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## The Spatial Range of Local Governments

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### Abstract

*This paper presents a discussion on the significance of space in the implementation of development policies by local governments. The hypothesis that geographical distance weakens the transmission of the socio-economic development policy, and peripherally located local governments are weaker than those centrally located was theoretically justified and empirically tested. On the basis of the measured distances between municipalities (NUTS5) and voivodeship capitals (NUTS2) before and after the 1999 territorial-administration reform, performance indicators were calculated for local governments in 1995-2007. The results show that the effective range of regional centres is limited to adjacent municipalities within a distance of 15 km, and other local governments should be considered to be of peripheral significance.*

**Key words:** public sector, spatial range, institutional rent

**JEL Classification:** R50

### 1. Introduction

The activities of territorial government authorities are predetermined by the institutional framework. Both the geographical range of their activities and their competencies at the respective level are specified. The territorial-administration reform of 1999 changed the institutional and spatial regime for self-governments in Poland. The strategic objective<sup>1</sup> of the reform was to create strong regions – voivodeships, that could become partners for other European regions (Kaczmarek, 2005). 49 small voivodeships, corresponding to NUTS3<sup>2</sup>, were merged to form 16 NUTS2 units. Districts (*powiaty*, NUTS 4), the level of administration which had existed prior to 1975, were reintroduced, to play the role of intermediary government between the municipality level (NUTS 5) and voivodeship level (NUTS 2). The assumption was that new voivodeships, with a stronger financial and

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<sup>1</sup> Another goal was to adjust the public statistics system to the EUROSTAT reporting requirements, and to break up with the socialist regime.

<sup>2</sup> Before the 1999 reform, the NUTS classification was not used in Poland. At present, there are no administrative authorities at the NUTS1 (regions) and NUTS3 (sub-regions) levels.

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organisational capacity, were to stimulate weaker local authorities within their respective operating areas. The reform and financial support from EU funds were supposed to be a remedy to the country's spatial diversity. The first perceptible effect of the reform was the change in the spatial relation between the self-government authorities. Primarily, both the geographical and the institutional distance between municipalities and voivodeship capitals increased.

Much research has been carried out in respect of the functioning and the effectiveness of the provision of public goods by local / regional self-governments. Usually, however, studies focus on the concerns of ongoing administration in the existing institutional settings. Nearly 10 years later, the collected data enable the analysis of the institutional changes alone, and the determination whether the new administrative structure is more effective than the former one in respect of promoting sustainable development. The reform assumed that a diffusion mechanism would occur – stronger regions would enhance weaker regions. The decentralisation was to be reinforced by the policy of investing in the “drivers” – the richest cities, which were to push forward the development of weaker areas. The implementation of those mechanisms is strictly related with the public sector, its tasks, competences, capabilities, budget etc. The establishment of a hierarchical self-government formed the basis for those processes, where functions were assigned to each level, individual or overlapping in terms of their scope, but not in terms of the territory covered. A question arises, whether the established institutions which form the framework for the functioning of local governments, were designed in such a way as to improve the effectiveness of the provision of public goods and of the transmission of the policy promoting socio-economic development. Institutional analysis can cover many topics, this paper, however, is dedicated to spatial aspects.

The institutional rent is an important concept in the study and it is understood as the proximity of regional authorities with significant competence or financial power – voivodeship authorities in particular. The administrative reform has deprived many voivodeship capitals of their status, and thus has increased the distance between a substantial part of municipalities and regional centres. Due to the institutional transition, which changed the relative location of municipalities, many of them became peripheral. This applies mostly to weaker local governments, which were adjoined to a stronger core.

The objective of the study is to determine to what extent the detrimental change, i.e. the increased average distance between municipalities and voivodeship capitals, has been balanced by other institutional changes. In particular, it is important to determine whether the

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geographical distance is a discriminating feature in the developmental regional policy implemented by local governments, in the provision of public goods and in the promotion of development. This paper will focus on the hypothesis that the spatial effective range of regional centres, i.e. voivodeship capitals, is insufficient, and the performance of peripheral local governments is poorer than that of the more favourably located local governments, i.e. closer to the centre. The local government reform has enhanced the significance of the institutional rent to local development, which leads to a stronger diversification at the regional level.

