

Annales Universitatis Paedagogicae Cracoviensis

Studia Geographica VIII (2015)

Krzysztof Wiedermann

The role of industry in the labour market of small towns

Abstract

The problem of changing and shrinking economic base of many small towns causes necessity of searching new paths of development for them. Central service functions existing in those towns previously are largely washed out to larger cities as a result of the present metropolisation processes. The opportunity for economic base or redevelopment of small towns should focus on manufacturing industry. The issue of the paper is to indicate the role of industry for the development of labour market in the space of the small towns, proving the positive impact has practical applications because of its ability to design and implement new development strategy objectives of these towns. The study area were Poland's counties (poviats), in which the central city had less than 20,000 inhabitants.

Keywords: economic base; industry; metropolitan areas; small towns

Introduction

Economic transformation of Poland and the whole region of Central Europe, which had started in the late 1980s and the beginning of the 1990s, led to profound changes in the economy, including the spatial organization of industrial production. Economic structures developed under the centrally planned system had to face the reality of the free market. Another considerable change was the inflow of new foreign investment resulting in the relocation of industrial production. These processes have led to significant spatial differentiation of productive activities, both at the local and regional levels. These processes were the subject of many studies since the early 1990s (e.g. Czyż, 1998; Domański, 2001; Domański, 1997; Kukliński, Mync, Szul, 1997; Stryjakiewicz, 1999; Szlachta, 1993).

Restructuring and modernization of the industry and the growth of new investment in production impacted significantly to the growth of competitiveness of production which resulted in a decrease of the labour demand and to a large decrease in employment in manufacturing industry, also in the case of companies that had developed intensive manufacturing activities. There was a significant decline in the importance of the industry in the labour market (Rachwał et al., 2008, 2009). These

processes, together with the fall of many unprofitable industrial enterprises significantly contributed to the shrinking of the economic base of many areas, to their economic stagnation or even recession. To a large extent, this problem affected many small urban centres, particularly in areas where labour-intensive industry was developed (Heffner, Marszał 2006; Kwiatek-Sołtys, 2001; Kwiatek-Sołtys, Wiedermann 2014; Rajman 2000–2001).

Metropolisation processes and the resulting leaching processes of central functions to the greatest cities make it necessary to search for new paths of development of small towns (Kwiatek-Sołtys, 2011; Kwiatek-Sołtys et al., 2014). Metropolitan areas are also very attractive for the location of new specialized functions, industry included (Rachwał, 2012). The most important factors for the competitiveness of these places are good transport accessibility, large resources of a diversified workforce, and, of course, a much greater market. Metropolitan areas are characterized by relatively high prices of land property in relation to the peripheral areas. In the case of production activities this is essential due to the relatively large space needed for building factories. This facilitates and accelerates the process of relocation of existing production resources from major metropolitan areas to those located on the outskirts of the agglomeration or beyond them. The process is particularly visible in the former socialist countries, because the lack of an appropriate rent from the point of view of a free market economy meant that many industrial plants, were located in the very city centres. Since the 1990s, such areas have been converted to service and residential units such as shopping malls, hotels, restaurants or lofts, while production is moved outside the city centres.

The author presents the contemporary industrial space of Polish counties (poviats) in which there are no large or medium-sized urban centres. This image was compared with the economic situation of these areas and its labour markets. The districts taken for analysis are those where the number of inhabitants of the greatest town is below 20,000. The level of detail of the analysis carried out on the basis of districts resulted not only from an availability of the Polish Statistical Office (GUS) data concerning in the labour market and industrial production. Industrial activities and its economic connections went beyond the boundaries of cities, to their immediate surroundings. These links show large relations closure in the context of the labour market or income growth in the local environment that can be considered for the area of the county (Domański et al., 2005; Huculak, 2011; Gwosdz 2011).

Development of industry

Spatial differences in the size of production shows high diversity both on a local and regional basis (Fig. 1). It is due to the considerable degree of production concentration in the districts located within the metropolitan areas of large cities. This mainly concerns those of Wrocław, Warsaw, Bydgoszcz-Toruń and Poznań. Also around the smaller centres such as Rzeszów, Opole, Olsztyn and Gorzów Wielkopolski developed areas the high production value is observed.

