

**MICHAŁ KUDŁACZ**

Cracow University of Economics

**DEVELOPMENT OF METROPOLITAN AREAS  
IN POLAND  
BASED ON THE EXAMPLE  
OF CRACOW METROPOLITAN AREA**

**Abstract:** The subject of discussion in this article is the role of metropolitan areas in the geographic and economic space of Poland. It is well known that big cities, the metropolises, are centres of production potential of national economies. The dominance of metropolises, combined with other phenomena, such as globalization and liberalization of economy, has caused some side effects. One of them is the growing importance of areas which are functionally related with metropolitan centres, but lack the capacity of self-creation. For many years, it was believed that the relationship between metropolis and its environment exists in a very limited scope, and its form is rather awkward. The author of this article, taking as an example Cracow and Małopolskie Voivodeship, is trying to answer the question what is the importance of metropolitan areas in Poland, and what is their possible future. Consideration has also been given to the relationship between metropolitan and regional environment, resulting from both natural processes and policy development.

**Key words:** Metropolises, metropolization, local development, regional policy development, metropolitan areas.

### **Introduction**

The discussion in the present article shall concern the question of trends in the development of metropolitan areas from the perspective of market mechanisms, complemented and adjusted by the policy of territorial development. The hypothesis that metropolitan areas in Poland are not a virtual entity, but a real one, shall be the point of departure for these considerations. Many regional-level local governments delimited the administrative boundaries of metropolitan areas in the hope that appropriate legal regulations at the national level would allow them to develop faster and in a more stable way. There was, however, no shortage of opinions critical of these decisions; these voices mostly questioned whether it was possible to find empirical

evidence for a functional link between the metropolitan centre and its surroundings. The research carried out in various research centres in Poland has shown that metropolitan areas certainly do appear in the Polish geographical space.

The objective of this article is to show the interaction between the city-core and its surroundings, as well as to present a detailed analysis of the consequences of such free interactions. The strengths and directions of the impact that cities have on their environment, examined from the point of view of free market mechanisms, are of special interest in this context. The quality of regional policies pursued by regional authorities will be important in strengthening the signals coming from the development of natural processes, as well as in combating regional polarization.

The territorial area of research is Małopolskie Voivodeship, a region in southern Poland with a strong (in Polish conditions) city of Cracow, which may be a development factor or a barrier for sub-regional areas of Małopolska. It should be noted that one example does not mean that we have to do with a general regularity; however, this example could be an important signal for regional authorities to observe natural flows between metropolises and their surroundings.

## **1. Basic assumptions concerning the significance of metropolitan areas in the world**

In the contemporary information economy, the metropolis is both the exporter and the importer of production factors: workforce, capital, and innovation. The presence of a metropolis is precisely what made the creation and development of metropolitan areas (understood as the metropolis together with its functional base) possible [Szczepański, Jałowiecki 2000].

Metropolises are self-sufficient, meaning that they create potential for development, especially in terms of reinforcing knowledge potential and creating the conditions necessary to attract external capital. The development potential created independently by a metropolitan centre (measured, among other things, by: the amount of goods created and services provided, the achieved surplus of money, knowledge and information, the invention of modern technologies, the innovation, and appropriately trained human capital, often with key competencies) is not consumed by the metropolis in its entirety. A certain surplus of potential remains, and it may be exchanged with other potential metropolises. It is, therefore, beyond argument that metropolises intensify the process of exchange of development factors between them, and this process is further enhanced by progress in the fields of communication, transport and data transfer; this very fact explains the exclusion of non-metropolitan areas. There are, however, natural relations between the metropolis and its surroundings, the existence of which is confirmed both by theoretical models and by observations.

