

**Alina Daniłowska<sup>1</sup>**

Department of Economics and Economic Policy  
Warsaw University of Life Sciences  
Warsaw

## **External financing of local governments' expenditure in the rural areas in Poland**

**Abstract.** The role of repayable sources in financing local governments' expenditure in rural areas in Poland was examined. The analyses showed that during years 2005-2009 the expenditure of local governments in rural areas was rising. An especially high increase was observed in 2009. The shares of the investment expenditure in total expenditure were at 20% for 2005-2008 but in 2009 it rose noticeably. The local governments use credits, loans and municipal bonds for financing expenditure. Except for 2009, the 'new' credits and loans financed mainly repayment of 'old credits', only in 2009 less than 50% of 'new credits' value was used for repaying old debts. The debt of local governments in rural areas rose quickly but in examined years the payments of interest were not a problem and took less than 1% of budget incomes. In the future, it can change because of the expected increase of debts and, moreover, the interest rates could rise noticeably.

**Key words:** credits, local government, debt, infrastructural investment, rural areas.

### **Introduction**

The very high level of budget deficit and public debt in many European countries which occurred in 2009 and 2010 has drawn the attention of societies to the problem of financing public expenditures. The crisis of public finances has a spectacular positive aspect. It gave an impulse to a revision of the social and economic policies, to a debate on the scope and the role of public sector in meeting needs of inhabitants and the responsibility of societies for high consumption paid from public budgets at different levels, state and local.

The aim of this work is to examine the role of external sources of financing the local governments' expenditure in rural areas in Poland. The analyses focus on external repayable budget revenues. The following problems are examined: (i) kinds of the external financing sources and their role in financing the local governments' expenditure, (ii) the size and the consequences of indebtedness of local governments, (iii) the local governments' debt as a part of public debt.

### **Materials and methods**

The examined period covers the years 2005- 2009. The information and data are taken from the Ministry of Finance and the Central Statistical Office. The data used in paper illustrates the examined issues, shows the scale of changes and their tendency.

Mixed methods of analysis are used. The descriptive method with elements of the

---

<sup>1</sup> PhD, associate professor, address: 166 Nowoursynowska St., 02-787 Warsaw, Poland, email: alina\_danilowska@sggw.pl.

comparative one is the main method. It is supported by a descriptive statistical method.

Local communities in rural areas are the object of the analyses. In Poland, the basic unit in territorial division of the country is a local community called 'gmina'. Gminas located in rural areas are described as rural gminas in contrast to urban or urban-rural gminas. As of 1<sup>st</sup> January 2010, there were 2479 gminas in Poland of which 1576 had the status of a rural gmina [The list... 2010].

The paper is organised as follows. Firstly, some theoretical and juridical aspects of public finances, mainly concerning the sources of repayable financing and reasons of deficits, are presented. Next part of the paper is devoted to empirical analyses of different aspects of examined problem. In the end the conclusions are drawn out.

### **Theoretical and juridical aspects of public finances**

The local governments are a sub-sector of the general governmental sector which beside the local governments involves such sub-sectors as a) central government b) state government<sup>2</sup>, c) social security funds. In literature, instead of general government sector, the term of public sector is often used<sup>3</sup>.

The local governments provide the local society with a vast range of goods and services. Taking into consideration the criteria of classification like the excludability from consumption and the rivalry in consumption, only some of them are pure public goods. In practice, in the case of many goods a precise classification is difficult to carry out [Kondratowicz 2009].

The activity of local governments generates costs. They are covered by revenues of different kind which can be divided into incoming revenues and repayable revenues.

The incoming revenues involve:

- own source revenues from local taxes, fees for services, revenues from selling or renting local governments' property
- shares in revenues from central taxes collected in the local territory (for example, the gminas' share in Personal Income Tax in 2009 was 36,72%)
- general purpose grants
- subsidies coming mainly from the state budget, special funds (for example for environmental protection), other local governments and from the EU.

Repayable revenues are necessary in the case when the planned expenditures are higher than planned incoming revenues so they have to cover the budget deficit.

They can come from:

- credits and loans
- issue of municipal bonds.

Credits and loans (bank and non-bank) or municipal bonds help to sort out the problem of budget deficit but they create a problem of debt. A simple textbooks' definition characterizes debt as accumulated deficits minus accumulated surpluses [Colander 2010].