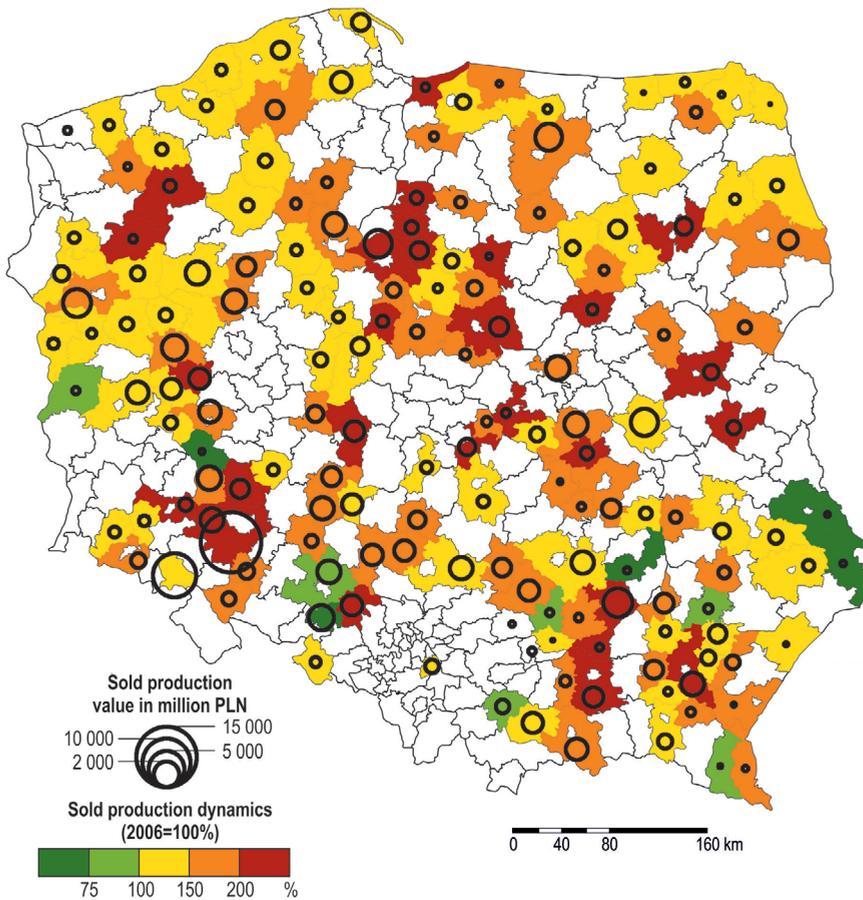


Fig. 1. Sold production value of industry and construction in 2012 and its dynamics over 2006–2012 period

Source: the author's own work based on GUS Database

To better show the importance of industry and construction for the economic development of the particular counties, it was also presented on the map (Fig. 1) by the dynamics of production over the years 2006–2012. On a national scale, it is clear that industrial production grew in this period. There are only few areas showing a decrease. Nevertheless, in such cases the decline may be a problem in the local area. Such examples are usually found in the eastern Poland where it has especially negative effects due to the fact that the decrease in production relates to the areas in which its size was already low. The largest scale of changes was characteristic in the areas of Bydgoszcz-Toruń and Wrocław regions. Especially in the first case, this was very important because this region has been rather weak in comparison with other large urban centres. These changes are in both cases the result of large industrial projects in the field of TV sets and LCD screens productions in their new established industrial parks (including Łysomice near Toruń, or Biskupice Podgórne near Wrocław).

The impact of industry on local labour market

The impact of the industry on the local environment has been the subject of numerous studies (Grabher, 1994; Lloyd, Dicken, 1972; Porter, 1990). In Polish geography of industry since the 1990s there has been a growing interest in local and regional development. The most important works dealing with industry – environment relations are issues of location factors including with special emphasis the creation of areas of enterprise clusters (Porter, 1990), links between the business environment known as embeddedness (Grabher, 1994; Hardy, 1998) induced multiplier effects in the environment (Lloyd, Dicken, 1972; Domanski et al., 2005; Stryjakiewicz, 2004; Gwosdz, 2011; Huculak, 2011; Micek, 2011; Rachwał, Wiedermann, 2008; Wiedermann, 2007), as well as the sustainability of investment in production, particularly in the context of globalization and progressive relocation processes.