Varying opinions concerning the future significance of metropolitan areas may be found in the literature on the subject. There are two main approaches based on the notion of territorial development. According to the first one, when metropolitan centres develop dynamically, metropolitan areas lose their significance. According to the second one, metropolitan areas will homogenize their relation with the metropolises. The notions of territorial growth presented thus far are, in turn, based on two different ideas: the theory of endogenous (internal, “bottom-up”) development, and the theory of exogenous (external, “top-down”, induced) development [Szul 2007]. Models based on the theory of endogenous development/growth, that take into account utilizing internal potential (especially the economy of innovation) for the purpose of development, place emphasis on the possibility that – within metropolises – the relationships between the processes of creating innovation, creating knowledge and its assimilation, and learning may be intensified. It is in large metropolitan centres and their functional bases that economic activity and the accumulation of knowledge are concentrated, and in the contemporary world metropolitan centres are the areas where growth and employment, the main components of development, are created [based on: *Cohesion Policy...* 2010]. Metropolitan centres are the driving force behind the development of global economies, but they also play an important role from a local perspective due to their influence on metropolitan areas. According to some theories, the metropolis drains potential (mostly in the form of human capital) from its surroundings. On the other hand, the theories based on diffusion of innovations and spill-over speak of the transfer of potential from the metropolises to their surroundings. This is confirmed by Gorzelak, who states that, on the one hand, it is necessary to widen and amplify the channels through which development is distributed to non-metropolitan areas (regional diffusion), and, on the other hand, complementary intervention should be oriented towards areas that are under threat of long-term decline and increasing marginalization, not towards areas with relatively slow, but still positive, growth rates [Gorzelak 2010]. However, there is substantial evidence that a policy based on the endogenous growth theory may only result in the accelerated widening of the gap in socio-economic development, especially in areas (regions) with large urban centres which have not yet fully developed their metropolitan functions. Not only do metropolises draw their resources from the less developed regions, but they also take over many elements that could accelerate development of such regions (*e.g.* foreign investments, the demand for trade and services, highly qualified human resources, jobs, young people, prestigious public investments, cultural activity, *etc.*) [Heffner 2010, 2011].

The increased discrepancy between the development potential of metropolis and its functional area does not, however, preclude the possibility of the continuous development of the latter. Situating the headquarters and regional offices of international corporations in the central, commercial zone of a metropolitan centre is a matter of business profitability and prestige. This trend, observed since the mid-20<sup>th</sup> century, has been undergoing some changes in terms of its intensity and direction: the

office and services infrastructure of metropolises is becoming too expensive for some entities, while for others it is too limited; hence the tendency to relocate the headquarters of companies to specifically designated sites on metropolitan peripheries or just beyond municipal boundaries. This has been one of the reasons for the disruption of spatial cohesion of metropolises and for increase in the significance of metropolitan areas. Consequently, metropolitan areas in Poland should be a subject of strategic thinking, even though they have not become a category of management.

Metropolitan areas are less interested in co-operation with their surroundings, since the latter cannot offer any valuable object for exchange, and intensive exchange of goods, services, financial capital, information or people is usually undertaken by two units of a similar rank. However, regardless of the intentions of authorities or entities that shape the development potential of the metropolis, the surroundings naturally 'take away' some of the metropolis's potential to satisfy their own needs. This is especially noticeable in the private sector. In order to improve their competitiveness and the quality of goods produced and services rendered, and also to cut production costs, businesses located near metropolitan centres take advantage of the opportunity to transfer knowledge and innovation from the centre that ensures an adequate supply of these factors. Furthermore, the constant natural influence of the metropolitan centre is often determined by the distance from the city-core or, to be more precise, the travel time to and from the metropolitan centre. Examples include Niepołomice and Zabierzów, both located near Cracow. In the recent years, this proximity has made it possible for the authorities of these two towns to draw major investors: numerous facilities that were opened in Niepołomice include a Coca-cola plant, a plant manufacturing MAN trucks, and a DHL logistics centre, while a number of companies offering consulting and other services have their offices in Zabierzów. Due to the geographical proximity and convenient connections, some of Cracow's inhabitants with the appropriate qualifications may find employment in such towns. This illustrates one of the possible conditions that favours the development of enterprise.

Enterprise is one of major driving forces in the economy. The development of enterprise is always accompanied by the creation of new jobs, by higher corporate (CIT) and personal (PIT) income tax revenues, and by increasing popularity of knowledge-based economy. On account of their basic motivation, *i.e.* the maximization of profits, entrepreneurs act in the most prudent and rational manner of all the representatives of economic sectors. Professional management and the rationalization and economization of actions results in certain patterns of behaviour, which are quite predictable – especially from the viewpoint of public authorities – as far as the creation of conditions for development of enterprise is concerned. Local authorities have at their disposal a considerable number of powers and capabilities to shape such conditions, attract private equity. These include: financial and fiscal policy, relevant laws and regulations (*e.g.* resolutions, administrative decisions, such as lowering taxes or allocating built-up areas for the expansion of a given enterprise), and promotion and information (local governments

are naturally the best, central source of information about themselves). This implies that by adopting an appropriate policy it is also possible to encourage the development of enterprise in the surroundings of the city-core; however, the question arises as to which level of public authorities should be responsible for this.

