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## INTRODUCTION

Years of economic transformation and implementation of market economy rules in Poland and other Central and Eastern European countries created new conditions for the functioning and transformation of spatial and sectoral structures of industry. They resulted from: decline of companies that were unable to withstand the competition of incoming goods from Western European countries, the purchase and then often the liquidation of businesses as they were potential competitors for Western ones, the acquisition of enterprises and launching the production of components for companies overtaking them, as well as location of new companies using cheap and well-educated labour resources. These factors have contributed to the transformation of pre-existing industrial structures and the formation of new ones operating in the socio-economic space. Works presented in the current issue refer to this general idea. Based on selected examples they illustrate the factors and mechanisms of changes in industrial structures in spatial systems.

An important factor in the transformation of industrial structures is the location of new forms of economic activity, which are carried out through the discovery and use of existing market niches. An example of this is the development of Polish yacht production, which have achieved a high level of competitiveness on the international market. They are widely acknowledged for offering an attractive product with the use of modern materials, technologies, innovative projects with efficient organisation of work and production links with subcontractors, as well as appropriate marketing activities. It was found that these factors contribute to the systematic advancement of Polish yacht industry position on international markets, as well as on the domestic one. Of great importance for the modernisation and development of this production is the fact that a yacht is a significant determinant of affluence, as well as and the growing trend of spending free time on water (P. Czapliński).

The processes of transformation of industrial structures in different directions are marked in regional structures. This is indicated by the reactivation of industrial functions in the coastal area. The activation of port cities is linked with the development of pre-existing industries (mainly shipbuilding and fish processing) stimulating the development of the maritime sector and their relations with the local environment. In the spatial structure, depending on the economic potential and the functions performed, four groups of Polish cities were distinguished: with a diverse structure of industry (Gdańsk and Szczecin), with one dominant sector (Gdynia, Elbląg), with shipbuilding sector of less economic potential working for fisheries (Świnoujście, Kołobrzeg, Władysławowo, Ustka, Łeba), and smaller service cities (T. Bocheński).

In the historical process, the economic potential, professional and spatial structure of industry in the metropolitan systems is changing. An illustration of this is an analysis of the structural and spatial changes of Szczecin (Poland) industry in the years 1888–2018. The initial period was characterised by an increase in the spatial concentration of

the location of companies, followed by a period of progressive spatial deconcentration of industrial activities. Szczecin's spatial layout distinguishes the areas around Odra, which are still an attractive area for the location of maritime industry and new investment areas in its Western part (A. Kiepas, M. Kupiec, A. Łysko, E. Dusza-Zwolińska). In the general trend towards deindustrialisation, industry continues to play a significant role in the economic base structure of most small and medium-sized cities in Łódzkie Voivodeship (Poland). The development of large and medium-sized cities is connected with the placement of modern knowledge-based services, while the economic development of small and medium-sized cities still depends on the level of industrial development (J. May, K. Wiedermann, P. Śleszyński). The relocation processes of industrial enterprises in the spatial structures of metropolitan areas take place in different directions and with varying degrees of intensity. This is indicated by the analysis of changes and dynamics of the distribution of production activities in Wrocław (Poland) and the suburban area in the years 2008–2016. It was found that the relocation of companies during this period has little impact on the relocation of industrial activities in the spatial structure of Wrocław (D. Sikorski).

The innovation of the products offered has a diverse impact on the development of European countries' businesses. This is referred to in the analysis on the level of innovation of industry in the new EU Member States in the years 2008–2017. It was found that there are significant differences among countries in terms of the innovation potential of industry (P. Brezdeń). The process of transformation of industrial structures is also largely achieved through the implementation of new technologies. This issue is studied in the article on the implementation of the concept of "Industry 4.0". Based on the example of seven EU Member States in 2011-2018, presented was the impact of new technologies on: accelerating business transformations, changes in the employment structure, management methods and market areas for goods and services (G. Wegrzyn). Of great importance for the conditions for the socio-economic development of cities is their marketing potential, which is not always properly exploited. In this respect, the price of the products and services offered, the availability of education at academic level and the saturation with health and cultural institutions are of particular importance. These advantages are not always positively assessed by current and potential city dwellers (M. Vikhoreva, A. Jakobson).

The growing processes of globalisation are reflected in the emergence of new network infrastructure enabling products to be transported throughout the world, Europe, national and regional areas. Nowadays, this process is very clearly visible in the Eurasian economic area. An expression of this is the construction of transport infrastructure connecting China, Asian countries, the area of the Russian Federation with the countries of the European Union. This new transport corridor will make it much more possible to increase economic links by developing trade in goods between the countries concerned (A. Burnasov, M. Ilyushkina, Y. Kovalev, A. Stepanov).

In the process of the collapse of enterprises in urban space appear areas that change their former industrial functions. This is illustrated by examples from Krakow (Poland), where post-industrial areas located in the immediate vicinity of the city centre take on new function of public spaces (A. Brzosko-Sermak, D. Wantuch-Matla).

Traditional industrial sectors are changing their functions. An illustration of this is the qualitatively changing metallurgical production. It continues to be the main basis for economic development as a source of supply of specific production assortments for

other industrial and economic sectors. Between 1990 and 2020, the process of transformation of the metallurgical industry changed its importance and manufacturing potential, new products appeared and its spatial structure changed in European countries (P. Wilczyński).

In view of the significant limitation of access to statistical information, the search for methods to estimate the value of selected economic characteristics, especially for local spatial systems, plays an important role. An example of this is the presented method of estimating the number and structure of employees in their area, based on the concept of economic base (P. Śleszyński, K. Wiedermann).

We encourage you to discuss and to develop this particularly topical research issue in order to more and more precisely learn the rules for the transformation of industrial structures, as well as socio-economic and cultural structures, taking place in different scales of spatial systems. The implementation of the results of research into economic practice can make a significant contribution to improving management outcomes in the national, regional and local areas against the changing international and global circumstances.

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