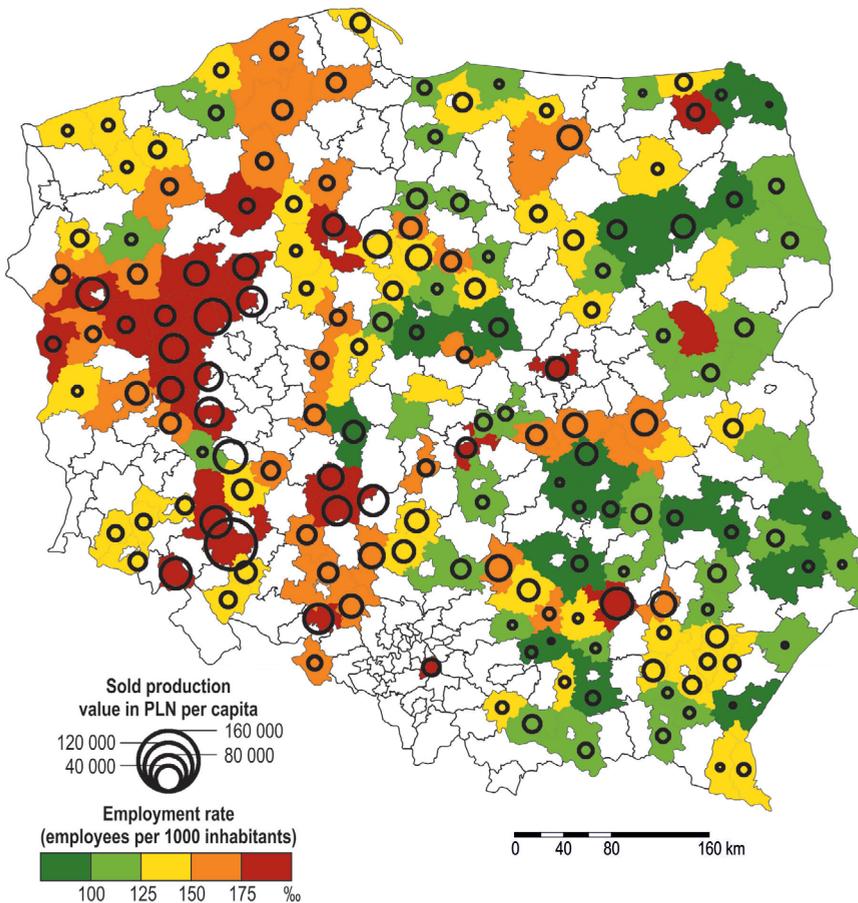


Fig. 2. Sold production of industry and construction in 2012 and the employment rate

Source: the author's own work based on GUS Database

One of the major current socio-economic problems of the most developed countries is the increase in unemployment resulting from the reduction of the demand for labour. This is due to the increase in labour productivity in production resulting from on the one hand the automation of production processes, on the other – the relocation of activities with high labour costs to those with the lower one. In the structure of the labour market the lack of jobs for people with low skills concerning especially young people is continuously growing. The greatest problem concerns the areas located on the outside of major metropolitan areas, where the loss of jobs in manufacturing is not offset by an increase in demand for services. In the case of Europe, this situation is observed mostly in its southern and central-eastern part. To a large extent, these are the areas that seem to be attractive for the relocated investment in manufacturing. Although progressive globalization means that now a large part of this type of investment goes to areas with much lower labour costs.

In Poland industrialized counties are located in its western part. The comparison of the volume of production with the employment rate show strong relationship (Fig. 2). This applies not only to the Wielkopolska, Lower Silesia and Pomerania regions, where the average production level achieves a much higher percentage of employees but also is higher in other provinces such as Świętokrzyskie voivodeship (Kielce) or Podkarpackie one (Rzeszów), where staszowski and tarnobrzewski counties respectively show the highest values of both parameters. Some exceptions are the metropolitan areas of Warsaw and Lodz, where in some cases the relatively low production value is not reflected in the low employment rate. This is due to the great development of central functions of these metropolitan areas.

Described above, the production value even at high results may also apply to the areas affected by the recession. Thus, the impact of production on employment is even more visible in their output growth with the dynamics of the employment rate (Fig. 3). This relation is nearly linear. Of course, there are areas where the discussed relation is less visible. Among the surveyed counties the fastest growth in production in 2006–2012 was characteristic for toruński and wrocławski. However, in the case of the first one more than six times higher production value resulted in the nearly 30% increase in employment while in the second case five times higher production value was associated with the two times higher increase in employment. Generally, districts for which rates were above the regression line are characterized by rapid growth in jobs, resulting from the production increase. Hence, in the case of such counties as skierniewicki, warszawski zachodni or rzeszowski, production growth is less important than the development of services, especially in the core areas of central cities.

To a lesser extent, the relationship between the development of production is linked to the unemployment rate recorded in particular counties (Fig. 4). The same increase in labour supply due to the industrial development and that of other functions does not affect the various factors of demand for labour. Less correlation in this case is caused by such factors as migration processes, the age structure of population and, last but not least – by the “hidden” unemployment, mainly in agriculture. The zones of high population outflow, mainly people in the productive age, show a decrease in unemployment, despite the absence of changes in the labour market. The agricultural population is not recorded in the unemployment statistics. There is an underestimation of the unemployment rate in most of Eastern and South-Eastern

