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ASSESSMENT OF EFFICIENCY OF DEBT MANAGEMENT BY LOCAL GOVERNMENT

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JEL category: D61, E62, G10; Public finance focus

Abstract

The objective of the paper is to analyze and assess level of efficiency of debt management by local governments and development of structures and procedures that facilitate this efficiency. We present a model for debt management efficiency - theory and case study analysis based on data from local governments in Poland and their financial reports. In the model we develop 12 standards for measuring debt management efficiency, analyze the level of performance and satisfaction of these standards by a representative group of local government. Then we formulate observations, regarding implementation of the presented standards and recommendations - to enhance the observed situation in Poland and facilitate improvement of debt and financial management. The model is a *novelty* in municipal finance and debt literature.

1. INTRODUCTION

In Poland, as in many other new member countries of EU, we observe a substantial infrastructure gap as compared to old member countries of EU. There are less local infrastructure facilities, their quality is worse and related services are of poorer quality. Therefore, the need for resources to invest in local infrastructure is very high. We present a model for debt management efficiency, which helps analyze and assess level of efficiency of debt management by local governments (Lg). The model develops theory and includes case study statistical analysis based on data from local governments included in specially designed questionnaires, and official financial reports, which JST in Poland submit to Regional Audit Chambers (RIO) and to the Ministry of Finance. The model is a *novelty* in municipal debt literature.

We develop 12 standards for measuring debt management efficiency categorized in three areas:

1. *long – term financial and investment planning*
2. *organizational and institutional procedures*
3. *technical tools and methods of debt management enhancement.*

In the first area the standards include development and special form of long – term financial and investment plans and of long – term debt projections. In the second area standards include - possession of long – term debt management strategy, and of credit and investment rating, and existence of a department for debt management in city office. In the third area we include standards regarding transparency for bond and bank loan pricing, efficient timing of debt issue (matching time schedule of investment disbursement) and elimination of negative arbitrage risk, and selection of the form of debt with the lowest possible true cost.

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A system of assigning a given number of points to each of the standards is developed. The system was consulted with International Fitch Rating Agency - Poland, largest banks which cooperate with local government in Poland and treasures of several Polish cities.

We submit recommendations regarding debt management, and implementation of introduced standards, which can be implemented in Poland without major costs and time delay. Recommendations are addressed separately to the central government and to local governments. They will help increase access of Lg to municipal capital market, improve debt management efficiency and facilitate acquiring the EU funds.

2. INVESTMENT AND DEBT OF LOCAL GOVERNMENT SECTOR IN POLAND AND IN EUROPEAN UNION

Investment projects implemented by institutions of public sector, to a large extent, contribute to the Gross Domestic Product (GDP) in all countries of European Union. In addition, the local government finance sector plays an important role in redistribution of the state revenue. Below, we highlight specific features of the local government finance sector. Its expenditure (Figure 1) equals close to half of the state budget expenditure (including transfers and grants to local government sector). However, in Poland, the share of local government investment in public sector is very large, much larger than that of the state budget. In 2005 the local government (Lg) investment expenditure (which in majority equals capital expenses) was twice as high as investment expenditure of the state budget, and in 2006 and 2007 the investments are even higher (Figure 2).

Figure 1. Comparison of total expenditure of the state budget and of local governments (in mln PLN)

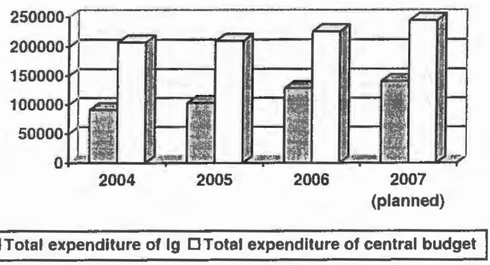
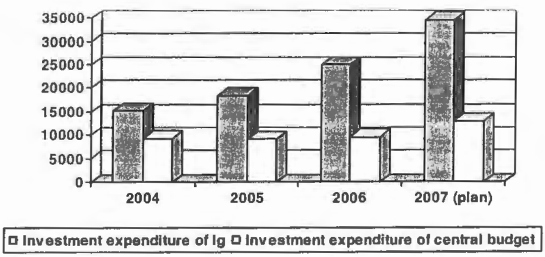


Figure 2. Comparison of investment expenditure of the state budget and of local governments (in mln PLN)

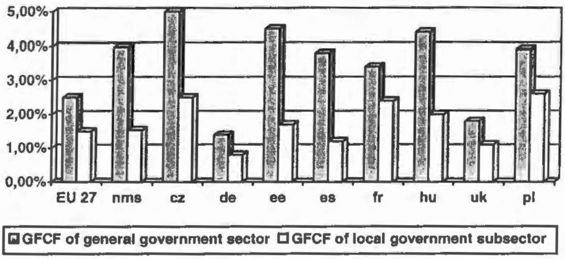


The largest investment are observed in cities with district (poviat) authority, as both cities and districts implement and assume responsibility for the majority of local tasks in such areas as municipal infrastructure, environment protection, transportation, communication, education and health care. Infrastructure tasks such as construction and modernization of local roads, sewerage networks, waste water treatment and solid waste management as well as tasks associated with education prevail among local tasks.

