

Economies and Diseconomies of Scale in Polish Local Governments

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Paweł Swianiewicz, Mikołaj Herbst¹

1. INTRODUCTION—LOCAL GOVERNMENT IN POLAND

Before 1990, the highly centralist doctrine of real-socialism left no space for a local self-government system. Local administration was hierarchically dependent upon the upper tiers of administration and central government branch ministries. Consequently, local discretion to act upon any financial issues or forms of service delivery was next to none. The constitutionally dominant position of the communist party limited any reforms aimed at real democratization of the local political process. Nevertheless, the inefficiency of the centralist system had been commonly observed for many years. The Polish Communist Party then tried to introduce some forms of decentralization and local government (see Acts of 1983 and 1988). But these limited reforms could not change the doctrinal base of the centralist state and they were unable to create more democratic or effective local government results.

The turning point was the round-table negotiation (between the “Solidarity” opposition and the ruling communist party) in 1989. Local government reform was one of topics of discussion. It is worth emphasizing that it was the only topic on which a final agreement was not reached and a “statement of disagreement” was signed. Nevertheless, the main directions of the future reform had been already drawn by the “Solidarity” opposition.

Local government reform was one of the main priorities for the first post-communist government, formed in September 1989. Reformers from the Solidarity movement assumed that it was not enough to change the government in Warsaw in order to launch the transformation towards a democratic country and free-market economy. They were afraid that “old-style” local administration could block the practical implementation of actual reforms for the countryside. Quick, but intensive, preparation allowed for the passing of the new Local Government Act in March 1990. This was followed by general local elections in May 1990 and radical decentralization of financial regulations in January 1991. The 1990 reform introduced elected local government on the municipal (*gmina*) level only, while upper tiers of territorial divisions remained in the control of the state administration. This solution was treated as provisional one. It was argued that the existence of 49 small regions (*województwa*) introduced by the

communist administration in the mid-seventies was dysfunctional and required modification. It was assumed that newly elected regional governments should be introduced along with reforms in territorial division. However, for a number of reasons which will not be discussed here in depth, the introduction of upper tiers of local governments had been postponed for several years, until the end of 1998.

There are some striking similarities between the implementation of the 1990 and 1998 reforms. Like in 1990, the 1998 reform were prepared very quickly. The specific directions of the government proposal were formulated at the beginning of 1998, the elections for county and regional councils were held in October, and new tiers of government started operation by January 1, 1999. Again, similarly to 1990, many important legal regulations were approved at the last minute (or even later). The Act on Revenues of Territorial Self-Government was voted on after the October 1998 elections. Moreover, the Act was only temporary-limitations of its validity, as specified in the original title of the Act, were between the years 1999 and 2000. The government and the parliament agreed that substantial revisions would be necessary after a couple years of the new system's operation. Also precise regulations on division of competencies between tiers of government and between local government and state administration were discussed by the Parliament, even after the 1998 county and regional elections. In both cases (i.e. the municipal and the regional reform), the validity of temporary financial regulations was extended beyond the intended period (i.e. in the case of municipal governments—beyond 1991, when the more stable law was voted at the end of 1993, in the case of county and regional reform—beyond 2000. Currently, there are many signs that validity of this temporary solution will be extended for 2002 as well).

As a result of this process, there are currently three tiers of territorial governments: almost 2,500 *gminy* (municipalities), 308 *powiats* (counties), plus 65 cities with a county status (i.e. performing both tasks allocated to municipal and county level of governments) and 16 *województwa* (regions) which replaced earlier 49 smaller units. On both a municipal and a county level, self-government is the only form of public administration. On a regional level, there is a dual structure—on the one hand—elected self-government, and on the other—a governor (*wojewoda*) nominated by the Prime Minister with his/her own administrative apparatus. However, functions of regional state and self-government administrations are clearly separated and there is no hierarchical subordination between them.

The goal of the reform was to clearly separate functions and policy areas between tiers of government and to eliminate vertical (hierarchical) dependency of the lower tier upon the higher. This has been achieved in regards to the three levels of sub-national self-governments. Obviously municipal, county and regional levels co-operate, for example in economic development policies, but in terms of specific service delivery, the separation is close to perfect. The situation is much more complicated in regards to the relationship between central and local government level. In some cases (such as education

or some of social welfare benefits), nation-wide regulations are so strict that local government's role is reduced to a large extent to the central government agents and implementation of central policies.

The set of reforms granted a wider range of functions to municipal governments while the list of county's functions is much shorter. The aggregate county budget is only a small fraction (about a quarter) of the aggregate municipal budgets. Such a division of functions is possible because of a relatively large size of municipal units in Poland.² This issue is discussed in following sections of this chapter.

As it is presented briefly in Table 5.1, the widest scope of services is delivered on a municipal level, county responsibilities are more limited and the role of regional self-government in direct service delivery is very limited (although there are also some examples of such roles, higher education and main road maintenance) but they are mostly focused on strategic planning and regional development programs.

Table 5.1
Allocation of Functions Among Tiers of Local
and Regional Self-Government in Poland

	Municipality	County	Region
Strategic and Physical Planning	<ul style="list-style-type: none"> • Plans for local development • Local physical master plans • Granting building permits 	<ul style="list-style-type: none"> • Plans for county's development • Building inspection 	<ul style="list-style-type: none"> • Strategic regional planning (including international economic relations and regional promotion) • Regional development contracts with central government
Roads and Communal Infrastructure	<ul style="list-style-type: none"> • Water supply and sewerage • Waste collection and disposal • Street cleaning • Street lighting • Parks and green areas conservation • Central heating • Local roads • City public transportation 	<ul style="list-style-type: none"> • County road network 	<ul style="list-style-type: none"> • Regional work network • Water management (flood protection)

Table 5.1 (Continued)
Allocation of Functions Among Tiers of Local
and Regional Self-Government in Poland

	Municipality	County	Region
Public Order and Safety	<ul style="list-style-type: none"> • City guards • Voluntary fire brigades 	<ul style="list-style-type: none"> • Public order and security (police) • Civil defense 	
Education	<ul style="list-style-type: none"> • Kindergartens and primary schools 	<ul style="list-style-type: none"> • Secondary school education 	<ul style="list-style-type: none"> • Some higher education facilities
Health		<ul style="list-style-type: none"> • Public health and sanitary services 	<ul style="list-style-type: none"> • Public health (regional hospitals)
Welfare	<ul style="list-style-type: none"> • Social services, such as housing benefits, services for elderly, social welfare benefits 	<ul style="list-style-type: none"> • Unemployment measures and fighting • Care for homeless people 	
Housing	<ul style="list-style-type: none"> • Construction of social housing • Management of municipal housing 		
Culture, Sport and Leisure	<ul style="list-style-type: none"> • Local libraries, theatres, cultural institutions 		<ul style="list-style-type: none"> • Regional cultural facilities
Misc.	<ul style="list-style-type: none"> • Civil act registration 	<ul style="list-style-type: none"> • Land registry and surveying 	<ul style="list-style-type: none"> • Protection of the environment

Presently (1999 data), local governments spend 10.5% of the Polish GDP, or 38% of total government expenditures. It has been a clear increase from 7.4% of GDP and 16% of total government expenditure spent by local government in 1991. Almost 80% of self-government budgets are spent on the municipal level (including big cities with a county status), 15% on the county level and only 5% by regional self-government.

Local governments are financed by a mixture of own revenues (mostly local taxes which—within the limits defined by law—are set and collected by local governments), shares in revenues collected within its local unit territory from central income taxes and grants transfers from the central governments. The proportion of local revenues is significant on a municipal level, while counties and regions are financed predominantly by grants.

2. BASIC DESCRIPTION OF TERRITORIAL ORGANIZATION AND ITS CHANGES

2.1 Descriptive Statistics and Characteristics of Territorial Organizations

Present division into basic territorial units (*gmina*) was introduced in 1973 as a result of amalgamation of earlier, smaller units, called *gromada*. The number of newly created municipalities totaled about 2,400, but later, during the 1970s, there was further gradual amalgamation and, in 1978, the number of municipal governments (including boroughs in the largest cities) was 2,348. Later, a very slow fragmentation process begun and, in 1988, the number of municipalities was 2,399 (again, including boroughs in big cities).

The last decade has not brought a dramatic change to this picture. The 1990 reform liquidated division in the big city boroughs (Warsaw was the only exception). Apart from this, the number of municipalities was relatively stable, diverging only with the occasional rare case of splitting or joining units according to the will of its citizens. The most significant shift in municipal structure reflects the transformation of the rural areas into quickly developing mixed rural-urban *gminas*³. This involves granting (by the Council of Ministers) urban status to the “central village” of rural municipalities. During the last decade, there were 56 villages who received urban status and 30 such cases in the period between 1994–2000 (most often for new cities 1994–99 and in 1996–96). However this kind of transformation, unlike splitting and joining existing units, doesn't affect the total number of municipalities, since each liquidated rural unit is replaced by a mixed one.

The most common type of municipal division occurs in mixed urban-rural *gminas* and results in the establishment of new purely urban and new purely rural municipalities. There are over 500 such (mixed) local governments in Poland, many of them function quite smoothly. However, in some cases, conflicts between the rural and urban population (or even more frequently between urban and rural politicians) results in strong pressure to the divide the local government unit. The reasons for such conflicts are discussed in more detail in the following sections. The largest series of such splits took a place in 1991, when 23 urban-rural municipalities divided into separate urban and rural units. A few other cases took a place in 1994–1997, but central government has been very reluctant to comply with fragmentation pressures and, since 1998, there has not been any case of such splits.

The third type of change in municipal territorial organization was related to the division of existing rural local government into two or more or to the separation of districts of the city. Also this type of new local governments emergence were the most

frequent before 1998, especially in 1994–1997 period. For example, in 1994 only as many as 15 new local governments were created in such a way.

Other cases of splitting are very rare and, as it is shown in Table 5.2, the total number of municipalities has been very stable throughout the last decade. The difference between the number of municipalities in 1991 and in 2000 is 69—less than 3% of the total number of Polish *gminas*.

In total, there were 2,489 municipalities in Poland in 2000, including 307 purely urban (cities), 1,599 rural, and another 572 consisting of both urban and rural areas. The city of Warsaw has special status and consists of eleven municipalities, each having its own council and budget (before 1994, there were 7 (and later 8) boroughs in Warsaw).

Table 5.2
Changes in the Number of Municipalities 1990–2000

	1991	1995	2000
Urban	274	304	307
Mixed	559	555	572
Rural	1,580	1,611	1,599
Warsaw	7	11	11
Total	2,420	2,481	2,489

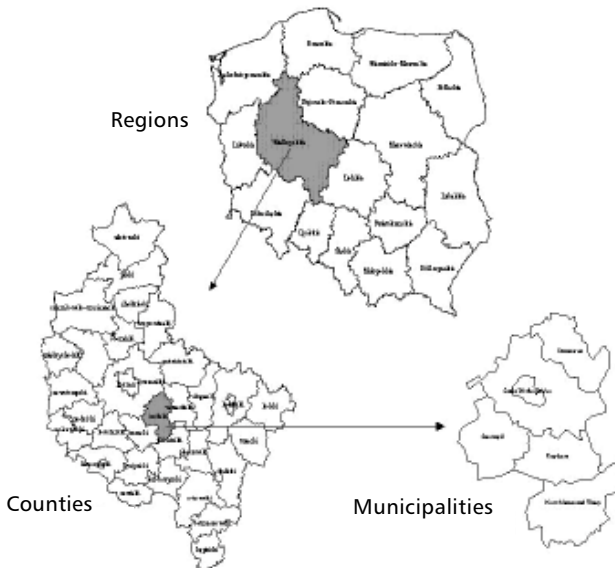
This organizational system, based on a single decentralized level, lasted from 1990 to 1998. At that time, beside municipalities, the country was divided into 49 prefectures (*województwo*) governed by the state administration. In 1999, a new three-tier administrative system was established. The basic unit for administrative division—the self-governing municipality—remained unchanged. However, 49 prefectures were transformed into 16 bigger regions and an intermediate county (*powiat*) tier was created. Of these, 65 of the counties are big cities that have both municipality and county status. The other 308 counties consist of a capital city with a surrounding area covering 3 to 19 municipalities.⁴ Starting from January 1, 2002, seven new counties were established and the total number of counties increased to 315. This change reflects bottom-up fragmentation pressure, which is perhaps more pronounced on a county level rather than on a municipal level.

The organization of municipalities, counties and self-governing regions is presented in Table 5.3 and Figure 5.1.

Table 5.3
Area and Population of Regions, Counties and Municipalities (2000)

Unit	Area in km ²			Population in Thousands		
	Average	Min	Max	Average	Min	Max
Region	19,500	9,500	35,600	2,400	1,012	4,966
County	838	13	2,987	103	22	1,518
Municipality	125	3	635	15	1,3	918

Figure 5.1
Regions, Counties and Municipalities



Polish rural municipalities, being relatively large (the typical rural *gmina* has a population between 7 and 8 thousand), consist of several settlement units. In 1999, there were almost 58,000 rural settlement units. Some of them are a bit larger than others. They are called *solectwa* (villages)⁵ and have limited autonomy within the municipality. There are almost 40,000 *solectwa* in Poland. The traditional position of a village leader is called a *soltys* (this position is further explained in Section 2.5). As it is presented in Table 5.4, only a small fraction of rural local governments consist of one village. About three-quarters of local governments consist of over 10 villages and, in almost 90% of the cases, they have more than 10 settlement units. The most typical

number of villages in one *gmina* is between 11 and 20, however, there are almost 10 local governments which have even more than 50 villages.

Table 5.4
Number of Villages (Solectwa) and Settlement Units
in Rural Local Governments (2000)

Number of Villages	% of All Rural Local Governments	Number of Settlement Units	% of All Rural Local Governments
1	1.1	1	0.4
2–5	4.2	2–5	3.1
6–10	17.0	6–10	8.5
11–20	44.0	11–20	32.0
21–30	26.6	21–30	27.9
31–50	6.5	31–50	6.5
51 and over	0.6	51 and over	0.6

2.2 Debates on Territorial Organization and the Size of Local Government Units

Within the last decade, the size of municipal government has not generally been debated. The present shape of *gmina* units is usually taken for granted, despite the fact they were introduced from above, less than 30 years ago. One can point out examples of vital discussions in individual cases (such as the split of some mixed urban-rural governments or, quite recently, the organization of local government within the city of Warsaw). Still, the general model for municipal government has not yet been questioned. If there are any suggestions for systematic change in territorial organization on a municipal level, they move in the direction of even further consolidation, not fragmentation. A recent example is provided by the Ministry of Finance proposals for revision of the Law on Local Government Revenues, presented at the beginning of 2002 [Weber, 2002]. The proposal suggested an additional 1% share in PIT revenues for 5 years as incentive for local governments who decide to merge. This suggestion is primarily targeted at county governments, but is also addressed to the municipalities. Still, it should be stressed, once again, that territorial reform on a municipal level is not a topic of Polish debates.

This has not been so with the two other tiers of sub-national government (counties and regions), created only few years ago at the end of 1998. County reform has been a central political issue since 1993, when the first proposal for division into about 300

units was presented by the national government. Also, since the beginning of 1990s, the existence and shape of regional self-government has been disputed.

The discussions included the topic of existence and size of the units to be created as well as their functions and the mutual relations between the tiers of government. Some opponents at the county level suggested that functions which are difficult to deliver by individual municipalities should be provided by voluntary co-operative groups within the municipal governments, rather than by a new tier. However, municipalities were not very willing to give up part of their autonomy to any associations. Mainly because no central incentives were provided and, although there were quite numerous examples of such co-operation, they could not solve the general issues surrounding some services' provision (voluntary co-operation between municipalities is further discussed in Section 7.3).

Before 1999, there were two general approaches to the size of county government. Most economic analysis suggested establishing relatively large units. Many argued that before the relevant legislation was passed the total number of *powiats* should not exceed 175–200. Professor Michal Kulesza, the main architect of the reform, stated very clearly that he was against such a reduction in a number of units because he expected public opinion to be against it [Emilewicz, Wolek, 2000]. In fact, even introducing a much larger number of *powiats* did not prevent the bitter protests of citizens from yet another dozen cities with *powiat*-capital ambitions. After two years (at the beginning of 2001), the government agreed to the modification by creating 7 new counties, increasing the number of units from 308 (plus an additional 65 cities all enjoying *powiat* status) to 315.

The discussion over regional government primarily concentrated on the role of regions. Some opponents were afraid strong regions might lead to federalization and even disintegration of the country. They were powerful enough to both ensure a strong position for the nominated state-administration in the regions and to limit the fiscal autonomy of the elected regional self-governments. Size was another hot issue. The national government's initial proposal, to create 12 large regions, was rejected by the parliamentary opposition and the president, who finally vetoed the relevant Act. The new (accepted) proposal included 16 slightly smaller units. The battle centered around regional forces, all fighting for regional capital status for their cities [Jalowiecki, 1999]. The debate is not totally over, since there is at least one more city (Koszalin) with regional capital ambitions and these aspirations are supported by some politicians.

The third dimension of the regional division debate concentrated on the European statistical NUTS classification. After much debate, self-governing regions are finally equal to NUTS 2 units. This solution was strongly advocated by regional self-governments and all major local government associations. They believed it may help strengthen the role of local governments in implementing EU regional policies and, in

particular, in making detail decisions on the allocation of EU pre-accession and future structural funds.

