

Zoltán Zéman

The Risk-mitigating Role of Financial Controlling at Local Government Entities

Modelling Profitability and Liquidity Aspects

SUMMARY: The modernisation of international and Hungarian financial and economic controlling tools and of the entities using them requires enhanced management tasks to be performed. The high quality performance of management tasks contributes to the increased development of public finances audit. This actually includes a repositioning of the financial management and functions of enterprises run by local governments. Control systems (both external and internal) play an important role in the implementation of the value-creating phases of development. However, while efficiency, effectiveness and economy are given prominence, the issues above also play an ever more important role in institutional management. This paper describes the roles and supporting function of controlling methodology in respect of the financial management of local governments. Empirical modelling is used to demonstrate the role of financial controlling and its function in the financial management of local governments, including the relationship of liquidity, profitability and solvency. The paper calls special attention to the fact how much performance and costs matter in setting up local government controlling, and it also points out the positive effects of a clear strategic focus on financial management, like common asset management (with a holding nature) or the use of strategic indicators (e.g. creating a BSC at local governments).

KEYWORDS: financial controlling, local government controlling, liquidity, profitability, controlling system

JEL CODES: H11, H40, H70, M41

The financial management of local governments is a not-for-profit type of cost management; if, however, you wanted to classify these entities according to the types of financial management described in literature, you will find that due to the nature of their activities local governments cannot be assigned to any of the basic types. A state-of-the-art, efficient asset management presupposes the existence of a specialised controlling unit which, in addition

to general controlling functions, also covers other specific fields. Financial literacy is defined by the State Audit Office of Hungary as not only an adequate level of financial knowledge and the ability to manage funds, but also and mainly as a realistic self-image and financial decisions based on the information available to the entity. (Németh et al., 2014) The authors emphasise the role of financial literacy in modern financial management.

First of all, here is an overview of the generally known controlling orientations and

E-mail address: penzogy.intezet@gtk.szie.hu

functions. Among controlling orientations, future orientation is of key importance, since for example when you invest in or operate real estates, you need to think ahead for some longer periods. Another important controlling orientation is decision orientation and the proactive decision support. The third controlling orientation is no other than cost efficiency implemented through cost awareness. In the context of financial controlling and the operation of the enterprises run by the local governments, profitability and liquidity can be key financial indicators. The reason for this is the different extent to which these companies are able to independently finance the performance of their basic public functions. In auditing companies owned by local governments, the State Audit Office of Hungary encountered the following major problems (with no claim of the list being exhaustive, of course) (Domokos L. et al. 2016):

- lack of a clear definition of performance,
- content related problems of the planning process,
- a non-profit-oriented financial management, hence the exhaustion of own assets,
- lack of regulations,
- deficiencies of cost accounting,
- lack of contractual discipline.

In my opinion the deficiencies listed above also underline the fact that in the financial management of local governments, including in particular that of local government-owned companies, there is an great need for a well-designed controlling system in order to mitigate the risks of emerging problems. However, corporate risk management tools can provide multiple help in this respect, including for example the risk based selection of audit topics and locations, and the incorporation of feedback on audits based on risk analyses into the controlling system. A controlling approach is adopted where the fulfilment or performance of the main criteria, like cost orientation, bot-

tleneck orientation (performance factors), decision orientation, future orientation, target orientation, contributes to achieving financial management, including asset management related activities, with less inherent risks. As a matter of fact, the regulatory power of controlling and the financing background of local government management might offer an opportunity for long-term survival, as well as for the development of a financial management input-output circulation.

THE CONTROLLING ASPECTS OF ASSET MANAGEMENT

A non-negligible focus of the local government asset management is the identification and resolution of bottlenecks, which at the same time is an efficiency-increasing tool. As regards the topic at hand, the availability of funds is also a frequent bottleneck, which requires to be specifically managed. The following basic controlling functions obviously appear in the case of facility and asset management controlling as well:

- planning,
- gap analysis,
- information supply.