Voivodships focus on investment regarding regional and national roads and health care. Districts, small cities and towns implement some local tasks concerned with health care services. In Poland, small cities, towns and rural local governments are large in numbers – they constitute over 65% of all local governments (excluding districts and voivodships), but the investment expenditure of an individual local rural government, and small town are nominally low.[3]

Below, we compare the share, in GDP, of *gross* fixed capital formation in public, and local government sectors – in select countries of European Union (EU). Among all 27 member countries only in Ireland local government sector contributes more investment than Poland in relation to GDP (investment defined as *gross fixed capital formation* [GFCF]). The share in Poland is higher than 2,5%, while the average value of this share in EU, including countries, which joined the EU in 2004 (new member states [nms]), equals about 1,5% (Figure 3.).

Figure 3. The share of *gross* fixed capital formation in public and local government sectors, in select UE countries



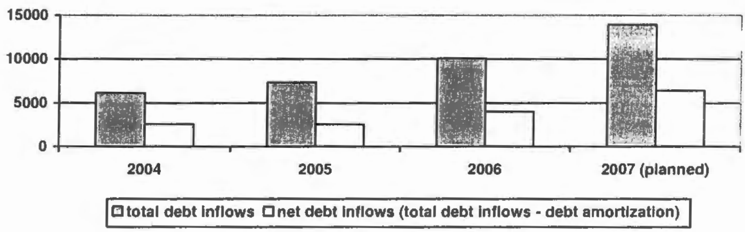
Poland joined the UE (became its member) on 1 May 2004, and since then became allegeable for funds from European Union budget, specially the European Regional Development Fund (RDF). Local governments are the largest beneficiary of the RDF, they receive also the majority of grants from the European Social Fund (SF) and the Cohesion Fund (CF). A substantial increase in investment expenditure of Lg, in 2005 and in 2006, are induced, to a large extent, by an inflow of funds from the EU budget. In 2006 local government investment expenditure, co-financed with the EU structural funds and with the CF and SF (we call them European projects), equal over 30% of the total JST investment expenditure. The Lg share in financing European projects equaled 36%, and the UE budget share – 64%.

Process of narrowing the infrastructure gap between Poland and „old EU countries", depends on the ability of Lg to ensure its own financial share in projects co-financed by European funds. Securing own funds (own share) is a necessary condition for absorption of European funds over 2008-2013. The level of the public sector planned share is substantial. The condition of ensuring own financial share for implementation of European projects requires that Lg (cities, districts and

[3] In Poland there are three categories of local government: gminas (which include rural gminas, large and small cities), poviats (districts) and voividships (regions). In the paper we call local governments, in brief, Lg.

regions) must use external resources, first of all debt. The Lg used debt over 2004 – 2007, to finance investment project, but utilization of debt in financing European projects will become more intensive this year and in the years to come.

Figure 4. Local government debt financing; new debt, and *net* debt inflows



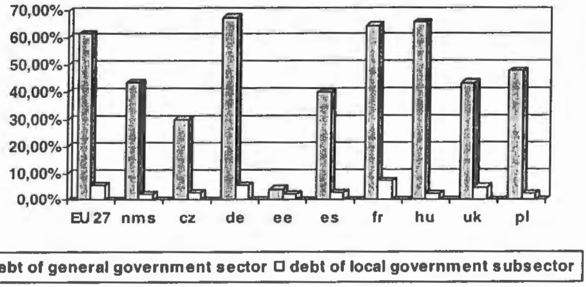
The National Financial Plan of Strategic Reference Framework 2007-2013 anticipates that Polish public sector share, in European projects co-financed from EU structural funds and the Cohesion Fund, will amount to 11,86 billion euro. Half of this sum will be ensured by the state budget, and half by local government sector. Thus, Polish Lg will have to secure minimum a sum of 3 billion PLN yearly (on average) – which equals the sum which Polish Lg secured as own share in 2006, the maximum sum of the 2004-2006 period. Therefore, various forms of debt issued by Lg will help acquire EU funds and implement infrastructural and other local projects both at local and regional levels. It is anticipated that the amount of debt will grow, together with the EU funds absorbed by JST, in the coming years of the 2008-2013 period.

One should emphasize that in the majority of Polish Lg the indebtedness ratio, a ratio of total debt outstanding to total annual revenue, remains at a low or very low level. The value of this ratio, which by the *Polish law on public finance* should not exceed 60%, over the period 2004-2006 assumed, on average, values in the vicinity of 21%, and in 2007 will grow to 24%, but only in case of full implementation of all European projects (100% financing plan implementation). The value of the indebtedness ratio for all new EU member states (nms) is above 35%. Thus, the Polish Lg sector total debt outstanding equals only 66% of the nms local government indebtedness. Among countries of the „old European Union", only in Denmark the indebtedness ratio of local government sector is lower than in Poland.

Local governments in Poland over the period 2004-2006 and in 2007 had excess resources for financing investment projects. In 2008 budgets the Lg reserved large amount of funds to finance investment. These funds include anticipated debt. There is a high probability that some Lg anticipated very high debt, much higher than in previous years to finance investment projects, because they have planned many projects to be co-financed from EU, and will soon need own resources to apply for the EU funds.

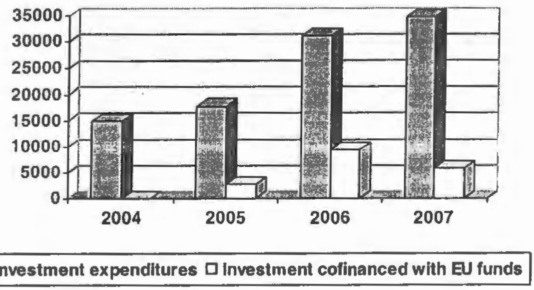
The necessity to ensure external resource, including debt, for financing European projects creates new challenges for Lg, regarding efficiency of debt management and justifies the need to carry out various analyses with regard to enhancing this efficiency.