## **2. The Spatial Performance of the Public Sector**

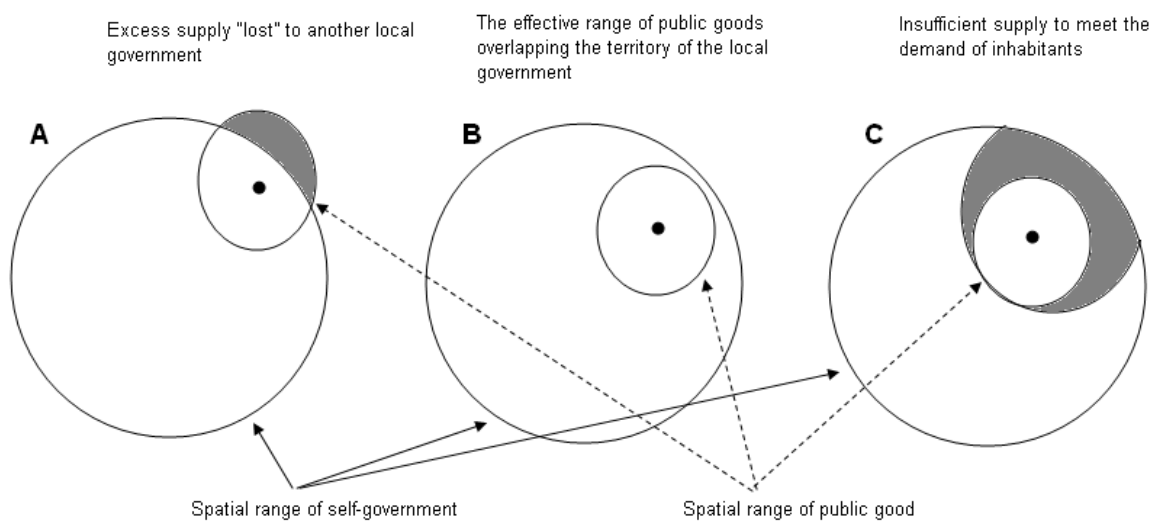
Regional and local governments have two operating areas where space is of utmost importance: the provision of public goods and services and the transmission of regional and local policy within a hierarchical structure. The analysis of institutional and economic mechanisms provides much evidence to confirm the significance of the geographical aspects.

The provision of public goods and services is a spatial process. The spatial factor is involved in the decisions on locating hospitals, schools, roads, designating catchment areas for schools and public offices, and it is significant for the performance of public responsibilities (Oakerson, 1992). Local governments are expected to perform effectively: the supply of the public goods should meet the demand, economies of scale should be used to provide public goods, and the policy should correspond to the heterogeneous preferences of local communities (Hooghe and Marks, 2009). With the strong autonomy and unwillingness to cooperate, local governments are seeking to restrict the provision of public goods to their respective areas, when the provision of those goods generates a positive spatial external effect experienced by the communities of other local governments, without any costs of participation on their side. An spatial external effect<sup>3</sup> of a good or service is understood as the part of supply that may be taken over by the inhabitants of other local entity, due to its spatial range. A neighbouring local government can act as a free rider. From the perspective of an individual local government, the effective location of community or urban infrastructure, enabling the provision of public goods, is closer to the centre, so that the effective range is equal to or smaller than the respective territory (see Figure 1). Such behaviour is contrary to the postulate of global effectiveness. Intermediary governments should be responsible for eliminating such behaviours.

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<sup>3</sup> External effects are spatially limited (Hanink, 2006).

An example to illustrate the model of effective location (see Figure 1) can be the construction of a hospital on the border of a voivodeship. The effective range of the institution would reach beyond the administrative borders, thus generating spatial external effects and reducing the effectiveness of the local government. Being faced with the choice whether to have a zone that is beyond the effective range or to reach beyond the borders of the voivodeship, authorities will be enticed by the former scenario (see Figure 1B, C), which will result in the shortage of public goods and services. A better solution (for the local authorities) is to locate the hospital in the depths of the voivodeship, thus depriving the inhabitants of the border municipalities of the access to healthcare services. The mechanism of locating infrastructure for the provision of public goods is different when the generated effect is negative. A landfill might serve as an example. Local governments do not have any incentives to internalise the negative social and environmental effects, and thus such operations will be located at the border of the area of the local government.



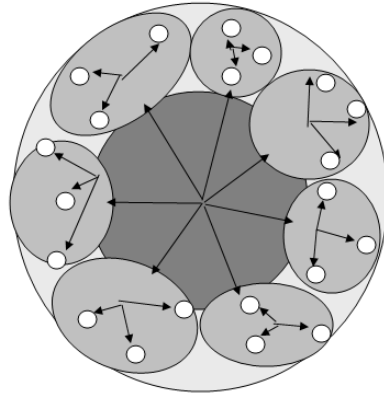
**Figure 1: Effective Location of Public Goods**

The problem of dividing space and providing public goods can be compared to the issue of providing universal services. The zoning of postal services and catchment areas of post offices can serve as an example here. When the catchment area is too small, the post office might be economically unviable, and when the catchment area is too large, and thus the customer traffic is too heavy, the performance of the post office can be paralysed. The problem of regional and local governments is analogous. Considering the economies of scale, with a small scale many processes can be uneconomical. A local government (a municipality)

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can be too small to operate effectively. Districts, the intermediary level, although better suited in terms of “size”, do not have the necessary competences, as their statutory responsibilities are of a different nature than those of municipalities, while voivodeships are too large and the cost of scale increases within a limited budget. In theory, decentralisation enables the adjustment of the provision of public goods to heterogeneous social preferences. However, there is a trade-off between cost effectiveness and the maximisation of social utility.