2.3 The Size of Local Government and Democratic Representation

The number of councilors elected in each municipality depends on population size and is determined by an Article 17 of the Law on Local Government. The 1990 reforms decreased the number of councilors (if compared with the old “people’s councils” system) and a recent (April 2001) amendment to the Local Government Law specified further reductions. This is illustrated in Table 5.5.

The Polish Law on Local Election states, in Article 27, that the division of a municipality into electoral wards is determined by the *wojewoda* (government’s administrative representative in the region). The number of election wards depends on the settlement structure. As long as they do not exceed the total number of councilors to be elected, each village (*solectwo*) constitutes one ward. Urban areas are divided into wards on the basis of sub-municipal administration structure (administration districts, residential areas, etc.)

The Act differentiates between municipalities under 20,000 inhabitants, where voters elect 1 to 5 councilors for each election ward, and units with populations exceeding 20,000, where the number of councilors for each district varies from 8 to 12 (Art.90). In *gminas* under 20,000 inhabitants, election results are calculated according the simple majority rule (voting for individual candidates). In larger units, the councils are elected under the proportional system, with citizens voting in fact for the list (organization) the candidate represents. (Art. 87,88).

Because the number of villages in a municipality is usually quite large in practice, the number of councilors is lower than the number of villages in almost half the rural local governments. This means, some of the villages are not directly represented by their own deputy in the council (a more precise distribution of councilor per village ratio is presented in Table 5.6). Obviously, the recent April 2001 amendment that reduced the number of councilors will increase the number of “unrepresented” villages. After the 2002 local elections, the proportion of rural governments where the number of councilors is lower than number of villages will increase from the present 40% to 59%. Also, the proportion of governments in which the number of councilors is lower than number of settlement units will increase from the current 63% to 76%.

Table 5.5
The Number of Councilors per Municipality as Stated by the Act
on Local Government

Situation Before 2002 Local Elections		Regulation to be Applied in Local Election 2002 (After April 2001 Amendment to the Act)	
Number of Inhabitants	Number of Councilors	Number of Inhabitants	Number of Councilors
Under 4,000	15	Under 5,000	12
4,000–7,000	18	5,000–10,000	15
7,000–10,000	20	10,000–20,000	19
10,000–15,000	22	20,000–50,000	21
15,000–20,000	24	50,000–100,000	23
20,000–40,000	28	100,000–200,000	30
40,000–60,000	32	Five for each of next 100,000 but not more than 60	
60,000–801,000	36		
80,000–100,000	40		
100,000–200,000	45		
Each Additional 100,000 Started	5 (With total number not exceeding 100)		

Table 5.6
Number of Councilors per Village (*Solectwo*) and per One Settlement Unit
Within Polish Rural Local Governments (1999)

Number of Councilors Per Village	% of All Rural Local Governments	Number of Councilors Per Settlement Unit	% of All Rural Local Governments
0–0.5	4.8	0–0.5	17.7
0.5–0.99	35.7	0.5–0.99	45.6
1	4.6	1	3.7
1–2	40.7	1–2	24.1
>2	14.2	>2	8.9

The average number of councilors per 1,000 inhabitants varies from 1.38 in the cities to 3.14 in rural *gminas* (see Table 5.7).

Not surprisingly, the number of councilors per sq. km is the highest in the cities (1.19). However, it is slightly bigger in rural (0.19) than in mixed (urban-rural) *gminas* (0.16). When it comes to settlement units, rural areas have (on average) better representation in the council (1.15 councilors per unit) than in mixed *gminas* (1.01). Cities, obviously consisting of one settlement unit, can not be taken into account in this comparison. It's worth emphasizing that the democratic representation indicators vary strongly within the settlement categories. In most cases, the standard deviation exceeds half of the mean value.

Table 5.7
Democratic Representation in Polish Municipalities (2000)

	Councilors Per Settlement Unit			Councilors Per 1,000 Inhabitants			Councilors Per sq.km		
	Urban	Mixed	Rural	Urban	Mixed	Rural	Urban	Mixed	Rural
Mean		1.01	1.15	1.38	1.91	3.14	1.19	0.16	0.19
Std. Deviation		0.80	1.47	1.31	0.85	1.04	0.85	0.09	0.13
Min.		0.24	0.20	0.10	0.58	1.16	0.11	0.04	0.04
Max.		8.00	22.00	6.99	6.76	8.56	6.00	1.00	1.88

The common rule is that the level of democratic representation decreases with the increase in population. In small urban areas (i.e. cities under 20,000 inhabitants) the number of councilors per 1,000 inhabitants varies from 1 to 7, with a very strong tendency to rise as the population decreases. In bigger cities, the indicator value is between 0.1 and 1 (see Figure 5.2).

The indicators presented above refer only to direct forms of democratic representation within municipalities. This is obviously a simplified view of local democracy that may be supported, especially in larger units, by some auxiliary forms of citizens' participation. Political parties, NGO's and the local media are supposed to strengthen inhabitants influence on local public life and help them control their elected representatives.

One of the most common measures of the indirect function of local democracy is the number of inhabitants per NGO. As shown in Table 5.8, indirect representation improves as the number of inhabitants increases, except for the sub-sample of small municipalities with populations not exceeding 10,000. Within this group of *gminas*, the relationship between size and the measure of indirect representation is in the negative: the smaller the municipality, the lower the number of inhabitants per one NGO.

Figure 5.2
Democratic Representation and Population in Polish Municipalities

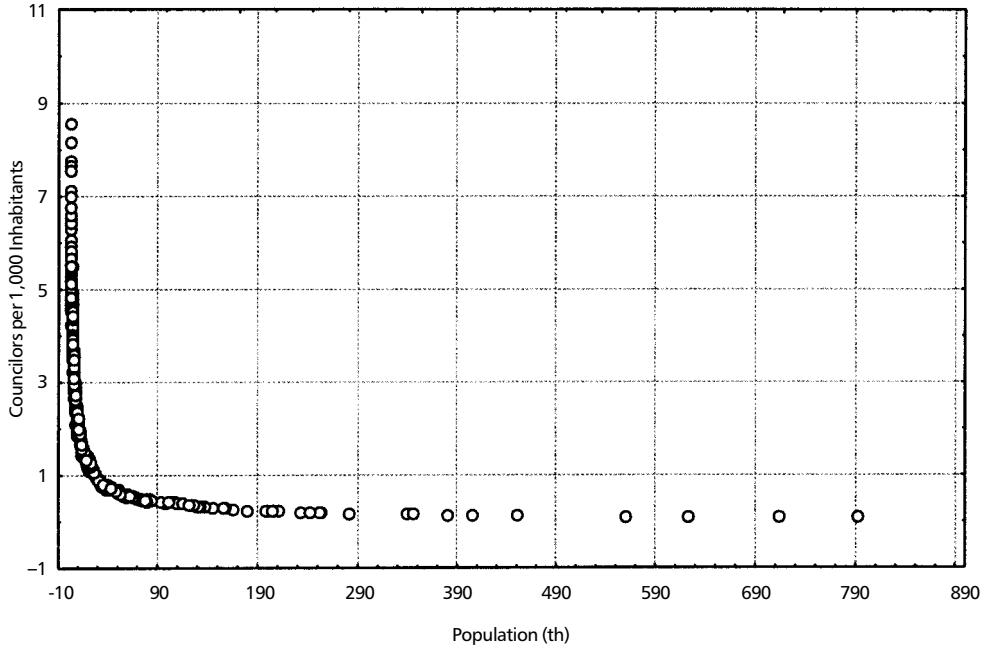


Table 5.8
Size and the Measure of Indirect Representation (2000)

Population	Number of Inhabitants Per NGO
Less than 4,000	829
4,000–7,000	1,048
7,000–10,000	1,125
10,000–15,000	1,083
15,000–20,000	1,049
20,000–40,000	959
40,000–60,000	815
60,000–80,000	804
80,000–100,000	579
More than 100,000	591

2.4 Regulations on Division and Amalgamation of Administrative Units

In the Polish legal system, it is the central government that has right to decide upon the number and range of local governments on both the municipal and county level. The decision to change the present borders (or even more so, for amalgamation or split of existing local governments) has to be made after consultations with the effected local councils and citizens. However, the results of these consultations are not binding for the government. The Municipal Government Act states (in Art. 4) that changing the local unit borders' should follow several principles. For instance, the *gmina* should be as homogenous unit as possible, borders should respect settlement structures and spatial organization, they should take into account social, economic and cultural ties and the shape of borders should ensure local government capacity to deliver public tasks. These suggestions are of a very general nature and, in fact, they leave a lot of decisions to the discretion of the central government. The last argument (about capacity to deliver tasks) is most frequently referred to when local attempts at fragmentation (division of local government units) are being fought.

Quite recently, in August 2001, the Council of Ministries published a resolution setting rules for municipalities who are interested in dividing. The municipal council has to pass its petition to the regional governor, who (within 30 days) prepares his (her) opinion and passes it, along with a petition, to the Ministry for Interior and Public Administration. The central government must make their decision within a year and the decision has to be announced no later than June 30 of the preceding year. Such a rule allows the newly created local governments enough time to prepare next year's budget. The municipal petition has to include:

- estimation of the one-time, and consistent, costs of the split;
- the prognosis of local revenues and expenditures for suggested new governments in the next financial year;
- results of social consultations (usually in the form of a local referendum) for each village involved separately, including turn-out and the number of voters actively supporting and opposing the change.

The basic statistics of such splits has been presented in Section 2.1 and some further case studies are presented in Section 4.1.

2.5 Regulations on Sub-Municipal Governments

The Polish municipalities, being relatively large, provide ample opportunities for decentralization within local government. This concerns both rural communities, where

decentralization of some decisions to individual villages could have a place, and big cities, where they might be divided into smaller districts (boroughs). The Act on Municipal Governments leaves all important decisions on sub-municipal “auxiliary units” in the hands of the municipal council (Art. 5). Each municipal council has the power to decide whether such units should exist and, if so, what its geographical borders, precise competencies, method of election of local representatives, etc. should be.

In rural areas, there is a very old tradition of limited forms of self-government led by popularly elected village leaders (*soltys*). The Act on Municipal Government determined that the most important decisions about village government are made directly through “village meetings”, which also elects the *soltys*. In city districts’ citizens elect the district council (although some issues may be decided in citizen meetings as well). Executive power in the district belongs to the district board elected by the district council.

Both the village leader and the city district chairman of the board have a right to participate in all meetings of the municipal council.

Although village and district councils exist in almost all local governments, municipal councils are usually reluctant to transfer any considerable amount of discretionary authority to them. Nevertheless, there have been some examples of innovations in this respect, both in big cities and in small rural communities. This issue is further discussed in Section 4.6.

3. SIZE OF LOCAL GOVERNMENT IN THE LEADERS’ PERCEPTION

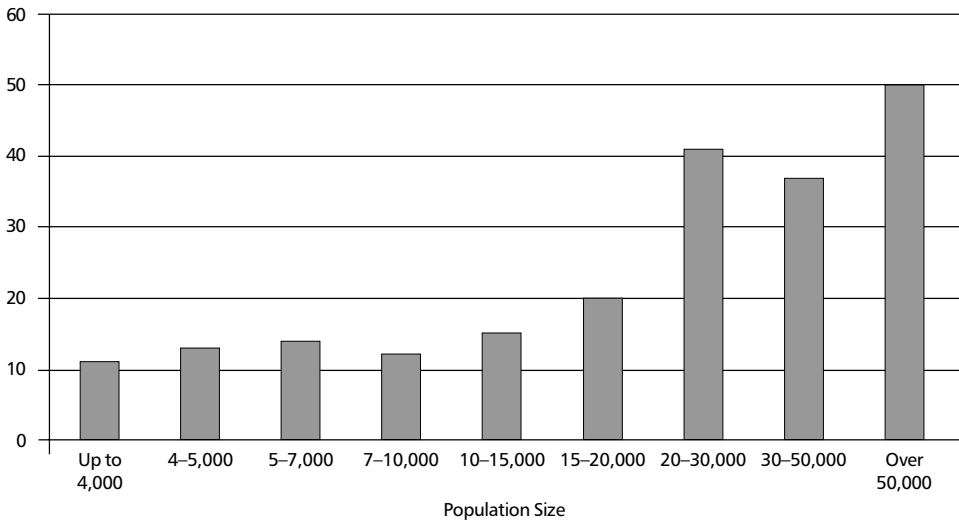
What do Polish mayors think about the size of their municipalities? As it was presented in the introductory chapter, according to the survey conducted by the LDI project,⁶ Polish mayors see the advantages of potential amalgamation of their municipalities more often than their colleagues in the Czech Republic or Slovakia. Nevertheless, there are negative opinions about potential merging that prevail also in Poland. Only 5.5% of Polish mayors said that merging with another municipality would be a very good idea, another 13.1% said it would be a good idea, while 43% thought it would be bad and 39.4% said it was a very bad idea.

But the idea of splitting (and creation of smaller municipalities) is even less popular among Polish mayors. Only a small margin (0.2%) thought it would be a very good idea, another 2.5% said it would be a good idea, while over 60% said it would be a very bad idea and 36% called it a rather bad idea. This means a vast majority of Polish mayors think their municipalities are a proper size and there are no convincing arguments for enlarging or dividing them.

One might expect that arguments in favor of merging with neighboring local governments might be more convincing in small municipalities. Interestingly enough,

the opposite is true. Mayors in large local governments are more often in favor of amalgamation. This is illustrated by Figure 5.3. The breakdown is at about population size 20,000. About 40% of mayors in larger cities see advantages in such mergers, while only 10–20% of smaller local governments do. It seems that mayors in larger units normally think about incorporating the smaller surrounding local governments, while those in smaller municipalities are more often afraid of losing their autonomy as a result of a merger with another unit of a comparable size.

Figure 5.3
 % of Mayors Who Agree that Merging Their Municipalities
 Might be a Good Idea (1997)



Acceptance for potential splits of local government is low among mayors, regardless of the size of the local government they represent. It is only slightly larger in units with population between 15–20,000. In Poland, most local governments belonging to the group consisting of several settlement units. One may expect that local governments in this group are large enough to generate a variety of conflicts between various parts of local governments. Acceptance of splitting is less common in larger local governments, because these are usually single cities, where a split would be unnatural and would cause numerous infrastructure service problems.

Mayors’ points of view on most the individual arguments for merging local authorities is usually unrelated to size of local government. The only clear exception is the opinion

that “merging would help create just distribution of services among citizens”. This opinion is more frequently supported by mayors from large local governments. Probably, they see the possibility to reduce spillovers in service delivery as resulting from incorporating surrounding local governments to the city.

From the same survey, we can see that an increasing number of conflicts between areas of municipality is viewed as the strongest argument against further amalgamation of local government. Since Polish local governments are relatively large and heterogeneous, we may ask whether territorial roles play an important role in local political life. Unfortunately, the only data which we have to help us answer this question comes from a 1991 survey [Grochowski, 1991]. Local mayors were asked to assess the importance of several problems with local governments’ functions. In the hierarchy of perceived problems, conflicts between parts of municipality were not among the most frequently mentioned. Problems relating to insufficient financial resources and central control and standards were indicated much more often. Still, territorial conflicts were indicated as important by 17% of mayors, significantly more than other local conflicts such as conflicts between political groups (10%), between councilors and local administration (11%), and conflicts with occupational groups (6%). This means that territorial conflicts did not effect everyday life in Polish municipalities but, at the same time, they were relatively frequent and important for local political life. Unfortunately, we do not know whether the intensity of these conflicts was related to the size of the local governments nor do we know how the situation developed after 1991. One may speculate that, with further development of the political system in Poland, conflicts between political parties became much more frequent, conflicts between occupational groups have become more apparent, even though the role of territorial conflicts might have relatively decreased. We do not have hard facts to support this intuition, although this thesis can be indirectly supported by some case studies. For example, Malewska-Szalygin (2001) in her analysis of one rural community in Northern Poland comes to the conclusion that the most important contemporary local conflicts include the following dimensions: poor versus rich citizens, teachers versus farmers, as well as members of the communist party before 1990 versus those who were never in the party, but she never mentions territorial conflicts. This intuition is further confirmed by results of the 2001 village leaders (*soltys*) survey, reported in detail in Section 4.3. Yet, some cases of splitting existing municipalities into smaller units (some aspects of these cases are discussed in following sections) suggest territorial conflicts still happen to play a significant role in local politics.

4. SIZE OF LOCAL GOVERNMENT AND LOCAL DEMOCRACY⁷

4.1 Size, Trust, and Citizens' Satisfaction

In theoretical debates on the size of local government units, arguments about democracy are among the most frequently brought up. Most often these arguments are raised by advocates of small local units, although they can be found with proponents' of the amalgamation thesis as well.

From the earlier study on public perception of local government in Poland [Swianiewicz, 2001], we know that people in small municipalities are more interested in local governments' activities. This is confirmed both by citizens' verbal declarations as well as—indirectly—by greater voter turn-out in local elections held in small territorial units. The greater turn-out in small communities (than in big cities) is observed in spite of usually lower education and lower income status of citizens. Size remains the most powerful explanatory variable for turn-outs, even when controlled by other variables such as levels of income or education of the local population.