Figure 5. Debt to revenue ratio in select UE countries, in 2006



In 2006 the share of investment, which were co-financed from European funds, in total Lg investment equals approximately 30% (Figure 6), and in 2004 the value of this share was at a very low level of 1%. The average level of co-financing from European funds, for all projects, and all Lg in 2006, equals 64%, while the remaining 36% of funds come from Lg budget resources, including debt.

Figure 6. Local government investment expenditures: total and those, co-financed with the EU funds



At individual local government, the level of investment expenditure, with co-financing from EU, as a share of total expenditure varies from very low, to very high levels, exceeding 70 %.

The increasing debt used for financing investment will accompany the development of local infrastructure and utilization of the E.U. funds over 2008 – 2013. Therefore, it is very important that the debt resources are used efficiently. An analysis of efficiency in financing investment is presented in chapter 4., and an extensive study of debt efficiency is presented in Bitner, Cichocki, 2008.[4]

3. THE MODEL FOR EFFICIENT DEBT MANAGEMENT

The objective of the paper is to assess a level of efficiency of debt management by local governments and find out whether Polish Lg have developed structures and procedures that facilitate debt management efficiency as defined by the model. The model bases on literature,

[4] Cichocki, Krzysztof S., M. Bitner. „Efficiency of Debt Management in Local Government" (Polish), Ernst&Young Monographic Report, *Better Government Program*, Warszawa, 2008.

international experience and practice in the area of debt management, and on over 12 year personal experience of authors - in cooperation with local government. One should emphasize that, while there exists a wide spectrum of literature concerned with public debt of state treasury (there are published recommendations of the International Monetary Fund and the World Bank in this regard), the literature regarding local government (municipal) debt is scarce, and poorly documented.

In the paper we define 12 standards for measuring debt management efficiency, which are basis of the model, and analyze the level of satisfaction of these standards by a representative group of local government in Poland. The presented standards base on good practices regarding debt management in countries of EU, and in the USA - the most developed municipal capital market.

The standards of the model which measure debt management efficiency are categorized in three areas:

1. long – term financial and investment planning, including debt
2. organizational and institutional procedures of debt management
3. technical tools and methods of debt management enhancement.

The model of debt efficiency, has been verified on real life data of a representative group of Polish Lg. For the purpose of analysis we selected local governments, which simultaneously financed infrastructure investment projects from European money and from debt - in the form of either municipal bond, or credit, exceeding 2 million PLN. We have examined yearly financial reports of the 2004 - 2006 period of these Lg, and data included in specially designed questionnaires from 92 local governments in Poland. The questionnaires were sent out to over 170 Lg, and 60% of the Lg responded to the questionnaires. Financial reports were mostly taken from the Municipal Data Base in the Ministry of Finance (BESTIA), which includes quarterly financial reports of all Lg in Poland.
Five types of local government were analysed: large cities (lc), small cities (sc), rural communities.(rc), districts (d) and regions (r).

In the model we develop a system of assigning a given number of points to each of the standards. The assessment of a Lg is the result of summation of points attributed to each standard, which usually has a three level structure (see chapters 4.1-4.3, and figures 7-9).
More thorough analysis, of assessing debt efficiency is included in Bitner, Cichocki (2008). The model utilizes some ideas of efficiency indicators developed in Cichocki, 2002; Cichocki, Leithe, 2000; and Cichocki, Bitner, Szpak, 2001[5].

Based on the model statistical analysis we formulate observations, which identify the existing situation in Poland regarding implementation of the presented standards and an institutional system supporting development of the municipal capital market. Finally, recommendations regarding debt management are formulated, for all three areas, which can enhance the observed situation, facilitate improvement of debt and financial management, and which could be implemented in Poland without major costs and time delay. Recommendations are addressed separately to the central government and to local governments.

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[5] Cichocki, Krzysztof S. "Can the Polish Municipalities Issue Debt? (Polish), Our Capital Market, monthly, No 12.2002., pp. 92-95, Penetrator, Kraków;
Cichocki, Krzysztof S., J Leithe, "Financing Infrastructure with a Help of Debt", (Polish), Local Government Review, monthly, pp. `6-20, No 6, and pp 13-18, No 7, Warszawa, 2000; also in USAID-LGPP report, 1999
Cichocki, Krzysztof S., M. Bitner, M. Szpak, "*Multi–Year Financial Planning*", (Polish), Municipium, Warszawa, 2001, chapter II, pp. 23-92;

In the recommendations we discuss select changes in law, development of some institutions and procedures associated with the municipal capital market in Poland, and the role the central government could play in animating municipal capital market development.

4. STANDARDS OF EFFICIENT DEBT MANAGEMENT

4.1. Standards Regarding Long – Term Financial Planning

The development of a Long-term Financial Plan (LtFP), with operating elements of long-term debt management, and a long-term Capital Investment Plan (CIP), coordinated with the LtFP is the basis of an efficient financial management. The LtFP increases a probability of acquiring external resources, including EU funds and debt, and of effective management of these resources.

There are two major factors, which determine the necessity and importance of design and operation of the LtFP. First, any local government has to determine, over several year period, amount of funds which are required for financing current and delegated tasks (operating expenditures). Second, Lg has to determine, over at least 3-4 year period, investment expenditure – an amount of funds required for financing investment, which should be selected at a level ensuring budget liquidity each year and over a long-time period.