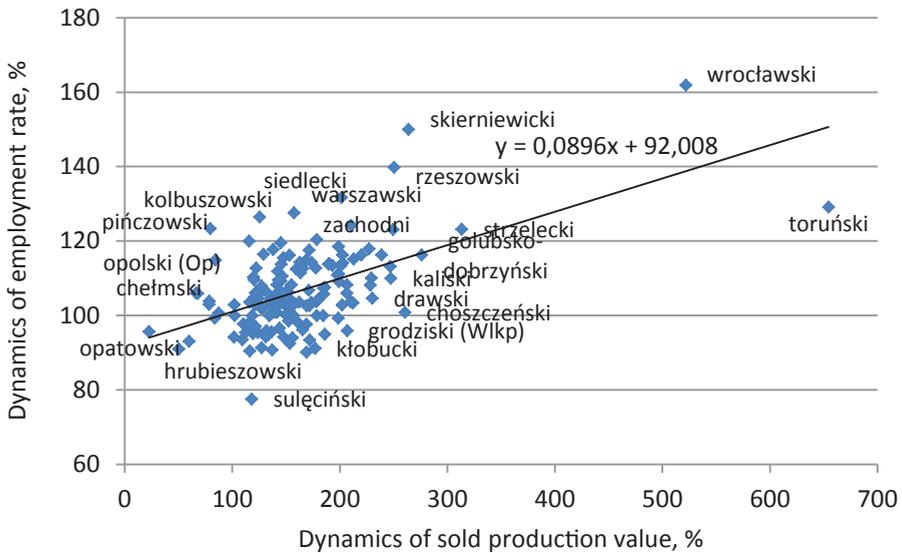


Fig. 3. Dynamics of sold production of industry and construction value over 2006–2012 period and employment rate
 Source: the author’s own work based on GUS Database

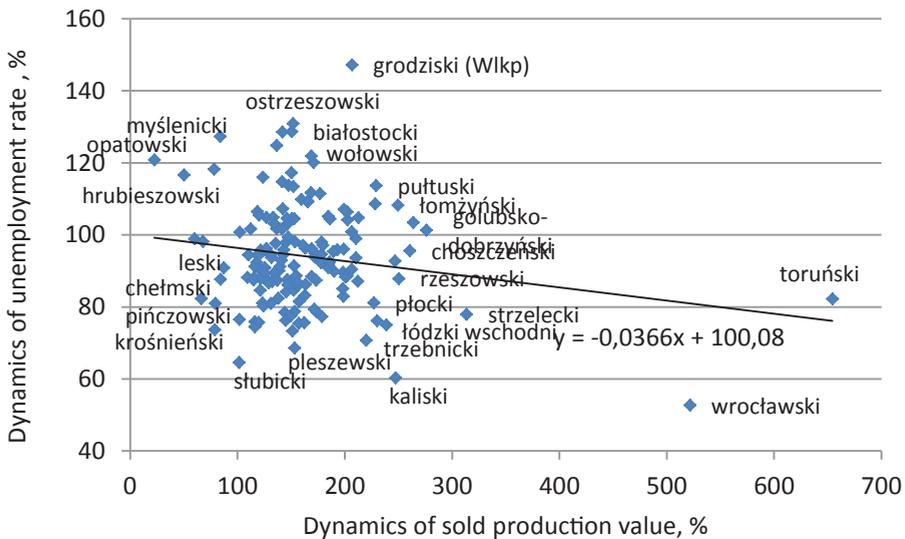


Fig. 4. Dynamics of sold production of industry and construction value over 2006–2012 period and unemployment rate
 Source: the author’s own work based on GUS Database

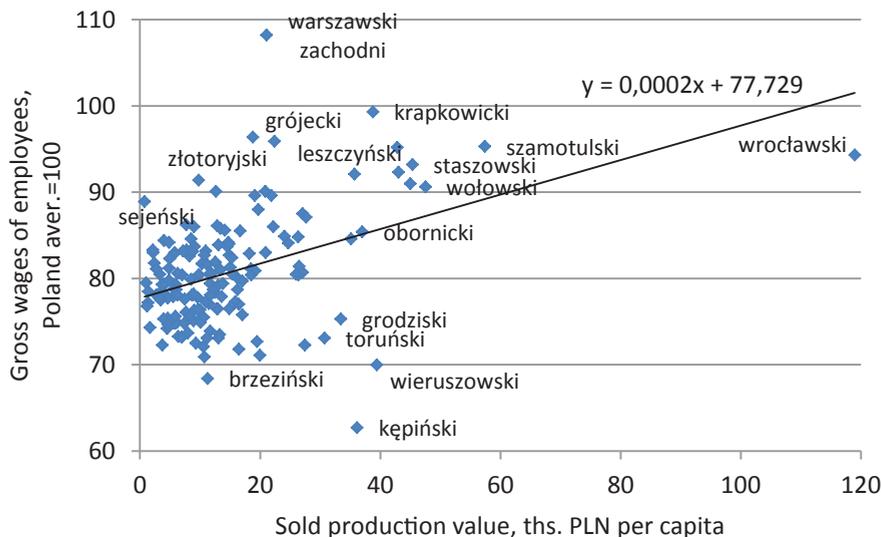


Fig. 5. Indices of sold production of industry and construction value in 2012 and wages of employees number 2012

