

Process of Revitalization of the City Centers in Poland: The Problem of Cooperation between Sectors

Ewa M. Boryczka

Abstract—Contemporary city is a subject to rapid economic and social changes. Therefore, it requires an active policy designed to meet the diverse needs of their residents, build competitive position and capacity to compete with other cities. Competitiveness of cities depends largely on their resources but also to a large extent, on the policies and performance of local authorities. Cooperation with social sector also plays an important role, as it affects the use of resources and builds an advantage over other cities.

The subject of this article is city's contemporary problems of development with particular emphasis on central areas. This issue is a starting point for reflection on the process of urban regeneration in medium size cities in Poland, as well as cooperation between various actors and their roles in the revitalization processes of Polish cities' centers.

Keywords—City, cooperation between sectors, crisis of city centers, revitalization.

I. INTRODUCTION

INCREASING competition between the private sector entities, but also between those in a public sector results in a reorientation of approach to the management of the administrative territory and its development policies. Cities are particularly subject to rapid economic and social changes, requiring an active policy designed to meet the diverse needs of their residents and to build competitive positions and capability to compete with other cities.

Competitiveness of cities depends largely on their resources but also to a large extent, on the policies and performance of local authorities. Cooperation with private and social sectors also plays an important role, as it affects the use of resources and builds an advantage over other cities. Competitiveness of a city is determined and assessed by, among others, linkages and cooperation between businesses, public entities, science, quality of municipal services, level of entrepreneurship, degree of social cohesion, quality of life. [1] In the market economy, it means businesses actively look for best locations and markets to operate. Authorities have a double role in this circumstance. Firstly, they have to act to attract new investment, to encourage entrepreneurship among residents, to build a climate of cooperation between these entities - that contribute to the development of the city. Therefore they act as investment offer generator and provider of available resources, in order to encourage potential investors. Concurrently, it is authorities' role to uphold and protect the so-called 'common good' (including protecting the environment, tangible and

intangible cultural heritage, mitigating social problems, etc.). In addition, local authorities provide public services and perform tasks that, in a true civil society, are performed by non-governmental organizations - social sector entities.

An important aspect of urban policy - besides 'constructing' local resources - is to counteract negative processes conditioned by external or internal factors. Modern cities are faced with many problems, which often build up over years, resulting in dire consequences. Complex functional and spatial structures of cities - that developed over decades - are a source of many development barriers. Authorities must therefore skillfully and effectively respond to emerging problems, using available instruments - thus performing essential roles in the process, as well as building a climate of cooperation between public, social and private sectors.

The subject of this article is city's contemporary problems of development with particular emphasis on central areas. This issue is a starting point for reflection on the process of urban regeneration in medium size cities in Poland, as well as cooperation between various actors and their roles in the revitalization processes of Polish cities centers.

II. CITY AND ITS CENTRE AS A SUBJECT OF REGENERATION

The constituent characteristics of an urban settlement can include: compactness of the settlement, diversified occupations of population, large areas of dense and diverse building mass, dominance of subject over personal contacts, specific demographic profile of communities, lifestyle of the population, discontinuous in time and space process of land use change, high level of entrepreneurship. [2] City has a multilaterally developed socio-economic, functional and physiognomical character, and complexity of 'urban life' (characterized by connections and interactions in various areas of life) is essential in defining development trajectories. [3] Together with city's growth, its components also change, i.e. population, functions, social and economic structures, spatial form and natural environment. [4] City, as a complex organism, requires cooperation between its different elements, namely, entities having a real impact on its life and functioning. These entities actually impact on city's economy, shape development policies and are manifestations of local communities' voices. In the process of revitalization three groups of key actors can be distinguished: social and public sector.

City's multidimensionality, apart from all its undoubted strengths and advantages, urges to pay attention to downsides of inhabiting and using urban space, as well as problems faced by the city in modern times - both functional and

Ewa M. Boryczka is with the Department of Regional Economy and Environment, University of Lodz, Lodz, Poland, (e-mail: eboryczka@uni.lodz.pl).

developmental. The extent and seriousness of these problems are determined by city's history and lack of adaptability to new conditions. From city residents' and authorities' perspective city centers are particularly important and require individual approach, because apart from being areas of exceptional concentration of economic, social and material problems, they form key part of cities' identities, as well as they are focus of exceptional cultural value, historical testimony to the continuity of cities formation. [5]

New challenges - competing for development resources - new functions and investments, skilled workforce (competitiveness measured by attractiveness of labor markets and living conditions) [6] - call for reorientation of city policy, whose crucial element is the policy of 'urban regeneration' - especially of central areas. City centers often become the subject of urban regeneration; not only because of their social and technical degradation, but also because of the important role they play in the cities' identities.