Reform theorists [see for example Mouritzen, 1989] might argue that citizens' willingness to participate in local politics might be more pronounced in bigger local governments because large administrative units may be granted more functions. This results in local politics becoming more important in people's everyday lives. In Poland, cities over 100,000 citizens have been responsible for more services than smaller local government units. The 1998 reforms then granted similar extended functions to some smaller cities which received a county status. However, empirical data does not provide support for reform theory suggestions. In 1998, local electoral turnout in cities with populations between 40–100,000 and county status was even a little bit lower than in other cities of the similar size (42.1% in cities of county status and 44.3% in remaining cities). One might argue that people were still unaware of the consequences of the recent change in allocation of functions in 1998. But, in cities with populations over 100,000, the extended functions had been transferred to the local governments four years before (in 1994). Nevertheless, the change in turnout between the 1994 and 1998 election was no different there, than in other local governments.

According to public choice arguments, creation of smaller local authorities should result in the increase of local populations' political activity. However, 1990 and 1994 analysis of local electoral turn-out, for over 40 local governments all created in 1991 as a result of a split of larger municipalities, does not support this hypothesis [see Jalowicki, 1995]. In newly created urban local governments, the turnout in 1994 was only marginally higher than in average cities of similar size, while, in newly created rural governments, turn-out was even lower than in remaining rural areas.

Another popular argument for fragmentation says that residents in small local governments know more about local politics and policies and communicate better with councilors and administrative staff. This seems, to large extent, to be confirmed by Polish data. People in small communities know their local representative much more often than in larger agglomerations [for details see Swianiewicz, 2001].

As it was shown in the study on public perception [Swianiewicz, 2001], the level of trust in local governments is relatively high and much higher than the overall level of trust in national political institutions (central government, Parliament). Also in this case, the general assessment of local government is much better in smaller communities. In 1999, the level of trust varied from 60% in rural areas and 59% in cities below 20,000, to below 50% in cities over 100,000.

This relatively good score for local governments is undermined by the widespread belief that municipal authorities are corrupt. Also, in this case, there is considerable variation between the opinions of residents of small and large local governments – better in small, and much worse in big local governments.

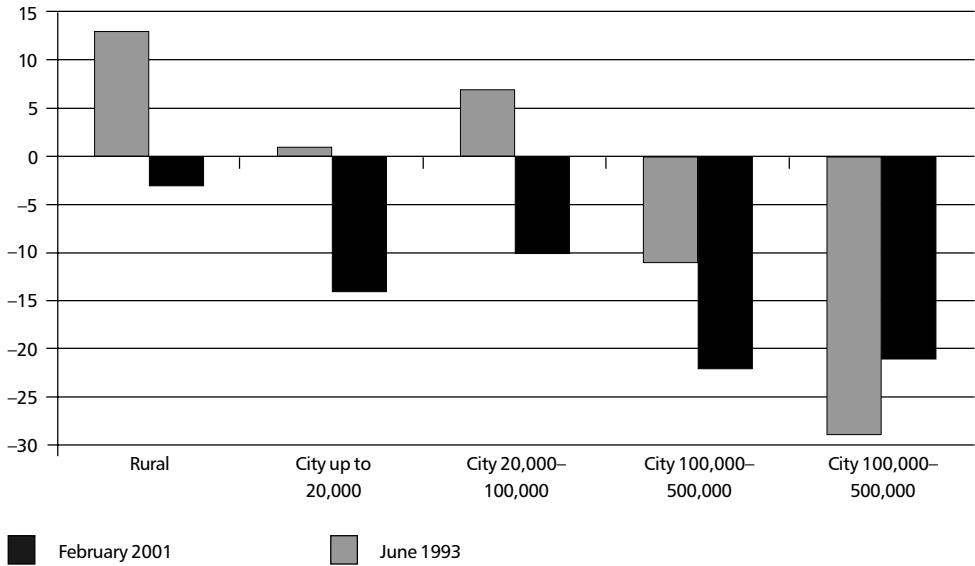
What do people think about the results of local government activities? As it was shown in the “public perception” study in June 1993, the number of those who believed that it led to positive results minimally outnumbered those who did not. The number of positive opinions strongly prevailed in rural communities but only marginally in cities of less than 100,000. In the largest agglomerations, the trend was definitely negative.

In 2001 [CBOS, February 2001] along with the general decline of public opinions in Poland, satisfaction with local government activity was also much lower. The number of negative answers for the question: “Are you satisfied with how local government is functioning” outsourced the positive opinions. However, as it is illustrated in Figure 5.4, this negative attitude was much stronger in larger, rather than in smaller, communities. In rural communities, the number of negative answers was 42% with almost the same number (39%) of positive opinions. In cities over 100,000, the number of negative answers was almost twice as many as the number of positive. This is despite the fact that, in the same year [CBOS, November 2001], overall opinions in big cities, about the political changes after 1989, were much more positive. In rural communities, the present political system is considered better than before 1989—but only by 35% of respondents. In cities, the numbers satisfied with a change varies from 47% in cities below 20,000 to 71% in cities over 500,000.

What is the Variation in the Satisfaction With Individual Services?

In 1999, over 3,000 citizens and over 600 small business local entrepreneurs were asked about their satisfaction with the client service at their city hall [see Swianiewicz, 2000]. The level of satisfaction was much higher in rural governments than in cities of over 100,000.

Figure 5.4
 Are You Satisfied With the Result of Local Government Functioning?
 Percentage Difference Between Positive and Negative Answers
 (Citizens' Opinions)



In 1992, more positive opinions about most local services were found in small rural communities while much more critical opinions were taken from residents of large cities [Swianiewicz, Bukowski, 1992]. This rule was confirmed by opinions on health care, education, water-sewage services, gas, waste collection, safety and telecommunication (see Table 5.9). The only exceptions to this rule concerned activities related to local economic development—unemployment, industry, retail trade (at the beginning of economic reform Polish local government played an important role in reforming retail trade).

Much more recently, following a June 2001 CBOS survey, a similar relationship between the size of local government and satisfaction with service provision was found within primary education (see Table 5.10). People in small communities tend to believe more often that recent education reforms produce positive results, think their local schools better prepared for life in the contemporary world, and are more likely to look at co-operation between schools, local educational administration and parents as positive.

Table 5.9

Do You Think Local Government in Your Community Has Undertaken Visible, Positive Activities in the Following Services [% of Positive Answers, 1992]

	Cities With Population:			Rural Communities
	Over 200,000	50–200,000	Below 50,000	
Gas, Water Services	21.9	25.2	20.3	42.0
Public Safety	19.5	16.0	18.7	22.5
Health Care	16.5	19.8	11.7	27.2
Education	13.8	10.7	19.8	21.4
Housing	13.2	23.7	16.3	18.2
Retail Trade	70.3	48.1	66.9	67.6
Local Industry	13.2	7.6	9.3	7.4
Environmental Protection	10.5	12.2	14.0	13.3
Unemployment	5.1	13.0	8.9	6.2
Street Cleaning, Waste Collection	19.5	28.2	37.7	30.9
Culture	18.9	14.5	26.8	15.4
Telecommunication	32.0	14.5	26.5	41.7

SOURCE: Swianiewicz, Bukowski, 1992.

But what does all this really tell us about policy recommendations for territorial organization? Does the fact that citizen satisfaction is generally higher in small local governments mean that the division of larger into smaller units would help to improve these aspects of their operation? This is not so obvious. There are at least two reasons why this relationship is not so straightforward. Firstly, the Sharpe observation (quoted in Chapter 1 of this book), that the differences between bigger and larger local governments, are not so much a consequence of the size difference, but the difference between urban and rural life. Secondly, people may be wrong in their predictions about the real results of suggested changes.

Three pairs of municipalities, created as a result of a split in 1991, were surveyed in 1995 in order to investigate how local population evaluates the decision to split a few years after the fact [Jalowiecki, 1995]. The opinions were quite similar, and ambivalent, in all six new municipalities. About 35% of respondents said the split was positive, significantly more than the 13% who had the opposite opinion. But the number of those who had no opinion was the largest (52%). So, one may hardly say the split led to an explosion of enthusiasm and local activity. When asked about various consequences of the split, citizens positively assessed the change in treatment of customers in the city

hall, in education, and cleaning services. At the same time, most the respondents said the division of the municipality had a negative impact on economic development.

Table 5.10
Satisfaction With Local Primary School Functions (2000)

	Schools Work Better than Before the Reform		Schools Co-Operate With Parents		Schools Prepare Pupils for Family Life		Schools Prepare Pupils to Become Active in Their Social Environment		Schools Prepare Pupils to Deal With Various Contemporary Problems	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Rural Community										
Cities:	21	35	77	14	46	38	40	42	40	46
Below 20,000	15	43	61	31	42	48	31	58	28	60
20–100,000	20	39	67	23	32	52	30	53	34	54
100–500,000	15	33	68	21	30	59	37	48	30	56
Over 500,000	16	45	52	41	25	63	29	62	26	67

SOURCE: CBOS survey, June 2001.

Citizens surveyed thought that the most important reason for the split was the ambition of local politicians. According to average respondents, it was politicians and local political parties who really initiated the split. In some cases, citizens of rural villages were seen among initiators as well but citizens in the cities played no active role in the decision on split.

Among the positive consequences of the division, they mentioned fairer allocation of financial resources between the geographical parts of the former municipality. But they also agreed the costs of local government administration and of local service delivery increased after the split. Surprisingly, only in 4 (out of 6) new municipalities did citizens think that the split helped to reduce number of conflicts in local communities.

The last observation on splitting local governments, yet it not necessarily resulting in reduced number of conflicts, leads us to the question of political representation.

According to a 1993 CBOS survey, most people believe that local councils represent the interests of ordinary citizens. Again, more positive opinions are found among respondents from small local communities [see Swianiewicz, 2001].

4.2 Size and Representation

Another aspect of representation is connected to the social structure of councilors in comparison to the social structure of the represented community. Obviously, it is not a condition of representative democracy that age, education, or gender structure of the representatives, and of the local community, should be identical. For example, it is quite common that people think better educated councilors would present their cases more effectively. In practice, we also know that too wide a gap between the characteristics of the councilors and the represented community frequently contributes to problems of democratic representation and to the psychological distinction between “us” (people) and “them” (authorities). In Poland, age and education (and not gender) structures are closely related to the size of the municipality. The relationship remains strong regardless of whether we consider all local government, only rural, or only urban areas. This is illustrated in Table 5.11, which presents the correlation coefficients as well as in Figures 5.5 and 5.6.

Figure 5.5
Age Structure of Councilors in Polish Municipalities (2000)

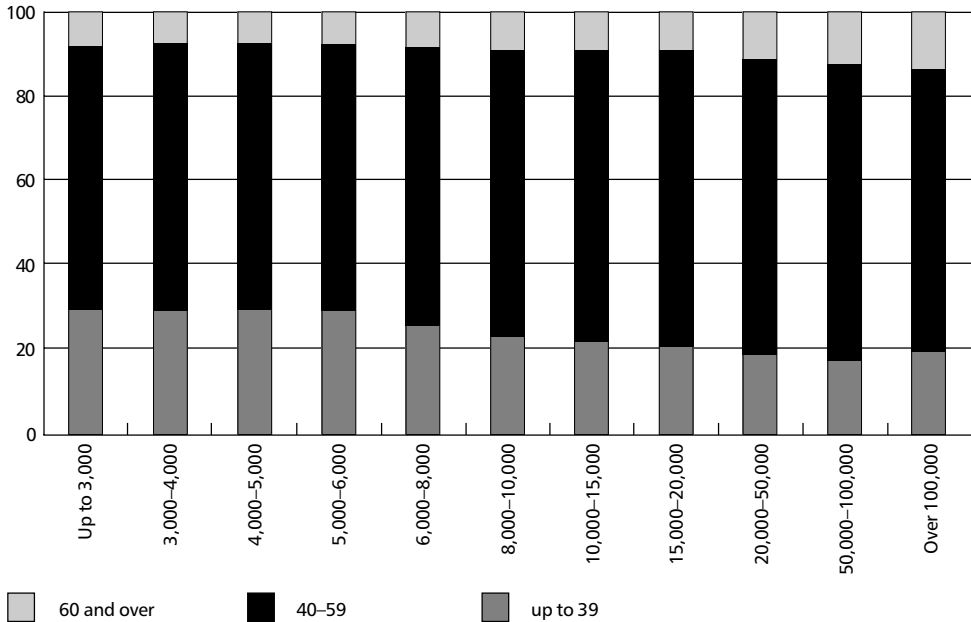


Figure 5.6
Education Structure of Councilors in Polish Municipalities (2000)

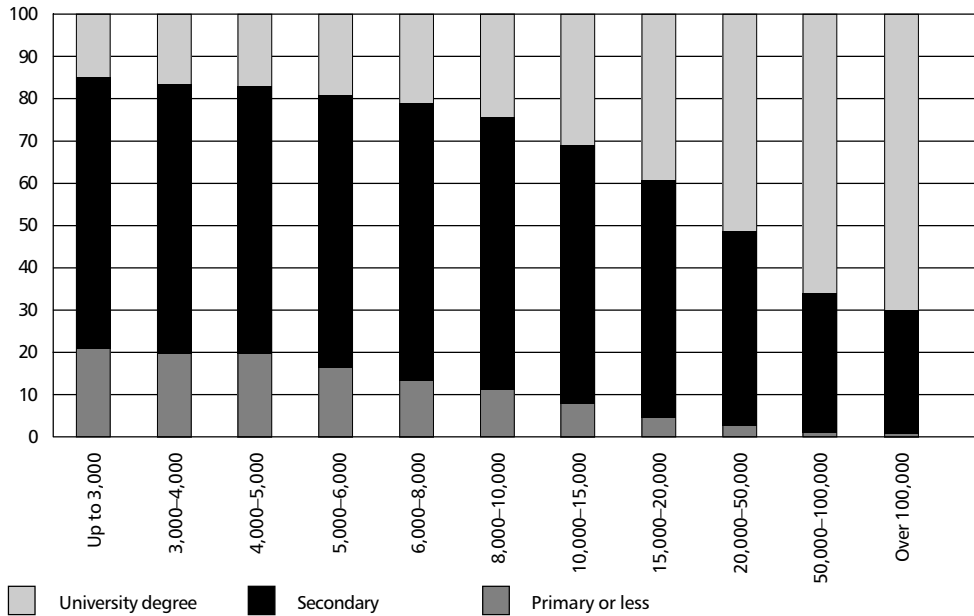


Table 5.11
Size of Municipality, Education and Age Structure of Local Councilors—Pearson’s Correlation Coefficients (2000)

	All Municipalities	Rural Local Governments	Urban and Mixed (Urban-Rural) Local Governments
Age Structure			
– % of Councilors Below 39 Years Old	–0.06**	–0.18***	0.0
– % of Councilors 60 Years Old and Older	+0.09**	+0.11***	+0.11***
Education Structure			
– % of Councilors With University Degrees	+0.35***	+0.27***	+0.34***
– % of Councilors With Primary or Lower Education	–0.14***	–0.21***	–0.12***

NOTE: ** means a correlation coefficient significant on 0.01 level and *** significant on .001 level.

Councilors in small communities are usually much younger. In tiny rural governments with populations below 4,000, the proportion of councilors who are less than 39 years is over 30%. In large rural municipalities (over 10,000), it is usually about 20%. In instances of councilors who are 60 years old or over, the average proportion in urban governments varies from about 6% in towns with less than 5,000 population to over 13% in cities over 100,000. A similar variation may be found in rural local governments.

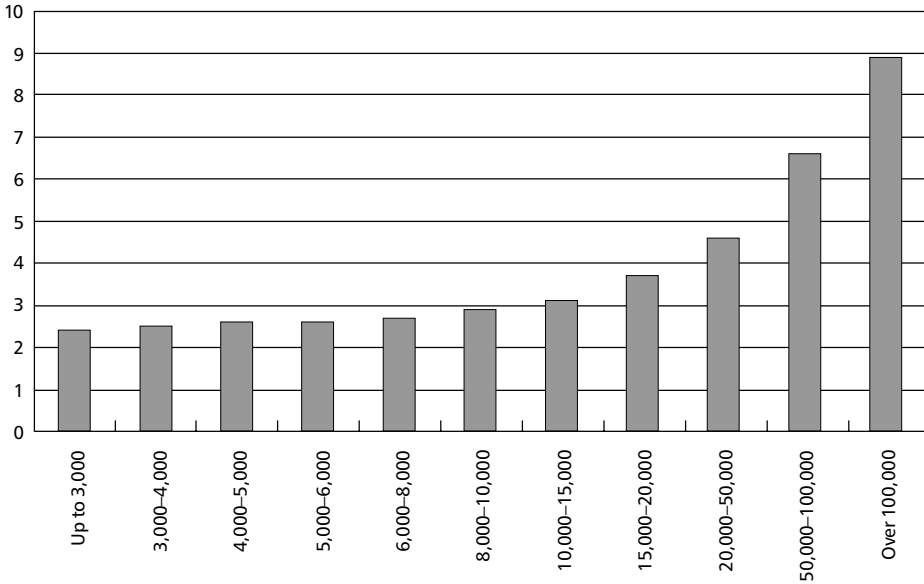
The difference between large and small is even more pronounced in the case of educational structure. In cities over 20,000, the proportion of councilors with university degrees exceeds 50% (in cities over 100,000 it is even over 70%). While, in towns below 10,000, this number is below 30%. In rural municipalities, the proportion varies from slightly less than 14% in municipalities below 3,000 to over 25% in local governments with populations over 10,000. In contrast, the proportion of councilors with primary or lower education varies from over 20%, in rural communities under 4,000, to about 7%, in rural communities over 15,000. In cities, it is between almost 10% in towns below 5,000 to less than 1% in cities over 50,000.