Source: the author’s own work based on GUS Database

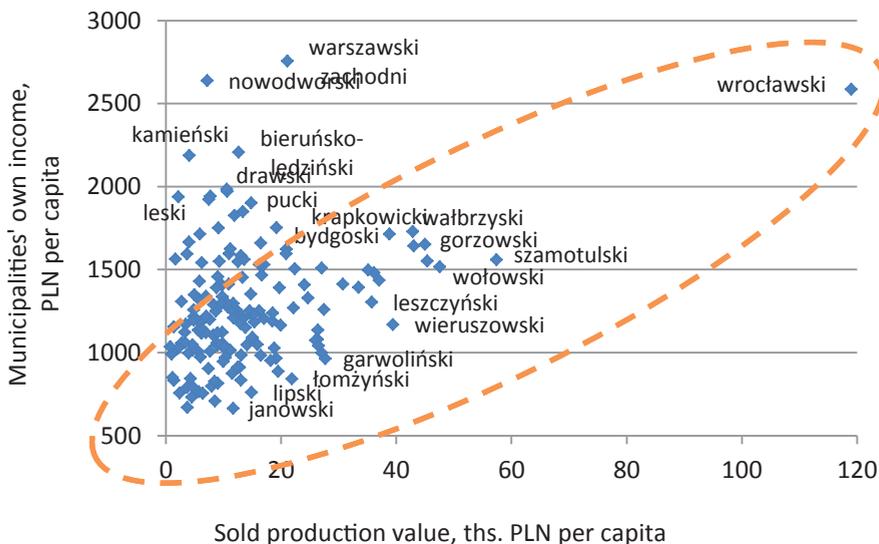


Fig. 6. Sold production of industry and construction and municipalities’ own income in 2012

Source: the author’s own work based on GUS Database

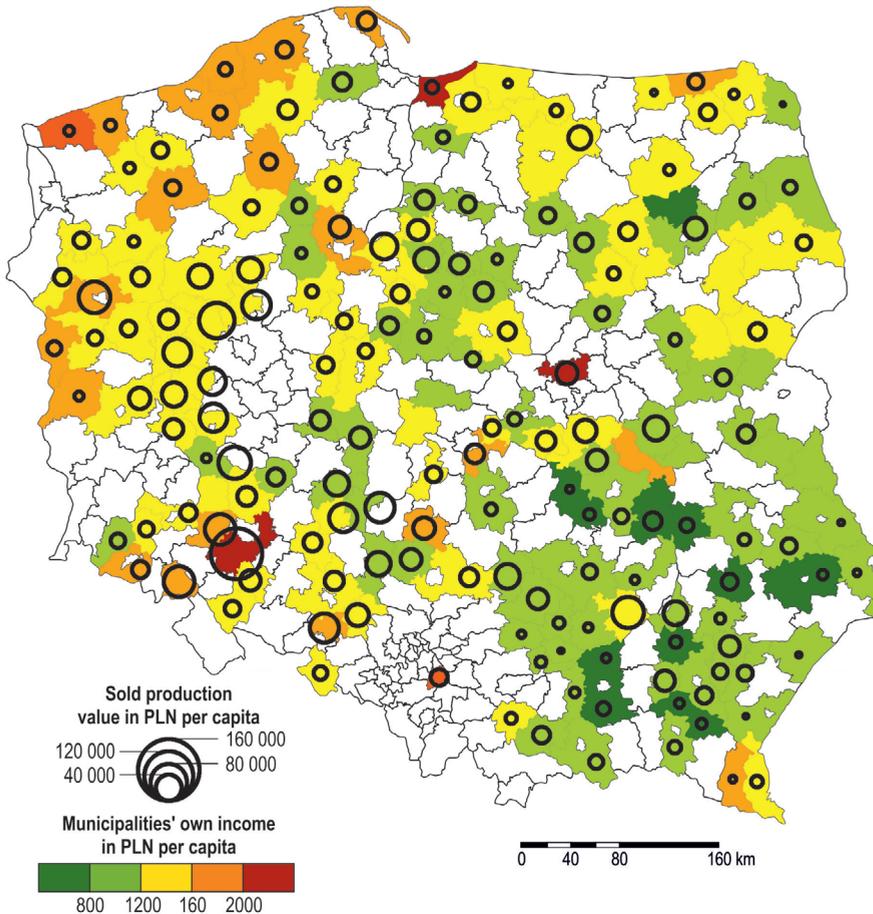


Fig. 7. Sold production of industry and construction value in 2012 and municipalities' own incomes

Source: the author's own work based on GUS Database

Poland mainly in voivodeships of Podkarpackie (Rzeszów), Małopolskie (Kraków), Świętokrzyskie (Kielce), Lubelskie (Lublin) and Podlaskie (Białystok). Therefore, the increase in the job number is not reflected in the decrease of the unemployment. a good example is the district of Golub-Dobrzyń where in the years 2006–2012 the unemployment rate heavily decreased while the number of the Kujawsko-Pomorskie (Bydgoszcz-Toruń) voivodeship employees grew by more than 15%.