Planning starts with the identification of the needs serving the goals of the entity, followed by the requirements arising from the aforesaid and of the service functions satisfying these being established. In the course of planning, the strategic aspect according to which facility and asset management and strategy are activities closely related to each other, should also be taken into consideration. Another relevant area of financial management is cost management, including the planning and analysis of costs. In this area, costs can be more closely associated with financial management processes and activities. Financial management tasks (e.g. facility management, maintenance, func-

tions related to hygiene and security, public utility services, maintenance of urban green areas) should be identified and broken up into processes and activities. This is particularly important if the company dealing with asset management has several business lines. Costs can be allocated and associated to items once the above have been identified. Controlling calculation procedures (e.g. flexible plan cost calculation, ABC cost calculation, standard calculation) can be widely used for the planning, verification and forecasting of costs, and gap analysis. The key controlling function is information supply through IT support, serving primarily as a basis for management decisions. One solution for an efficient IT support is where the database created is managed with professionally formulated algorithms using targeted software.

In the wide sense of the term, the financial management of a local government and the controlling thereof includes the financial funding and cost-efficient operation of the different asset groups, the related planning and analysis, and support provided to decisions related to the aforesaid. One might be tempted to say that it is best to spend the revenues of off-budget enterprises fulfilling public tasks cost-efficiently, but unfortunately the picture is more complex than this. If the funds, i.e. revenues available for financial management are considered, it is clear that cost-based orientation should be followed. The assessment of the degree of freedom granted in the use of the available funds shows that the application of funds from the central budget that constitute the largest part of revenues, is pre-determined to a considerable extent. In the case of such revenues, local governments are to ensure the efficient spending only of state subsidies and contributions received for task financing, and the funds granted to the local government through tenders. As a result, it is fundamental that the strategic orientation is included in

the scope of the financial management of local governments. In fact, the aforementioned financial management circulation which may ensure long-term financial stability for local governments, may be derived from strategic and operative feedback. Consequently, for example economic programs and development plans should define long-term and short-term objectives at local level, of course in line with macroeconomic plans.

KEY FEATURES FOR THE DEFINING CONTROLLING SYSTEMS FOR LOCAL GOVERNMENTS

The fundamental purpose of the controlling function is to sufficiently harmonise the major functional subsystems, including institutions and their owners. Its major elements are as follows:

- setting up responsibility and accounting functions,
- planning system,
- setting up internal accounting,
- reporting system.

In view of ensuring efficient operation, responsibilities should be defined, and allocated to persons and heads of organisational units. As a precondition to accountability, tasks and competences relevant to the responsibility levels set should be defined. This ensures efficient cost management, cost control and the standardisation of internal interest systems, and at the same time has an impact on the overall transparency of costs and results. However, organisational units performing central tasks should be cost centres (financial, controlling, human resources management, accounting, marketing) to ensure adherence to the budget determined in the course of planning. In the case of local government-owned companies performing public services, not all aspects of either the sales revenue side (the local govern-

ment acts as a price authority with the right to set prices), or the expenditures side (due to the holding structure, the companies fail to have full disposal over their resources) can be influenced by member companies. The above proves that the responsibilities and competences of the member companies are not identical to the responsibilities of traditional profit centres, as their financial management includes numerous factors that they are unable to influence. As far as the planning function is concerned, the degree of coordination and uniformity of the planning process is obviously a key to the controlling system. The planning system is fundamental, and it is important that the total planning process runs from 1 July until 31 December which can ensure that the entire group of local government-owned companies can start the following year with a comprehensive and approved business and operative plan. The planning system consists of two elements: strategic and business (annual) planning. Strategic planning defines long-term market, profitability and organisational goals and the resources necessary for the implementation of these, by setting objectives. The strategic expectations are identical with the advantages of operating the assets of the companies run by the local government within the framework of a holding:

- the financial needs for group company self-financing can be better monitored,
- synergies, economies of scale, organisation development,
- image improvement, uniform appearance, communication.

The strategic planning phase should be closed by 31 August of the given year so that business planning could in fact take place in accordance with strategic objectives. The lack of quantified strategic indicators also prevents the measurement of and reporting on the implementation of the strategy. The information service background of the controlling system

is provided by the reporting system, where a reporting system needs to be set up to ensure adequate information for the performance of the tasks and the adoption of decisions at the different levels of management and areas of responsibility, integrated in the decision-making process of the local government. Furthermore, the system is designed in line with the planning system. The reporting system should be divided into several levels, one level being that of the member company reports. These reports should be structured identically with the plans, but due to a somewhat more detailed content they allow for the activities of the member companies to be described, and for the evaluation of their performance which serve as a basis for the board of directors of the holding to adopt decisions and take measures affecting the activities of the member companies. Another level of the reports provides information on the operation of the corporate groups as a whole, enabling the shareholder, board of directors and supervisory committee of the holding to evaluate the performance of the group as a whole.