Obviously, both the age and educational structure of the whole population varies significantly between small rural and large urban communities. However, the variation in social structure for councilors is much larger than that of the whole population. For example, the educational structure for the population in small and large rural governments is almost identical. Yet, the structure of councilors' education varies rather significantly. This means size matters. Younger and less educated people have a much better chance of becoming local representatives in smaller local governments than they do in larger ones. Consequently, the distance between the social structure of a local population and their representatives is much more narrow in smaller municipalities.

Some authors argue that there are more interest groups in larger municipalities that try to express their opinions and this leads to more pluralist politics. Such a thesis has been formulated by T.N. Clark on the basis of statistical analysis of local politics in American cities [Clark, 1967]. Is this true of Polish local governments? We can try to measure pluralism in local politics by an imperfect, but significant, indicator—number of candidates competing for a given seat in the local council. In 1994⁸ this ratio was significantly related to the size of municipality. As it is presented on Figure 5.7, the number of candidates was much larger in big cities than in small communities. The average ratio differed from below 3 candidates in local governments below 10,000 to almost 9 in cities over 100,000. The correlation coefficient between number of candidates and the size of governments was very high (+0.63). It also remained significant for the rural and urban governments analyzed separately, although it was much higher in the cities (+0.09 in rural areas and +0.64 in urban governments). We can conclude that this prediction of the reform theory has been proved in Poland—there is more

competition and, consequently, the political process is more pluralist in larger local governments, more so than in smaller ones.

Figure 5.7
 Number of Candidates Per Seat in the Local Council (1994 Election)

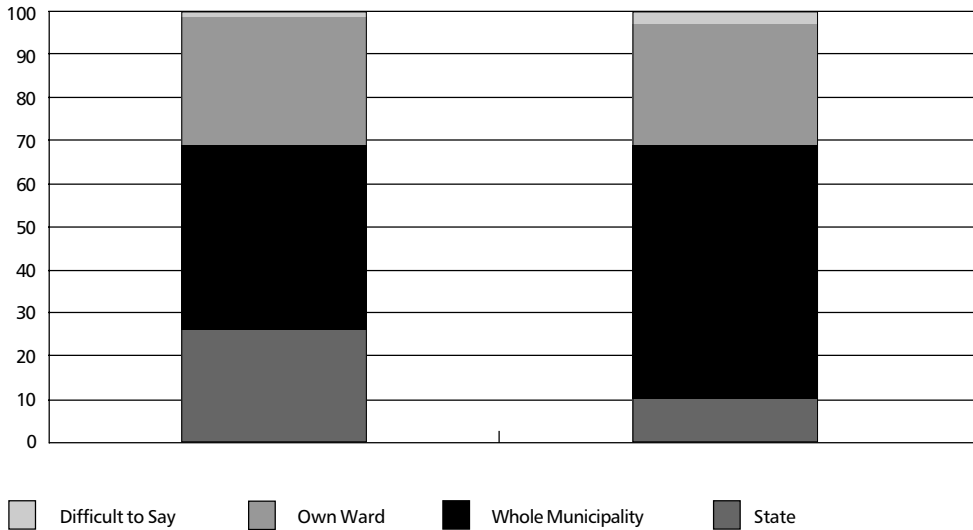


In Polish rural governments, the problem of representation is very much related to territorial representation. As it was mentioned in Section 2, most of the rural municipalities consist of several villages. One may ask; to what extent does this cause problems for local democracy? Are territorial conflicts between individual villages an important dimension to local political life? Do people think councilors should represent their village over the interests of the whole municipality? And is it true that local democracy functions better in governments where each village has its own councilor? On the basis of existing data, we cannot give full answers to these questions, but at least we can draw some preliminary conclusions.

First of all, according to CBOS data, most of people think councilors should represent, first and foremost, the interests of the whole municipality—not of his (her) own ward. However there are those who suggest territorial representation of the smaller geographical area should come first of all. This number is also significant, although it seems to be on a declining slope. This is illustrated in Figure 5.8. Unfortunately, we do not know how the opinions of residents differ depending on the size of the municipality nor depending on the number of villages within one municipality.

Figure 5.8

If There Is a Conflict of Interest, Whose Interests Should Be Represented, First and Foremost, By the Councillor? (Citizens' Opinions According to CBOS)



The point is that people seem to be more interested in local politics in rural municipalities where each village (*solectwo*) has its own representative in the local council. This is confirmed by data from the 1998 local electoral turn-out, which is positively and significantly correlated with the number of councillors per village ratio. This relationship remains significant even if controlled by population size. However, the willingness to participate in local elections (measured by the 1994 data on number of candidates per seat in a local council) does not show any systematic dependency on the number of councillors per village. This relationship gap is probably caused by two forces working in opposite directions. On one hand, people are more interested in politics in villages represented in the council. On the other hand, the potential danger of not having one's own councillor may lead to the increase of competitiveness in local elections.

4.3 Decentralization Within Local Government—the Relationship Between Municipal Authorities and Villages (or City Districts)

As stated in Section 2.4, the functions and financial resources of village self-government depend almost entirely on the decision of the municipal council. The relationship

between the municipality and villages (or districts in urban governments) is not always smooth and straightforward.

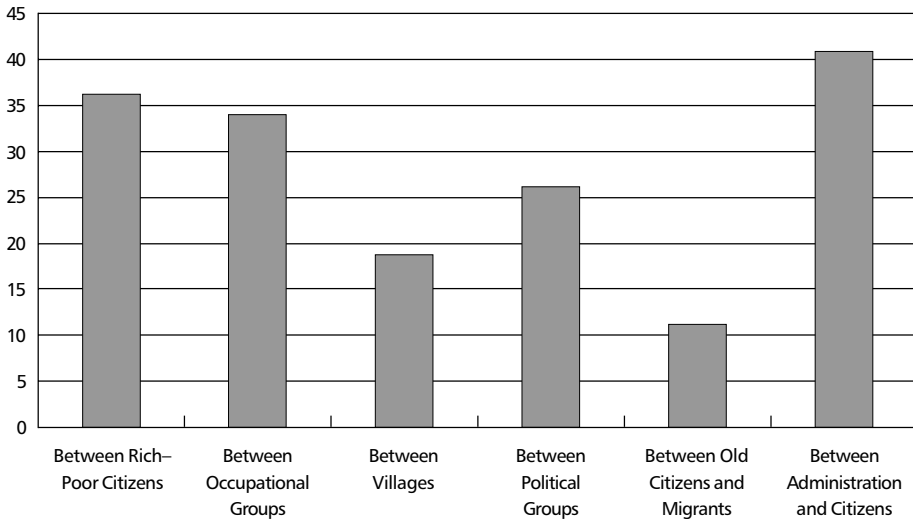
The large size of Polish municipalities, especially considering that rural communities consist of several villages, brings forth the question of *territorial representation*. Is there a real danger that the largest settlement unit may dominate the decision making, leading to financial and economic development policies biased in favor of the central town or village? In regards to this question, we have no systematic observations. Available information suggests this is very unlikely to happen. As it is argued later in this section, village leaders do not see territorial conflicts as important dimension of local politics. The electoral system in the vast majority of multi-settlement municipalities is based on one-councilor wards. So, each part of the municipality has its own councilor. Such a system prevents the danger of domination by the largest town/village in the council. Available data also suggests that, in most municipalities, allocation of resources among geographical parts of the municipality is usually more or less proportional to need and the populations living in these parts. Let's briefly analyze the case of Goldap municipality, a typical example of a mixed urban-rural municipality. It consists of the town of Goldap (inhabited by about 70% of the whole municipality) and several small villages nearby (with remaining 30% of population). In 2001, about 75% of capital spending was related to investments implemented in the town and about 25% of spending went to projects in the surrounding villages [Miros, 2002]. This means, the proportion per capita spending in the town was not substantially different from the percentage of town population to the total population of local government.

This does not mean that operation of multi-settlement local governments is ideal and problem free. Research conducted on the small urban-rural local government of Dukla shows that citizens, as well as local leaders in individual villages, concentrate mostly on the problems in their village, and very rarely do they have common interests and issues concerning the whole local government unit [Mielczarek, Domańska, 1999]. Local political life and discussions among councilors are very often organized around bargain sessions as to which village should get the next investment funds and the meaning of the individual projects, relating to the overall local government strategy, is very often overlooked. All the same, the final result of this process is usually a relatively balanced allocation of resources between geographical sections of the local government, not a domination of one town or village.

However, according to village leaders⁹ surveyed in December 2001,¹⁰ territorial conflicts between individual villages are not seen as frequent occurrences. Only 19% of respondents said these conflicts are important, while much more often the significance of other types of conflicts that was indicated. The most common conflict, according to village leaders, is the conflict between "us" and "them", i.e. between groups of citizens and local bureaucrats (41% indicate this as important). This was followed by conflicts between occupational groups (for example, farmers and the non-

farming population), conflicts between rich and poor citizens, and conflicts between political groups. Among suggested options, only conflicts between old and newly arriving (migrant) populations was seen as less important among villages than within local government (see also Figure 5.9).

Figure 5.9
The Most Important Social Conflicts in Local Rural Governments
According to Village Leaders (2001) [% Answers—“Very important”]



The majority of village leaders assess contact with municipal authorities as sufficient (53%) and the general atmosphere of co-operation as good (54%). However, almost 40% claim that municipal authorities are not interested in regular contact with villages and their leaders.

Giving limited financial autonomy to villages is not unique, though it is not uniform practice either. In almost half of the instances (47%), local government allocated small amounts of the budget for minor village investments, to be both decided and managed locally. In 33% of the cases, part of the revenue from local taxes (usually from the agriculture tax) was kept in the villages in which they were collected. It is a small fraction of the municipal budget, at least it gives a taste of limited autonomy to the individual villages.

Taking into account the observations quoted above, it is surprising that various functions' management is not delegated to villages more frequently. Such a “internal decentralization” was declared by only 25% of our respondents. The most frequent cases of managerial decentralization include: management of village culture centers, repairs for local village roads, street lighting and transport of pupils to the schools.

We can also provide some innovative examples of more radical decentralization within local government. In one rural municipality [Zell, 2001b], each village receives a portion of revenues from the property tax and agriculture tax collected within its territory. They can also keep the revenue from rental of village municipal property. Villages in that *gmina* are responsible for the maintenance of sport-grounds, of some of local roads and bus stops. They also support local kindergartens and primary schools.

A very good example of far-reaching decentralization in rural areas is the rural *gmina* of Brzeg in the Opole region. It has decided to transfer part of its communal property to individual villages [Zell, 2001a]. Villages in this *gmina* are allowed to keep a part of local budget revenues (plus, 100% of the agriculture tax), and are responsible for some services such as transport of their children to the local schools, local street lighting and maintenance of local roads. They have also their own (although very limited) investment budget, which is spent according to the agreed village priorities.

Our survey sought to verify the hypothesis that larger municipalities, and municipalities with the most villages, facilitate more intense territorial conflicts and the contact between municipal authorities and individual village leaders is much worse.

However, this hypothesis has not been confirmed by the empirical data from our survey. The first analysis has even suggested the opposite to this casual relationship. The correlation between population, size of local government, and intensity of contacts is positive (+0.151**) ¹¹ and even stronger (+0.180***) concerning the atmosphere of this co-operation. Bigger municipalities are also more willing to leave some resources for village investment (correlation +0.213***) and leave revenues from some local taxes (+0.188***). The number of villages in a municipality proved to be statistically insignificant. However, this result is biased by the presence of mixed urban-rural local governments in our sample. They are usually larger (in terms of population) and more aware of the necessity to decentralize and maintain good contact with village leaders.

The picture changes if we separate the sub-group of “pure” rural local governments. In larger local governments, the intensity of conflicts is larger. Perhaps this is because they are more internally diversified. Interestingly enough, it affects rich vs. poor and political groups’ conflicts much more than territorial conflicts between villages. In larger rural governments (both in terms of number of villages and total population size), contact with village leaders is much more frequent—perhaps they are seen as more important within larger municipalities. On the other hand, bigger rural governments are less willing to decentralize their finances (correlation of receiving resources for village investments with population number is -0.191** and with the number of villages—0.153**).

There is another variable that helps to reduce the intensity of conflicts and improve the atmosphere of co-operation between municipal authorities and village leaders. This is financial affluence. In general, local authorities with more money (in per capita terms) are more often able to construct successful co-operation and function without

devastating conflicts (compare Table 5.12). However, there seems to be a threshold revenue (about 1,200 PLN), if exceeded, by which the authorities begin to lose their good relationship with the village leaders.

Table 5.12

Village Leaders' Opinions on Contacts With Municipal Authorities (2001)

Municipal Budget Revenues Per Capita	Frequent Enough Contact	Co-Operation Is Good	More Conflict than Co-Operation
Up to 1,000 PLN	40%	36%	14%
1,000–1,100 PLN	54%	54%	8%
1,100–1,200 PLN	59%	59%	5%
Over 1,200 PLN	56%	51%	12%

Interests of the auxiliary units in rural areas are represented by the National Association of Village Heads (*Krajowe Stowarzyszenie Soltysów*), a relatively influential lobbying group.

The city of Kraków provides one of the most interesting examples of the decentralization policy within a big city. Kraków City Council decided to divide the city into 18 districts. They have been given discretion to decide upon certain functions including:

- Repairs to primary schools, kindergartens and nurseries;
- Repairs to local roads, pavements and street lighting;
- Modernization of playgrounds;
- Taking care of local green areas;
- Overseeing local cultural events.

The city council must approve the rules relating to the established method of financing the decentralized functions. A separate resolution by the Kraków council created a stable framework for supporting small investment projects, such as construction and modernization of water and sewage systems, as initiated by neighborhood groups.

4.4 Size and Function of Local Democracy —An Attempt at Conclusions

Summing up the observations from the whole of Section 4, citizens' perception and interest in local government activity is usually better in small municipalities rather than large. Exceptions to this rule, although they do exist, are not very numerous.

Citizens in small municipalities are more interested in local policy issues, and better communicate with local authorities. They also trust their authorities more and are more satisfied with local service delivery. They also feel better represented by local councilors than residents in big cities. The nature of the sociological data available is such that we can usually only make conclusions about the differences between rural and urban areas and between small and big cities. Therefore, we cannot be sure to what extent a discovered relationship tells us anything about the impact of size itself and to what extent, about the difference between urban and rural life, and/or about the difference between life in a small urban town and big city. Yet, the rare cases where we were able to analyze the impact of size directly (for example, through analysis of voter turn-out, mayoral opinions about citizens interest in local politics, mayoral turn-over, education and age structure for councilors) suggest that size does matter—not only are there statistically significant differences between rural and urban settlements, but also between small and big rural municipalities.

Nevertheless, drawing the conclusion that, by dividing a municipality, one may increase the levels of trust, satisfaction with local government activity or willingness to be active in local public affairs would be a simplification. The story of 23 mixed urban-rural communes that split in 1991 is very telling [see Jalowiecki, 1995]. As mentioned in Section 4.1, available analysis suggests that, the number of citizens satisfied by a split, years after the event, outscores the number of those who think it was better before the split. Even so, the number of those indifferent is much larger still. Also the perceived negative consequences are as numerous as the positive feedback on the organizational change.

The pressure to split was more frequent in municipalities with less than average affluence—one may speculate that lack of satisfaction of needs, stimulates mutual complaints and tensions between the city and rural villages. But did the split lead to policies which would better reflect local preferences? It seems that, in the case of tax policies and allocation of sector spending, this has been true to large extent. Tax policies in new municipalities have been significantly different. For newly created city governments, tax policies usually have concentrated on stimulation of economic activity (average tax rates quite high, but with tax incentives for preferred economic activities) while in new rural municipalities, they have been closer to the populist model with reduced tax rates for the majority of voters but high rates for local enterprises. Also, resource allocation between sectors was considerably different in newly created urban and rural governments. It is very difficult to reach a final conclusion about the impact of splitting to local democracy. Then again, most of residents had ambivalent feelings for a few years after the split. They also thought the change was initiated and worked to the favor of local politicians and their ambitions and it is very hard to find any evidence of increased activity within the local community. Yet again, the number of satisfied citizens was larger than the number of clearly disappointed citizens and

observation of local policy changes suggest they began to reflect the variation in local preferences more closely.

5. SIZE OF LOCAL GOVERNMENT AND ALLOCATION OF FUNCTIONS BETWEEN TIERS OF GOVERNMENT

It is frequently argued that large local governments can be responsible for a wider scope of functions. On an empirical basis, such a thesis has been supported by Page and Goldsmith (1987) in their comparative study of the European local government system, quoted already in Chapter 1. Consequently, larger local government units allow for more radical decentralization. This claim seems to be confirmed by Polish data; by citizen and leader perception as well as by the actual behavior of small local governments, which are more afraid of new functions.