There are many reasons of budget deficits. They influence the budgets of sub-sectors

---

<sup>2</sup> There is no state sector in Poland.

<sup>3</sup> Public sector is usually defined as general government plus public corporations which are government-owned trading businesses that obtain most of their income from the sale of goods and services [Manual... 2010].

of the public sector and they change over time. The reasons of local governments' deficits are quite similar to deficits of state governments. Firstly, they are caused by a recessionary fall in incomes in the economy. Secondly, they can be a result of government policy (for example tax cut) [Colander 2010]. Thirdly, the wars can undercut the budgets incomes [Barro 1997]. However, they influence state and local budgets in not the same way. The theory of political business cycle [Nordhaus 1975] points out the connections between the elections and changes in monetary and fiscal policy. These policies are tightened just after elections and become more expansionary before next elections. Some of researchers: Rogoff and Sibert [1988], Rogoff [1990] and Harrington [1993] have developed and adopted this theory to the local level. These models predict that local politicians may increase spending on items visible for voters (and increase deficit and debt) prior to elections to signal greater competence. This occurs when voters are rationally, but imperfectly, informed. Veiga and Veiga [2004] examined the connection between investment highly visible to the electorate, such as buildings and constructions, in Portugal and found a strong evidence of opportunistic cycles. In the case of Poland, the possibility of a connection between the local government indebtedness and the election cycle was signaled by Kopańska [2010].

Owsiak [2002] pointed out that taking credits and loans by local governments decreases the scope of expenditure for their basic activities, because of costs connected with taking credits and loans. This reason, together with a fear of excessive debt, can limit taking credits and loans.

The concern about targets the credits are taken for and about the ability to repay the debt makes the state intervene in the finance of local governments. The credits and loans aims as well as the level of indebtedness and of debt service are under state regulation.

In Poland, the law on public finances states that local governments can take credits or loans or issue bonds to cover :

- the budget deficit
- the repayment of debt.

Maximal level of debt is established at 60% of incoming revenues, whereas interests and instalments can not be higher than 15% of incoming revenues<sup>4</sup>.

The level of public debt imposes limitations on the local government deficit. Till 2009 in the case the public debt exceeded 50% of GDP, the planned deficit of any local government unit could not be higher than the planned deficit of the state budget. According to a new law [Act... 2009], when the public debt is higher than 55% of GDP, any local unit is allowed to plan deficit only for projects financed from the EU grants. If the public debt exceeds 60% of GDP, no public deficit can be planned. It is worth to mention that in 2009 the government debt in Poland rose noticeably and it was at 50.9% of GDP. In 2010, a further increase to 53% of GDP was observed. If the law had not been changed the local governments would have found themselves in financial troubles and their expenditures, for example for financing investment, would have been limited markedly.

---

<sup>4</sup> These limits are valid till 2014.

## Empirical findings

During the period of 2005-2009, the rural gminas' incoming revenues were rising and the rate of dynamics was changing year to year (Table 1). The dynamics<sup>5</sup> reflected the economic growth which took place in Poland. However, in 2005 and 2006 the rates of dynamics were much higher than the rate of GDP growth, whereas in the other three years nearly the same. The share of rural gminas' incoming revenues in all local governments' revenues was stable and amounted to 18-19%. The subsidies and grants were the main sources of rural gminas' incomes. Their share was about 60%. The main part of the subsidies (about 75%) was assigned for financing the system of education, in the case of grants about 65-70% of them were given for social aid. Taxes, fees and property incomes gave only 25-30% of revenue incomes. The real estate tax was the most important source among them with a share of 40.0 %. The agricultural tax played rather small role with a share of about 10%. The local governments are eligible for participation in the state budget incomes due to personal and corporate income tax. In 2005-2008, the share of personal and corporate income tax in rural gminas' budget was rising due to the economic prosperity. It decreased in 2009 mainly because of a reform of income tax system (the number of tax rates was reduced from 3 to 2) and partly due to fall in the rate of economic growth. This element of incomes makes local budgets more vulnerable to the economic conditions (business cycles).