Reporting is a continuous activity that is built up of quarterly and annual reports and monthly flash reports. Quarterly reports are to be prepared on a quarterly basis, always by the 30th day of the month following the target period. The purpose of quarterly reports is to provide an overview of a longer period of the year, and to forecast expected actual values, applying the cost benefit principle. One of the most important functions of interim reports is to indicate differences between the planned and actual values so as to ensure that management can interfere in time.

In the business sector, the shareholders' interest in profit and net cash flows is of key importance for the interests of the different stakeholders of companies; however, local governments are a totally different world. In the case of companies, salaries and other

expenses and costs are subject to strict budgetary limits, whereas although there are also limits at local governments, local governments have to perform the given specialised task or have the same performed anyway in accordance with Act CLXXXIX of 2011 on the Local Governments of Hungary. Although there are special interests running counter to the enforcement of the principle of economy, for example the employees' exaggerated salary demands, or so-called agency costs caused by management (the financial burden of superfluous management spending that serves more the interest of the management rather than that of the shareholders of the enterprise), the shareholders' interest in payback and profit prevails over such counter-interests. The enforcement of such interest has resulted in the development of a robust controlling toolkit within management science over the last few decades. Local governments have also begun to make more and more use of this toolkit. In the scope of the audits and studies of the State Audit Office, several researchers and analysts have described the weight and role of companies run by local governments within the system of public services (Domokos et al., 2016). They emphasised the social and public service benefits of the efficiency and effectiveness aspects of management, pointing out the need for a renewal of public management. They concluded that the role of today's managers goes beyond the maintenance of an operation directed at conformity with the regulations, as financial and ethical challenges are also extremely important.

Of course, it should always be kept in mind that the direct owner of public sector entities is the Hungarian State or a local government. Although the State is revenue oriented, the basis for its revenues is not the proceeds from the sale of public goods, as public goods are indivisible, therefore they cannot be sold to the citizens. At the same time, the production

of public goods has a cost, which is financed by the State from taxes levied on original incomes.

Due to such specific features, the controlling system of local governments should be perhaps the number one system of the financial management of local governments in the future, and as such, it should be connected to all other systems of the local government. This way risks related to the financial management of local governments can also be mitigated. There is hardly any process at local governments that has no financial aspect at all. In my opinion it is worth analysing the integration of the controlling system of local governments into the organisation and its relationship with the different elements of the system of local governments as regards the future. The connection of the different controlling tools supports the feedback on the performance of financial and economic objectives, thus contributing to sustainability. Consequently the purpose of the controlling system of local governments is planning and monitoring the financial management of the local government as a whole, keeping managers informed on the financial management of the entity run by them, and supplying the management with information necessary for the financial management of the local government. This is the system that will fundamentally reform the financial management of local governments, taking the requirements of good public management into consideration.

The currently known systems of local governments that support their financial management (which are in most cases only monitoring systems) also endeavour to perform this function. The greatest problem with these systems is, however, that they give information on economic events only after such events are closed, therefore the monitoring aspect of such information is stronger than its predictive, future-oriented controlling aspect. As I

see it local governments would best make use of the strategic oriented options of all the controlling dimensions. For example the development concept of individual regional areas, either through State intervention or capital injection and investments. It would be important to make sure that all this is represented at the level of operative implementation, including in particular the financial aspect. The relatively high number of amendments of the budgetary appropriations of local governments (4 or 5 on average) also proves this deficiency of the systems supporting the financial management of local governments.

Essentially a controlling system should provide information on a “daily online” basis, which also in the case of local governments means that the system raises the alarm when it is not yet too late to intervene in order to ensure compliance with the original ideas or appropriations. Budget for local governments is a plan to be implemented with the controlling system being responsible for the implementation and compliance. Therefore, with the introduction of a controlling system the organisational unit in charge of financial management at the Mayor’s office will be significantly transformed, while on the other hand all entities have to be prepared for the efficient operation and integration of the controlling system. In my opinion, the integration of the controlling system should be completed in three areas.