The spatial range of local governments applies also to the effects of the socio-economic policy. Here, a spatial scale exists as well, being a consequence of the administrative and territorial division (Spicer, 2006). The vertical hierarchy and the size of the local government, and the associated division of competences and influence diversify the effective range of the policy. Within hierarchical administrative structures, the intermediary level is the source of unreliability. In this intermediation extent and range are of great importance. Voivodeship authorities forward programmes of action to district authorities, because these are more suitable in terms of geography and competences than the municipalities. It can be modelled as “signal transmission” (see Figure 2). Districts are expected to transmit the “signal” further to municipalities. At this stage, a particularly significant question arises – whether the districts enhance or weaken the signal, when transmitting it to the municipalities? As a transmitter, the districts ought to augment the transmission to reach each municipality, even the most remote ones. If, however, the district weakens the signal, it is likely that the signal will not reach the municipality level. It means that the municipalities would not fully implement the voivodeship policy. What affects the strength of signal transmission by districts? There are at least two factors: the competences and the cooperation network. Competences are understood as the general influential power of district authorities. It consists of the legal capacity, budget and governance. Limited competences are restrictive. The cooperation network of municipalities within a district is significant. The district needs to make more effort to reach an individual, non-cooperating municipality than to transmit the same signal to a network of interrelated municipalities. Another factor is the geographical distance. The effective range of voivodeship authorities does not need to cover the entire territory of the voivodeship, owing to the transmissions at the level of the district. However, when districts fail to duly meet their responsibilities, it might turn out that the influence of voivodeship does not go beyond the district level.



**Figure 2: Policy transmission within a voivodeship**

The transmission mechanisms should work both top-down and bottom-up. Assuming that it is the role of the district to act as an intermediary, the district, as a level that ties the municipalities together, should be expected to demonstrate initiative to integrate the municipalities and to transmit the “signal” to the voivodeship authorities. An inefficient district will not act as an integrator or transmitter, thus forcing the municipalities to cooperate with the voivodeship authorities on their own. The more remote a municipality is, the more difficult it finds to interact with the centre.

The first law of geography according to Waldo Tobler (1970) can also come true in the transmission of regional policy. Top-down policy signals can be suppressed by a weak intermediary or by the nature of the transmission itself. When treated as a stream of tacit knowledge, the policy transmission is better received by the municipalities and districts located near the voivodeship entities. The circulation between heterogeneous actors is strictly dependent on the distance, which includes the geographical, cultural, social distance etc. The more remote the authorities, the weaker the flow of knowledge. In the literature concerning local innovation, the significance of spatial concentration in the learning process is emphasised, understood as the ability to develop new ways of acting, skills, networks of social interrelations, etc. (Lundvall and Johnson, 1994). In addition, learning requires interaction and combining knowledge and information from many sources. Those mechanisms benefit from proximity (Albagli and Maciel, 2007). The implementation of policy is founded on two groups of actions. Primarily, on the direct **financial** transfer. This usually applies to central authorities, which (partly) contribute to the budgets of local governments. The effective range here is basically unlimited, and the implementation is instant. Things are quite different with **managerial** activities, where specific decisions are

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made, relating to a specific location and situation. The simple accounting transfer mechanism does not apply here, and distance is of utmost importance. The more remote locations, the poorer the mutual understanding: of people, situations, conditions, circumstances, etc. In large administrative units, it is more difficult to know all local entities, what could result in wrong decisions, unsuited to the circumstances. In other words, large voivodeships may “fail to see” the problems of the most remote municipalities. Moreover, the geographical distance and the population potential may be of significance – operational management of a large unit is more difficult than in the case of a small entity. The spatial range is positively correlated with the size of infrastructure. Under the new administrative division, the average travel time from the most remote municipalities to voivodeship capitals exceeds 3 hours. Therefore, the development of the IT infrastructure to connect all government levels is important, in order to enable the efficient management of the available resources (Jeruzalski, 2009).

The above presented mechanisms do not explicitly explain why more remote local governments are weaker. The core-periphery model could be an explanation, where the core attracts resources from the periphery. Strong cities make peripheries dependent on them, and the absence of cooperation between the cities and the surrounding municipalities, with their relations being rather based on competition, supports the detrimental mechanisms and increases the distance between the areas (Kopczewska, 2009). Divergence is a natural process, like the fact that only the fittest survive in nature. It means that an equal opportunity policy (convergence and cohesion) is a must, both for the society and for the economy. The absence of such a policy entails an increasing regional divergence. What is more, the expected diffusion mechanism is often imperfect. The policy of supporting the drivers implies the diffusion, but the process requires institutional support. Infrastructure is usually the basis for the support, and economic or social benefit is the determining factor. In the absence of signals and transmission channels, the mechanism fails, which is particularly detrimental to the peripheral municipalities.