Table 1. Level, dynamics and structure of rural gminas' incoming revenues

Year	Incoming revenues, PLN million	Incoming revenue' dynamics (previous year = 100)	Rural gminas' incoming revenues/all local governments' incomes, %	Structure of incoming revenues, %		
				taxes, fees, property incomes	share in central taxes (PIT and CIT)	subsidies and grants
2005	19 953.7	113.9	19.4	30.6	9.9	59.5
2006	22 648.6	113.5	19.3	28.0	10.0	62.0
2007	24 637.3	108.8	18.8	27.6	12.3	60.1
2008	27 035.9	109.7	19.0	25.9	13.4	60.7
2009	28 476.6	105.3	18.4	25.0	11.8	63.2

Source: own calculation based on governmental reports [Informacja... 2006-2010].

Simultaneously to the changes in incomes, the changes in expenditures: their level, dynamics and structure were observed (Table 2). In the three examined years (2006, 2008, 2009), the dynamics of expenditure was higher than that of incomes. Especially big difference in these dynamics was in 2009. In 2005 and 2007, the expenditure rose slower than incomes by some percentage points. As a consequence, in the former of mentioned years the budget results were negative while in the two latter years positive. An extraordinary high budget deficit occurred in 2009. It was three times higher than the deficit in 2006 and many times more when compared with 2008. It caused a sharp increase in the level of rural gminas' indebtedness (Table 5). The relation of the budget results to the incoming revenues was at a low level in 2005-2008 but this indicator rose sharply in 2009 because of an increase in expenditures.

<sup>5</sup> In real terms (data in Table 1 are in nominal values).

Table 2. Dynamics and structure of rural gminas' expenditures

Year	Expenditure, PLN million	Expenditure dynamics (previous year = 100)	Rural gminas' expenditure/ total local governments' expenditure, %	Expenditure structure, %			Budget result, PLN million	Budget result/ incoming revenue, %
				current	capital	capital, of which investment		
2005	19756.0	110.4	19.0	80.9	19.1	19.0	+197.7	1.0
2006	23213.6	117.5	19.3	79.3	20.7	20.6	-565.0	-2.5
2007	24286.7	104.6	18.8	80.9	19.1	18.9	+350.6	1.4
2008	27100.3	111.6	18.7	79.8	20.2	19.9	-64.4	-0.2
2009	30195.6	111.4	18.0	76.7	23.3	23.0	-1719.0	-6.0

Source: own calculation based on governmental reports [Informacja... 2006-2010].

The share of rural gminas expenditure in all local governments spending was falling slowly, mainly due to a rapid growth of expenditure by other types of local governments. The current expenditures prevailed in the structure of expenditures. A noticeable increase in capital expenditure was observed in 2009, mainly due to a growth in investment which can be connected with a massive infrastructural investment.

Table 3. Rural gminas' repayable revenues level and structure

Year	Credits and loans, PLN million	Credits and loans for investments from the EU funds/credits and loans, %	Dynamics of credits and loans (previous year = 100)	Municipal bonds issue revenues, PLN million	Bond revenues for investments co-financed from the EU funds/bond issue value, %	Dynamics of repayable revenues (previous year = 100)	Repayment of credits and loans, %	Redemption of municipal bonds / revenue from municipal bond issue, %
2005	1235.2	20.2	-	11.8	0.0	139.0	88.9	85.4
2006	1670.5	29.1	135.2	62.6	1.4	79.4	64.8	17.6
2007	1332.7	16.2	79.8	42.7	1.8	104.2	84.2	27.3
2008	1329.3	4.5	99.7	104.6	0.1	167.2	75.9	16.1
2009	2230.4	6.7	167.8	166.6	1.8	139.0	45.1	14.6

Source: own calculation based on governmental reports [Informacja... 2006-2010].

Poland has entered the market economy with a very underdeveloped technical infrastructure. It stemmed from many reasons of mainly economic character. The well developed infrastructure is important for the quality of life of inhabitants and is a precondition to start and to conduct the economic activity by enterprises. During last twenty years the great progress was achieved in this area, but the needs are still great. Local governments are under a constant pressure of inhabitants to improve the infrastructure, but the infrastructural investment are costly and the problem of financing them arises. It is nearly impossible to create in short term a modern infrastructure relying only on current incomes. In 90ties, grants financed from loan granted to Poland<sup>6</sup> by the World Bank played

<sup>6</sup> The local governments in rural areas could apply in 2004-2008 for subsidies for building water supply, sewerage and telephone networks. The subsidies covered up to 35% of costs of building water lines, 40% of sewerage

a great role in building infrastructure in rural areas. Next, the pre-accession help from the EU under the SAPARD scheme was very valuable. With Poland's accession to EU, the scope of financial help for development of infrastructure has broadened. The subsidies have some positive aspects. They do not only help to carry out investment but often they influence strongly decisions about undertaking infrastructural investments. Inhabitants know about the vast range of help and expect the local governments to use them.