As a result of decisions regarding investment expenditures, operating expenditures and debt proceeds, we obtain an amount of funds which physically remain in the municipality's budget at the end of the fiscal year (Cichocki, 2003[6]; Bitner, Cichocki, Szpak, 2001). The condition of a Lg budget liquidity over a long-time period, is closely related to ensuring a safe debt in the Lg, which in turn depends on the level of operating surplus – the available resources in Lg budget. Thus, on the one hand the debt should be coordinated with the operating surplus and ensure budget liquidity, on the other hand it should meet the investment needs.
The amount of funds, which remain in the municipality's budget at the end of the fiscal year is called surplus on the current account (see also *law of public finance,* 2005).

Major elements of the LtFP include:

a. long-term (7-10 years) projection of budget revenue, including Lg own revenue and external revenue
b. projection of repayment of debt (loan and bond) principal and interest of the existing debt
c. projection of operating expenditure, which should ensure implementation of all statutory and delegated tasks
d. projection of investment expenditure
e. projection of operating surplus - revenues in excess of operating expenditures
f. long-term (7-10 years) projection of revenue from debt proceeds; debt level must be safe – guarantee liquidity of the budget;
g. projection of *net* operating surplus, operating surplus less costs of spending for service of the existing and planned debt;
h. projection of a surplus on the Lg current budget account; it equals *net* operating surplus less investment expenditures, plus newly borrowed funds, plus budget surplus from previous year.

[6] Cichocki K. S., „Creditworthiness assessment of local government", (Polish), pp. 64 –68, in: Our Capital Market, monthly, No 7 (151), July 2003, Kraków, Penetrator

Cities and other local governments do not know the real limits to their borrowing. Therefore, it is of great importance to prepare a long term (about ten years) finance and debt program, which ensures budget liquidity and efficient debt management.

The functions of the LtFP include:

- to relate, and make consistent yearly budgets and long – term financial plans
- to relate budget prognosis (first of all revenue and investment expenditure projections) with strategic objectives of the Lg (as formulated in the Lg Strategy) and with its long – term CIP
- assess creditworthiness of the Lg – ability to borrow, and identify areas of financial management, specially debt management, that need improvement.

In the area of long – term financial and investment planning we have formulated the following four standards (for each standard we define usually three criteria to quantitatively measure implementation of the standard):

Standard 1. Lg should develop a long-term Financial Plans, and a long-term Capital Investment Plans, for a period of minimum 7 years.

Ad 1. Existence of the operative long – term financial plan (program) criteria:

a) LtFP exists, and includes a period of >= 7 years;
b) LtFP exists, and includes a period of > 3 years, but <7 years;
c) LtFP exists, and includes a period of <= 3 years;
d) LtFP does not exist.

Standard 2. Lg should have the long-term Financial Plan and CIP approved by the Lg Council

Ad 2. Legal form of the long – term financial plan criteria:

a) LtFP and CIP have been approved by city (Lg) council;
b) LtFP and CIP have been approved by the commission of the council, or by any other official document of the city;
c) both, the LtFP and CIP are operational without approval of the Lg council, and without any official city (Lg) document.

Standard 3. Lg should develop a long-term Financial Plan, and a long-term Capital Investment Plan in several scenarios, specifically should determine the lower and upper limits for investment expenditure.

Ad. 3. Scenarios of the long – term financial plan criteria:

a) LtFP and CIP have been designed in three, or a larger number of scenarios;
b) LtFP and CIP have been designed in two scenarios;
c) LtFP and CIP have been designed in one scenario.

Standard 4. Lg should develop debt proceeds projection, for a period of minimum 7 years, including the existing debt and future debt.

Ad.4. Existence, period and form of the debt proceeds projection criteria:

d) the debt prognosis includes proceeds of the existing debt and projected debt, over a period of >= 7 years;
e) the debt prognosis includes proceeds of the existing debt and projected debt for the period of < 7 years;
f) the debt prognosis includes only the existing debt proceeds.

4.1.1. Results

Figure 7. Summary results for the area Ni I: Long – Term Financial Planning

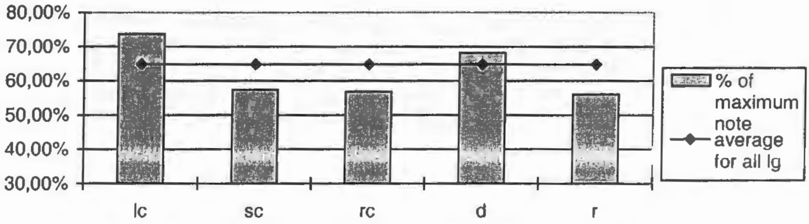
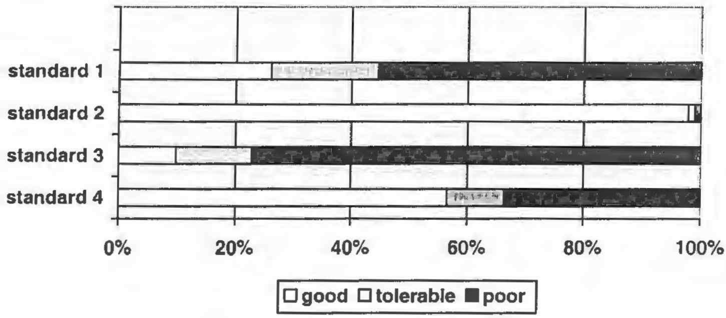


Figure 8. Results for individual standards



The best results in the analysis were obtained for standards in the area (category) of *long–term financial planning*. Average score for all Lg was 63,8% of the maximum score to be achieved in this category. The best performers were large cities (average – 73%). Regions, rural Lg, and small cities scored below average, about 53% of the maximum score.