The existence of the institutional rent is a consequence of the core-periphery model. Voivodeship capitals, as strong regional centres, attract business and new inhabitants, while municipalities where no administrative authorities are located are less attractive in terms of investments, living, culture, etc. Municipalities adjacent to the centre benefit from the institutional rent. Their location is often the only source of comparative advantage over other municipalities, similar but peripheral. On the other hand, the spatial distribution of economic and social activity or of the regional welfare is important. When large voivodeships are an

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effect of an administrative marriage between weak and strong units, strong municipalities are usually located in the centre, and weaker adjoined municipalities are located in the periphery, as the objective of the reform was to join development drivers with the peripheries. Therefore, remote municipalities are naturally weaker. Such an administrative reform deteriorates their relative location, which does not provide any developmental incentive but rather consolidates their developmental stage.

### **3. Space Transformation by the Administrative Reform**

There is broad literature on the Polish territorial administration reform of 1999, its preparation, implementation, expected outcome, new institutional settings, etc. (e.g. Kaczmarek, 2005). The most important change consisted in the relocation of regional centres – voivodeship capitals. The elimination of the majority of voivodeship capitals caused the voivodeship territories to grow (three- to sixfold) and thus increased the distance in the core-periphery relation (see Table 1). In the previous system, the average distance between a municipality and the central city within a voivodeship ranged from 17.5 km to 46.4 km, while the maximum distance (the voivodeship span) ranged from 28 km to 143 km. Under the existing administrative division, the average distance from a municipality to a voivodeship capital is 55 km (within a range of 30-80 km), and the most peripheral municipalities are at a distance of 121 km on average (between 69 and 179 km) (see Figure 3). With the population density in municipalities and cities remaining the same, the population density within voivodeships is less diverse, which is a purely statistical effect, being a consequence of very different administrative units being combined into single bodies. On the other hand, the establishment of the district level, that is closer to the municipalities than the former voivodeship capitals, has brought the municipalities nearer the centres of power, however, with less competence.



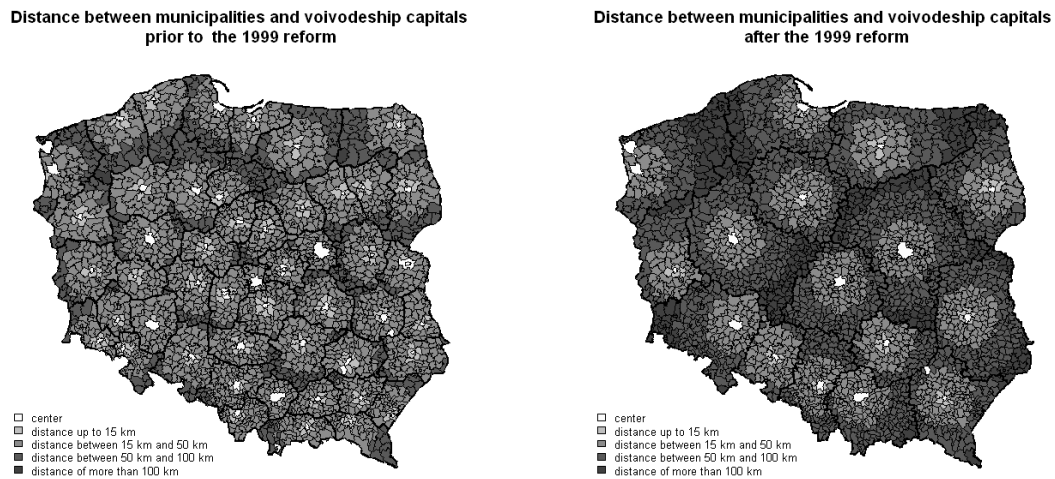
**Table 1: The sizes of local governments after the 1999 reform - statistics for all existing voivodeships**

Voivodeship	Area (km <sup>2</sup> ) 2005	Number of municipalities in voivodeships	Average distance between municipality and voivodship capital (km)	Max. distance between municipality and voivodship capital (km)	Number of districts	Inhabitants (2006) (in thous.)	Inhabitants per municipality (in thous.)	Inhabitants in voivodship capital (in thous.)	Density of population
Dolnośląskie	19947	169	68	145	29	2882.32	17.06	634	144.50
Kujawsko-Pomorskie	17972	144	60	111	23	2066.37	14.35	363	114.98
Lubelskie	25122	213	62	127	24	2172.77	10.20	353	86.49
Lubuskie	13988	83	51	119	14	1008.52	12.15	86	72.10
Łódzkie	18219	176	53	107	24	2566.20	14.58	760	140.85
Małopolskie	15183	180	51	108	22	3271.21	18.17	756	215.45
Mazowieckie*	35557	314	72	133	42	5171.70	16.47	1702	145.45
Opolskie	9412	71	36	69	12	1041.94	14.68	127	110.70
Podkarpackie	17846	160	48	109	25	2097.56	13.11	163	117.54
Podlaskie	20187	118	61	134	17	1196.10	10.14	294	59.25
Pomorskie	18314	123	30	132	20	2203.60	17.92	456	120.32
Śląskie	12334	166	46	91	36	4669.14	28.13	314	378.56
Świętokrzyskie	11710	103	44	83	14	1279.84	12.43	207	109.29
Warmińsko-Mazurskie	24173	116	65	151	21	1426.88	12.30	174	59.03
Wielkopolskie	29827	226	75	156	35	3378.50	14.95	564	113.27
Zachodniopomorskie	22892	114	80	179	21	1692.84	14.85	409	73.95
min	9412	71	30	69	12	1008.52	10.14	86	59.03
max	35557	314	80	179	42	5171.70	28.13	1702	378.56