The subsidies are valuable but the own gminas' financial means are necessary too. So many gminas have decided to use repayable financial means from credits, loans and municipal bonds. They used credits and loans every year but the differences were immense year to year. The dynamics ranged from 80% in 2007 to nearly 170% in 2009. Issuing of municipal bonds became more and more popular among rural gminas. However, their value was much lower than that of credits and loans. In the first three years of the analysed period, the share of credits for investments co-financed by the EU funds in the total value of credits was noticeable. In 2008 and 2009, its significance diminished to some degree. The issue of bonds for financing investments co-financed from the EU funds was nearly unused.

Taking credits and loans drew the necessity of repayment. In each of the examined years, a distinct part of 'new' credits was used for repayment 'old' credits. More than 50% of new credits and loans was devoted in 2005-2008 for repayment of old credits commitments. It was less only in 2009 because of an increase in value of new credits and loans.

Table 4. The role of repayable revenues in financing expenditures

Year	Credits and loans/total expenditure, %	Credits and loans/investment expenditure, %	Bond issue value/ expenditure, %	Net credits and loans <sup>1</sup> /investment expenditure, %	Net municipal bond revenues <sup>2</sup> /investment expenditure, %
2005	6.3	32.8	0.06	3.6	0.05
2006	7.2	34.9	0.27	12.3	1.08
2007	5.5	29.0	0.18	4.6	0.68
2008	4.9	24.6	0.39	5.9	1.62
2009	7.4	32.1	0.60	17.6	2.05

<sup>1</sup> taken credits and loans minus repaid credits and loans

<sup>2</sup> revenue from bond issue minus bonds' redemption

Source: own calculation based on governmental reports [Informacja... 2006-2010].

As it is indicated by data in Table 4, the relation of credits and loans to investment expenditure was relatively stable and it can be said that they covered some percent of expenditure. These relations for municipal bonds were less than 1%. The role of bonds in financing the investment evaluated by the relation of their net value to investment expenditure was very little. The relation rose quickly what is a positive signal for the future.

The role of credits and loans for financing investments when taking into consideration repayment 'old credits' differs year to year, and in some years it was distinctive, in some low.

---

systems costs, and 25% of telephone networks costs. Since 2006, building and modernization of roads has been added.

Using repayable sources of financing creates the problem of debt. During the examined period the debt was rising gradually and the rate of its dynamics differed year to year. An especially high dynamics was observed in 2009 due to the aforementioned higher dynamics of expenditure. This in turn was due to massive investments dynamics compared with income dynamics. The relative level of debt was low in the examined period. The relation of debt to incomes was lower than 20% and was far from the maximal level of 60%. The share of rural gminas' debt in the debt of all local governments was low and amounted to 13-15%, in the total public debt it was lower than 1%.

Table 5. Characteristics of rural gminas' debt

Year	Debt dynamics (previous year = 100)	Debt / incomes, %	Rural gminas' debt/local governments' debt, %	Rural gminas' debt/public debt, %	Long term debt/total debt, %	Debt due to credits and loans/total debt, %	Bank debt/total debt, %
2005	100.9	14.6	15.1	0.62	92.24	95.4	44.1
2006	119.7	15.4	13.7	0.69	93.17	94.8	50.3
2007	104.0	14.7	13.9	0.69	94.87	94.4	53.9
2008	108.1	14.5	14.0	0.66	98.31	94.1	61.6
2009	132.6	18.3	13.6	0.78	93.77	93.9	70.1

Source: own calculation based on governmental reports [Informacja... 2006-2010].

The structure of debt reflected its genesis. The long-term character of debt indicates a great investment activity. Credits and loans were the main element of debt. They were taken mainly from banks. It is worth to mention that banks appreciate the local governments as clients. Local governments are creditworthy clients. According to law regulations, local government can not go bankrupt. According to the Public Finance Law, from 1999 on, the state budget may provide loans for local government for recovery programmes [Kopańska 2010]. Share of securities (mainly municipal bonds) in the rural gminas' debt was very low, but during the examined period it was rising quickly and nearly doubled.