▶ First, in the organisation of the local government, since the transformation of the organisation is a relatively simple task.

▶ The second area is that of the organisations and institutions funded and managed by the local government, which perform different mandatory tasks that are the responsibility of local governments.

▶ The third area is that of the business companies in which local governments hold an ownership interest.

At the different entities, the effort made to implement the controlling system is inversely proportional to the relationship of the entities and the local government.

Today local governments are forced, in the strictest sense of the word, to carry out an actual financial management. This required a fundamental change of approach, followed by significant organisational changes. These organisational changes, however, did not mean that today key financial activities are not performed by the administrative offices of local governments, rather what basically changed were the financial management functions of the administrative offices, the activities performed by the entity. However, only those business organisation may become entities operating the controlling system, that perform the fundamentally changed tasks. With this, the organisation undergoes a significant change: a controlling unit has to be set up, as the tasks are rearranged, with the majority of financial and budgetary tasks assumed by the future controlling organisational unit. The setting up of a controlling system also results in a functional change, but where the entities manage substantial amounts, an independent controller function or controlling team has to be set up.

At local governments, there are teams dealing with budget and finances (labour issues), and also accounting and bookkeeping units performing registration functions within units performing economic functions. The number and nature of internal connections are determined by the controlling system and the functional management relations of the different entities within each unit.

A significant part of financial management at local governments is implemented within the framework of business companies with their sole owner or majority shareholder being the local government itself. As a consequence, the financial management of these entities

cannot be separated from the financial management of the local government. Communication with business companies through the controlling system is still a task for the future; as a matter of fact, first, companies have to implement their own controlling systems, then the relationship between the autonomous systems thus developed should be defined. Shareholder control needs to be a crucial factor in the active and efficient governance of financial management at companies. This, of course, also means that efficient, effective and economic governance requires the harmonisation of the design of internal control systems. This is what should be a primary focus in the management of local governments, as well as that of the companies established by them.

KEY FEATURES OF CONTROLLING ACTIVITIES OF CORPORATE GROUPS RUN BY LOCAL GOVERNMENTS

Management scientists have frequently discussed the issue of how national economy and corporate environment can be harmonised at the level of management, and how the improvement of economic performance can be achieved by such harmonisation. Of course, this essentially means the harmonisation of the tasks of management functions both at macro and micro level (planning, organisation, management, control).

Due to the dynamically changing and complex economic and social environment, it is important that a sufficiently flexible system is developed in the case of local governments as well. Keeping in mind the goals defined when the local government asset managers were set up, the controlling system is expected to meet the following requirements:

- it should have planned, actual and expected values, and allow comparison according to different aspects,

- it should define a clear system of responsibilities and competences,
- the frequency and accuracy of information provided by the system should be proportional to each other,
- the system should provide adequate support for financial management,
- it should include both natural and financial/accounting data,
- it should be future and decision oriented,
- it should focus primarily on bottlenecks,
- it should also support information flow between member companies.

MODELLING THE PROFITABILITY AND LIQUIDITY ASSESSMENT OF FINANCIAL CONTROLLING

In the scope of empirical research, I examined two aspects, liquidity and profitability, of the operation of companies run by local governments. I had two hypotheses.

H1: LIQUIDITY HAS A MORE IMPORTANT ROLE IN THE OPERATING FEATURES OF LOCAL GOVERNMENT OWNED COMPANIES.

I agree with the findings of research by *Hegedűs* (2016) as regards the liquidity situation of the companies run by local governments. In my opinion, the liquidity of local government owned companies is more favourable than their profitability.

H2: THERE IS A DETECTABLE RELATIONSHIP BETWEEN LIQUIDITY AND THE LOCAL TAX FORCE BASE.

My hypothesis is that the aggregate personal income tax revenue per capita measuring the local revenues and the number of taxpayers within the total population significantly affects the liquidity of companies. As the liquidity of companies primarily depends on the solvency and financial situation of the population, thus a relationship between the two factors is presumed.

Material and method

In the course of the research, I looked at the liquidity and profitability profiles of business companies owned by towns with county rank, Budapest capital and its different districts. For these towns and districts, the performance of the following specialised tasks, as defined in the currently effective Act on the Local Governments of Hungary, is a mandatory duty allocated to local governments.