One of the ways for local governments to attract external capital is the development of spatial potential, including infrastructural potential. The latter is mostly associated with the improvement in the external and internal transport accessibility (this is of particular significance to entities that produce goods), and in the availability of office space in prestigious locations or suitably located and built-up development areas. Spatial potential also involves the presence of institutions that ensure the supply of knowledge and innovation, as well as an adequate base of information, logistics, and technical resources. This requires active involvement on the part of public authorities. In addition, every commercial entity is dependent on the capacity and flexibility of the labour market. One of the essential duties of local authorities is, therefore, to support the natural development of the labour market, mostly by aiding scientific institutions that train people who have key competencies and form the metropolitan class, but also by encouraging professional development of people who belong to the middle class (which is usually the most numerous group), and by preventing marginalization and social exclusion. While the lowest social class is usually a burden for the city, attempts to encourage the activity of its members may create the possibility of employing them to carry out basic tasks, which is usually useful for companies who take advantage of the economies of scale. It is beyond dispute that social capital is one of the basic elements that determine the investment attractiveness of a city. High investment or tourist attractiveness may create new jobs and generate extra revenue for the residents. As it is stated in the acts on *gmina*, *powiat* and *voivodeship* local government (these administrative units roughly correspond to municipality/commune, district/county, and province, respectively), a society growing wealthy translates into higher revenues for self-governments of every level, as is the case with taxes paid by corporations. By exploiting existing potential (for example, using municipal assets for commercial purposes), local authorities increase their financial capability to cater for individual and collective needs of residents. Local governments, therefore, compete with each other, thus creating conditions that attract external capital. In the case of metropolitan areas, a common development policy needs to be elaborated, and then consistently implemented. This is because co-operation and competition are not mutually exclusive, as demonstrated by the metropolitan centres participating in external exchange networks.

If a metropolitan area is assumed to comprise a metropolis and its functional base, then it might be observed that the size of metropolitan area depends on the potential of the metropolitan centre. The larger it is, the stronger the spill-over effects spontaneously affecting the surroundings. One of the tasks of regional authorities is to strengthen the unintentional interaction between the metropolis and its regional surroundings with the intent to bolster the development, competitiveness, and cohesion of metropolitan areas.

It is also worth to note that administrative metropolitan areas have been delimited for all major cities in Poland. Some authors evaluating the state of affairs in rural areas in Poland (which are also under direct influence of large urban centres) have come to the conclusion that following the policy of domestic development based on the polarization and diffusion model as the determinant of the transfer of capital, people and knowledge may result in the further reinforcement and consolidation of adverse socio-economic trends in areas that are beyond the range of influence of developing urban agglomerations. Spatial consequences include the division of the influence exerted on local and regional surroundings into zones that grow weaker with increasing their distance from the centre [Rakowska, Wojewódzka-Wiewiórska 2010].

The role of strong urban centres, which are developing their endogenous potentials, may give rise to an opportunity for such centres to gain a competitive position in the global economy; on the other hand, actions that stimulate diffusion processes may counteract the marginalization of peripheries and of areas devoid of metropolises [Potencjały... 2011]. The diffusion of potential to the metropolises' surroundings may result in an increased future significance of metropolitan areas. The possible ways in which the natural development interactions of metropolitan areas in Poland may be supported should, therefore, be analyzed. Metropolitan areas are mentioned in the following official documents issued by the government: *National Strategy of Regional Development*, and *National Spatial Development Concept*. However, there have been few practical implications so far. Metropolitan areas have not become a category of management, and that is why it is the regional authorities who should make use of the advantage offered by the presence of a metropolitan centre in their voivodeship.

## 2. Cracow Metropolitan Area

### 2.1. Natural flows

The following section is dedicated to the case study of Cracow and its direct functional base. An attempt has been made to analyze both Cracow Metropolitan Area (*i.e.* the administrative metropolitan area) and the existing functional links of Cracow's functional base (*i.e.* the economic metropolitan area).

Studies on the spatial policy of the European Union classify Cracow as one of the so-called Metropolitan Economic Growth Areas (MEGA), one of 72 largest urban centres of the EU. Today, the capital of Małopolska region is already an international tourist centre able to rival Prague or Budapest, and a centre with a dynamically growing knowledge industry.

Over the last decade, Cracow Metropolitan Area has experienced the largest in its history positive change in terms of economic growth and the quality of life. This area is successively increasing its demographic potential and expanding the range of



its territorial impact. Currently, it encompasses 4,300 km<sup>2</sup>, has the population of *ca* 1.5 million, and ranks at a solid third place in terms of population potential, behind the Upper Silesian and Warsaw metropolises. The ongoing metropolization should result in further expansion of the metropolitan area in terms of its size and of population, which over the course of the following decade should reach around 2 million [*Strategia Rozwoju...* 2011].

According to the data from Polish Central Statistical Office, Cracow Metropolitan Area accounts for 28% of the total area of Małopolskie Voivodeship. However, it is inhabited by over 44% of the population of the region. As many as 55% of the business entities, nearly 75% of commercial companies and partnerships, and over 80% of companies with foreign capital are based in gminas that are part of the Area. This illustrates the economic potential<sup>1</sup> of this area.