Table 6. The rural gminas' debt service and repayment

Year	Dynamics of credits and loans (previous year=100)	Debt service/ budget expenditure, %	Value of repayment of credits and loans, PLN million	Credits and loans repayment dynamics (previous year=100)
2005	-	0.61	1 098.3	-
2006	135.2	0.46	1 081.9	98.5
2007	79.8	0.52	1 122.0	103.7
2008	99.7	0.62	1 009.2	89.9
2009	167.8	0.57	1 006.8	99.8

Source: own calculation based on governmental reports [Informacja... 2006-2010].

The expenditure for repayment of credits and loans was constant (Table 6), but because of the high rate of growth of debt, the value of repayments can be expected to rise in the future.

The service of debt amounted to less than 1% of budget expenditure. It is a low level and the service of debt was not a problem for rural gminas in the examined years, but it can change in the future with the change of debt volume and interest rates.

## Conclusions

1. Gminas' expenditures increased in 2005-2009 very quickly. They rose by about 50% during these five years. It was possible because of a very good prosperity in the economy and because of using the repayable sources of financing as well an external financial support.
2. Poland's membership in the European Union has enabled the local governments' access to the EU financial support for a very vast range of investment. Rural gminas, like local governments of other kinds, have tried to take advantage of the chance they have been offered.
3. The long-term character of debt suggests that the credits, loans and bonds have financed mainly investment. They allowed to finance massive infrastructural investments which were partly undertaken with a support from the EU funds, however, the role of these fund was diminishing gradually.
4. The role of municipal bonds in financing the expenditure of rural gminas was much lower than that of credits and loans.
5. The indebtedness of rural gminas can be expected to get higher because the needs and expectations of local societies are still high and the EU support will be continued (however, its scope can change).
6. The service of debts amounted to less than 1% of budget expenditure which suggests that the debt service was not a problem for rural gminas in the examined years, but it can change in the future with a growth of debt and a rise in interest rates
7. The share of rural gminas' debt in the total public debt was lower than 1%, so any restructuring or reduction in rural gminas' debt will not improve the situation of public finances noticeably.

## References

- Act of parliament of August 27th 2009 on public finance. *Dziennik Ustaw Rzeczypospolitej Polskiej* no 157, item 1240.
- Barro R. [1997]: *Macroeconomics*. PWE, Warsaw, pp. 659.
- Colander D.C. [2010]: *Macroeconomics*. McGraw-Hill Irwin, New York, pp. 541.
- Harrington Jr. J. [1993]: Economic policy, economic performance, and elections. *American Economic Review* no. 83 (1), pp. 27-42.
- Informacja o wykonaniu budżetów jednostek samorządu terytorialnego. [2006-2010 passim]. Rada Ministrów, Warsaw.
- Kondratowicz A. [2009]: Samorząd lokalny a dobra publiczne – wprowadzenie do badań empirycznych. [In:] *Samorząd lokalny. Od teorii do badań empirycznych*. J. Kleer (ed.). CeDeWu Sp. z o.o. Warsaw, pp. 7-24.
- Kopańska A. [2010]: Factors Influencing Local Government Debt Policy in Poland in 1999-2009. [Available at:] <http://www.nispa.org/files/conferences/.../201005012112040.nispa-kredyt.pdf>. [Accessed: May 26th 2011].
- Manual on Government Deficit and Debt. [2010]. Methodologies and Working Papers. Eurostat. European Commission. pp. 360.



- Nordhaus W. [1975]: The political business cycles. *Review of Economic Studies* no. 42.
- Owsiak S. [2002]: *Finanse publiczne. Teoria i praktyka*. Wydawnictwo Naukowe PWN, Warsaw.
- Rogoff K. [1990]: Equilibrium political budget cycles. *American Economic Review* no. 80, pp. 21–36.
- The list of identifiers and names of the units of territorial division of the country. [2010]. Central Statistical Office. Warsaw.
- Veiga L.G., Veiga F.J. [2004]: Political Business Cycles at the Municipal Level. NIPE Working Paper, WP-4/2004, pp. 1–26.