The reason for including the sectors in question in the research is that they have direct contact with the people, thus the entities that actually perform public services are the enterprises active in the sector. As it can be seen in *Table 1*, the enterprises dealing with real estate property management are represented in the largest number in the sample under review, whereas the other sectors are represented in a roughly equal measure in the sample, which includes the data of a total of 95 companies.

The time horizon of the assessment is the period between 2010–2013; the reason for choosing this period is that in the 2010s the local government sector, as well as the Hungarian population, got heavily indebted (*Lentner, 2014*). The rationale for choosing year 2013 as the end point was that it was the last year before the implementation of price regulation by the Hungarian State, therefore the data still reflect the state of affairs prevailing

before the regulation called “utility cost reduction” entered into force.

In my research, I took the data of the annual reports of the 95 companies in question, and used such data to generate indicators. Data were collected from the electronic reporting portal of the Ministry of Public Administration and Justice, where in compliance with their disclosure obligation companies publish their reports.

Company performance indicators under review:

- liquidity ratio (current assets to short-term liabilities),
- acid-test ratio (current assets less inventories, divided by short-term liabilities),
- ROA (return on assets; after-tax profit divided by total assets),
- ROE (return on equity; after-tax profit divided by shareholders’ equity).

Tax force indicators under review:

- personal income tax revenue per capita (aggregate tax base, divided by the population of the town or district),
- revenues from enterprises per capita (revenues from enterprises, divided by the number of inhabitants of the town or district),

Table 1

DISTRIBUTION OF THE SAMPLE UNDER REVIEW

		Distribution	Percentage	Total percentage
Sector	District heating	16	16.8	16.8
	Waste treatment and management	25	26.3	43.2
	Real estate property management	34	35.8	78.9
	Water and sewerage system	20	21.1	100.0
Total		95	100.0	

Source: SPSS output

- ratio of taxpayers (number of taxpayers, divided by the population of the town or district).

Company performance indicators are derived from data collection, while the indicators showing the tax force of the population are from the TEIR database, and were determined at the average values of years 2010–2013 in the 23 towns with county rank and in the capital and its individual districts (Districts I, III, IV, V, VIII, X, XV, XVI, XVIII and XXI).

The reason for this is that we only had data concerning these local government owned companies. The majority of the companies are exclusively (100%) owned by local governments, while as far as the rest is concerned, local governments have a majority ownership interest. As regards company data, the analysed corporate performance indicators were defined based on the average values of the years under review.

For the first hypothesis, I performed a cluster analysis, where the variables I used were the corporate performance indicators presented above. The purpose of my analysis was to find out how companies with good or unfavourable liquidity (as per the indicators) are spread out between clusters, what the ratio of companies with good liquidity and profitability is among the companies, and what their ratios compared to each other is within the clusters.

To this end I combined hierarchical and k-means clustering. In the case of hierarchical analysis, I applied Ward's method with squared Euclidean distance in order to define the ideal number of clusters, then defined the number of clusters with the k-means procedure, taking the recommendations of *Sajtos – Mitev* (2007) into consideration.

In my research certain indicator values are considered favourable and others unfavourable, adjusted to the general practice. In the case of the liquidity ratio, a value above 1.8 is regarded as favourable, and a value of 1.3 as

just acceptable, whereas in the case of the acid-test ratio a value above 0.8 is favourable, and a value of 0.5 acceptable. As regards profitability ratios, of course, positive values are favourable.

For the second hypothesis, I performed a correlation analysis, comparing corporate performance indicators and indicators defined for the population. The connections where a significant relation can be shown are marked with * in the table. Statistical analysis was performed with the SPSS program package and the MS Office program package.

Modelled results

Only a total of 70 companies had data for every period, therefore I could run the cluster analysis for only 70 companies out of the 95 (*see Fig. 1*). In the cluster analysis, I thought it justified to create 4 clusters at connectivity level 10. The key statistical features of the 4 clusters are summarised in *Table 2*.

