ. On the other hand, some land remains undeveloped because no investors have been attracted to it. Despite the dynamic changes in the surface area of land included in and excluded from the zones as well as the number of permits issued and withdrawn, according to the data available at the end of 2016, about 40% of the land within the SEZs in Poland remained undeveloped. There were notable differences between individual zones in this respect (from 25.8% of undeveloped land in the Łódź SEZ to 74.1% in the Legnica SEZ).

With this wide range of land sites offered in SEZs in Poland, their future development appears significant, especially in the context of the Draft Act on Supporting New Investments. The announced evaluation of the effects caused by the above law coming into force, as well as the concomitant assessment of the effects achieved by companies operating within SEZs, may provide us with an answer to the question which of these instruments is more effective in the Polish economy. It should also be highlighted that, by analogy to the results achieved by the special economic zones, the announcement of some new regulations in the aforementioned act may reduce the effectiveness of the new law when it is implemented.

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