\*(with capital city Warszawa)

**Table 2: The sizes of local governments in 1975-1998 – statistics for the smallest and the largest voivodeship**

Voivodship	Area (km <sup>2</sup> )	Number of cities and municipalities	Average distance between municipality and voivodship capital (km)	Max. distance between municipality and voivodship capital (km)	Inhabitants in voivodship (1996) (in thous.)	Inhabitants in cities and municipalities (in thous.)	Density of population (per km <sup>2</sup> )
Min	1523	20	17,5 km	28	249,7	11,89	46,46
Max	12327	150	46,4 km	143	3918,4	26,12	729,61



**Figure 3: Distance between municipalities and voivodeship capitals prior to and after the 1999 reform**

The 1999 administration reform redistributed the responsibilities and competences between the local and regional levels of authority. Philosophy of the power separation results in the catalogue of responsibilities, obligations, rights etc. It can be assumed that the responsibility of voivodeship authorities is to develop long-term regional development strategies. An activity profile, priority actions, essential investments etc. are identified for the entire voivodeship. Thus, the voivodeship authorities set the general direction of changes and the support framework. Municipalities are in charge of most of the ongoing activity, which should be carried out in such a way as to provide public goods and services that are best suited to the needs and preferences of the inhabitants. Investments or future-oriented activities are supposed to be in line with the voivodeship strategy. Districts are responsible for ongoing activities, mostly local, but of an intermunicipality character, such as intermunicipality infrastructure, the labour market, security and defence etc. Such an arrangement of responsibilities implies a natural cooperation between municipal, district and voivodeship authorities<sup>4</sup>. On one hand, the voivodeship government identifies the strategic path for the future, and on the other hand, its responsibility is to respond to the needs of its districts and municipalities. It is important for the voivodeship authorities to acknowledge the concerns of the local level, especially when it is located many kilometres away. The worst scenario, albeit

<sup>4</sup> Municipality authorities (village mayor (*wójt*) / town mayor (*burmistrz*) / city mayor (*prezydent miasta*), district authorities (*starosta* and *district board*) and voivodeship authorities (the voivodeship marshal and the *sejmik*).

likely, is when the voivodeship is too large to struggle for the even development of its peripheries.

According to the assumptions of the administrative reform, voivodeships are supposed to be strong bodies. At present they concentrate populations from 1 to 5 million. This equals the population of many European countries, such as Estonia, Slovenia, Lithuania, Latvia, Ireland, Croatia or Norway, which gives the voivodeship the potential to play a significant role on the international market. Districts are condemned to be local centres, in many cases without any chance to become the real core, due to their location and territories, hierarchy and competences. They do not exceed a population of 150 000 people<sup>5</sup>, with a population of 100 000 on average<sup>6</sup>. The “old” voivodeships were closer to the people. Their population ranged between 300 000 and 4 million, but most of them did not exceed a population of a million. Such a magnitude of the local government corresponds to large cities, such as Warsaw, Poznań, Krakow.

### **3. The Significance of Spatial and Institutional Factors to the Performance of Local Governments**

The objective of the study is to determine how the peripherisation of local governments, being a consequence of the relative distance between municipalities and voivodeship capitals, affects the performance of local governments and the implementation of the sustainable socio-economic policy. On the basis of the available budget and development indicators, a cross-section time-series analysis was performed at the NUTS5 level. Distances between municipalities and their respective voivodeship capitals were calculated for both administrative divisions<sup>7</sup>. Development trends were compared for the municipalities (cities with district rights) which used to be voivodeship capitals and the municipalities located at a distance of less than 15 km, 15 to 50 km, 50 to 100 km and more than 100 km (see Figures 4 and 5), using municipality development indicators for the years 1995-2007. The distance applies to a certain year, thus the groups of municipalities located at a certain distance before and after the reform are not composed of the same municipalities. Therefore, statistical bias occurs. Before 1999, only 4 municipalities were located at a distance of more than 100 km from voivodeship capitals, and after the reform, the sample of voivodeship capitals was substantially reduced.

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<sup>5</sup> Approximate population of such cities as: Elbląg, Koszalin, Tarnów, Płock, Ruda Śląska or Wałbrzych.

<sup>6</sup> Approximate population of such cities as Legnica, Grudziądz, Chorzów, Tychy.

<sup>7</sup> The Euclidean distance was calculated between the centroids of figures representing the municipalities.

The transmission of the regional policy to the local level is to equalise socio-economic development parameters. This should be reflected in similar patterns of municipality development, irrespective of their location. The policy transmission should also be reflected in the balancing of the structure and magnitude of municipality budgets, both in terms of receipts and expenditure. The investigation of the effective range of a regional government is an attempt to answer the question whether the performance of the municipalities that are remote from voivodeship capitals is significantly different than that of more central municipalities. The distribution of the municipalities at specific distances from the centre (see Table 3) clearly indicates that the prevailing distance shifted from the 15-50 km interval to 50-100 km.