We can see in Figure 8, that legal regulations play an important role in observing standards defined in the paper. The best performers of the first category are legal form of the LtFP and of CIP (Standard 2.), and the existence and form of debt proceeds projection (Standard 4. - required by law). However, we do not know exactly whether the future debt, defined by Lg, concerns only the consecutive budget year (one year), or several future years. Also, by law, the Lg in Poland are obliged to plan investment expenditure for three future years. The criterion c) regards situation, when the LtFP and CIP exist, and includes a period of <= 3 years, and thus, includes investment expenditure for three future years. However, a majority of formulated standards is not regulated by law. There were only 4% of Lg, which did not have any LtFP at all.

Some municipalities do not make long-term financial plans, neither analyze long-term debt. They make arbitrary decisions regarding the level of debt. These Lg very often experience the debt - investment trap. They borrow too much and over-invest. Two high a debt incurs unnecessary costs of debt service. As a result, they have to drastically reduce investment expenditures, often for several years, reduce operating expenditures or even stop financing an uncompleted investment project.

Each municipality has to determine a level of safe debt individually (its nominal value and values of debt indicators and debt service), based on the value of operating surplus to revenue indicator, and on the revenue structure, revenue projection and past debt commitments. Debt service in relation to total revenues is a measure of the burden of debt that has been assumed by a Lg. Debt service is a fixed obligation that commits a Lg resources for many years into the future.

Debt is issued when other sources of revenue (additional user's charges, grants, revenue from property) can not be used. However, in the situation when large funds are required to finance local investment, and when debt can help acquire additional funds from EU, debt proceeds should be considered a standard source of financing investment. The periods in which cash flows resulting from borrowings appear should match time schedule of investment disbursement.

Debt resources add funds available for financing investment and can contribute to economic development of a municipality. Using debt for financing an investment project which will benefit future generations is seen appropriate by economists (Rosen, 1995, Stieglitz, 1998[7]) and by politicians.

4.2. Standards Regarding Organizational and Institutional Procedures of Debt Management

Identification of standards concerning organization of debt management process is based on the idea, that borrowing should be viewed by municipalities as a regular source of investment financing. Local governments, likewise the State Treasury, should continuously use the opportunities of financing offered by capital markets. Provision of the investor (Lg) with the best possible opportunities justifies changes in organizational structure of Lg (introduction of debt management unit) as well as in budget planning (development of debt policy). It also underlines the necessity of investment rating and maintaining investor relationship programs that contribute to general perception of municipality as a reliable, accountable and rational partner of potential lenders.

We have proposed five standards in the area of organizational process of debt management.

Standard 5.

Municipality should be continuously present on capital markets

Continuous presence on capital markets reflects the standpoint of an experienced manager, who is able to take advantage of all potential market sources of financing investment in a way that is safe to municipal budget. Successive debt issues are particularly important in the case of municipal bonds issue. They enable potential investors (a municipality) to "grow accustomed" to a bank-lender, and to financing conditions proposed by the lender (Kurish, Tigue, 1993; Joseph, 1994; "Method of Sale", GFOA 1994)[8]. On the contrary – single (one time) debt issue creates a risk of negative arbitrage and does not contribute to long term cooperation between municipality and financial institutions interested in investing in municipal liabilities.

Standard 6.

Municipality should set up debt policy (long-term debt management strategy) –in a form of a document.

The necessity of developing debt policy of a central budget and making public opinion acquainted with this policy is generally acknowledged in OECD countries (IMF, WB Guidelines;

[7] Rosen, H. S. "Public Finance", 4th edition, IRWIN, 1995; Stieglitz, J.E. "Economics of Public Sector", Norton, 1998.

[8] Kurish J.B., Tigue P., „An Elected Official's Guide to Debt Issuance", Chicago, GFOA 1993; Joseph J. C., „Debt Issuance and Management. A Guide for Smaller Governments", 1994.

Sundararajan, Lay, 2002). Since 1999 it is also stipulated by the *Polish law on public finance*. In countries where municipal capital markets are developed, the need of similar document at the local level is widely accepted and not controversial (Kurish, Tigue, 1993; "Debt Policy Handbook", 1994; "Development of a Debt Policy and Analyzing Debt Capacity and Establishing Debt Limits", GFOA 1995; "Advance Refunding", GFOA 1995; Leonard, 1996[9]; Miranda, Picur, Straley, 1997; Arens, 1998; Tigue, 1998; "Debt Management Policy", GFOA 2003). Debt policy guarantees consistency of debt management objectives and removes potential conflicts among members of the board and of the council as well as debt management professionals.

Standard 7.

Municipality should, within its structure, establish a debt management unit.

Both, continuous presence on capital markets and strategic approach to debt structuring justify the establishment of a debt management unit within the organizational structure of local government. Unit size and scope of competence should be adjusted to the average debt volume and structure, and debt policy of a municipality. In smaller municipalities it will usually suffice to create a separate work place for debt management.

Standard 8.
Muncipality creditworthiness should be assessed by a professional rating agency.