Contemporary understanding of the concept of revitalization requires a multidisciplinary approach and comprehensive understanding of various functional aspects of a complex urban organism. It is a coordinated process carried out by local authorities, local community, and other participants. Revitalization forms a part of local development policy and is aimed at preventing a degradation of urban mass, counteracting adverse processes, stimulating development and qualitative change. [7] Growth of cities, or their selected areas, is accomplished through an increase in social and economic activity, improving the quality of the living environment and simultaneous protection of heritage, while maintaining the principles of sustainable development. [8] In the process of revitalization, as a result of coordinated efforts to transform the functional and spatial structure of degraded urban areas, the economic base of the city - its development foundation - transforms. Revitalization is one of the tools of urban policy, dedicated to protection and restoration of cultural and environmental qualities of urban spaces with the promotion of new activities to strengthen the economic base of the city, and, most of all, the activity of local community living in the area directly affected by revitalization. [9] Revitalization can be described as a new phase of urban development, a process whose initiation is essential when hitherto actions supporting and preserving urban fabric are not enough. [10] Revitalization requires a multidisciplinary approach and comprehensive understanding of various functional aspects of a complex urban organism, with the involvement of a broad spectrum of stakeholders. It is a process which requires cross-disciplinary cooperation in implementing urban policy assumptions.

City centers are by far the widest area and scope of regeneration activities, but many other urban sites requiring bringing back to life can be identified. The nature of the revitalization process requires - because of the subject and involved entities - requires comprehensive approach and cooperation between different actors.

III. CRISIS OF CITY CENTERS - NEGLECTED DISTRICTS IN POLISH CITIES

Central areas are particularly valuable in spatial structure of cities - with their central location, diverse urban structure, and multifunctional character. In Poland, central districts of cities have been neglected for decades. Socialist economy disregarded economical and symbolic values of historic city centers [11], government policy called for expanding city limits and construction of housing estates and surrounding infrastructure. Moreover, the property divisions in city centers - were complicated. Many large flats were turned into social housing units. No investments or technical upgrades created a gap in living standards between historic substance and newly mass-built housing estates. Negative selection occurred. Wealthier, more affluent, more resourceful inhabitants, moved to new districts leaving old centers inhabited by the old, less privileged and troubled groups of society. Unsustainable social structure expanded already harsh situation old city centers had to experience. Problems were further worsened by difficulties in property swap, low rent levels and resistance to move, especially expressed by older people (often large flats (over 100m²) are inhabited by solitary persons or elderly couples), it all added up to a poor, ineffective use of built mass.

After the transformation in 1990, the condition of central urban areas continued to plummet. Unsolved property ownership issues continue to be an obstacle; strong position of tenants in the legal system did not allow landlords to raise the rent for those living in social housing. Consequences of suburbanization also contribute and can be visible now, and cause: (1) 'escape' of the taxpayer to the suburbs - outside of the city limits - for local government budgeting this means 'jay riders' who use city's infrastructure and pay their taxes elsewhere, (2) depopulation of central areas together with their unsustainable social structure (poor population unable to move, socially excluded), (3) city center's attractiveness as a place to be, live, work, diminishes (negative image), car-use pressure and consequent transportation infrastructure inefficiency (leading to low attractiveness of city center for any kind of activities), (4) exodus of services to the suburbs, following inhabitants (e.g. shopping malls) - further stimulating car use and renders city center unserviceable, (5) city center property prices decrease, (6) renovation gap of tremendous scale. It is estimated that unmet yearly reparation needs in multifamily city housing exceed more than 4.000 mln PLN. [12] Negative tendencies and phenomena in Polish are strengthened by economic cycles and poor conditions of companies - and general socio-economic situation of cities.

IV. PERCEPTION AND ATTITUDES OF PUBLIC AND SOCIAL SECTOR ENTITIES IN THE PROCESS OF REGENERATION OF POLISH CITIES - STUDY RESULTS

In the process of regeneration, two major groups of active actors/participants can be distinguished. These are public entities - local government and administration, social entities - non-governmental organizations (NGO's). The involvement of

the various units of the public and social sector determines intensity and complexity of the process of urban regeneration.