First of all, it is necessary to explicitly demonstrate the relationship between the metropolitan centre and its surroundings. The following assumption may be made: if a metropolis affects the development of its surroundings, then the spatial distribution of its influence decreases while the distance increases. At least two models – the growth pole theory and the gravity model – support this hypothesis. In addition, the results of many empirical studies (including those by experts from the Centre for European Regional and Local Studies (EUROREG) indicate that metropolitan areas need not necessarily be artificially defined via administrative decisions, but they may also be delimited based on natural relations. The results of the author's studies on the spatial distribution of potential in individual gminas of Małopolskie Voivodeship are presented using Figure 1.

First and foremost, it is important to note the relatively high<sup>2</sup> development potential of these areas, which considerably outdistance the other areas of the voivodeship. They feature gminas with the highest development indices (darker colours indicate higher economic potential). Three conclusions may be made based on this observation:

1. The concentration of high development indices in the metropolitan area is undoubtedly consistent with the hypothesis that assumes significant influence of the metropolis on the development of regions. There are hardly any other possible reasons behind this spatial distribution of development potential.
2. The relatively high and uniform level of development of the metropolitan area, with the appropriate role of the large city, justifies the attempts that had been made in the past to integrate metropolitan areas in terms of their organization, which would make it possible to synchronize the management of their development (these attempts include the discussion on the drafts of the so-called "Metropolitan Act").

---

<sup>1</sup> Local Data Bank.

<sup>2</sup> At this point it is worth to mention which indices were synthesized in order to obtain the results in Fig. 1: Mean net migration rate, Migration index, Mean value of migration index, Property income, Business entity sections: D, F, G, H, J, K. The data in Fig. 1 represent potential in 2007. The data in further studies pertain to years 2002-2007 and 2010.

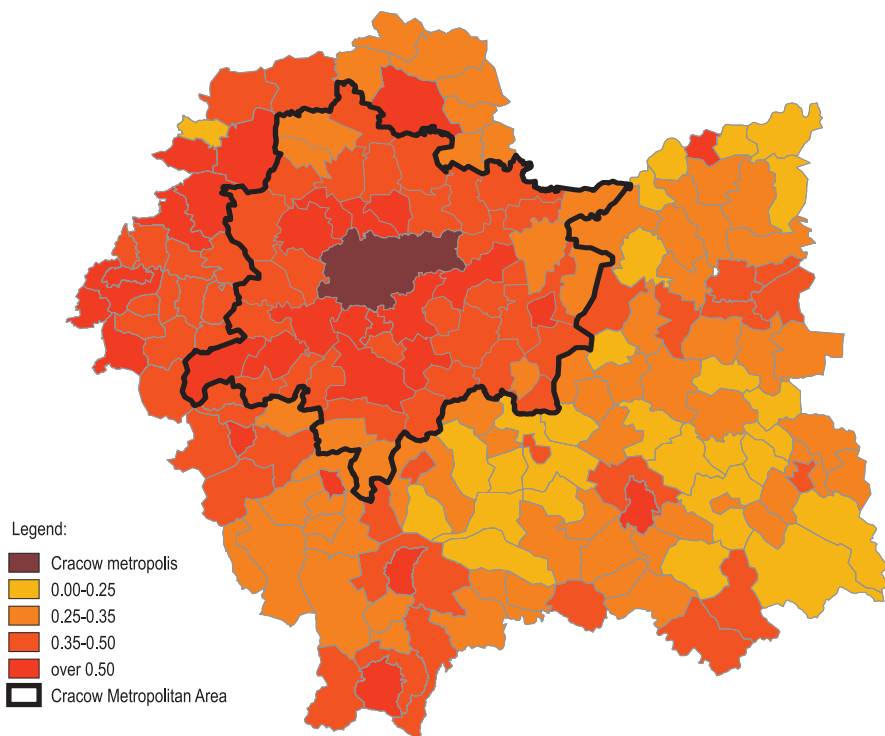


Figure 1. Spatial distribution of economic potential in individual gminas of Małopolskie Voivodeship  
Source: Own work (Figs. 1, 2).

3. The analysis of spatial distribution of the potential of gminas in Małopolskie Voivodeship confirms that the metropolitan area understood as an appropriately delimited surrounding area of the metropolis really does occur; the question remains as to the extent to which this economic (functional) space is consistent with the boundaries of the Cracow Metropolitan Area, as defined by administrative decision.

Metropolitan areas, therefore, seem to be privileged territories with regard to the number and intensity of functional relations with the metropolitan centre, unlike the peripheries of the administrative region. As follows from the map presented above, metropolitan areas are parts of the administrative region with better-than-average values of stimulants of development, *e.g.* the index of entrepreneurial activity, or a positive net migration rate.