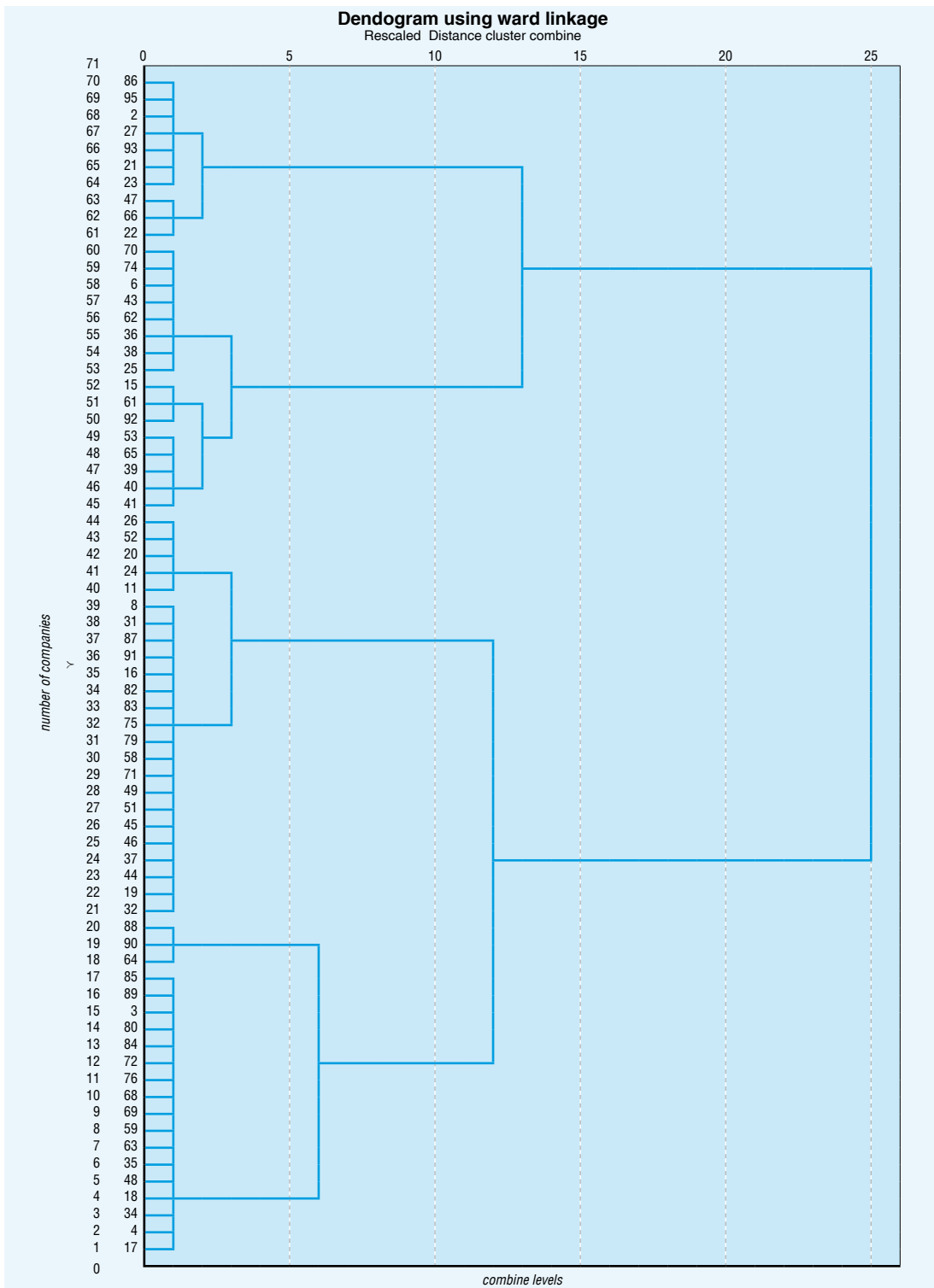
In the case of **CLUSTER 1**, the average value of liquidity is somewhere around the acceptable range, while profitability is unfavourable for the companies, as average profitability is negative.

In this cluster all companies have a low liquidity ratio (as well as a low acid-test ratio), as they all fail to reach the desirable 1.3 plus value. As regards profitability, 7 of the companies made loss on average in the 4 years under review. The majority of the companies included in this cluster deal with real estate property management, while the rest are district heating suppliers. This cluster is homogeneous, but has a poor profitability and liquidity profile based on the results.