Since 2004, that is from Polish succession to the European Union the intensification of activities in the field of conservation and restoration of degraded areas of Polish cities can be seen. Local governments in Poland, in order to obtain funds from the European Union, started developing and implementing programs and strategies for revitalization. The analysis of documents and action taken at that time indicates that most of them had focused on regeneration of degraded central areas of cities.

The aim of the study was to identify the perceptions and attitudes of public and social entities functioning in neglected urban centers in the process of regeneration. The study was intended to enable the determination of:

1. How does the process of cities' regeneration perceived by social entities (NGOs) and public sector entities?
2. How do the respondents perceive their role and the role of territorial management in the regeneration process?
3. What are the advantages for the development of the city, implemented in recent years?
4. What are the barriers to the revitalization process perceived by respondents?
5. What are the participation barriers for other entities from the public and social sector in the process of regeneration?
6. Do the entities cooperate with other entities in the areas undergoing the regeneration process?

Analysis of the ways of perception of the regeneration process by the public and social entities, functioning in degraded city centers, had been performed in medium towns in Poland, in the region of Łódź. The study included midsize towns in central Poland, that over the last decade, had taken initiatives and actions related to the process of regeneration of their city centers. The study included all midsize cities from 20 to 100 thousand residents (Piotrków Trybunalski, Pabianice, Tomaszów Mazowiecki, Bełchatów, Zgierz, Skierniewice, Radomsko, Kutno, Zduńska Wola, Sieradz, Łowicz, Wieluń, Opoczno, Aleksandrów Łódzki), located in central Poland, in one of the sixteen Polish regions (Łódź region).

Analysis of the results allowed defining the role and importance of particular groups of entities and their mutual expectations in the process of transformation of city centers. The study also made it possible to identify areas of cooperation and barriers to/in cooperation among these entities when making attempts to revive degraded urban areas.

Analysis of results allowed concluding that the social entities (NGOs) pay attention mainly to the spatial aspects of the regeneration process. Regeneration, according to this group of respondents, is mostly focused on investments in the modernization of public spaces, renovation of historic buildings and renovations of buildings located in the city center, and subsequently there are actions focused on the quality of living in degraded areas. Only a third part of respondents indicated that it can be also applied to the revitalization of social and economic development and transformation functions of brownfield sites and military sites

(Table I). On the basis of carried research, the representatives and employees of local government units more often treat the regeneration issues in a wider sense of actions not only spatial but also social and economic (Table I). Perception of the regeneration process by local government entities is the socio-economical process with its own spatial dimension. However in Polish conditions, over the last decades, regeneration issue has been reduced to activities and investments, with some interference mainly in spatial tissue of degraded areas of Polish towns. With no complexity (integration of social, economic and spatial spheres) and lack of cooperation between different entities caused that, initiated processes of revitalization and rehabilitation of centers in many towns do not result in the intensification of social and economic life, which is its main goal. The situation associated with the concentration of activities, mainly infrastructural and spatial, implemented in recent years was caused by, among others, allocation of financial resources from the EU funds mainly in this, specific area. Scarcely the new financial perspective of the European Union, prepared framework and objectives for the 2014-2020 period, amend and pay attention to, that regeneration is a broader, comprehensive and long-term process of transformation of the urban tissue (urban fabric) with its social, economic and spatial dimension.

TABLE I
PERCEPTION OF THE REGENERATION PROCESS BY LOCAL GOVERNMENT ENTITIES

Perception of the revitalization	Respondents answers
Renovation and modernization of public space (squares, passages, courtyards)	72,9 %
Renovation of a historic building	47,1 %
Renovation and modernization of buildings in the city center	47,1 %
Actions aimed at improving the quality of life and residents' functioning	42,9 %
The social revitalization district (civic activities, building social ties)	38,6 %
The process of transformation and function change of brownfields and former military or railway sites	38,6 %
Local government action to revitalize and improve the socio-economic condition of the degraded area	35,7 %
The process of district economic revitalization (new businesses)	32,9 %
The program for the EU funds use	18,6 %

This has the confirmation in the analysis of the studies' results, where the types of activities defined by the representatives of the local government as a regeneration completed in the last five years were analyzed. It turns out, that in the examined towns there is a domination of projects that are primarily spatial, and only 10% of respondents, underlines the information about the implemented activities related to the development of entrepreneurship, job creation, and the introduction of new businesses into the degraded area. Moreover, the projects concentrated on the interference into the towns' social tissue were in the minority. There were the projects aimed at the elimination of significant social problems in Polish towns. (Table II).