When analyzing the natural flows between Cracow and the gminas of Małopolskie Voivodeship, several interesting regularities may be noticed. In the present work, numerical data concerning the socio-economic potential of gminas of Małopolskie Voivodeship were analyzed from a dynamic perspective. The gminas were ranked based on their economic potential. For many development indices, the dependence under discussion is represented by a curve with a relatively sharp fall of influence in the close vicin-



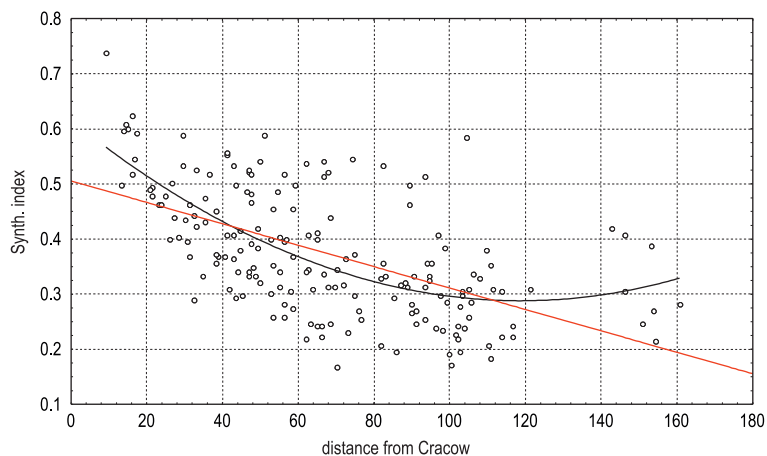


Figure 2. Synthetic index of development of gminas in Małopolskie Voivodeship vs. distance from Cracow

ity of the metropolis, and a much less rapid decline at longer distances. Nearly half of all investigated relations were best represented using the quadratic function. In addition to representing the shape of the relation, this function may also be used to estimate (*via* its extremum) the approximate range of the metropolis's influence. The calculations indicate that the range of measurable influence of Cracow on the surroundings is usually around 80 km. The results of another study of natural flows are presented below (points represent all gminas that are part of Małopolskie Voivodeship, the horizontal axis represents distance from the voivodeship capital, while the vertical axis represents the value of synthetic index of the development of gminas). There are a number of elements that distort the model, but it is nonetheless sufficient to demonstrate the dependence of development potential on the distance from Cracow.

The adopted reasoning assumes that potential is exchanged between the metropolitan centre and its immediate functional base: the social potential of the surroundings makes the metropolises' local labour market even broader and more flexible, while the metropolitan centre unintentionally "hands over" some of its potential related to human capital, knowledge and innovation, and the proximity of an exchange hub of at least supra-regional importance.

## 2.2. Formal framework and development policy

The socio-economic potential of a metropolis is connected with a dynamic development of free-market processes, which are mostly limited to the commercial sector and to regulatory mechanisms, predominant in the public sector. The institutions that shape development of metropolitan areas include local governments, both of

the city-metropolis and of the gminas making up these areas. The contribution of regional authorities to the development of metropolitan areas also appears to be significant. When analyzing the formal capability to exert influence, it is worth to note that, irrespective of the size of a gmina, its mode of operation and set of tasks are specified by the act on gmina-level government, while the regional-level local authorities operate based on the act on voivodeship-level government. These acts define the tasks that local governments carry out independently and on their own responsibility, based on the principles of subsidiarity and relative independence.

From the point of view of public administration, the metropolitan area comprises a number of gminas forming a ring around the urban gmina which plays the role of the metropolitan centre. The act on the gmina-level government is an example showing how the principles of decentralization, subsidiarity and relative independence are put into practice. The revised acts on gmina-, powiat- and voivodeship-level governments define the elements that form the basis for the socio-economic development policy implemented by executive and legislative/controlling bodies. The acts essentially specify those responsibilities of local government that are to ensure that the individual and collective needs of the residents of a given territory are met. Local governments at each level have a wide range of tasks, and it is their inalienable and often capital-consuming obligation to carry them out. These tasks not infrequently take up a major part of the annual budget. The local government of Cracow, for example, spends around 40% of its annual budget on education-related tasks. The execution of local government's own tasks may contribute to increased functional cohesiveness and uniformity of a metropolitan area by making the relation between the metropolis and its surroundings more consistent. However, this is not always the case. For example, investments in specialized medical care in the metropolitan centre may make the residents of the region even more reliant on the city in this respect. With regard to the so-called commissioned tasks, local authorities should be driven by professional management, prudence and cost efficiency, and to take the fullest advantage of the potential offered by their administrative unit. The competitiveness of local governments is particularly important in the context of attracting external capital, as stated previously.