As regards **CLUSTER 2**, it can be concluded that the average value of liquidity is relatively high, but it comes with weak profitability; however, the average value of the index is in the positive range, which is favourable as com-

Figure 1

DENDROGRAM OF CLUSTER ANALYSIS



Source: SPSS output

Table 2

SUPPORTING DATA FOR THE CLUSTER ANALYSIS					
	Cluster	Liquidity ratio	Acid-test ratio	ROA	ROE
1	N	10.00	10.00	10.00	10.00
	Average	0.96	0.62	-0.30	-0.20
	Standard deviation	0.56	0.48	0.48	0.42
2	N	20.00	20.00	20.00	20.00
	Average	3.23	2.70	0.03	0.06
	Standard deviation	0.85	0.73	0.24	0.48
3	N	16.00	16.00	16.00	16.00
	Average	1.50	0.94	0.81	0.94
	Standard deviation	0.52	0.25	0.40	0.25
4	N	24.00	24.00	24.00	24.00
	Average	2.79	3.00	-0.04	-0.08
	Standard deviation	0.41	0.51	0.20	0.28

Source: SPSS output

pared with the previous cluster. In this cluster, the liquidity of all companies was above the desirable level, both measured with the liquidity ratio and with the acid-test ratio. Also on the plus side, profitability was positive for all companies, therefore the financial management profile of these companies is rather favourable. The homogeneity of this cluster is clearly indicated by the fact that from the sector point of view water works constitute the majority (out of the 20 water works companies 9 are included in this cluster), whereas 6 companies deal with waste management, and the rest are district heating suppliers.

CLUSTER 3 is characterised by medium liquidity within the acceptable range and strong profitability on the other hand. In the cluster liquidity ratio is typically favourable in the case of 8 companies, whereas 8 are slightly below the minimum limit of 1.3, but measured with the acid-test ratio 15 out of the 16 companies have a favourable value with liquidity above 0.8. Three of the companies show a deficit, and 13 make a profit (the ma-

majority being district heating suppliers and asset management companies).

CLUSTER 4 is also characterised by strong liquidity; however, profitability is negative on the basis of averages and standard deviations. The liquidity profile of the companies assigned to this cluster is relatively good, as the acid-test ratio is above the expected value of 0.8 for all companies, but an assessment of the profitability situation shows that 23 companies made loss in the period under review, the majority of these being asset management companies.

Of the 95 companies under review, 66 had good acid-test ratios in the period under review, and 57 had good liquidity ratios. On the other hand, good liquidity does not mean good profitability, since of the 95 companies 50 showed continuous profitability, and the rest (45 companies) showed deficit.

The data shown in Table 3 are the results of the separate assessment of each year under review.

The table shows that more than half of the companies under review had a favourable ac-

Table 3

RESULTS OF A YEAR-TO-YEAR ASSESSMENT	
Number of companies with a good acid-test ratio every year	48
Number of companies making profit every year	19

Source: own research, 2017

id-test ratio every year, whereas only 19 were able to ensure continuous profitability. Interestingly, there were 14 companies in both dimensions with a good indicator value both in terms of profitability and liquidity.

This suggests a preference on the part of companies run by local governments for liquidity as opposed to profitability. This is explained by the fact that profitability deteriorated during the time of crisis due to the payment difficulties of the people, therefore financeability could only be remedied with good liquidity.

In my second hypothesis I sought answer to the question of how any relationship between the financial situation of the population and the liquidity of public service companies can be identified. Therefore, I looked at the relationship between revenues from enterpris-

es, the incomes included in the aggregate tax base, the ratio of taxpayers within the population, and liquidity (see *Table 4*).

There is a positive relationship between the aggregate tax base per capita and the two liquidity ratios in question, which is stronger than average, but not strong enough to map regression.

Therefore, it can be concluded that the ability of the population to pay taxes might have a positive correlation with the liquidity of companies, which means that where the amount of personal income tax paid by the population, hence “quasi-welfare” is high, the enterprises run by the local government have no liquidity problems either.