Type of employment and unemployment rates in the region are reflected in the level of wages. In the case of small towns and rural areas located in the analyzed counties wage rate is significantly lower than the average for Poland (Fig. 5). Only in the case of the western Warsaw district, the average wage in the county was higher than the average for Poland. In the strongly industrialized Krapkowicki district, in the zone of numerous large manufacturing companies, this value was equal to the national one. Another counties showing high-wage values were situated in

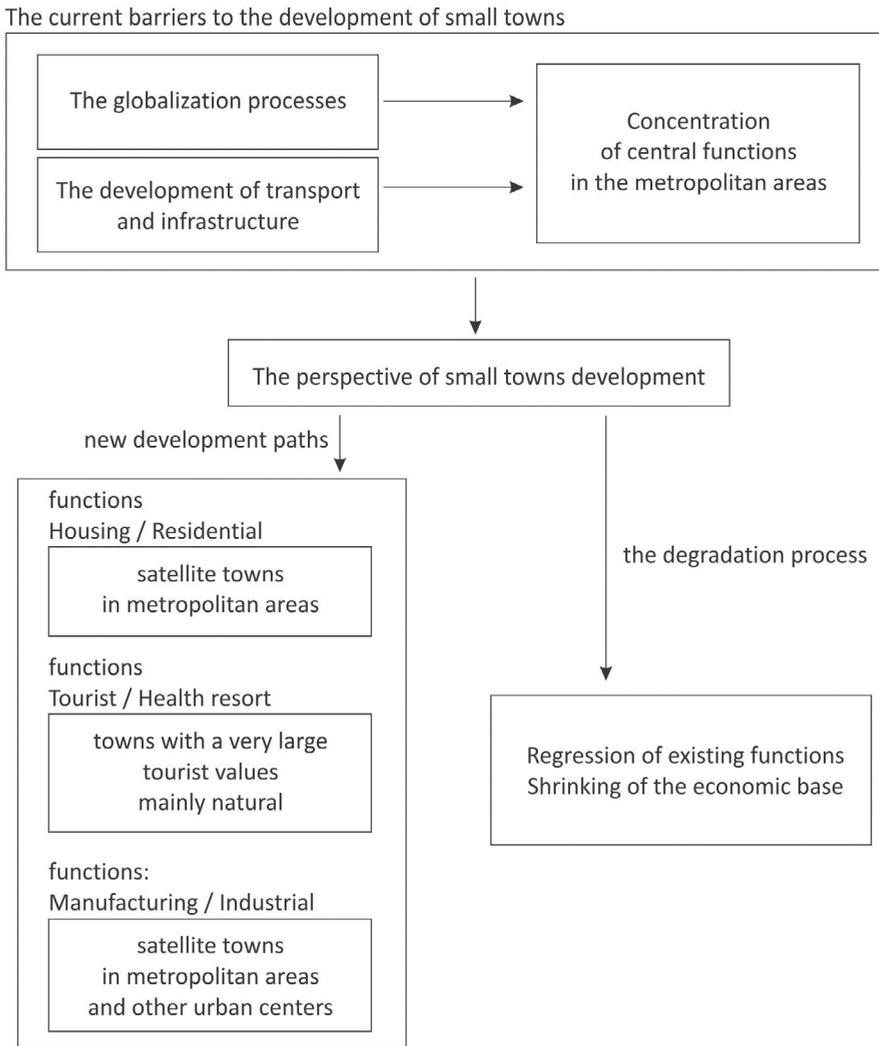


Fig. 8. Model of possible paths of small towns development by type of their location

Source: the author's own work based on GUS Database

metropolitan areas of large cities and in their neighbourhood (Warsaw, Wrocław and Poznań), or in the zones of large industrial projects, like the county of Staszów, by the Połaniec power station. On the other hand, the author found the counties with relatively high level of industrialization and where wages are among the lowest. This situation was typical for Southern Wielkopolska, where a large part of the industry is a labour-intensive, with relatively low added value. This is due to (among other factors) rather early adoption by this region of companies relocated mainly from Germany, when the process is usually very time-consuming and concerning the

stages of production. The result of this relationship between the production and the level of wages is lower than the supply jobs.

To assess the impact of industrial economic base of analysed towns and municipalities, the volume of production was compared with their own revenues (Fig. 6, 7). The value of these incomes is largely derived from the property taxes and personal income taxes paid by residents. Therefore, this index shows the level of the economic base and wealth of the inhabitants. There are two different paths of urban development (Fig. 6). The dependence of revenues from industrial and construction production concerns to such counties as wrocławski, wałbrzyski, krapkowicki, gorzowski, szamotulski, wieruszowski and garwoliński. There is also a large group of counties for where the increase of incomes has no relation with the development of the production base. These are such poviats as warszawski zachodni, nowodworski, kamieński, drawski, leski or pucki. The author compared these observations with the map (Fig. 7) and noticed better spatial distribution of these two indices. Municipalities lying in the metropolitan areas or on Baltic Sea shore have higher incomes than there would resulted from the production development. This image shows an alternative path of development for such areas. In the metropolitan areas, what is important is the residential function, growing in the zones of high value natural attractiveness and some local development opportunities arise for the development of tourism or second homes concern the coastal areas and those of the Bieszczady Mts.