The assessment of municipal creditworthiness by a rating agency generates several advantages to Lg (SEC report, 2003). First, it is a way to obtain independent, external and professional review of all activities of a local government, in particular its financial and asset management policy. Second, rating contributes to reduction of borrowing cost and, in some cases, it is a general precondition of accessing capital market (Büschgen, Everling, 1996; Dziawgo, 1997, Cichocki, Kleimo, Lee 2001)[10]. Third, rating has an important information-promotional function, and it enables comparisons among various municipalities regarding their creditworthiness.
Rating, partially removes asymmetry of information between prospective lender and prospective borrower and may be an important factor of success, particularly of pioneer debt issues (Access to International Capital Markets, 2003).

Standard 9.
Municipality should prepare and maintain an investor relations program.

Providing potential lenders, investors, and other market agents with reliable information on financial matters should be constant concern of every municipality accessing capital markets ("Disclosure Handbook", 1992). American standards in this respect ("Using a Web-Site for Disclosure" GFOA, 2002; "Maintaining an Investor Relations Program", GFOA, 2003) postulate among others: (1) identification of officials in charge of maintaining current relations with investors, (2) creation of an "information council" (consisting for example of city treasurer, persons dealing with debt management, and a city council representative), (3) maintaining data base on potential lenders, (4) deciding on the methods of information dissemination.

4.2.1. Results

[9] Leonard P. A., „Debt management", w: Aronson J. R., Schwartz E. (eds.), „Management Policies in Local Government Finance", Washington, ICMA 1996

[10] Cichocki K.S. , J Kleimo, and J. Ley, *Budgeting and Accounting Practices for Subsovereign Debt Issuers*, pp. 341 –357, in: International Comparative Issues in Government Accounting, A. D. Bac (Ed.), Kluwer Academic Publishers, Boston, 2001.

In the area of *organizational and institutional procedures* of debt management an average score equalled about 42% of the maximum score. Again, the best performers were lc, the poorest - rural Lg. However, the sc and districts also scored poorly, about 30% of the maximum. Generally, the area requires many various improvements.

Figure 9. Summary results for the category No II: Organizational and Institutional Procedures of Debt Management

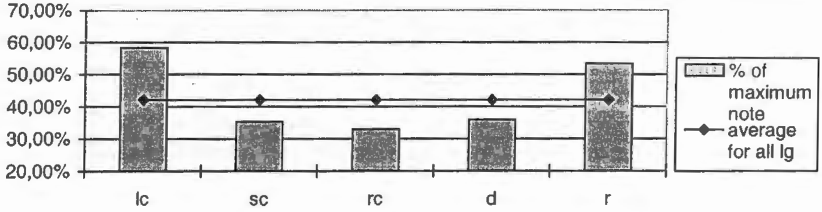
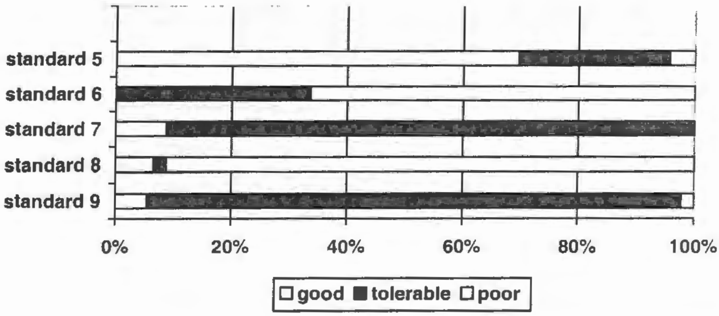


Figure 10. Results for individual standards



Good results for standard no 5 (continuous presence on capital markets) result from selection of criteria used in the research (we analysed only those municipalities, which incurred some debt). Debt policy were not enacted by the council - debt issues were prepared in an "unformal" way- only by 34% of local governments. Even worse are the results for standard no 7 (existence of a debt management unit): the standard is observed in 9% of Lg. Only 5 poviat-cities and 2 rural communities have such a unit within their organizational structure. Local governments with investment rating are also the exception: poviat-cities are undisputable leaders in this respect, although only 39% of Lg have any rating at all.

Finally, only 5% of investigated municipalities maintain investor relations programs. However, on the other hand most municipalities we explored presented basic financial data on their web sites. Legal regulation indicating the scope of information to be published in the Public Information Bulletin (BIP) plays again an important and positive role.

4.3. Standards Regarding Technical Tools and Methods of Debt Management

The general objective of municipal debt management is reduction of borrowing cost under the provision of appropriate level and timely financing of an investment. Debt management techniques contribute to attaining this objective, together with the standards regarding long term financial planning and organization of management process. These techniques include among others: appropriate debt structuring, selection of the most suitable borrowing method and market

sector, various methods of handling financial risk connected with incurring debt. In most cases it is very difficult, or impossible, to formulate any general rules for selection of given techniques and tools. The selection of appropriate tools depends on many factors, which are associated with specific conditions of financial management in a local government. However, past experience of Polish municipalities and our observations give reason to formulate at least three criteria, which should be observed by Lg:
(1) adoption of the borrowing cost as a single criterion for bid selection (standard 10, formulated separately for municipal bonds and for municipal bank loans);
(2) extending potential market for debt placement (standard 11, likewise standard 10 formulated as two sub-standards), and
(3) management of interest rate risk, and/or currency risk (depending on needs).