**Table 3: Number of municipalities within a distance of 15, 50 and 100 km from their respective voivodeship capitals**

Administrative division	Voivodeship capital	Distance<15	15< Distance<50	50<Distance<100	Distance>100
Old division	49	293	1694	431	4
New division	16	92	917	1168	266

The analysis implies (see Figures 4 and 5) that the distance is correlated with funding for the municipalities. The periods before and after the reform are not fully comparable, as the principles of financing have changed for local governments. From a cross-cutting perspective, the revenue of municipalities *per capita* for each year is substantially higher in voivodeship capitals. In 2007, the amount available to local governments located just 15 km away from the centre was approx. 25% lower than the amount available to voivodeship capitals, and the amount available to local governments located more than 15 km away was approx. 35% lower. Own revenues of the municipalities located within a distance of 15 km is 27% lower, and at a distance of more than 15 km – as much as 60% lower than in voivodeship capitals. Much the same, PIT (*Personal Income Tax*) revenues accounts only for 60% of the voivodeship capital level within a distance of 15 km, and approx. 30% at a distance of more than 15 km<sup>8</sup>. The investment expenditure of the municipalities located at a distance of more than 15 km from the centre is similar and accounts for approx. 50% of the investment expenditure of voivodeship capitals.

<sup>8</sup> Statistics are biased due to the “farmers’ effect”, where the farmers are not covered by PIT. The number of farmers increases with the distance to the centre. Therefore, the effect of decreased PIT revenue is doubled (lower income of population and lower number of tax payers).

Budgeting in municipalities has certain common features: voivodeship capitals have, earn and spend much more *per capita*. Municipalities adjacent to voivodeship capitals are weaker than the centres, however, their revenues are substantially higher than that of other municipalities, where it is difficult to note a significant variation relating to distance. It means that in principle, the periphery is the area located at a distance of more than 15 km from the voivodeship capital. Therefore, there is no spatial differentiation in the activities of the local governments, only the institutional effect can be seen. Is it a good outcome? It can be interpreted in two ways. The size of the voivodeship does not affect the municipality budgets. Non-core municipalities act in a similar way across the entire territory. However, the substantial difference between those municipalities and the centres is puzzling – it is a reflection of regional divergence without any diffusion. Voivodeship capitals are development drivers, generating a substantially higher revenues and expenditure. However, they do not stimulate the other municipalities. The municipalities located within a distance of 15 km from the town are usually the “bedroom suburbs”, performing auxiliary functions to the core. They benefit from the geographical and institutional rent, albeit only a moderate one.

Substantial inequalities can be seen in the socio-economic sphere. Business is clearly concentrated in voivodeship capitals (approx. 130 entities per 1000 inhabitants), and for municipalities located at a distance of more than 15 km, the level is approx. 50% of the voivodeship average. The unemployment rate is quite a different issue<sup>9</sup>, being strongly related with the distance between the municipality and the centre. In the municipalities located at a distance of more than 100 km, since 2003, the unemployment rate has been consistently double the voivodeship capital rate. In 2007, on average, in each subsequent distance interval, the unemployment rate was 1.5 percentage points higher, and in 2003 (when the general unemployment rate was higher), the difference was 2-2.5 percentage points. The farther a municipality is from the centre, the fewer children (as a population percentage) attend kindergartens. This is due both to the scarcity of kindergartens and to population ageing. Most likely, it is not a cultural effect linked to non-working women, as in remote municipalities there is even more than 1.2 employed women per 1 employed man. An opposite phenomena can be seen in the municipalities adjacent to voivodeship towns, with approximately 7% less women than men among the employed. However, those municipalities are strictly dependent on voivodeship capitals, which may distort the statistics. Voivodeship capitals are characterised with strong population ageing, however, this effect might be linked to the fact