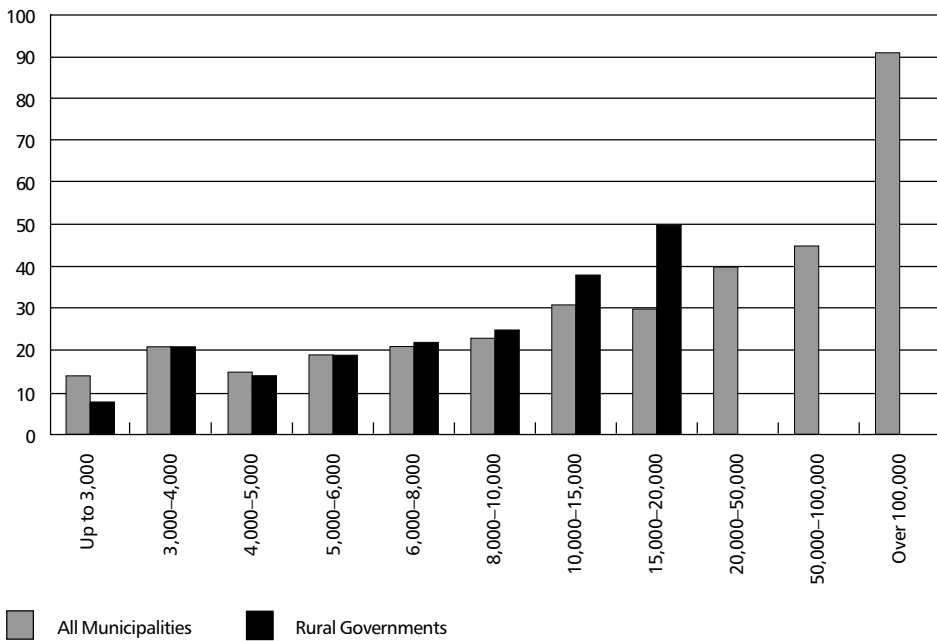
As it has been reported in the “Public Perception of Local Governments” study [Swianiewicz, 2001], several proofs indicate that general support for transferring more functions to local governments in Poland has been greater in big cities than in small towns or rural communities. These variations by community size probably have two parallel explanations. The first is rooted in the empirical observation that small local governments are not prepared to deliver a wide range of functions. They usually do not have enough qualified staff, the majority of users of some services recruit from more than one local government, and the delivery of many functions by small territorial units would lead to diseconomies of scale. These are all arguments discussed elsewhere in this chapter and sociological surveys seem to confirm that many people are aware of these difficulties. This is so, despite citizens of small towns and villages being of a very good opinion about their local governments’ present activities.

The second reason might be of a political nature. Since at least 1993, the PSL (Peasant’s Party) has been strongly opposed to many decentralization reforms, including any transferring of responsibility for primary schools to municipal governments. The PSL influence is strongest in small, rural communities. This means that respondents’ skepticism may partially reflect the opinions of their political leaders. However, one may argue that it is exactly the political base of PSL, in small and relatively weak local governments, which makes this party oppose some decentralization reforms.

The same pattern of variation has been reflected in the actual decisions made by local governments. Before 1996, when accepting responsibility for schools was voluntary, “brave decisions” were much more frequent in larger units. This correlation was especially visible at the beginning of decentralization reform (1991–1992), when responsibility for schools was accepted by less than 10% of rural communities but by over 33% of cities over 100,000 residents. Also, in 1994, a total of 21% rural municipal

local governments managed the primary schools. But in cities over 50,000 residents, it was over 40% and in cities over 100,000, over 90% [Thurmaier, Swianiewicz, 1996]. As analysis of the 1994 data proves this relationship cannot be reduced to an urban-rural variation as to the pattern of behavior—it remains valid only if we consider rural communities. Moreover, if we compare rural and urban muni-cipalities with similar population sizes, there were rural governments who were often more willing to take over responsibility for schools. This is illustrated in Figure 5.10.

Figure 5.10
 Percent of Local Governments Who Took Over Responsibility
 for Primary Schools Before 1995



Willingness to oversee management of schools was also related to the affluence of local governments measured by per capita own revenues of local budgets. One might expect that larger local governments are more affluent and that is why they were taking over schools before smaller units. However, statistical data does not support such a claim. In multi-variable analysis, size is more important than affluence of local budget and, in a group of rural municipalities, the significance of affluence disappears completely. It means there were also other factors (perhaps qualification of local staff was one of them) related to size which played an important role.

There is also evidence that administrative capacity, to provide services efficiently, grows with an increase in population size [Swianiewicz, 2000]. In 1999, the ratio of personal computers per one hundred employees varied from 36, in municipalities with less than 5,000 residents, to over 57, in cities over 50,000 (see also Table 5.12). Similarly, the proportion of local governments that declared Internet use and their own web-site varied from 35%, in municipalities below 5,000, to over 80%, in municipalities over 10,000. This relationship is also statistically significant if we consider rural areas only. Moreover, regardless, whether we consider all local governments or only rural, 10,000 population seems to be a turning point between offices with low or with high technical potential to support their administration. A similar breaking point was also found in case of decisions to take over responsibility for primary schools before the compulsory date.

Also Bartkowska-Nowak (2001), in describing formal procedures for recruiting and promoting staff in Polish cities,¹² discovered that the sophistication of staff management techniques increased with the size of government. For example, in large local governments use of following was much more frequent: training programs for staff, evaluation of training, formal job descriptions.

Table 5.13
Size of Municipality and Technical Capacity
of the Local Administration (1999)

Population Size	PCs Per 100 Employees		Internet Use and Own Web-Site	
	All Municipalities	Rural Only	All Municipalities	Rural Only
Pearson's Correlation	0.271***	0.137*	0.209**	0.253**
Up to 5,000	36	36	35	36
5-7,000	37	35	43	41
7-10,000	35	36	37	41
10-20,000	44	48	83	92
20-50,000	48		79	
Over 50,000	57		80	

NOTE: * on .05 level
** on .01 level and
*** correlation significant on .001 level .

SOURCE: Survey of 208 local administrations.

6. SIZE OF LOCAL GOVERNMENT AND ECONOMIC DEVELOPMENT POLICIES

Capacity of the local government to influence economic development depends on several factors. In this section, we examine some of them. One of the most powerful instruments is provision of infrastructure, which increases investment attractiveness and makes existing firms more competitive. In Poland, there are municipal governments which are responsible for most the infrastructure and that is why we limit our analysis to this tier of government. To compare only governments with similar functions, we exclude cities with county status.

The capacity to undertake investment projects depends on fiscal revenues and burden of operational spending. Total revenues per capita grow with the size of a local government, however, this relationship is not very strong (compare Tables 5.13 and 5.14).¹³ But even this relationship is mostly a difference between urban and rural municipalities. If we analyze rural *gminas* only, the relationship is even the opposite—larger means financially weaker. The picture changes a little bit if we consider only revenues from own and shared taxes. The dependence on revenues on the size of municipality becomes stronger, but it completely disappears if we limit our analysis to rural communities. The difference results from smaller municipalities' higher dependency on state transfers (mainly in form general and specific grants from the state budget) and higher burdens for operational spending. One may draw a very clear conclusion—small local governments are more costly for the public finance system; they require higher transfers, mostly due to higher per capita current spending. This relationship is valid both for analysis of all Polish municipalities as well as for rural communes only. In the latter case, there is a clear difference between municipalities smaller and larger than population 10,000. One may expect that the fragmentation of relatively large rural governments in Poland would result in an increased demand on the state budget to provide the grants necessary to cope with the burden of increased operational spending.

Investment spending per capita is also higher in larger municipalities. Again, this correlation seems to result from the difference between urban and rural areas as well as from the difference between small and big cities. The difference between small and large rural governments is very weak. One may speculate that only some of local government investment, those related to infrastructure projects, has a direct impact on economic development. However, the relationship with the size looks similar regardless of which group of investments we consider. The only exception to this rule is the higher burden of investment related to social welfare function in big cities and higher investments in education facilities (mostly schools buildings) in small municipalities.

Table 5.13a
Indicators of Capacity to Promote Local Economic Development and Size of Municipalities (2000)

Size	Per Capita Current Spending*	Per Capita Total Revenues*	Per Capita Own and Shared Revenues*	Per Capita Transfers to Local Government*	Per Capita Investment Spending*	Fixed Expenditures as % of the Total Budget*	Fixed Expenditures Per Capita*	Registered Companies With Foreign Capital Per 1000 Citizens	New Physical Master Plan Prepared by the End of 2000 [%]	Development Strategy Prepared by the End of 2000 [%]
1–3,000	1,154	1,377	543	834	292	70.0	735	0.62	42	42
3–4,000	1,106	1,395	578	817	243	71.9	736	0.35		
4–5,000	1,028	1,221	434	787	239	72.6	710	0.31		
5–6,000	1,010	1,189	427	767	213	68.2	655	0.36	38	37
6–8,000	981	1,169	434	735	221	67.4	650	0.39		
8–10,000	965	1,146	440	706	227	66.9	640	0.36	52	47
10–15,000	961	1,152	500	652	236	63.6	615	0.56	58	53
15–20,000	956	1,121	541	621	222	63.0	598	0.66		
20–30,000	976	1,149	602	547	226	60.5	588	0.65		
30–50,000	992	1,166	706	460	240	55.6	565	0.91	67	55
50–100,000	974	1,136	707	425	248	56.3	562	0.69		
100–300,000								1.12	65	53
Over 300,000								2.66		

NOTE: *due to different functions, and difficulties in direct comparisons with other cities, cities of county status have been excluded from these columns.

Table 5.13b

Indicators of Capacity to Promote Local Economic Development and Size of the Municipality—Rural Local Governments Only (2000)

Size	Per Capita Current Spending	Per Capita Total Revenues	Per Capita Own and Shared Revenues	Per Capita Transfers to Local Government	Per Capita Investment Spending	Fixed Expenditures as % of the Total Budget	Fixed Expenditures Per Capita	Registered Companies With Foreign Capital Per 1000 Citizens	New Physical Master Plan Prepared by the End of 2000 [%]	Development Strategy Prepared by the End of 2000 [%]
1–3,000	1,113	1,305	457	849	269	71.1	721	0.24	42	44
3–4,000	1,099	1,391	565	826	239	72.3	735	0.29		
4–5,000	1,008	1,198	404	794	234	73.3	708	0.22		
5–6,000	998	1,177	401	776	216	68.7	655	0.28	36	36
6–8,000	961	1,153	409	744	224	67.3	648	0.31		
8–10,000	947	1,131	421	710	228	67.6	638	0.31	52	48
10–15,000	936	1,143	466	667	256	63.8	614	0.51	52	61
15–25,000	903	1,100	437	664	237	63.3	604	0.58		

Table 5.14

Person's Correlations Between Size of Municipality and Various Indicators of Capacity to Promote Economic Growth (2000)

	All Municipal Governments	Rural Governments Only
Total Revenues Per Capita(x)	0.056**	-0.072**
Own and Shared Revenues Per Capita(x)	0.115***	
Operational Spending Per Capita(x)	0.105***	-0.191***
Transfers From Central Budget Per Capita(x)	-0.167***	-0.283***
Investment Spending Per Capita (x)	0.099***	
Fixed Spending as % of the Total Budget(x)	-0.170***	-0.253***
Fixed Spending Per Capita (x)	-0.101***	-0.251***
Registered Foreign Investments Per Capita	0.255***	0.119***
Prepared New Drafts of Master Plans	0.165***	0.151*
Prepared Development Strategy	0.159*	

NOTES: (x)—without cities of county status. * Correlations significant on .05 level; ** Correlation significant on 0.01 level; *** Correlation significant on 0.001 level. Blank spaces mean correlation insignificant on at least 0.05 level.

Small local governments capacity to make strategic decisions is also limited by a greater burden of fixed expenditures.¹⁴ This burden is higher for small municipalities both in terms of percentage of the total budget and per capita base. In 2000, the average share of fixed expenditures was over 70% in local governments below 5,000, but below 60% in cities over 30,000. The difference is also clear if we only consider rural *gminas*. In the latter case, the breakdown between smaller than 10,000 and larger than 10,000 governments seems to be visible again.

To measure the capacity to promote economic development, we also analyzed planning instruments. We use two specific indicators:

- preparation of new physical master plans. In 1996, Parliament changed the law on physical planning requiring a new format of physical master plans to be prepared by the end of 1999. We analyzed how many of local governments were able to fulfill this obligation on time [for source of data see Swianiewicz, 2000]. In fact, many local governments had problems preparing the plan on time and finally the Parliament had to 'give up'—deciding to delay the deadline by another two years. Only 30% of local governments prepared new plans before the original deadline, another 23% had begun preparation, while the remaining 48% did nothing. Local governments have been very slow despite failing to prepare the new plan could result in inability to grant any building permits

after 1 January 2000 (not delaying the deadline would then nearly freeze any housing or commercial investments in almost half of the country).

- number of local governments who have prepared strategies for local development.

In both of cases, larger local governments performed considerably better than small municipalities. In case of physical master plans this correlation is stronger (than in case of preparation of development strategic programs) and remains valid (although is much weaker) when we limit our analysis to rural governments only. It can probably be explained by the lower administrative capacity of small municipalities. Very small organizations are less able to cope with complicated, new tasks.

7. UNIT COST, CATCHMENT AREA, QUALITY OF MUNICIPAL SERVICES AND THE SIZE OF ADMINISTRATIVE UNITS

For most local services, comparison of unit costs and the quality of delivered product is extremely difficult. It is so both because of methodological traps and frequent lack of relevant, reliable data. In the following subsections we try to analyze issues of unit costs, catchment area and service quality in three, relatively simple and well-documented cases. However, in these cases we can also not avoid some abridgements.

In regards to unit costs, all three cases document economy of scale, i.e. decreasing standard unit costs along with the increase of service area. Proving the economy of scale phenomena would be more difficult for other services Polish local governments are responsible for. But in contrast, we do not know any empirical analysis which would show (for any of the local services in Poland) the opposite case—i.e. the increase of costs together with the increase size of local government unit.

In general, small municipal governments spend more (on per capita base) on current operation, despite (as it has been noted in Section 4) their own and shared revenues are lower. In 2000, the average municipality under population 4,000 was spending more than 1,100 zloty per capita on current operation, while municipalities with over 6,000 inhabitants were spending less than 1,000 zloty per capita. Comparing smaller size cohorts, one may notice that current expenditures per capita gradually decrease up to the size of about 6–8,000, then remain relatively flat for larger local governments.

7.1 Basic Administrative Services

Current spending on local administration is relatively simple to analyze. Moreover, following the Sharpe (1995) distinction, analyzing the administrative overhead, we can really focus on the differences between small and big government, not on the

variation between urban and rural. The same statistical relations remain valid regardless of whether we take into account all local governments, only rural or only urban units.

The negative correlation between the size of local government and per capita spending on local administration has been already described for Poland in the 1994 and 1996 data [Swianiewicz 1996; Swianiewicz, Amos, 1998]. It has also been supported by the 2000 data presented in Table 5.15. We took into consideration only local governments with comparable scopes of administrative tasks. That is why we excluded the Warsaw city boroughs from municipal governments (due to specific division of functions between tiers of government in Warsaw) and cities of a county status (which are responsible for more functions than other municipalities). The correlation coefficient between the size and per capita spending on administration is -0.339 (significant on 0.001 level) and between size and percent of budget spent on administration -0.434 (also significant on 0.001 level). The average per capita spending on administration in a local government with a population under 3,000 is more than twice of the amount spent per citizen in a city over 50,000. But differences are also very visible within the group of small (for Polish standards) governments. The average Polish rural government has population of about 7,000. Such governments spend 40% less on administration than smaller *gmina* (having under 3,000 inhabitants) and 20% more than big rural *gmina* (with populations over 15,000). Parallel, with increasing size, administration spending becomes a decreasing burden from the total current budget (from 22% in the smallest local governments to below 15% in units with populations over 15,000, and below 13% in cities over 50,000).

The same negative correlation has also been established (although it is not as strong in the case of municipalities) for county level government. Average per capita spending on administration in the smallest group (below 50,000) is over 50% higher than in the largest counties.

But one should take notice of Table 5.21, there is an even higher variation of administration costs within individual size groups. It means, though size is a good predictor of spending, it is not the only one. The affluence of local government is an even more powerful explanatory variable. The correlation coefficient between per capita spending on administration and total revenues per capita is $+0.572$. It is also very high within individual size groups (varying from $+0.398$ for cities over 50,000 to $+0.891$ for governments between 3 and 4,000—all coefficients significant on 0.001 level).

The conclusions below may be additionally strengthened by an observation concerning the split of 23 mixed urban-rural governments in 1991. After the split, per capita administrative overhead increased by 20% [Swianiewicz, 1996].

Table 5.15a

Current Spending on Administration and the Size of Local Government (2000)
Municipal Governments (Without Cities of County Status)

Population Size of Local Government (Thousands)	N	Operational Spending on Administration Per Capita [PLN]			Spending on Administration as % of Current Expenditures		
		Average	Minimum	Maximum	Average	Minimum	Maximum
Below 3	82	256	124	990	22.0	15.0	33.3
3-4	195	216	134	1056	19.8	11.7	32.5
4-5	303	186	101	370	18.2	10.6	28.4
5-6	291	180	104	470	17.8	10.7	31.1
6-8	470	163	91	460	16.6	10.2	27.8
8-10	303	150	85	365	15.5	9.1	32.8
10-15	352	146	80	375	15.1	8.5	27.2
15-20	153	137	84	288	14.3	8.7	25.7
20-50	231	129	72	344	13.1	8.5	21.4
50-100	33	121	75	176	12.4	8.4	16.8

Table 5.15b

Current Spending on Administration and the Size of Local Government (2000)
County Governments (Without Cities of County Status)

Population Size of Local Government (Thousands)	N	Operational Spending on Administration Per Capita [PLN]			Spending on Administration as % of Current Expenditures		
		Average	Minimum	Maximum	Average	Minimum	Maximum
Below 50	53	66	49	109	14.4	7.5	34.5
50-60	45	63	49	96	13.1	8.3	24.6
60-70	34	59	45	87	13.3	8.8	28.1
70-80	41	53	43	68	13.0	8.3	27.7
80-100	53	54	39	75	13.7	8.1	31.5
100-150	60	49	31	74	12.2	8.2	30.3
Over 150	22	43	28	52	12.2	5.0	22.8

7.2 Primary and Secondary Education

The management of kindergartens, as well as primary and secondary schools, is currently one of the most important and certainly the most expensive tasks undertaken by Polish local government. Since 1990, municipalities have been responsible for maintenance and development of pre-school education. In 1996, they took on the primary schools (including hiring teachers) and, in 1999, counties have managed most types of secondary schools as well as some non-mandatory educational units. To fully understand the role of education in the Polish model of territorial self-government, it is important to realize that, in some municipalities (especially small ones), the share of education expenditures often exceeds half of the total annual budget.