This analysis allowed the author to build a model of potential pathways of Polish small towns under current economic conditions (Fig. 8). The development potential function has been assigned to the types of areas, resulting from the features of urban locations. By far the small towns within metropolitan areas have the greatest opportunities for development. These are, on the one hand, areas attractive for the locating new, modern production (Kwiatek-Sołtys et al., 2014), and, on the other hand – for dwellings. The areas of exceptional natural beauty of landscape or natural resources can focus on the tourism development. This applies, for example, to spas and towns located in the mountainous or coastal areas. However, the vast majority of small towns do not have such advantages, so they need to search for new chances for their economic growth.

Conclusion

This study clearly demonstrated the advantages of attracting productive investment. As a function of specialization, the export does not compete with the neighbouring resorts. What is more, it can become an asset for the location of similar companies and the formation of clusters. Of course, in remote areas it is uneasy to attract a large external investor because to a relative inaccessibility of them. But there are examples proving that it is possible in such areas to develop new productive activities. From the point of view of small towns, particularly valuable type of productive economic base are neo-Marshallian industrial districts due to their high local embeddedness and flexibility, with which they are able to respond quickly to market needs. Examples of such regions are footwear or furniture manufacturing in the surrounding of Słupsk or in small town of Kalwaria Zebrzydowska. In agricultural

areas it is worth to develop local manufacture of food products. This is a potential industrial sector, the role of which in local economy should be increased.

The necessity of industrialization or re-industrialization in many areas is still neglected. Lack of awareness in this matter is mainly visible at the level of local government managing. Many small towns and communities in their documents of their development strategy or the land use plans do not include the new path of development. Investments in infrastructure, which can improve an access to such areas are treated only in terms of better transport. The next step after these investments should be the designation of new zones of economic activity in the form of industrial parks. Nowadays there are numerous places with a very convenient location with well-developed communication infrastructure – but without the economic development. The application of these actions by the local authorities can be the opportunity for obtaining new production activities, resulting both in growth of local labour market and improvement of the economic situation of the given town and county, too.

References

- Czyż, T. (1998). Polaryzacja rozwoju regionalnego w okresie transformacji społeczno-gospodarczej w Polsce. In: J. Parysek, H. Rogacki (eds.), *Przemiany społeczno-gospodarcze Polski lat dziewięćdziesiątych*. Poznań: Bogucki Wydawnictwo Naukowe, 47–63.
- Domański, B. (2001). *Kapitał zagraniczny w przemyśle Polski. Prawidłowości rozmieszczenia, uwarunkowania i skutki*, Kraków: Inst. Geogr. i Gospod. Przestrz. UJ.
- Domański, B., Gwosdz, K., Huculak, M., Wiedermann, K. (2005). Oddziaływanie SSE Euro-Park Mielec na otoczenie lokalne. Powiązania firm i efekty mnożnikowe. In: B. Domański, K. Gwosdz (eds.), *Dziesięć lat doświadczeń pierwszej polskiej specjalnej strefy ekonomicznej. Mielec 1995–2005*. Kraków: Uniwersytet Jagielloński, Instytut Geografii i Gospodarki Przestrzennej, ARP o. Mielec.
- Domański, R. (1997). *Przestrzenna transformacja gospodarki*, Wydawnictwo Naukowe PWN, Warszawa.
- Grabher, G. (1994). The disembedded regional economy: the transformation of East German industrial complexes into western enclaves. In: A. Amin, N. Thrift (eds.), *Globalization, institutions and regional development in Europe*. Oxford: Oxford Univ. Press, 177–195.
- Gwosdz, K. (2011). Efekty mnożnikowe funkcjonowania firm na terenie gminy Niepołomice. In: W. Jarczewski, M. Huculak (eds.), *Sukces polityki proinwestycyjnej. Niepołomice 1990–2010. Wnioski dla władz lokalnych*. Kraków: Instytut Rozwoju Miast.
- Hardy, J. (1998). Cathedrals in the desert? Transnationals, corporate strategy and locality in Wrocław. *Reg. Stud.*, 32(7), 639–652.
- Huculak, M. (2011). Wpływ nowych inwestycji na rynek pracy. In: W. Jarczewski, M. Huculak (eds.), *Sukces polityki proinwestycyjnej. Niepołomice 1990–2010. Wnioski dla władz lokalnych*. Kraków: Instytut Rozwoju Miast.
- Heffner, K., Marszał, T. (2006). Uwarunkowania rozwoju i zmiany w zagospodarowaniu małych miast w Polsce w drugiej połowie XX w. In: K. Heffner, T. Marszał (eds.), *Uwarunkowania rozwoju małych miast*. Warszawa: Biuletyn KPZK PAN, 7–20.
- Kukliński, A., Mync, A., Szul, R. (1997). *Polska przestrzeń na przełomie XX i XXI wieku*, Uniwersytet Warszawski. Europejski Instytut Rozwoju Regionalnego i Lokalnego, Warszawa.