Acts on local government do not define the objectives for metropolitan areas, as discussed above: the act on gmina-level government does not account for the specific features of a large metropolitan centre as opposed to small rural gminas. As previously mentioned, a metropolitan area comprises gminas that encircle a metropolitan centre. The act on gmina-level local government allows gminas to form or join associations, and to sign legal agreements with one another. Resolutions to form associations are passed by municipal councils (in the case of rural gminas) or by town assemblies (in the case of towns) representing the interested gminas. An association elects its own governing bodies, and carries out public tasks on its own behalf and at its own responsibility. Co-operation may, therefore, be voluntary on the part of the metropolitan centre and the neighbouring gminas. However, as noted above, co-operation with other metropolitan centres – and not with

the surroundings which do not have much to offer – presents a more promising option. Neither the public finance law, nor the act on local government revenues, introduces any significant changes in the manner of functioning of metropolitan areas.

It, therefore, appears that while the afore-mentioned acts define the general principles of operation of local governments, they do not make any reference to metropolitan areas. In this respect, the functioning of metropolitan areas is impaired. It is beyond doubt that they operate in geographical space; however, their emergence and development is a consequence of certain natural processes, and the reinforcement of these processes via an appropriate policy for territorial development would be a supranormative expression of the activity of regional and local authorities.

The concepts and intentions of the local government of Małopolskie Voivodeship are laid down in basic planning documents: the voivodeship development strategy, the spatial development plan, and the *Regional Operational Programme*. If economic (*i.e.* functional) metropolitan areas have been proven to co-exist with administrative metropolitan areas, the question arises as to the extent to which mechanisms regulating development processes are used. For example, if we assume that the influence of a large city on the development of its surroundings is merely a sum of results of market gambling on the part of business entities, organizations, and institutions, then it is reasonable to conclude that this influence could be much more pronounced if the development relations between the metropolis and the adjoining region (as suggested by various theoretical concepts) were reinforced through appropriately programmed interventions, carried out by political entities. Taking this into consideration, the attempt to determine the possible contribution of policies of relevant local authorities to the observed impact that metropolises have on their regional surroundings poses an important research challenge.

### **2.3. Małopolskie Voivodeship Development Strategy**

The concepts and intentions of local authorities of Małopolskie Voivodeship are laid down in their planning documents; of these, the *Development Strategy for Małopolskie Voivodeship 2011-2020* is the fundamental and primary document (all other documents should be secondary to this one).

The Strategy outlines seven Areas of Activity and the same number of Strategic Goals:

- Strategic Goal 1: Strong position of Małopolska as a region attractive to investors, with knowledge, professional activity and enterprise of residents as the foundations.
- Strategic Goal 2: High attractiveness of Małopolska in the leisure industry, through exploiting its regional heritage and cultural potential.
- Strategic Goal 3: High external and internal transport accessibility of the region, bolstering economic competitiveness and spatial cohesion.

- Strategic Goal 4: Strong competitive position of Cracow Metropolitan Area on the European stage, and increased economic potential of sub-regions on regional and national scale.
- Strategic Goal 5: Active centres of public and economic services that would provide development opportunities for the residents of small and medium-sized towns and rural areas.
- Strategic Goal 6: High level of security of Małopolska residents in the environmental, medical and social sense.
- Strategic Goal 7: An efficiently managed voivodeship that undergoes development based on co-operation and the mobilization of resources.

It should be noted that the *Strategy* is a comprehensive document, both in its diagnostic and in its forecast part. This shows that it was drafted by a wide circle of experts with extensive competencies. However, in the authors' opinion, this has had some negative consequences: due to the large number of Strategic Goals of varying importance, the document has lost some of the advantages that a development strategy offers, one of them being the selectivity of issues. Furthermore, it is hard to say whether this Strategy is an offensive or a defensive one, and if it is to be executed based on a reference model or rather based on a classic approach where resources available at a given moment are used.

Not all of the strategic goals pertain directly to the development of Cracow Metropolitan Area. It is, however, important to point out those actions that may indeed directly contribute to increasing the cohesion of Cracow and its surroundings.

The Strategy proposes actions aimed at social development, which in this context is understood as the creation of conditions for the education of the region's residents and for the development of enterprise. There is no doubt that the capital of Małopolska provides the best conditions for education, especially at the university level. The intraregional differences observed in this respect may lead to an increased prevalence of the "brain drain" phenomenon – in this case, the migration of the ablest residents of Małopolska from their previous place of residence to Cracow.