Standard 10a (regarding municipal bonds)
An underwriter (an investment firm) should provide a municipality with stand-by guarantee of bond issuance under the condition that the participation of an authorized municipal officer in debt structuring and subscription process is assured. Otherwise, the underwriter should buy all the issue.

Standard 10b (regarding bank loans)
Municipality should apply true (effective) borrowing cost as a single criterion for bid selection

Both standards (or more correctly one two-fold standard (one for bonds, one for loans) aim at lowering borrowing cost, and they base on the assumption that selection of financial institution by a municipality should be the result of tendering procedure (although it is not a legal obligation with respect to bond issues). Choosing true interest cost as a single criterion of bid evaluation results in price competition among credit institutions and, in effect, contributes to the best possible results of the tendering process.

Standard 11a (regarding municipal bonds)
Municipality should access public bond markets.

Standard 11b (regarding bank loans)
Municipality should diversify interest rate risk through the issue of loans denominated in foreign currency.

The above mentioned standard (again formulated separately for municipal bonds and for municipal bank loans) has not any absolute nature. Not going public is an appropriate procedure for smaller issues, neither bank loans denominated in foreign currency should necessarily form a part of financial liabilities of each municipality. However, one should identify and emphasize the role of innovation in municipal debt management. It is particularly important for the Polish municipal capital market, which generally suffers from the lack of public bond issues and where incurring debt in foreign currency by the public sector entities (with an exception of State Treasury) is limited by law.

Standard 12
Municipality should reduce its exposure to financial risk through the use of financial derivatives.

In OECD countries, with well developed municipal capital markets, using derivatives by local governments to limit risk exposure is a standard procedure. The most popular instrument of reducing interest rate risk is the interest rate swap. Public finance theory (McManus, Pfeil, Zibit, 2003) highlight the positive role of using derivatives under the condition that it is based on coherent policy, identified in debt management strategy adopted by a municipality. Such a policy should determine, among others: instruments that can be used, decision-making process with respect to buying (and/or selling) derivatives, and sources of funds to finance future payments connected with premature closing of swap transactions.

4.3.1. Results

In the area of *technical tools and methods*, the score is low for all Lg, about 30% of the maximum score. The best performers in this category are regions, the poorest - districts (below 25% of the maximum score).

Figure 11. Summary results for the category No III: Technical Tools and Methods of Debt Management

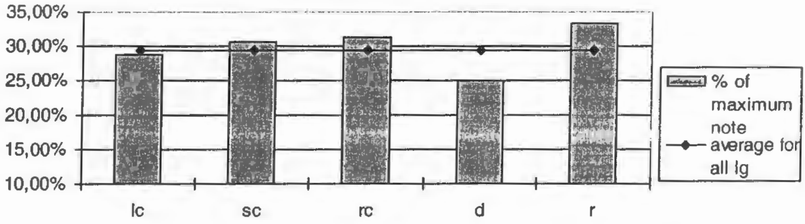
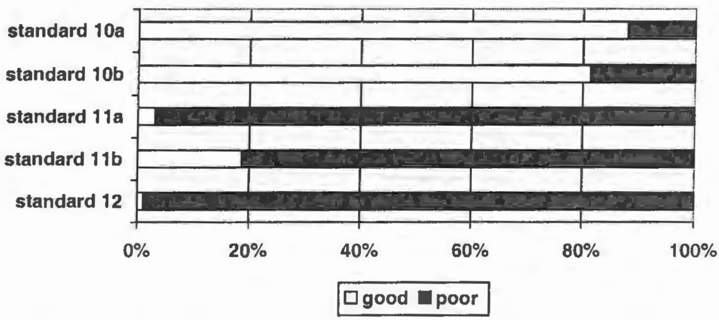


Figure 12. Results for individual standards



Some standards in the area of *technical tools* are not observed at all. For example, in order to reduce risk resulting from debt issue, derivatives were implemented only by one lc. To some extent it is caused by a failure of law in this respect (not clear and not transparent). The *law on public finance* does not clearly authorise local governments to use derivatives, and this is usually interpreted as a general prohibition.

The results for standard no 10 are surprising. Poviat-cities (lc), leaders in the other areas, have received the lowest average note (except for poviat - d). The reason is, that the large cities often make use of loans denominated in euro, offered by the European Investment Bank (EIB). Such loans are exempted from public procurement regulation. Thus, there is no room for any competition for EIB funds.

5. RECOMMENDATIONS

The major observation of the analysis is low degree of satisfaction of the presented standards among Polish local governments. There is a lot of room for a variety of improvement regarding debt management by Lg in Poland. The improvement in management of debt and other external resources used for financing investment can be facilitated by a coordinated actions of both, the central government (improvement of law) and local governments. Some institutions and procedures associated with the municipal capital market in Poland must be developed, and good practices should be popularized and facilitated. The central government should play a crucial role in animating municipal capital market development.

Below, we formulate the most important recommendations, addressed separately to the central government and to local governments. Implementation of these recommendations will help increase access of Lg to municipal capital market, improve debt management efficiency in all local governments in Poland and facilitate the Lg to acquire the EU funds for financing investment. The recommendations and introduced standards can be implemented in Poland in a relatively short period and without major costs.

Recommendations, addressed to the central government include:

1. Development of a Long-term Financial Plan (LtFP), with operating elements of long-term debt management, and a long-term Capital Investment Plan (CIP), coordinated with the LtFP. Principles and standards for development of LtFP and CIP should be established.