Pre-school education is financed through own revenues of the municipalities. Therefore, the attendance rate for children, 3–5 years old, depends on the cultural variation and also the development of the kindergarten network as well as on the financial capacity of the *gmina* consequently.

Primary and secondary education are supposed to be financed by part of a general purpose grant received by the local authorities from the central government. This part of the grant is called an education subvention and is aimed at covering the current costs of school system in municipalities and counties.¹⁵ The education grant is calculated on the basis of the weighted number of students in the municipality/county schools. The a-priori set standard subvention is granted to the local government for each “weighted student”.

In 2000, municipalities’ current expenditures on education (even excluding spending on kindergartens) exceeded the received subvention by 20%. However, it must be emphasized that the years 1999 and 2000 were exceptional in terms of local governments’ financial efforts because of the substantial reforms of Polish education system in process at the time.¹⁶ There is no point, at least in this paper, in comparing education expenditure figures for the different years, since both the method of calculating the school subvention and the scope of local government responsibilities have changed dramatically.

Table 5.16
Current Expenditures Over the Amount of Received Grants
in Three Types Polish Municipalities (2000)

Total	All Rural Municipalities	All Mixed Municipalities	All Urban Municipalities
20.0%	21.0%	24.3%	17.8%

Considering both primary and secondary education, there seems to be two kinds of units where the deficit of current expenditures on education is the highest. The first

type can be characterized as a small rural municipality with an ineffective network of low-quality small primary schools. The “per student” costs in such municipalities are higher because the small size of schools and classes increase the share of fixed costs in total expenditures. This may lead to a low quality of education, since municipality spends all the resources on current needs and is unable to provide better equipment/facilities/teachers.

The other extreme example of high education cost occurs in the big city, where teachers’ salaries are high,¹⁷ school programs include more faculties, and the school equipment is better than average. The ministerial subvention does not cover the total current expenditures, but the city spends its own resources in order to attract students, teachers, investors, etc.

It seems that, for the further discussion on the relationship between size and effectiveness of municipalities, only the first case of high cost education (small units with inappropriate school network) is relevant.

Secondary education in Poland is highly concentrated in urban areas. Only 7% of students attend secondary schools located in rural areas. Moreover, many students choose schools located outside their home county. In theory, this should not cause any disturbance to the financial system. Since the ministerial subvention is calculated per student enrolled in the county’s schools, a migrating student simply brings money to the county where he or she arrives to study. In reality, however, some counties invest their own resources towards the school system in addition to those received in the form of education grants. Therefore, students migrating to such counties act as “free riders”—benefiting from the local taxpayers’ effort. This is especially the case for the 65 cities with county status having dual status as a municipality and a county. These cities experience a significant migration of secondary school students. The problem can be defined in terms of the size of administrative unit, since the administrative boundaries obviously do not fit to the scope of the market for services provided by the county.

The three issues briefly discussed above are analyzed in the following sub-sections. We now focus on the cost efficiency of public education as a measure of local governments’ performance. This approach makes educational activities of different municipalities comparable, but omits the quality of the education services, hardly measurable in the Polish education system. Until 2002, all examinations in Polish schools were conducted and evaluated by local teachers. Therefore, the examination results do not reflect the differences in school quality. Other indicators, such as pupil/teacher or pupil/class ratios, are strongly correlated to the unit cost of education and are not worth discussing separately.

7.2.1 Pre-School Education and the Size of Local Government

The hypothesis: Smaller (less populated) municipalities have lower financial potential and, therefore, are less capable of providing pre-school education to its citizens.

As mentioned above, kindergartens are supposed to be fully financed by municipalities from their own revenues. This explains why local kindergartens attendance rates became one of the most frequently used indicators of *gminas'* financial self-sufficiency and ability to provide municipal services. Table 5.17 shows the average kindergarten attendance rate for various types of municipalities.

Not surprisingly, the highest (still, not very high) average rate is observed in urban areas. Yet, there are towns where pre-school education practically does not exist (min. attendance at 1.3%) and, yet again, rural municipalities where over 80% of children, 3–5 years old, attend kindergarten. Although cities are more populated than rural areas, and have bigger per capita own revenues (see Section 6), the differences in mean attendance rates are not enough to prove a relationship between size and ability to provide pre-school education services. It is common knowledge that parents in Polish villages are less interested in sending their children to kindergartens, so, the variation of rates presented in Table 5.17 may simply reflect variation in consumers' preferences.

Table 5.17
Average Kindergarten Attendance Rate of Children, 3–5 Years Old,
in Polish Municipalities (2000)

	N	Mean	Min	Max	Std. Dev.
Rural	1,548	17.1%	0.0%	83.0%	14.6%
Mixed	567	27.9%	0.5%	75.9%	13.4%
Urban	307	44.2%	1.3%	96.7%	12.3%

Therefore, to neutralize the influence of the rural life style, it seems reasonable to examine the variation of childrens' attendance to kindergartens within the category of rural municipalities. We assume that there are no significant differences in parents' attitude toward kindergartens amongst the rural villages.

Table 5.18 shows that attendance rates increase along with the size of municipality, as expressed in terms of population size, even if we limit our analysis to rural areas only. The average attendance in municipalities with 5,000–10,000 inhabitants is close to the average for all rural units. The rates for two largest size categories is almost equal, which may suggest that 21% is a natural (not limited by the capacity of local government)

attendance to kindergartens for rural areas. If this is so, we could intuitively claim that the population number in rural municipality should not be lower than 10,000 in order to provide the local government the potential to maintain their kindergartens.

Table 5.18
 Kindergartens Attendance Rate in Rural Municipalities (1999)

Population	Kindergartens Attendance Rate
Less than 3,000	11.9
3,000–5,000	15.2
5,000–10,000	17.2
10,000–15,000	21
15,000–25,000	21.2

7.2.2 The Primary School Network, School Size, and the Size of the Municipality

Hypothesis: Small (in terms of population number and population density) municipalities tend to have small schools and classes which leads to increased unit costs for education.

An average primary school in a Polish rural municipality has 148 students, in comparison to 540 in the city. The average rural class size is 18 students, while in the city—24. This disproportion is an obvious consequence of different settlement organizations. In many villages, the primary school is the only social and cultural center. For this reason, local authorities often prefer to maintain an economically ineffective school network. The ministry of education encourages the mayors to rationalize the local school system but, at the same time, the per-student education grant for rural areas is 33% higher than for cities (note that the average class size ratio for urban and rural areas is 1.33).

Table 5.19 shows that, in 2000, the average municipality spent over 20% more on education (current expenditure only) than it received within the education grant. This rule held in all kinds of municipalities, which shows that the subvention has been considered equally insufficient for rural and urban local governments.

As shown in Table 5.20, per-student expenditures in rural municipalities are also about 30% higher in rural areas than those in cities. At the same time, the average per-capita own revenues in rural municipalities are only 60% of those in cities'. This implies that expenditures over the received subvention create much bigger financial burdens for rural *gminas* than for the cities.

Table 5.19
Received Subvention and Resources Spent on Education by
the Municipalities (2000)

Municipalities	Total Subvention Received	Total Resources Spent on Education	Average Expenditures Over Subvention
Rural	3,979,028	4,798,432	20.6%
Mixed	2,657,125	3,302,609	24.3%
Urban	7,472,635	9,067,450	21.3%

Table 5.20
Expenditure on Primary Education and Budget Revenues in Polish
Municipalities (2000)

Municipalities	Expenditure Per Student	Per Capita Own and Shared Revenues
Rural	3,509	433
Mixed	3,104	512
Urban *	2,860	762

* Excluding cities with county status.

To examine the relationship between the municipality size and unit cost of primary education, one must realize that the strongest determinant of per-student expenditures is the size of classrooms in local schools. The correlation coefficient for per-student spending and average class size is -0.68 , which must be considered high, since the calculation involved the entire Polish municipal population.

Our research hypothesis says that sparsely populated *gminas* tend to maintain smaller schools and school classes, which leads to extremely high unit expenditures for education. Again, we restrict our analysis to rural municipalities in order to neutralize disparities coming from dramatically different settlement organizations. Table 5.21 confirms that average class size increases along with population (except in very small municipalities). Also, the unit cost of primary education in rural *gminas* is clearly negative in relation to population.

Table 5.21
 Rural Municipality Size (Population) and Average Per Student Expenditures
 on Primary Education (2000)

Population	Average Class Size (Students)	Per Student Current Expenditures
0–3,000	17.8	4,181
3,000– 5,000	17.5	4,184
5,000–10,000	18	4,047
10,000–15,000	19.1	3,917
15,000–25,000	19.7	3,824

7.2.3 The Problem of Free Riding Within Secondary Education

Hypothesis: Big cities with dual (municipality and county) status provide secondary education services not only to their own citizens. The service catchment area is larger than the administrative jurisdiction. This leads to inefficiency caused by the free-riding phenomenon.

In order to illustrate the inconsistency of the city-county size and the territorial scope of its educational services, it is enough to compare the attendance to secondary schools in some cities with county status and the surrounding areas.¹⁷ The average attendance rate in cities-counties is 132%, which obviously means that a substantial part of the students come from outside the county to benefit from the high quality teaching, better equipment, and further professional opportunities. Table 5.22 below presents the comparison of attendance rates in 5 big cities and surrounding units (so-called “around-the-city counties”).

As we can see, in all cities examined the number of students exceeds the local population base. In the most spectacular case of *Rzeszów*, only 32% of students which graduated the primary schools in surrounding *rzeszowski* county continue their studies there. In the neighboring city, the ratio of recently subscribed secondary students to last year’s local primary school graduates is 2.11.

This phenomenon can be classified as an example of free riding, since the current costs of education are not entirely covered by the education grant received by the county. Moreover, as shown, the financial effort (measured by the ratio of education expenditures to the received grant) is bigger in cities-counties than in surrounding areas.

Table 5.22

Attendance Rate in the Secondary Schools of 10 Selected Counties in 2000

County Name	County Type	Students in First Class of Secondary Schools/ Population of 15 Years Old	Students in First Class of Secondary Schools/ Graduates of Local Primary Schools	Students in Secondary Schools/Population of 15–18 Years Old
Toruń	City	1.61	1.49	1.31
Toruński	Surrounding	0.20	0.21	0.21
Rzeszów	City	2.28	2.11	1.9
Rzeszowski	Surrounding	0.31	0.32	0.28
Kraków	City	1.45	1.38	1.28
Krakowski	Surrounding	0.34	0.35	0.33
Wrocław	City	1.30	1.29	1.19
Wrocławski	Surrounding	0.18	0.20	0.17
Olsztyn	City	1.64	1.60	1.35
Olsztyński	Surrounding	0.42	0.49	0.38

Table 5.23

Cities and Surrounding Counties Financial Effort for Education (2000)

County Name	County Type	Current Expenditures on Education/Received Subvention
Toruń	City	1.73
Toruński	Surrounding	1.20
Rzeszów	City	1.57
Rzeszowski	Surrounding	1.10
Kraków	City	1.62
Krakowski	Surrounding	1.11
Wrocław	City	1.73
Wrocławski	Surrounding	1.03
Olsztyn	City	1.65
Olsztyński	Surrounding	1.17

7.3 Voluntary Co-Operation Between Local Governments

In spite of the relatively large size of Polish local governments at a municipal level (in an European comparative perspective), there are numerous cases in which local authorities decide it is worth joining resources and efforts with their neighbors to achieve certain goals or to deliver some public services jointly. Article 10, as well as the whole chapter 7 of the Gmina Government Act, allow and provide the legal framework for such arrangements. The Association (*Związek*) created in that way is a separate legal entity, financed and managed jointly by several local governments.

The number of such inter-communal arrangements has been dynamically growing throughout the last decade, as it is illustrated in Table 5.24.

Table 5.24
Number of Inter-Municipal Associations in Poland

1991	1992	1994	1996	2001 (January)
50	79	125	150	191

SOURCE: Karnkowski, 1996; Kowalska, 2002.

At the beginning of the 1990s, the most common associations dealt with infrastructure networks covering the area of more than one local government—first of all, water and sewage systems then public transportation and central heating [Aziewicz, 1994].

There were a few other features which were characteristic for the later development of inter-municipal co-operation:

- creation of associations focused not only on joint delivery of services, but on joint problem solving for more general issues, sometimes not related to the gmina compulsory functions. Organizations created for the joint promotion of economic development, implementation of tourist development programs or to deal with general issues related to environmental protection, are all good examples of this process;
- one-purpose associations began to cover some other services, not related to indivisible infrastructure. Under this new organization, the main focus was to reduce unit costs of service delivery. Joint arrangements for solid waste collection and disposal are a good example;
- the legal form of association, in some cases, proved to be inefficient and was sometimes replaced by joint communal companies established by a few local governments. The starting point for this change was an observation that noted, under the association arrangement, the decision making process was too slow (because delegates of individual local governments needed frequent consultations

with their local councils) and that the position of executive boards was too weak. A company form is less vulnerable to such negative phenomena.

Obviously, the function of both associations and joint companies is not a remedy for all the problems related to high unit-costs or difference between geographical borders and the catchment area of services. There are many examples where the initial attempt to establish the co-operation failed because local governments involved could not agree on some principles of co-operation. Aziewicz (1998) gives also some examples of the devastating conflicts in existing associations. Definitely not all the 191 can be treated as successful cases. But in many cases, they did all help in more efficient implementation of developmental policies or in better management of some services.

An interesting example of the successful single purpose association is an Association of Municipalities in Jura Region, which involves 36 *gminas* working together on the development of the tourist industry in the region. Over two thirds of the Association's budget comes from the members' contributions. This contribution is relatively small (about 10 cents per annum from every citizen in small local governments), so, it is not a heavy burden on local budgets. But co-operation of several local governments allowed for preparation of promotional materials and participation in international tourist fairs, which would be impossible for any single municipality. Preparation of a high quality video, filmed with the use of a hired helicopter, is just a one example. Successes in the join promotion of the region prove that, no doubt, the co-operation has been cost-effective.

7.3.1 Case Study—Solid Waste Management

Waste management is another example of a municipal task which is strongly related to the size of municipality and often goes beyond the capacity of a single *gmina*. One may ask why this function has not been transferred to county government, when the upper tier of local government was created in 1999. This is especially surprising when taking into account the fact that central government decided to leave this function with the *gmina* but, at the same time, was trying to encourage *gminas* within one county to co-operate on provision of the service. Probably, the only explanation is the promise made by central government that the 1998/99 reforms would not result in any limitation of *gmina* powers and function. One of the major arguments raised by opponents of the reform was that new tiers would dominate municipalities and central government made a promise in order to secure the support of municipal politicians.

Regardless of the reason for present allocation of this function, efficient waste management tends to exceed single *gmina* borders. There seem to be two reasons for this: management of solid waste is expensive and it is socially difficult. Some analysis

even estimates that complex technological solutions in waste management can be effectively implemented for a market of approximately 100,000 consumers (citizens) or more (*Regionalna gospodarka...*, 1998). These high costs are almost impossible for smaller units to independently carry out and are related to the cost of: (1) investment in the preparation of a new site, (2) high level of constant costs, independent of the number of users, (3) costs of technology for recycling and utilization of wastes.

The usual problem with waste management by local governments refers to the NIMBY (not-in-my-backyard) phenomenon. Waste treatment facilities (dumps, recycling plants) are commonly recognized as necessary, but nobody wants them to be established in his/her municipality. There is a strong believe that such facilities negatively affect the quality of the local environment, cause diseases, etc., even if research has proven the opposite.

Modern waste treatment infrastructure is expensive and not every municipality is capable of getting it. Moreover it's hardly efficient to build a facility for a single *gmina*, lets call it "A", since once the dump or recycling plant is established, it can be exploited by several municipalities (B,C,D) . If the facility is located in "A", the users B,C and D may be required to pay a fee to the authorities of "A" or to cover most of the investment cost as compensation to A's for their social and economic burdens related to the building and maintenance of the waste treatment facilities.

Such arguments lead Polish municipalities to join in on purpose-oriented associations established in order to provide waste treatment services for its' members. The existence of these associations proves that that the actual size and potential of many municipalities is inadequate, at least for some of the fulfilled tasks.