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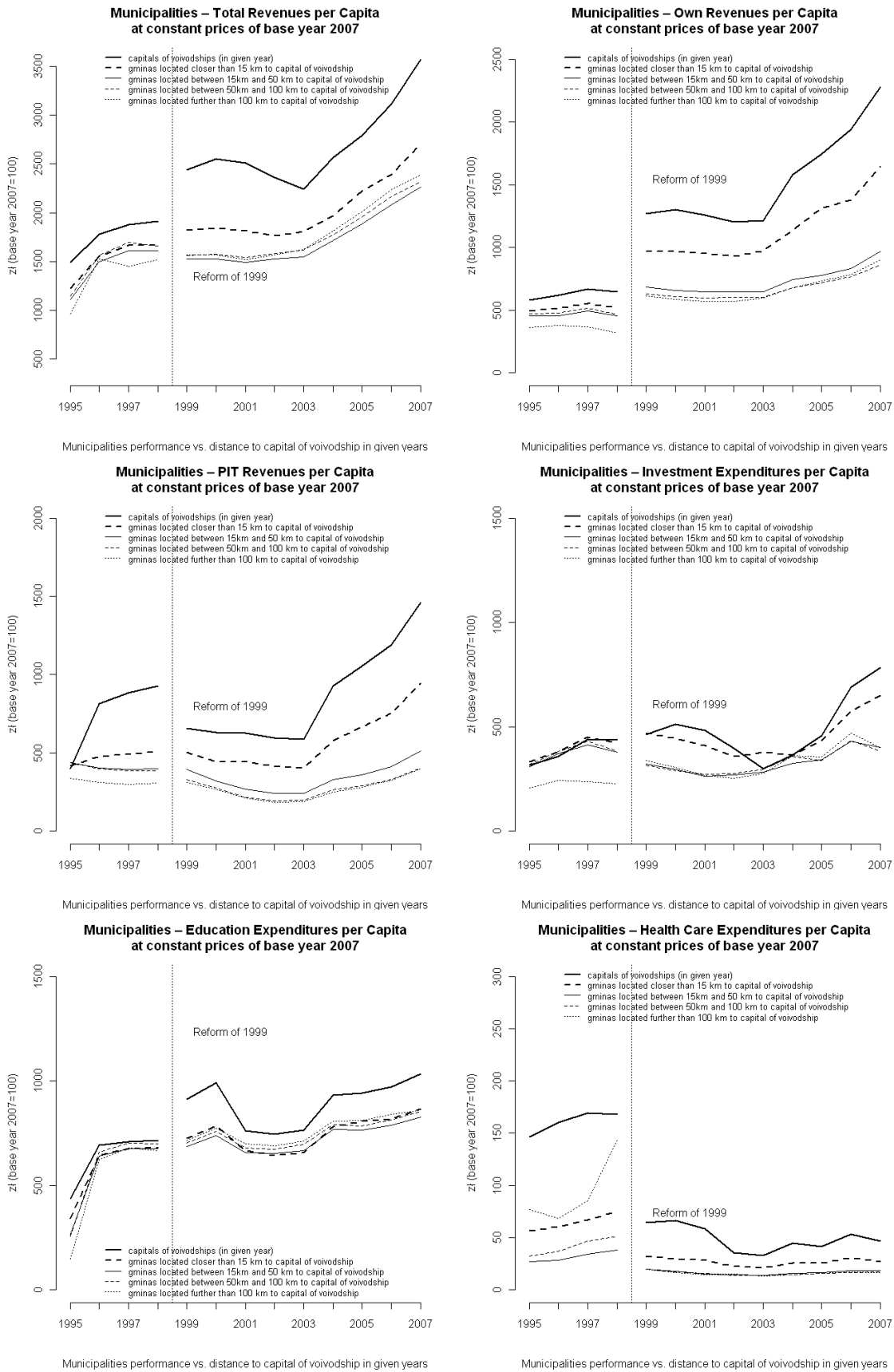
<sup>9</sup> Percentage share of the number of unemployed population in the number of economically active population (according to the Central Statistical Office).