In both LtFP and CIP plans the operating surplus, the value of the total amount of the planned and the existing debt outstanding (and anticipated debt service), as well as the surplus on the current budget account, for each year, have to be measured and projected.
The developed model will help establish standards for effective long-term financial and investment planning.

2. A gradual decrease of state subsidies and of other forms of soft, concessionary financing of projects, co-financed with EU funds, must take place. The concessionary loans and subsidies hamper development of municipal capital markets, and, in the long run, will decrease absorption of the EU funds by Lg.
3. Popularization of debt management standards and facilitating implementation of these standards, either through introduction of appropriate law, or by introduction of simplified procedures and relaxation of some legal constraints for the best Lg, which conform to the model standards. For example, the legal constraints regarding debt to revenue ratio could be relaxed, and implemented only in the local governments, which do not have investment rating, neither debt management strategy.

Recommendations, addressed to local governments include:

1. Development of a long-term debt management strategy and its coordination with the long-term plans (LtFP and CIP), and Lg budget liquidity. In the debt strategy, issuance of debt (credit or bond) must be carefully analyzed, and the debt must be structured to coordinate a face value of new debt (credit, and bonds issued), the time and value of capital repayment and interest paid, with values of total debt service and the total indebtedness, as well as with future revenue and expenditure (operational and investment) of the Lg budget. The issued debt should base on effective true real costs.
2. Setting up, within a municipality's structure, a debt management unit, which should develop and periodically verify a long-term debt management strategy; in small municipalities it will suffice to create a separate work place for debt management.
3. Establishing a data base, with a collection of good practices regarding debt issuance and management, as well as regarding current issues of the municipal capital market.

4. Facilitating negotiations with the banking sector and with potential underwriters. Investment rating should become more popular among local governments, and should make easier access to capital markets.

Local governments must be aware of the importance of creditworthiness assessment and of long – term financial and investment planning - for efficient timing of debt issue and for appropriate selection of a form of debt (bonds or credit).

One should emphasize, that presently, the banking sector in Poland is over-liquid, with a single bank (PKO BP) assuming the role of a leader, and a monopolist on the market. Other banks follow the practices of the PKO bank. However, this situation may soon change, and in a couple of years, the banking sector will become less liquid. The cost of issuing debt will become much higher to Lg, and then, efficiency of debt management and of other external resources will become of vital importance, specially in the light of increasing demand for investment financing.

Appendix: Financial flows in local government budget

In Poland, the sources of funds that flow into a municipality's (local government) budgets are defined at various levels of detail by: the Constitution of the Republic of Poland, the Law on Public Finance, the Law on the Revenue of Local Governments, and the Local Self-Government Act. Expenditures borne by units of local government are defined by the Local Self-Government Act according to the specificity and the scope of their responsibilities (tasks).
In order to obtain an actual and undistorted picture of the financial status and quality of financial management in the JST, specifically management of external resources, one should base the analysis not exclusively on the revenue and expenditure, as it was defined in the law until second half of 2005. The analysis should include financial flows defined in the budget as non-revenues and non-expenditures, as well as the actual cash flows between the JST and other entities.

For the purpose of analysis of the efficiency model we introduce notions of *gross* and *net* operating surplus, and net operating surplus on the current account. Neither of these notions functioned in Polish regulations, nor in local government financial reporting until the 2005 *law on public finance,* which introduced the net operating surplus on the current account value.

The *operating surplus* - revenues in excess of operating expenditures - can be used to fund capital expenditures and is not needed to fund operating expenditures. Thus, the available resources to fund capital public infrastructure projects and to service debt consist of the operating surplus (surplus current revenues and special grants), and the proceeds from borrowing (loans and bonds).

The net operating surplus is defined as operating surplus less costs of spending for service of the existing (and planned) debt - interest payments on short - and long-term debt, and JST guarantees of budgetary enterprise debt. The larger is the level of these resources the more available funds for financing investment. The available resources therefore represent a pool of funds JST has available to use for capital expenditures, or other purposes. JST should strive to allocate a consistent amount of these funds from year to year to meet its capital needs.

Revenue from loan proceeds, from sales of capital shares owned by JST and from previous time budget surplus are considered non-revenue, and serve to finance budget deficit. Likewise, the expenditure does not include amounts allocated for the repayment of loan principal - they also make up proceeds. Many legal und financial reporting inconsistencies regarding UE funds as a source of JST budget revenues were, in majority, clarified in the 2005 *law on public finances*, which included the UE funds into budget revenue.

Surplus revenues must be left for financing investment, and operating surplus cannot in all be spent for debt service. When the combined total of projected debt service payments are very close to the value of operating surplus, then no new investment can be financed, usually, for a period longer than one year.

Most local governments must assume continuity of investment process and ensures that some, and in many cases substantial investment are financed every period. Sometimes, municipalities are very ambitious - they start investment they can not afford, and which are not safe for their future budgets. They plan financing large (often needed) investment from debt, which later they can not repay (cost of debt service turns out to be higher than operating surplus). Then, a JST experiences "investment – indebtedness trap". As a result of too high investment and too high debt, the JST has to drastically decrease investment expenditures (and number of investment projects), often for several years, or even stop financing an uncompleted investment project.

In many countries in western Europe and in the USA it is customary to issue debt, which is below 60 percent of total taxable municipality's revenue. Polish national *law on public finance* requires that at the end of each year t, in any single JST debt is limited, specifically:
(1). an amount of total debt outstanding (indebtedness) does not exceed 60% of total annual revenues
(2). the total debt service as a percentage of total annual revenues does not exceed 15%.