TABLE II
TYPES OF ACTIVITIES IMPLEMENTED BY LOCAL GOVERNMENTS IN THE
PROCESS OF REGENERATION IN RECENT YEARS

Type of activities	Respondents answers
Renovation and improvement of the neighborhood/ district space quality (e.g. squares, courtyards, parks, sidewalks, setting benches, trash bins);	81%
Reconstruction and construction of roads, construction of car parks;	81%
Renovation and modernization of buildings;	60%
Preservation and restoration of historic buildings;	58%
Improvement of the quality of urban greenery;	49%
Improvement of safety and public order;	44%
Equipment houses and buildings with the technical infrastructure (e.g. sewage and heating systems);	40%
Development of a commercial offer (including cultural and entertainment amenities);	37%
New development and revitalization of brownfields and former military or railway sites	19%
Launching of new businesses and new jobs in the neglected city center;	12%
Elimination of social problems (e.g. unemployment, poverty, pathologies);	9%

Completed study allowed to attempt to identify other active participants, not only the local government units, involved actively involved in the process of regeneration. In the opinion of local government entities the greatest engagement in this process is shown by the owners of real estates and the entities from private sector (companies), and subsequently housing communities and the residents of regenerated areas. Local government representatives assess that, NGO's and residents are engaged least. Their participation in this process is negligible.

Moreover in the opinion of local government entities the greatest positive impact on activities implemented by local government have other public institutions, that participate and strengthen the effects of implemented activities. The next groups actively participating in regeneration processes in examined towns include the owners of real estates and NGO's. They do not only participate in regeneration processes but also play the active role in strengthening of these processes. Participation of housing communities, as well as private sector entities in this process is estimated as negligible.

The results of the analysis present that the regeneration process in polish towns is mainly the role of local government and generally the widely known public sector (Table III). This sector is also the main source of financing implemented activities in the field of urban regeneration. In terms of cooperation among individual entities in the field of urban regeneration, local government representatives assess the cooperation with mainly the public sector entities (universities, higher educational institutions, public offices) the best, mainly because of stable position and financial participation in implemented urban regeneration activities. Cooperation with real estate's owners is assessed as less effective in this field. From that point of view cooperation with NGO's and housing, communities are assessed as the weakest form. This might be due to the small engagement of these entities according to the activities associated with urban regeneration, as well as small financial contribution.

Furthermore, the poor evaluation might be a result of a complex and still not legally transparent structure of real estate ownership of estates located in polish towns' centers as well as because of the domination of public sector and individual real estate's owners in these parts of towns.

TABLE III
PARTICIPATION OF EVERY GROUP IN THE PROCESS OF REGENERATION

Group of participations	Participation in a regeneration process Average
Local government	2,65
Real estate owners	1,65
Private entities (companies)	1,62
Housing Communities	1,39
Residents	1,20
Social Entities (NGO's)	1,04
Public institutions (i.e. universities)	1

(0-no, 1-small, 2-medium, 3-significant)

However, the study results show that cooperation among social sector entities is even worst, especially in these groups is even weaker and negligible. The market and financial competition among these entities is strong and the cooperation is a rare gold in this field.

In such situation, the representatives of local government perceive their role also as the initiator of activities as well as the leader of the process. They perceive this leader-role as significant, on the other hand they do not overestimate their role as financing part, but still this role is perceived as crucial. Similarly other entities participating in the process of the town center regeneration in Poland underline the key role of local government and the whole public sector in reviving of these areas.

In the opinion of the respondents from the social sector, the local government should mainly lead a role of initiator of such activities as well as coordinator of the whole process and subsequently be the financing or a co-financing part.

TABLE IV
EXPECTED ROLE OF ENTITIES IN THE PROCESS OF REVITALIZATION

The expected role of entities in the process of revitalization	Respondents answers
Cooperator of regeneration processes	59%
Entity implementing the tasks supervised by local government	36%
Initiator of regeneration activities	34%
Entity implementing its own regeneration projects	10%
None	9%
Coordinator of regeneration activities	7%
Change leader	7%
Others	4%

Representatives of entities of the third sector (NGOs), when audited, they declared proactive attitude in the process of urban regeneration. They declared their participation in the process of revitalization but mainly in cooperation with local government units (60%) or as a contractor of the tasks commissioned by the government (36%), as well as initiating regeneration activities (34%).