Table 5.25
Purpose–Oriented Associations of Gdynia and Slubice

	Gdynia	Slubice
Year of Establishment	1991	1997
Number of Member Municipalities	5	12
Total Population [Thousands]	417	104
Total Area [km ²]	432	2,497
Main Activities	Water distribution, solid and liquid waste collecting, dumping and treatment, heating, environmental protection	Waste filling, dumping and recycling, ecological education
Initial Method of Financing	Contributions of municipalities proportional to the population number	Contributions of municipalities proportional to the population number

The two examples of the function of one-purpose-associations, presented in the Table 5.25, take place in different regions of Poland. The association located in Gdynia (northern Poland) groups six member municipalities, two of which are big neighboring cities with a joint population close to 300,000. The other association consists of 12, relatively small, municipalities located near the western border of Poland, surrounding the town of Slubice.

Both associations do not limit their activities to waste disposal, but manage also a variety of issues from water distribution and heating (Gdynia), to ecological education (Slubice). Table 5.25 shows the comparison of size, scope of activities and other details concerning the two associations.

One well-known and successful example of co-operation in waste management is the company *Beskid*, established in 1993 by 18 municipalities surrounding the town of Żywiec [Strypan, 1999]. In order to improve management mechanisms and speed-up the decision making process, local governments decided on a company instead of the traditional form of inter-municipal co-operation. The idea behind the Żywiec region joint waste management program was born in 1992 when the old waste disposal plant capacity had exhausted. There were five new locations available for the dump-site, but all of them met with the protests of local residents. Eventually, the only acceptable new location was within the Żywiec city limits. City government had an obvious choice: either it builds a plant for itself or it co-operates with the surrounding, mostly rural, municipalities. There were two arguments for co-operation: (i) exploitation of the plant by the city only would be much more expensive in terms of unit costs; (ii) due to considerable externalities, only a joint waste management system would provide the opportunity for a radical improvement in local environmental protection. Currently, the company operates one of the most modern facilities in Poland and runs a successful program of waste segregation and recycling. It is quite clear that the positive results of the program would have been impossible for a single *gmina* to achieve.

8. CONCLUSIONS

Following the Keating (1995) concept, quoted in the introductory chapter, the quality of local government functions can be evaluated as a sum of three factors:

- capacity for economic development;
- ability to provide high quality cheap services;
- functioning of local democracy.

Theoretical expectations concerning the impact of size on these broad categories often go in opposite directions. For instance, with capacity for economic development

growth with the size of local government according to reform theory, the ability to mobilize larger resources for massive infrastructure projects seems to be a decisive factor. But according to some public choice arguments, big bureaucracy problems can be more visible in large administrations and small units competing for investments should be more effective. Moreover, some neo-liberal concepts suggest that the ability to plan strategically does not matter, since only the market can provide an optimal allocation and any planning can have harmful effects by sending false signals to the market.

As far as the ability to provide services is concerned, reform theory argues for large governments. This is both due to lower unit costs and the ability to provide more services. But some public choice proponents suggest that size does not matter, since services can be contracted-out to private providers.

Last, but not least, most of arguments for local democracy opts for small units where contact between citizens and authorities is closer, bureaucracy is smaller, and policies may better reflect local preferences. However, reform theory suggests that big governments, having more functions, attract more citizens attention and that—following Dahl's (1961) classic concept—larger communities provide space for more interest groups competing for influence, which leads to more pluralist political models.

How do these conflicting competing theories correspond with Polish reality? The summary of findings is presented in Table 5.26. Capacity for economic development is definitely larger in large local governments. Public choice counter-arguments on bureaucratic difficulties in big organizations do not seem to be decisive. Ability to provide more services, and to provide them cheaper, works again in favor of larger territorial units. Once again, we could not find any evidence confirming public choice expectations. It is important to stress that these findings do not reflect simply differences between rural (small) and urban (big) governments, but have been confirmed by analysis of the variation between small and large rural communities as well.

However, in the case of local democracy indicators, the picture is almost opposite. Level of interest, trust and satisfaction with local government is much larger in small territorial units, rather than in large ones. This time, public choice expectations are confirmed and reform theory arguments, that larger capacity results in larger citizens interest, seem to be on a false track. However, there is one exception to this rule—as reform theorists suggested, larger local government seem to have a more pluralist model of politics. The findings on a variation in social structure of councilors are difficult to classify. The proportion of educated councilors grows with the size of the local government. On one hand, this means that “human capital” in the council increases. On the other hand, one may argue, since the structure of a council becomes more distant from the structure of the whole local society, it may cause representation problems.

Table 5.26
Size and Local Government Functioning—Summary of Polish Findings

Issue	Category	Variables (Indicators)	Theoretical Expectations According to:		Empirical Evidence in Poland
			Reform Theory (Economies of Scale)	Public Choice or Localism Theory	
Capacity for Economic Development	Financial potential	Total revenues, per capita investment spending	+	+	0
		Share of own revenues, per capita own revenues, low dependency on state transfers	+		+
	Burden of inflexible spending	Low share of fixed current costs (salaries, energy) in total budget	+		+
	Ability to strategic planning	Preparation of first plan of strategic development and physical master plan	+	—	+/-0
	Ability to gather resources from support programs and attract foreign investors	Share of total grants and non-state aid in investment spending, attracted foreign investments	+	—	?
Ability to provide services	Capacity to provide cheap services	Low per capita spending on administration	+	—	+
		Low unit costs of primary education	+		+
		Reduced free loading and other problems with catchment area	+		+
	Capacity to provide more services	Willingness to take responsibility for primary schools before compulsory deadline	+	—	+
		Citizens willingness to decentralize more functions	+	—	+

Table 5.26 (Continued)
 Size and Local Government Functioning—Summary of Polish Findings

Issue	Category	Variables (Indicators)	Theoretical Expectations According to:		Empirical Evidence in Poland
			Reform Theory (Economies of Scale)	Public Choice or Localism Theory	
Local democracy	Citizens' interest in local government	Turn-out in elections, declared interest	+	—	—
	Citizens' trust in local governments	Various survey measures		—	—
	Pluralist local politics	Competition in local elections	+		+
	Citizens' satisfaction	Various survey measures		—	—
	Political transaction costs	Number of councilors constituting the majority, the share of big political parties representatives among councilors, conflicts between parts (villages, city districts) of local government's territory		+	?
	Democratic representation	Number of councilors rep. 1,000 inhabitants and per settlement unit			—
	Human capital potential	Councilors' level of education	+		+

8.1 Efficient Function of the Municipality—Attempts at Building a Composite Index and Relationship With Size

The goal of this attempt to build a composite index of local government efficiency is to summarize the findings described in the previous sections as well as to confirm some general, theoretical relationships between the size and efficiency in economic development and public management.

The construction of an index will consist of three steps:

- STEP 1—Defining the efficiency (performance) in terms of the factors described in previous section.
- STEP 2—Matching variables for the factors and developing the final formula describing efficiency of the municipality.
- STEP 3—Verifying the relationship between size and efficiency.

8.1.1 Defining the Efficiency (Performance)

Let us consider the overall performance (P) of the municipality as the difference between its economic potential (E) and the sum of costs related to provision of communal services (S) and function of local democracy (D). The formula denoting municipality's performance is:

$$(1) \quad P = a_1 \times E - (a_2 \times S + a_3 \times D)$$

where a_1 , a_2 , a_3 are weights coefficients reflecting the contribution of factors to overall performance of local government.

Thus, we assume the linear relationship between the measure of efficiency (P) and each of the factors E,S,D. However, we do not impose any particular form of the relationship between overall performance (P) and size of the municipality. Indeed, the municipality's size (measured by population) is introduced to the analysis indirectly, via the factors E,S,D. What our indicator says is that the impact of size on the efficiency of local governments is an aggregate of the three relationships:

- between size and economic potential;
- between size and efficiency in service provision;
- between size and quality of local democracy.

The crucial element of the index refers to values of weights a_1 , a_2 , a_3 , attributed respectively to the factors E, S, D. The decision to pay more attention to one factor

depends on the values we believe in, rather than on scientific considerations. Starting with the democratic theory, we may treat functioning of democratic system as the most important. In a more economic-pragmatic approach, we may focus on provision ability and costs of services. But, for example, starting from Peterson’s “city limits” theory (1981), we may assume that capacity to promote economic development is absolutely crucial and, in fact, determines the ability of local government to perform any other social functions.

The values of weights a_1 , a_2 , a_3 clearly depend on some general assumptions made by the researcher or, under another approach, on the importance attributed to different issues of municipality’s public life by local society. Therefore, the goal of developing the indicator should not be considered in terms of finding “the optimal size” of the municipality or defining the precise function explaining the influence of population number on the local quality of life. Instead, the indicator should show how the relationship between size and efficiency changes in reaction to the shifts in the relative importance given to the three elements constituting the local development.

8.1.2 Matching Variables, Developing the Final Formula for the Efficiency (Performance)

The empirical application of the equation (1) is conducted with a sample of about 1,900 (out of 2,489) Polish municipalities. We have decided to exclude cases in which impact of size may be significantly distorted by various factors:

- 65 cities with county status—due to different (wider) scope of tasks;
- boroughs of Warsaw, which have different functions than other municipalities;
- a few extremely affluent municipalities, in which the 2000 revenue per capita exceeded the national mean, plus 10 standard deviations;
- municipalities located within metropolitan areas, whose functions and affluence are heavily dependent on their role within metropolitan areas.

Each factor of the indicator is represented by the unweighted average of the standardized indicators. Variables included are presented in Table 5.27.

Therefore the equation (1) takes form:

$$(2) \quad P = a_1 \times \sum_{i=1}^4 e_i / 4 - (a_2 \times \sum_{j=1}^3 s_j / 3 + a_3 \times \sum_{k=1}^3 d_k / 3)$$

where i , j , k show the number of the variable within the three factors (E, S, D).

Table 5.27
Variables Used in the Index of Local Government Performance

Factor	Variable (Indicator)	Variable Name	Comments
Economic potential(E)	Per capita own revenues together with shares in state taxes (2000)	e_1	in PLN
	Per capita investment spending (1998–2000)	e_2	in PLN
	Share of fixed costs in the budget (2000)	e_3	in %
	Number of personal computers per employee in municipal office	e_4	
Cost and willingness to provide services (S)	Per student spending on education (2000)	s_1	in PLN
	Per capita spending on administration (2000)	s_2	in PLN
	Municipalities overtaking schools before compulsory term	s_3	“dummy” (0–1) variable
Cost of functioning of local democracy (D)	Turnover in local elections (1998)	d_1	in %
	Number of candidates per mandate in local elections (1994)	d_2	
	Number of councilors per 1,000 inhabitants (2000)	d_3	

8.1.3 Verifying the Relationship Between Size and Efficiency

Although theoretical findings are sometimes in contradiction (for example, public choice expects that local democracy functions better in small local governments, while some reform theorists provide arguments for the opposite case). However, dominant literature, as well as empirical evidence from Poland, leads to the following expectations about the three factors mentioned above:

- municipalities' potential for economic development increases with the rise of population. Larger units have more resources as well as higher human and organizational potential. Nonetheless, the relationship between size and economic development is likely to have a diminishing marginal performance. This expectation has been confirmed by Polish empirical data—most of indicators of economic capacity correlate better with a log of population size than with size expressed by linear function of the number of population;

- the “unit cost of services” factor is likely to work in favor of big municipalities, as the unit cost of provided services falls with the increase of population. Also, large governments are better equipped to provide larger number of services. However, one may expect a threshold size, above which the service factor value is negatively related to the size. Big cities providing services to its’ citizens, face not only the economies of scale but also diseconomies related to the problems of co-ordination in large organizations as well as additional infrastructure costs. We should add, however, that the latter phenomenon has not been observed so far in Polish empirical data;
- most of the results in Polish empirical analysis suggest that idea of local democracy works better in small units, where relationship between authorities and citizens is closer and more direct. An exception to this rule is the higher pluralism of local politics identified in large municipalities.

The data available for our empirical research does not always allow us to identify the “optimal size” of the municipality. Not by applying analyses focused on particular issues of local development, nor by using more “holistic” model approaches. Also, many sociological surveys which we quoted use very broad size categories which lowers the precision of the approximations. Nonetheless, whenever we could speak of ‘efficient size’, it has been somewhere between 10 and 50 thousand residents. For example, local governments below and above 50,000 clearly differ from the point of view of following measures:

- turn-out in local elections;
- education structure of councilors;
- number of candidates per seat in local election.

Those in the 10,000 size seem to be a breaking point for an even larger number of indicators such as:

- citizens’ opinion that local powers are too narrow (somewhere around size 10–20,000);
- mayors’ opinion that councilors often loose touch with ordinary people;
- ratio of councilors per inhabitants (somewhere around 30,000);
- size of local government spending on administrative (per capita);
- use of internet and computers in local administration;
- size of local government investments per capita;
- local government budget dependency on state grants;
- attendance rate in kindergartens;
- average class size in primary schools and, as a consequence, per pupil cost for primary education.

If so, one may speculate that the “ideal” balance between the beauty of being small, and advantages and strengths possessed by being large, is in a category somewhere between 10 and 50 thousand. Available data does not allow for a complete verification of this brave hypothesis, but we make an initial attempt by constructing a composite indicator for municipal efficiency, as described in the paragraphs 8.1.1 and 8.1.2.

Let us consider seven different sets of coefficients, a_1, a_2, a_3 , as described in Table 5.28. In sets 1, 2, 3 we assume that evaluation should focus entirely on a single factor. For example, we give absolute priority to the capacity to promote local economic development or to local democracy. Set 4 reflects the “indifferent” approach, where equal weight is given to all identified factors. Also, in sets 5 to 7, all three factors are taken into account but one of them is considered more important and is given the weight 3, while other coefficients equal 1.

Table 5.28
Weighted Values for Different Index Variations

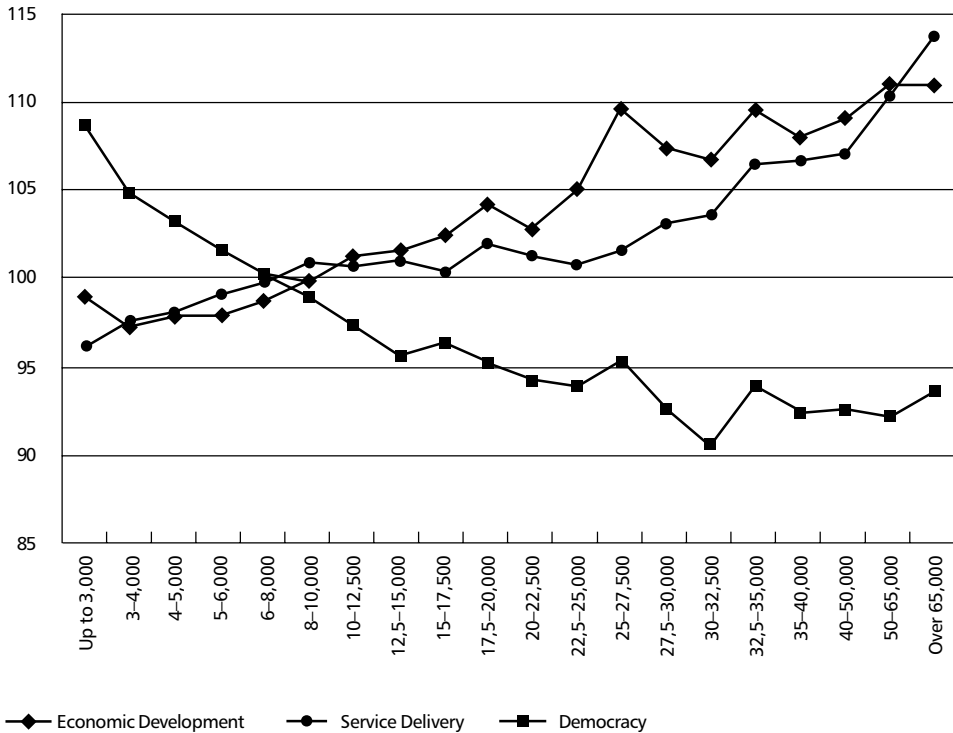
Set Number	Set Description	a_1 (Economy) Value	a_2 (Services) Value	a_3 (Democracy) Value
1	Only economy matters	1	0	0
2	Only services matter	0	1	0
3	Only local democracy matters	0	0	1
4	Equal weight	1	1	1
5	Economy oriented	3	1	1
6	Services oriented	1	3	1
7	Local democracy oriented	1	1	3

Lets see how these relationships are reflected in empirical data for over 1,900 Polish municipal governments. Figure 5.11 illustrates the relationship between population size and value of local government performance (P) under the assumptions expressed in sets 1, 2, 3 (single factor indicator). In general, the observed relationships are consistent with the expectations presented at the beginning of this section. Not surprisingly, the economic potential is positively correlated to the size of local government. The bigger the municipality, the larger is it’s economic potential. However, the marginal gain in efficiency clearly decreases for the units with populations exceeding 25,000.

Imposing a “service only” variant results in almost linear function—the bigger the local government, the more efficient service provision is. The positive relationship between the size and the efficiency in the service is observed all along the whole population spread.