- Kwiatkiewicz, A. (2001). Libiąż – rozwój miasta przemysłowego. In: *Polska – Europa, Gospodarka, Przemysł*, J. Rajman (ed.), Kraków, 167–177.
- Kwiatkiewicz, A. (2011). *Barriers and factors of growth of small towns of Poland*, Elsevier, Procedia, 19, 363–370.
- Kwiatkiewicz, A., Wiedermann, K. (2014). Spatial structure transformations in small towns in view of rehabilitation and gentrification processes, *Annales Universitatis Paedagogicae Cracoviensis. Studia Geographica*, 155(5), 31–40.
- Kwiatkiewicz, A., Wiedermann, K., Mainet, H., Edouard, J.C. (2014). The Role of Industry in Satellite Towns of Polish and French Metropolitan Areas—Case Study of Myślenice and Issoire, *Prace Komisji Geografii Przemysłu Polskiego Towarzystwa Geograficznego*, 25, 194–211.
- Lloyd, P., Dicken P. (1972). *Location in space: a theoretical approach to economic geography*, New York, San Francisco, London: Harper&Row.
- Micek, G. (2011). Estimating Multiplier Effects on the Local Scale, *Acta Universitatis Lodzianensis. Folia Oeconomica*, 252, 175–190.
- Porter, M.E. (1990). *The competitive advantage of nations*, London: Macmillan.
- Rachwał, T. (2012). Rozdział 10. Inwestycje w dużych miastach i obszarach metropolitalnych. In: Nowak M. J., Skotarczak T. (eds.), *Inwestycje w mieście. Uwarunkowania ekonomiczne, organizacyjne i przestrzenne*. CeDeWu.pl Wydawnictwa Fachowe, Warszawa, 195–218.
- Rachwał, T., Wiedermann, K., 2008, Multiplier effects in regional development: The case of the motor vehicle industry in Silesian voivodeship (Poland). *Quaestiones Geographicae B*, 27, p. 67–80.
- Rachwał, T., Wiedermann, K., Kilar, W. (2008). Wydajność i koszty pracy jako czynniki konkurencyjności przemysłu regionów Polski w Unii Europejskiej w ujęciu regionalnym. In: D. Ilnicki, K. Janc (eds.), *Przekształcaniaregionalnych struktur funkcjonalno-przestrzennych „Europa bez granic – nowe wyzwania”*, Rozprawy Naukowe Instytutu Geografii i Rozwoju Regionalnego Uniwersytetu Wrocławskiego 3, Instytut Geografii i Rozwoju Regionalnego, UW, Wrocław, s. 79–89.
- Rachwał, T., Wiedermann, K., Kilar, W. (2009). Rola przemysłu w gospodarce układów regionalnych Unii Europejskiej. *Prace Komisji Geografii Przemysłu PTG*, 14, s. 31–42.
- Rajman, J. (2000–2001). Miejska sieć osadnicza województwa małopolskiego w okresie transformacji społeczno-gospodarczej. *Folia Geographica. Seria Geographica-Oeconomica*, 31–32, 61–79.
- Strykiewicz, T. (1999). *Adaptacja przestrzenna przemysłu w Polsce w warunkach transformacji*, Poznań: Wydawnictwo Naukowe UAM.
- Strykiewicz, T. (ed.) (2004). *Wpływ inwestorów zagranicznych na rozwój regionalny i lokalny na przykładzie Glaxo Smith Kline Pharmaceuticals S.A. w Poznaniu*, Poznań: Bogucki Wydawnictwo Naukowe, Poznań.
- Szlachta, J. (1993). *Poland's regional development under economic transformation*, Warsaw: Friedrich Ebert Stiftung.
- Wiedermann, K. (2007). Regionalne efekty mnożnikowe rozwoju przemysłu motoryzacyjnego w aktywizacji gospodarczej województwa śląskiego. In: Z. Zióło, T. Rachwał (eds.), *Rola przedsiębiorczości w aktywizacji gospodarczej*, Warszawa–Kraków: Przedsiębiorczość–Edukacja, 3, Zakład Przedsiębiorczości i Gospodarki Przestrzennej IG AP, Wydawnictwo „Nowa Era”, 24–34.

Biographical note of author: Associate professor in the Department of Socio-Economic Geography at the Pedagogical University in Krakow since 2007. His research interests focused on the issues of local and regional development, urban and regional economics, urban restructuring and industrial districts with particular emphasis on relocation of industry and services, foreign direct investment and instruments in support of economic development – the special economic zones, industrial parks.

Krzysztof Wiedermann, PhD
Pedagogical University of Cracow
Department of Socio-Economic Geography
Institute of Geography
ul. Podchorążych 2
30-084 Kraków
Poland
k.wiedermann@up.krakow.pl