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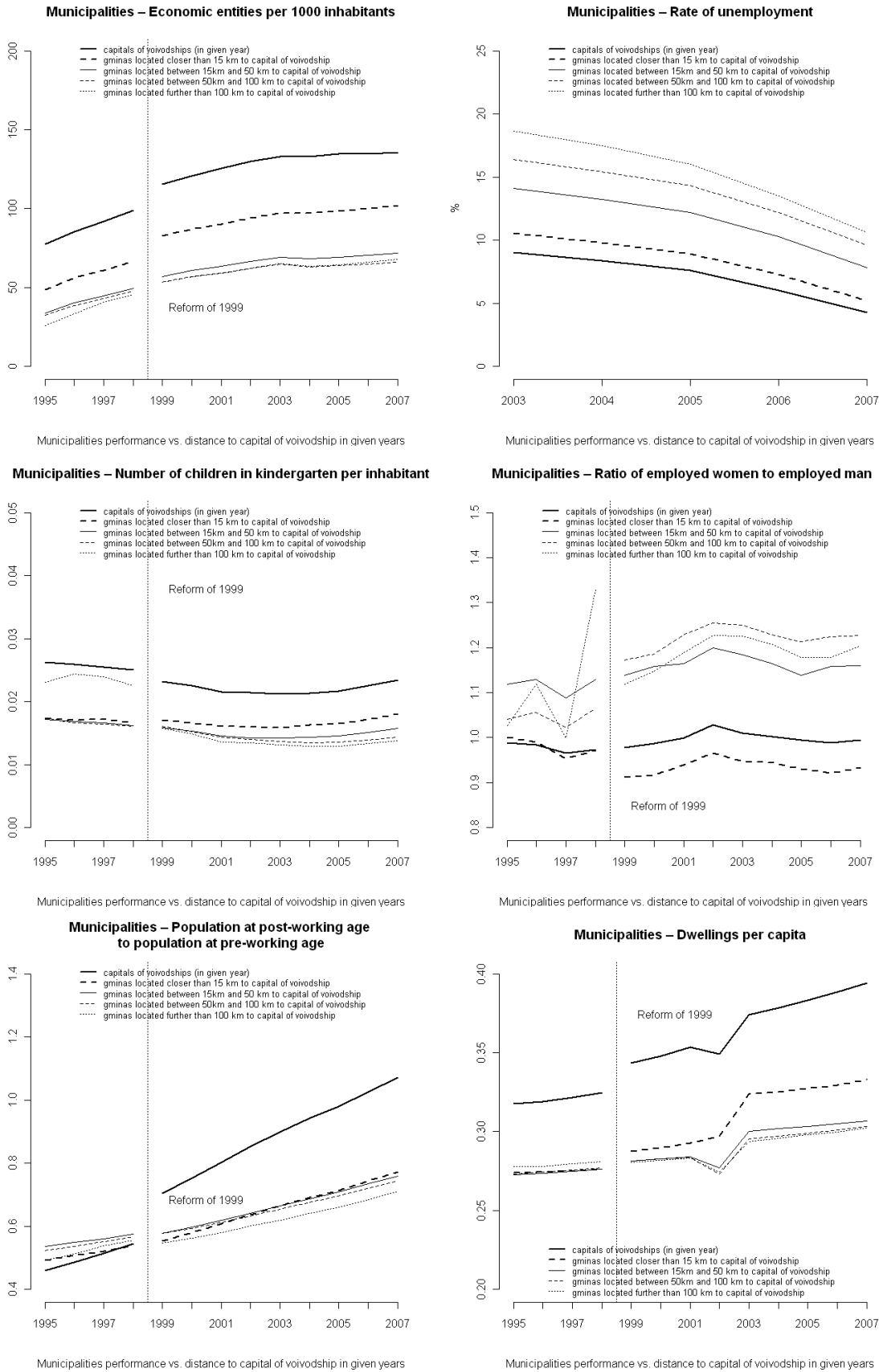
that many people live in cities without registering in their rented flats. Residential development has experienced substantial development since 1999, however, it is primarily concentrated within voivodeship capitals and adjacent municipalities (an approx. 15% increase). In the municipalities located at a distance of more than 15 km, the growth since 1999 has been just 7-8%.

The study shows that the model of the decreasing effective range of local governments is only true on the labour market. Substantial differences can be seen in the unemployment rate (to the detriment of the most remote municipalities) – the farther from the centre, the more difficult the labour market. It reflects the transmission (or rather the absence thereof) of the labour market policy and is an indicator of the attractiveness of peripheral municipalities. In spite of the fact that the number of firms *per capita* is not related to location (except the centre), the labour markets of the most remote municipalities demonstrate a high unemployment rate (vs. low) and a high (vs. low) percentage of women in the employed population.

**Figure 4: The significance of distance between municipalities and centres of power – the budget sphere**



**Figure 5: The significance of distance between municipalities and centres of power – the socio-economic sphere**





#### 4. Summary

The objective of this study was to determine whether regional and local governments, despite the varying location relative to the centre, implement a balanced socio-economic policy. The hypothesis that the distance from the centre (voivodeship capital) is important to the performance of municipalities has proven to be true. After the 1999 administration reform, which envisaged the establishment of large and strong regions (voivodeships), an ever-growing divergence phenomenon can be observed, along with the emergence of strongly developing voivodeship capitals and weaker peripheries. The municipalities located just 15 kilometres away from the voivodeship capital, according to the study, can already be considered to be peripheries. In those municipalities, the distance is not so significant – many processes are similar both at a distance of 15 km and 100 km from the centre. Such a spatial pattern indicates that actually there is no diffusion from the core towards the peripheries, beyond the borders of voivodeship capitals. Voivodeship capitals carry out the development process on their own, and adjacent municipalities benefit from diffusion to a moderate extent. The influence of regional governments and the effect of institutional rent do not go beyond the distance of 15 km from the core.

The presented statistics clearly point to a process of local divergence. Socio-economic processes and the activities of local governments in the centre are different than those of peripheral municipalities, and municipalities located just 15 km away from the regional centre should be considered to be peripheries. This proves that the core-periphery model is growing stronger. It should be noted that before the administrative reform, location was not so important, especially for municipal budgets. Total revenues, own revenues, investment expenditure or education expenses *per capita* were similar. The analysis of changes over time shows that the gap is growing, which may lead to a deeper marginalisation of non-central municipalities and to the concentration of socio-economic activity only in large cities.

The above presented analyses lead to the conclusion that the establishment of 16 strong centres in place of 49 weaker centres has caused the regional divergence to intensify. The absence of the diffusion process has caused voivodeship capitals to grow in strength at the expense of other local governments. The pre-reform division equipped a larger number of urban centres with the instruments to stimulate their respective peripheries. Leveraging the institutional rent of smaller centres of power enabled the wider diffusion of development processes within the natural reach of approx. 15 km. Paradoxically, a larger number of weaker

voivodeship capitals ensured better institutional settings for the promotion of sustainable development.

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