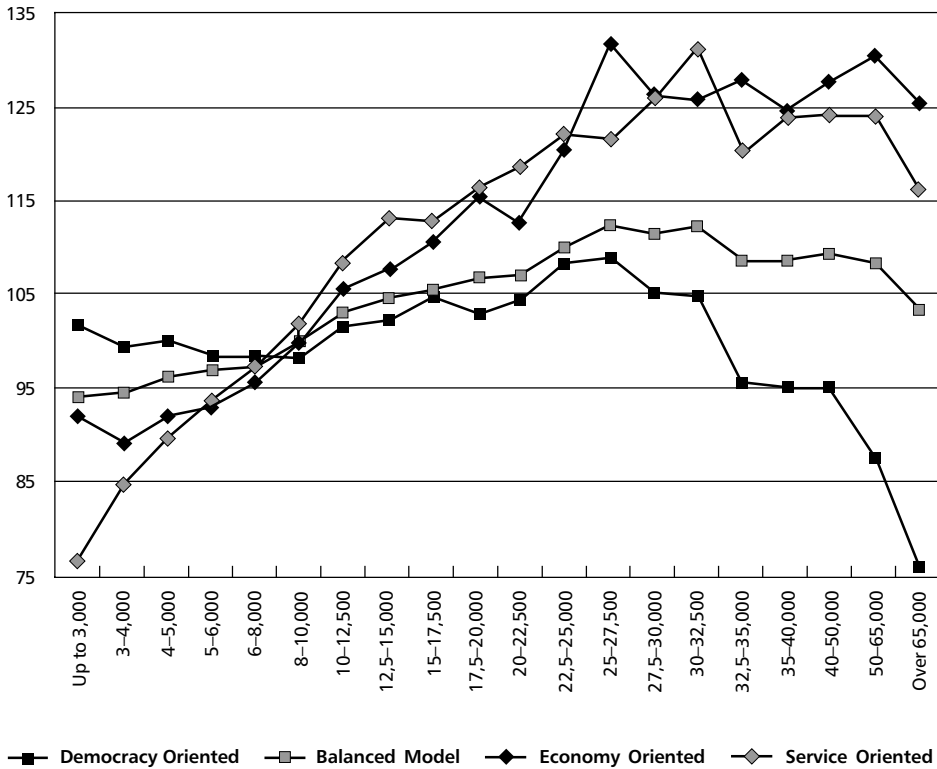
As expected, in the approach focused on local democracy, the performance curve slopes downward and relatively steep. This reflects the greater citizens' participation and democratic representation in smaller units. However, there is a clear threshold around populations sized at 25,000, after which the performance curve turns from clearly negative to almost neutral (flat curve).

Figure 5.11
Local Democracy, Economic Development, Service Delivery and Size of Local Government



The “equal weights” variant (Figure 5.12) is the easiest to defend on theoretical grounds, since there is no good reason to believe that any of the three factors are more important than others. This approach indicates an “optimal” size of local government somewhere between 25,000 and 32,000, dividing municipalities into two upward and downward sloping groups on the performance curve. The marginal gain in overall performance for small units is much higher than the marginal loss for the municipalities of population exceeding the threshold number.

Figure 5.12
Index of Performance and Size of Local Government



Not surprisingly, the “economy oriented” index shows “optimal size” at around a similar point. The major difference with the “equal weights” indicator is that, in case of “economy oriented”, the performance curve is almost flat for the municipalities above this population number. This may suggest no significant difference in efficiency between the municipalities of 25,000 inhabitants and larger.

In the “service oriented” index, the threshold population size seemed to be at about population 30–32,000. However, while the marginal gain for small local governments is very clear (the curve is very steep), the marginal loss for larger units is not so evident. Beyond the “optimum point” there is no clear relationship between size and performance of local government. In more detailed data analysis (not shown on Figure 5.18) we may, however, observe a significant variation of the performance value for big cities, which may indicate that efficient provision of local services depends substantially on some specific individual conditions.

Finally, the “local democracy oriented” variant clearly “worsens” the performance of big cities, moves the “pick performance” point down to about 22–27,000 and makes the performance curve slop sharply downward for high population numbers.

In all 4 variants the “optimal” point is somewhere between a population of 22 and 32 thousand. Interestingly, this result is not very different from Plato’s theoretical considerations (see the quotation in Chapter 1 of this book).

8.2 Practical Recommendations

Do the findings described in this chapter bring us to any practical recommendations for the territorial organization of local governments? In Poland, the discussion over the size of local government is not a very hot issue. However, it is occasionally the focus of social attention. It is not so often the case on a municipal level, although in some cases pro-fragmentation tendencies dominate the local political scene. More commonly, there has been recent discussion on the size of county tier governments and one can expect that the pressure for further changes will continue. The creation of 7 new counties at the beginning of 2002 is a good illustration of this phenomenon. Unfortunately, a lot of the evidence analyzed in this chapter is rooted in the municipal level. Though some examples from counties (spending on administration, free-riding phenomenon in secondary education) have been discussed as well. Therefore, some of our observations could be treated as useful practical recommendations for policy makers, both on a local and central level. Perhaps more important still, Polish experiences may be interesting material for other countries in the Central-East European region which are now undergoing a very lively discussion of the “size issue” (Czech Republic, Hungary, Slovakia, Ukraine).

How can these practical recommendations can be summarized? Below, we present a list of issue recommendations which are, of course, selected and formulated subjectively, but are based on objective empirical evidences:

- *Do not allow more fragmentation on a county level.* This would lead to strengthening the free-riding effect, would increase the unit costs of some services (most certainly with administrative overhead). Polish counties have very limited potential for undertaking infrastructure projects and further fragmentation would reduce this potential even more. On the other hand, at this size level, the expected positive change in local democracy function is rather an illusion. So, for reasons enumerated just above, the suggested development should be consolidation, rather than fragmentation.
- *Make sure the consequences of a municipality’s split are recognized by and clear for the local population.* Sometimes the level of conflicts within a municipality makes “divorce” difficult to avoid. There are also positive consequences of such a split which should not be neglected, even though, as we have shown in this chapter,

these positive results are frequently over-estimated. Quite often, the local population is not aware of the negative consequences of fragmentation such as increase of costs and reduced capacity to provide services. This message should be always very clearly communicated to citizens *before* they have to express their opinion in public consultation (by referendum or any other method of consultation which is applied).

- *Remember that a fragmented territorial system is more costly to the state budget.* Small local governments have larger operational spending (expressed on a per capita basis), they cannot cover these with their own revenues and require greater assistance in the form of transfers from the state budget.
- *In case of amalgamation, protect a form of the village autonomy.* This is a Polish experience, but also recognized in other countries with multi-village rural governments (parishes in United Kingdom, and in Scandinavia). The village level of government, even with very limited and mostly symbolic powers, is very important to the protection of village pride and identity. The Polish *soltys* is an important local leader and his presence, together with a formal recognition of the “village meeting” institution, clearly contributes to the strength of local democracy in rural areas.
- *Encourage co-operation between municipal governments.* Regardless of the territorial organization model type, there are always functions which can be performed more effectively when a few local governments co-operate with each other. In Poland, where municipal governments are rather large, this is clearly this case with solid waste management, tourist development, or environmental protection. The process of co-operation should not be left only to spontaneous development. This is more valuable if co-operation is voluntary, but it might stimulate co-operation if there are policies which provide incentives (possibly including financial incentives). In Poland, lack of such incentives is a main reason why most local governments try to cope (often ineffectively) with waste management alone. At the same time, availability of EU funds for local infrastructure investments caused some municipalities to co-operate on joint projects in order to meet formal requirements which were difficult to meet alone.
- *Better representation and closer links between authorities and citizens are real values in small governments and should be protected.* Therefore, the recently declared tendency to reduce the number of councilors in Polish local governments should be stopped, at least in rural areas. Such a change would increase the number of villages not represented in the council and may be harmful to local democracy in small communities. Yet again, the change in a number of councilors in large local governments is probably not so very important from a democratic principles point of view. While the reduction may bring some cut costs and better organization in the decision-making process, it could mean the relationship

between size of local government and size of a council could be more flat than it is nowadays.

- *The majority system and single-ward system is worthy of consideration for all rural and mixed urban-rural governments, regardless their population size.* Such a solution should support balanced representation of settlement units in the council. The proportional system (currently in all municipalities over 20,000 citizens) may lead to a situation in which the largest settlement unit is greatly over-represented, leaving smaller villages under- or not-represented at all in the council.
- *Available evidence suggests that a population size of 10,000 provides sufficient capacity for effective provision of many services.* This factor should be taken into consideration when any concrete decisions on fragmentation or amalgamation are to be made.

REFERENCES

- Aziewicz, T. (1994). *Prywatyzacja usług komunalnych w Polsce*. Gdańsk: The Gdańsk Institute for Market Economics.
- Aziewicz, T. (1998). *Gospodarka rynkowa w usługach komunalnych*. Gdańsk: The Gdańsk Institute for Market Economics.
- Bartkowska-Nowak, D. (2001). "Czy urzędy samorządowe potrzebują procedur kadrowych?" *Samorząd Terytorialny*, No. 7–8.
- Clark, T.N. (1971). "Power and Community Structure: Who Governs, Where and When?" In Bonjean, C.M., Clark, T.N., and Lineberry, R.L. (Eds.) *Community Politics: A Behavioral Approach*. New York: The Free Press.
- Ćwikła, M. (2001). *Finansowanie oświaty samorządowej w Polsce*. MA thesis, Institute of Economics, Catholic University of Lublin.
- Emilewicz, J., and Wolek, A. (2000). *Reformatorzy i politycy*. Warszawa: FRDL.
- Grochowski, M. (1991). "Praktyki społeczne władz lokalnych". In Jalowiecki, B., and Swianiewicz, P. (Ed.) *Między nadzieją i rozczarowaniem: samorząd terytorialny rok po wyborach*. EUROREG, University of Warsaw.
- Jalowiecki, B. (Ed.) (1995). *Funkcjonowanie gmin podzielonych i zespolonych*. Report prepared for the OMEGA-PHARE Programme, EUROREG, University of Warsaw.
- Jalowiecki, B. (1999). "Ruchy regionalne czy bunt elit? Obserwacja protestów społecznych". In Gorzelak, G. (Ed.) *Decentralizacja terytorialnej organizacji kraju: założenia, przygotowanie, ustawodawstwo*. Warszawa: CASE.
- Karnkowski, P. (1996). "Związki komunalne i ich rozmieszczenie w układzie wojewódzkim". *Finanse Komunalne*, No. 6.

- Keating, M. (1995). "Size, Efficiency and Democracy: Consolidation, Fragmentation and Public Choice". In Judge, D., Stoker, G., and Wolman, H. (Eds.). *Theories of Urban Politics*. London–Thousand Oaks–New Delhi: Sage.
- King, D.S. (1984). *Fiscal Tiers: Economics of Multi-level Government*. London: Allen & Unwin.
- Kowalska, R. (2002). *Związki międzygminne jako forma wykonywania zadań publicznych w gminie*. MA Thesis, University of Warsaw.
- Malewska-Szalygin, A. (2001). "Komu potrzeba jest demokracja? Wyobrażenia o władzy lokalnej w mazurskiej gminie lat 90-tych". *Kultura i Społeczeństwo*, No. 1/2.
- Mielczarek, A., and Domańska, A. (1999). "Funkcjonowanie gminy Dukla w aspekcie komunikacji z mieszkańcami". Report prepared by Partners Foundation for USAID Local Government Partnership Program, Warszawa.
- Miros, M. (2002). "Sprawozdanie z wykonania budżetu za rok 2001 oraz informacja o stanie zaawansowania poszczególnych elementów Strategii Rozwoju gminy Goldap". Goldap: Urząd Miasta.
- Mouritzen, P.E. (1989): "City Size and Citizens' Satisfaction: Two Competing Theories Revisited". *European Journal of Political Research*, Vol. 17.
- Peterson, P. (1981). *City Limits*. University of Chicago Press.
- Regionalna gospodarka odpadami*, 1998. (Warszawa: Co-operation Fund).
- Sharpe, L.J. (1995). "Local Government: Size, Efficiency and Citizen Participation". In "The Size of Municipalities, Efficiency and Citizen Participation". *Local and Regional Authorities in Europe*, No. 56. Strasbourg: Council of Europe.
- Sтарыpan, J. (1999). "Regionalna gospodarka odpadami na Żywiecczyźnie". In *Efektywna gospodarka odpadami komunalnymi: jak to zrobić?*, (Kraków: LEM Projekt).
- Swianiewicz, P., and Bukowski, J. (1992). "Krytyczna analiza działalności władz lokalnych". *Wspólnota*, No. 13.
- Swianiewicz, P. (1996). *Zróźnicowanie polityk finansowych władz lokalnych*. Gdańsk: The Gdańsk Institute for Market Economics.
- Swianiewicz, P., and Amos, F.J.C. (1998). "Wskaźniki porównawcze potrzeb i wydatków samorządowych; doświadczenia brytyjskie i rzeczywistość polska". In Swianiewicz, P. (Ed.) *System Analiz Samorządowych: jak oceniać i mierzyć zakres i jakość usług samorządowych*. Warszawa: British Know How Fund, Local Government Assistance Programme.
- Swianiewicz, P. (2000). "Institutional Performance of Local Government Administration in Poland". In Jabes, J. (Ed.) *Ten Years of Transition: Prospects and Challenges for the*

Future of Public Administration. Proceedings from the 10th NISPAcee Annual Conference, Budapest 13–15 April 2000.

Swianiewicz, P. (Ed.) (2001). *Public Perception of Local Governments in East-Central Europe*. Budapest: OSI/LGI.

Thurmaier, K., and Swianiewicz, P. (1996). “Primary School Decentralisation in Poland: Nurturing the Roots of Democracy”. *In Depth*, Vol. 5, No. 2.

Weber, M. (2002). “Plonne nadzieje”. *Wspólnota*, No. 15.

Zell, Z. (2001a). “Solecka pierwsza klasa”. *Wspólnota*, No. 3.

Zell, Z. (2001b). “Finansowanie potrzeb solectwa”. *Wspólnota*, No. 47.

NOTES

- ¹ Pawel Swianiewicz is a professor and Mikolaj Herbst a research assistant at the European Institute for Regional and Local Development, University of Warsaw.
- ² Similar observations on a wider European level were made by Page and Goldsmith (1987) who noticed that territorial organisation is very much related to the allocation of functions. Small (fragmented) local governments are usually unable to take responsibility for many services, which need to be delivered by upper tiers of governments.
- ³ A mixed municipality consists of a (usually small) town and several surrounding rural villages.
- ⁴ Some of these are called “around-the-city-counties” consisting of municipalities surrounding metropolitan counties
- ⁵ It is very difficult to find the proper English terms, but in this chapter we use the term “village” for larger settlement units (*solectwo*) and the term “settlement unit” for any, even the smallest, unit.
- ⁶ LDI–Local Democracy and Innovation Project sponsored by the Norwegian government. The survey quoted here was conducted in 1997 with a sample of over 1,000 mayors from the Czech Republic, Poland and Slovakia.
- ⁷ Several arguments on the relationship between size of municipality and local democracy have been already presented in the LGPP study on “Public Perception of Local Governments” [Swianiewicz, 2001]. In this book, we do not repeat this data. We present only general conclusions and focus on the aspects which were not analyzed in the public perception study.

- ⁸ Unfortunately we do not have data from the, more recent, local election of 1998
- ⁹ A village leader (*soltys*) plays a very important as a local leader at a village level. Often times, a village leader plays a crucial role as a channel of communication between the local government executive board and citizens within individual villages [Mielczarek and Domańska, 1999].
- ¹⁰ Survey organized December 2001 as a part of the LGPP “size” project with the support of the National Association of Village Leaders. A total of 395 respondents, from 87 local governments located in 4 regions, were interviewed.
- ¹¹ As elsewhere in this paper *** marks the correlation coefficient significant on 0.001 level, ** on 0.01 level and * on a 0.05 level.
- ¹² Her research concentrated on urban municipalities with a population size under 50,000. Bartkowska-Nowak distinguished between small, average and large local administrations on a base of the total number employed at city hall (in her classification, small administration had less than 33 clerks and large over 52 clerks). However, the number of local administrative employees is strongly correlated with population size, so we can draw conclusions on differences between small and large local governments as well.
- ¹³ Correlation coefficients in Table 5.14 are the most telling. Comparing group means in the Table 5.20 is sometimes misleading, because of small groups in very small governments, which for a variety of reasons have extremely high revenues per capita. These very limited number of very affluent municipalities are reflected in the group mean and in a very high standard deviation for the group.
- ¹⁴ A full description of the complicated methodology to determine which of city expenditures should be treated as fixed, as applied in this paper, would be too long to fit within limited space available. However, to give some example, we treat expenditures related to standard salaries of local government staff, or heating of municipal premises, as fixed.
- ¹⁵ The subvention is formally a non-targeted grant, which means it may be spent on any purpose, not necessarily related to education. However, in the vast majority of municipalities, actual current spending on education is higher than the received grants.
- ¹⁶ Among other issues, the 1999 reforms involved transforming the former 8-year primary school into two-tier system of primary (6-year) and middle level school (3-year). Municipalities covered most of the cost related to these changes. Also, in 1999, the controversial law on teacher’s rights (Teacher’s Chart) was approved by Parliament. This raised the teachers’ remuneration without sufficiently increasing the education grant for the municipalities. For this, and other reasons,

the share of municipalities' own resources in current education spending increased from 8% in 1998 to 20% in 2000. Also, the proportion of municipalities who "subsidized the education grant" from their own revenue sources increased from 83% in 1994 to 96 in 1999 [Ćwikła, 2001] and then to over 99% in 2000.

- ¹⁷ Average teachers' salaries are set by law, but local governments are free to pay an additional remuneration. Frequently, they pay more to offset the higher cost of living in the cities and to attract foreign languages teachers, etc.
- ¹⁸ By "attendance rate", we mean the ratio of students attending local schools vs. the number of 15–18 years old inhabitants, or the graduates of local primary schools.