Only 10% of surveyed companies indicate readiness for implementation and financing their revitalization projects. The

voluntary sector in Poland is still strongly dependent on financing from the budgets of local government units. This strong relationship seems to be impossible to implement many of the actions in the social, economic area, but also the spatial area, financed from its own funds.

The results allowed making an analysis of the evaluation of the benefits for the city flowing from realized revitalization activities in recent years. Representatives of local government units point out that the most positive changes are observed in the esthetics of public space center and its image. Also, the improvement of technical infrastructure is visible. However, there is less influence of revitalization activities on the issue of safety and public order. The interest in these revitalized areas is still marginal/not significant. What is still characteristic of Polish cities, public sector entities indicate that the implemented actions influenced the activity of enterprises and the elimination of social problems rather slightly (Table V).

What is also characteristic in strategic documents concerning the revitalization of degraded areas of inner-cities in Poland, there appear some records regarding the development of entrepreneurship in these areas as well as new-jobs policy and elimination of deep social problems. Analysis of the effects of the implementation of these documents, however, still shows a strong concentration of activities and their effects in spatial sphere.

TABLE V
ADVANTAGES FOR THE CITY'S DEVELOPMENT IN SPECIFIC AREAS OF THE ONGOING REVITALIZATION ACTIVITIES

Areas of the activities	Assessment of advantages for the city development
The esthetics of public spaces	2,9
The image of the city center	2,9
Technical condition and appearance of buildings	2,6
Technical infrastructure	2,5
Safety and public order	2,3
Interest of customers and users of the center	2,2
Commercial offer (including the cultural and entertainment amenities)	2,2
Transport accessibility	2,2
Social infrastructure (e.g. schools, kindergartens, nurseries, cultural institutions)	2,1
The local community activity (non-governmental organizations and citizens)	1,9
Companies activity	1,8
Social and economic problems residents (e.g. unemployment, poverty, pathologies)	1,5

(Scale 0-3; 0-no advantages, 1-small, 2-medium, 3-great advantages)

The authorities of local government and the public sector believe that in the implementation of the local government activities in the process of revitalizing, the greatest positive impact have the entities from the social sector, but they hardly ever switch on implemented measures.

Among other things, in accordance with the previous results of the analysis, local government investments are concentrated in the sphere of infrastructure and public space, which in Polish cities after socialism period is perceived as a no one's good.

One of the issues analyzed via cross-sectoral cooperation in the process of revitalization were difficulties faced by different groups of actors in the process of revitalization, particularly what does make this cooperation with the leaders (leaders meant as a public sector, local authorities) of this process difficult. Among the participation barriers appear barriers such as: financial problems and legal impediments as well as inability to communicate with entities, Conflicts between different groups of interests or limited knowledge about how to influence decisions in the town/city (Table VI).

TABLE VI
PARTICIPATION BARRIERS OF OTHER ENTITIES IN THE PROCESS OF REGENERATION

Barriers	Impact on the cooperation of the participants
Lack of financial resources	2,7
Legal impediments	2,2
No willingness to cooperation/participation	2,1
Inability to communicate among entities	2,0
Conflicts between different groups of interests	1,9
Lack of knowledge about how to influence decisions in the town/city.	1,9
Lack of interest in town issues.	1,9
The methods of governing by local government	1,6
No willingness to cooperation by local government	1,2
Scandals and corruption	1,1

(Scale 0-3; 0-no impact, 3-great impact)

As it is shown in the results of the study the barriers and difficulties are differently perceived by non-public sector entities. Non-public entities as the main cooperation barriers underline complicated procedures, bureaucracy, as well as conflicts among different groups of interests, lack of communication among entities, also lack of information on local government management and legal impediments.

It should be emphasized, that every of these groups as the most of frequent barriers points out barriers associated with mutual reluctance to cooperation, communication problems, as well as lack of information about the planned regeneration actions.