The development of tourism fosters economic development. The authorities of Małopolska recognize the potential of the region to develop "leisure industry". The millions of tourists that visit Małopolska every year provide an opportunity for increased socio-economic development. Cracow is especially popular with the tourist visiting the region. One of the goals set in the region's Development Strategy is to make the tourists who visit Cracow aware of the many tourist attractions available in its surroundings. The larger the number of tourists that decide to come to Cracow, the higher the chance that some of them will decide to spend time in other places offering numerous tourist attractions (such as Wieliczka, Zakopane, Wadowice, Oświęcim (Auschwitz), or the Sądecczyzna Region). The objective is, therefore, not only to exploit the natural tourist potential of Małopolska, but to have a strategy in place that is consistent with the metropolitan centre in this respect.

There is no doubt that achieving Strategic Goals 3 and 4 is the best way to stimulate development of the metropolitan area. Strategic Goal 3 involves actions aimed at the development of Cracow as a hub of international transport network, especially by ensuring direct access to high-speed rail and by improving road transport, which would significantly reduce the time required to travel between voivodeship capitals in Poland, and in the future would improve communication with other European cities [*Strategia Rozwoju...* 2011, pp. 94-96]. These actions are intended to reinforce the already strong position of Cracow in the domestic and international exchange networks. Furthermore, the actions projected as part of the Strategic Goal under discussion are to result in the expansion of the network of roads, which would ensure better external accessibility of Cracow. Not only would this improve interregional links, but at the same time it would also have a positive effect on mass transit through the Małopolskie Voivodeship by cutting travel time, improving the flow of traffic and the average driving speeds. In addition, the expansion of the integrated public transport system within the Cracow agglomeration is planned, based on light rail transit, premetro/metro, the "fast tram", and so on. The local authorities are of the opinion that raising the status of Cracow to that of a node/hub of international transport network will reinforce its metropolitan functions, so that the remaining part of the Voivodeship will benefit from the development processes that are generated; this will also be achieved through spreading of these processes by means of an advanced system of subregional transport hubs [*ibidem*, p. 96]. Four subregions were delimited as part of Strategic Goal 4, Cracow Metropolitan Area being one of them. Tarnów, Nowy Sącz and Nowy Targ together with their functional base are the other three subregions.

When analyzing the potential development trends set by the Voivodeship authorities, it may be observed that the regional authorities perceive Cracow as a prospective accelerator of regional development. The course of action is tailored with a view to reinforce Cracow's potential which, according to local authorities, will result in a more cohesive relationship between the metropolis and its regional surroundings. This particularly concerns the transfer of knowledge, technology and innovation potentials to the surroundings. The regional authorities are fully aware of the fact that Cracow is essentially a regional monopolist with regard to R&D and knowledge potential. The idea is, therefore, to reinforce the potential and to build appropriate channels that would transfer elements strengthening the competitiveness of the region to the surroundings. According to the local authorities, these channels may be created by building new transport links (rail connections, roads) and by expanding the existing ones. This type of thinking might be said to be consistent with the polarization and diffusion model. As observed in the first part of the present article, this model is not necessarily considered by the authors to be a good one. Connections with the global networks reinforce the potential of innovative, developed centres, but their influence on the surroundings is by no means evenly distributed. Subsequently, there is a risk that some places in the administrative region will fall outside the range of

influence of the metropolitan centre, which means that they will not take advantage of the positive effects, postulated by the polarization and diffusion model. Therefore, it appears crucial to build sufficiently efficient channels that will allow a fast process of territorial convergence to occur. It should, however, be emphasized that reinforcing cohesion by encouraging competitiveness is far more important than trying to ensure equal opportunities. Territorial diversity is an instrument of growth. The factors and conditions that determine development are unique for each unit. A problem arises when the disparity in potentials is too large, and may become a barrier. It is, nonetheless, important to treat the dynamics of development as the benchmark of potential, and to try to make an impact on the development rate by creating access to the cumulated potential of metropolitan centres, and utilize appropriately one's own potential. Unlike the concept of equal opportunities, territorial cohesion is compatible with the idea of competitiveness.

One of the Strategic Goals makes a direct reference to Cracow Metropolitan Area as a possible carrier of innovation and of potential, as postulated by the spill-over theory. However, the efforts of local authorities are directed elsewhere: instead of focusing on the establishment of a platform for co-operation with the gminas that make a part of Cracow Metropolitan Area, the authorities are attempting to encourage economic activity in areas with potential that is not fully exploited, *i.e.* Tarnów, Nowy Sącz and Nowy Targ, together with their functional base. This requires more extensive actions, with the focus not necessarily placed on developing of the functional base of the capital of Małopolska.