V. CONCLUSION

Today cities determine the progress of civilization; they are often large entities performing various and numerous functions, bringing together millions of residents and visitors. Emerging megacities compete in the global market while striving to maintain its local identity. Their development is carried out by an increase in social and economic activity, improvements in the living conditions and protection of national heritage while adhering to the principles of sustainable development. Under the conditions of competition between the various cities, effectiveness of local authorities plays an increasingly more prominent role, depending on the city development and the life quality of its inhabitants.

There are significant differences in the perception of the revitalization process by entities from public and social sector.

However it should be emphasized, that despite of more consciousness about the complexity of regeneration process, of entities from public and social sector, the realized activities have still been focusing on interference in spatial tissue of the town.

The analysis of the study results allows claiming that the regeneration process is perceived like one of the public sector aims, whose role is concentrated on coordination, initiation but also realization of regeneration activities, and in these activities there are other entities willing to participate, but mainly through realizing assigned tasks financed by public sector.

The character of regeneration process in accordance with the issue/subject of its activities as well as participating entities still needs the complex approach and strong cooperation among different entities, hence the regeneration process of polish towns is very limited and implemented activities do not bring expected results.

Regeneration activities implemented mainly by public sector are concentrated in the area of spatial as well as determined by the ownership of property/real estate. With no coordination and cooperation among other entities, especially from the social sector, these activities do not cause the engagement of financial resources from this sector.

REFERENCES

- [1] E. Łażniewska, *Konkurencyjność miast w teorii i praktyce*, in *Zarządzanie miastem. Studium Ekonomiczne i Organizacyjne*, M. J. Nowak, T. Skotarczak, Ed., Wyd. CeDeWu, Warszawa, 2010, pp. 271-284
- [2] M. Czornik, *Miasto. Ekonomiczne aspekty funkcjonowania*, Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice 2004, pp. 15-16
- [3] M. Sorre, *Les fondements de la geographie humain*, T III, L'Habitat, Paris 1952 in Kielczewska – Zaleska M., *Geografia osadnictwa*, Państwowe Wydawnictwo Naukowe, Warszawa 1972, pp. 108.
- [4] J. Reguński, *Planowanie miast*, Państwowe Wydawnictwo Ekonomiczne, Warszawa 1986, pp. 38
- [5] A. Muzioł-Węclawowicz, *Rewitalizacja dzielnic śródmiejskich* in W. Jarczewski, Ed., *Przestrzenne aspekty rewitalizacji. Śródmieścia, blokowiska, tereny przemysłowe, pokolejowe i powojenne*, IRM, Kraków 2009
- [6] Założenia Krajowej Polityki Miejskiej do roku 2020 przyjęte przez Radę Ministrów na posiedzeniu w dniu 16 lipca 2013 r., http://www.mmr.gov.pl/aktualnosci/polityka_rozwoju/Documents/Zalozenia_KPM_21102013.pdf, pp. 8, accessed on 11.11.2013
- [7] E. Boryczka, *Procesy rewitalizacji i ich konsekwencje dla przekształceń bazy ekonomicznej miasta. Przykład miast przemysłowych*. Rozprawa doktorska, Uniwersytet Łódzki, 2014, unpublished
- [8] Z. Ziobrowski, M. Bryx, Ed., *Finansowanie i gospodarka nieruchomościami w procesach rewitalizacji*, Instytut Rozwoju Miast, Kraków 2009, pp. 7
- [9] S. Podolak, *Podstawowe pojęcia i definicje*. w: Tom III, *Gospodarka przestrzenna gmin*, Kraków 1998, pp. 297
- [10] S. Cunningham, *The Restoration economy*, Berreyy-Koehler Publishers, Inc, San Francisco 2002
- [11] W. Jarczewski, *Skala degradacji miast w Polsce* in Z. Ziobrowski, W. Jarczyński, Ed., *Rewitalizacja miast polskich – diagnoza*, IRM, Kraków 2009, pp. 57-63 and W. Jarczewski, Ed., *Przestrzenne aspekty rewitalizacji. Śródmieścia, blokowiska, tereny przemysłowe, pokolejowe i powojenne*, IRM, Kraków 2009.
- [12] A. Muzioł-Węclawowicz, *Rewitalizacja dzielnic śródmiejskich*, in W. Jarczewski W., Ed., *Rewitalizacja miast polskich. Przestrzenne aspekty rewitalizacji - śródmieścia, blokowiska, tereny przemysłowe, pokolejowe i powojenne*, IRM, Kraków 2009, pp. 51