## Conclusions

To recapitulate, several important issues related to the functioning of Cracow Metropolitan Area need to be addressed:

1. In the author's opinion, the economic metropolitan area formed by Cracow and the functionally related neighbouring gminas comprises at least 44 gminas belonging to the Cracow Metropolitan Area, consisting of 52 gminas, and 6 gminas beyond the metropolitan area, as delimited by administrative decision. The difference between the economic and administrative metropolitan areas is a consequence of the disparity in the economic potential of gminas that surround the metropolitan centre. It may be remarked that the channels that transfer potential from the metropolis to its surroundings have a somewhat different course than the boundaries of Cracow Metropolitan Area.
2. As regards the policy of development, the activity of regional-level public authorities with respect to reinforcing the signals of natural development processes should be evaluated. Their activity and the efficiency of their actions should be measured against the relevant guidelines in the *Małopolskie Voivodeship Devel-*



opment Strategy, which represents the regional authorities' intentions in terms of desirable trends in development. In the *Strategy*, some provisions may be found as to the role of Cracow in shaping regional development as well as provisions regarding the projected actions aimed at establishing channels for the transfer of potential; however, it is important to recall once more the issues of the non-selective approach to trends in development and the capital-consuming character of the proposed solutions (which may render them ineffective).

3. When analyzing the metropolis-region interaction, two tendencies should be noted. Firstly, the disparity between socio-economic potential of eastern and western Poland, already demonstrated by the authors, may be observed even in Małopolskie Voivodeship. The potential of the eastern part of the region is far lower than that of gminas located close to Śląskie Voivodeship. The second tendency is demonstrated by the relatively high values of economic potential of gminas located along the main transport routes of Małopolska. This confirms the theory that it is the travel time and not the geographical proximity that determines the relations between the metropolis and its surroundings.
4. An appropriate development policy for metropolitan areas has not yet been presented. Perhaps it is necessary to introduce a change to the current legislation, and at the same time to establish a new instrument for the allocation of funds that would be different from the currently available ones. However, there arises a question as to the obligation or freedom of decision to form such a variant, which could in this case involve very specific legal and organizational solutions. It should also be kept in mind that the government of Cracow, as well as the governments of other metropolitan centres, striving for a global exchange of elements that constitute development potential, do not have to be interested in co-operating with their surroundings, which would limit the usefulness of changes in legislation. Nonetheless, it is clear that measures must be undertaken to encourage at least regional authorities to take more decisive actions in support of the development of metropolitan areas, which, given a proper policy, may stimulate growth, competitiveness and cohesion in Małopolska.

## References

- Cohesion Policy In the European Union: Growth, Geography, Institutions*, Report Working Paper of T. Farole, A. Rodriguez-Pose, M. Stroper. London School of Economics, January 2009, pp. 5-6, [in:] *Krajowa Strategia Rozwoju Regionalnego 2010-2020*, MRR, Warsaw, 2010, p. 33.
- Gorzela G., 2010, *O krajowej polityce regionalnej*, [in:] *Krajowa Strategia... 2010-2020*, *op. cit.* pp. 33-34.
- Heffner K., 2010, *Regiony międzymetropolitalne a efekty polityki spójności w Polsce*, [in:] *Jaka polityka spójności po roku 2013?* M. Klamut, E. Szostak (Eds.). Wyd. UE, Wrocław.

- Heffner K., 2011, *Powiązania funkcjonalne obszarów miejskich Polski Zachodniej w kontekście wykorzystania ich jako potencjałów rozwojowych*. Ekspertyza, Opole, p. 6.
- Potencjały i bariery rozwojowe polskich regionów*, Wspólnota, <http://www.wspolnota.org.pl/artukul/10223>, potencja%C5%82y-i-bariery-rozwojowe-polskich-region%C3%B3w, 2011.
- Rakowska J., Wojewódzka-Wiewiórska A., 2010, *Zróżnicowanie przestrzeni życiowej obszarów wiejskich w Polsce – stan i perspektywy rozwoju w kontekście powiązań funkcjonalnych*, [in:] *Powiązania funkcjonalne obszarów miejskich... op. cit.*, Expert opinion ordered by the Polish Ministry of Regional Development, Warsaw, p. 6.
- Strategia Rozwoju Województwa Małopolskiego 2011-2020*, UMWM, Cracow, 2011, pp. 14-27.
- Szczepański M. S., Jałowiecki B., 2000, *Miasto i przestrzeń w perspektywie socjologicznej*, [in:] *Spoleczna przestrzeń metropolii*, B. Jałowiecki (Ed.). Wyd. Naukowe Scholar, Warsaw, p. 32.
- Szul R., 2007, *Teorie i koncepcje w polityce regionalnej. Rozwój, region, przestrzeń*, [in:] *Collective Work*, G. Gorzelak, A. Tucholska, (Eds.). Warsaw, MRR, p. 119.