Interestingly, revenues from enterprises (defined by TEIR statistics as the sum of cor-

Table 4

EXAMINATION OF THE RELATIONSHIP BETWEEN LIQUIDITY RATIOS AND THE INDICATORS CHARACTERISING THE TAX FORCE OF THE POPULATION

Indicator		Liquidity ratio	Acid-test ratio
Aggregate tax base per capita	Pearson correlation	0.614*	0.604*
	Sig. (2-tailed)	0.044	0.039
Revenues from enterprises per capita	Pearson correlation	0.372*	0.375*
	Sig. (2-tailed)	0.048	0.047
Number of taxpayers within population	Pearson correlation	0.131	0.112
	Sig. (2-tailed)	0.592	0.648

Note: *significant relation

Source: SPSS output

porate income taxes and the amount of personal income tax paid by sole proprietors) also influence the liquidity of the companies, but with a weaker than medium explanatory strength. Accordingly, the income received by enterprises influences the liquidity of the companies only to a minor degree.

There is no relevant, significant relationship between the ratio of taxpayers and the liquidity of the companies, therefore the number of active members of the population does not actually influence the liquidity situation of the enterprises, which may indicate either a favourable payment morality, or a higher number of dependants.

Since my research covered the data related to towns with county rank and the capital city, and individual districts thereof, it is possible that an assessment of the entire country might not confirm my results, as it is in these two categories of administrative areas where the earning power of the population and of enterprises is the highest.

Of the two hypotheses, I accepted the one emphasising the importance of liquidity, as the data related the companies showed that in the period under review they were more capable of ensuring liquidity, than profitability. The cluster analyses revealed that the majority of companies is in a more favourable situation as far as their liquidity profile is concerned than in terms of profitability.

The second hypothesis was only accepted in part, as there is in fact a relationship between liquidity and the tax profile of the population; however, this relationship is of medium

strength, and no significant relationship was evidenced between the ratio of taxpayers and the liquidity variables.

The future direction of the research could be an assessment of how this relationship evolved in the years starting from 2014, as price regulation could have significantly influenced the operating attributes of business associations, the probable direction of this being a slight deterioration in profitability, but some improvement in terms of solvency is also possible as a result of the reduction of utility charges. (See Table 5)

As a consequence, the claim that strategic controlling should monitor not only profitability, but also cash flows also applies to local governments. Detailed cash flow calculations constitute the basis for the implementation of a strategic financial controlling. Therefore the achievement of the goal that satisfactory liquidity should be ensured while financing is regulated, is one of the greatest challenges of strategic financial controlling. Although both objectives (cash flows, profitability) are well known to all experts, they are regrettably often forgotten in practice. This is dangerous primarily in the case of liquidity, since with a sufficient amount of liquid assets it is hardly possible to reach satisfactory profitability.

In order to present the role that strategic financial controlling plays here, the content of both areas have to be described briefly. Consequently, profitability is nothing other than the difference between the performance created and the performance used in view for creating that performance, i.e. the profit or perfor-

Table 5

RESULTS OF HYPOTHESIS TESTS	
Hypothesis 1	Accepted
Hypothesis 2	Accepted in part

Source: own research, 2017

mance surplus. The profitability achieved may be viewed in several different ways, nevertheless, what matters most is the rate of profitability planned, and the rate of profitability necessary for the survival of the enterprise. However, there are no generally applicable rules for this. To ensure the comparability and assessability of profitability, the profit achieved (or the performance surplus) is compared with capital tied up (own funds or total capital) or with the size of turnover achieved, and then it is given in percentages. However, all 3 indicators of profitability (profitability of own funds, profitability of total capital, profitability of turnover) should be treated very carefully, as the benchmarks (the denominators) may significantly vary. For example, there may well be enterprises that shows profit in its balance sheet despite the fact that its shareholders' equity is negative. However, the importance of cash flow orientation should not be forgotten either, considering the role of cash management in financial management.

Consequently for strategic financial controlling the following sequence should be taken into consideration: liquidity precedes profitability.

CONCLUSION

Public sector entities differ in their respective purposes, therefore the purpose of the individual entities has to be taken into account

when designing controlling systems. This paper confirmed that for public sector entities an automatic covering of costs is not forward-looking, therefore the required cost-effective operation can only be achieved with the implementation of the controlling principle to the public sector, as it has been explained by several researchers working in this area. It is vital that the controlling of performance and costs are considered parallel with each other adapted to the specific features of the different public sector entities.

The controlling principle and management supporting function, which is much more than an in-depth implementation of controls, need to be implemented in the management, governance and operation of the public sector.

The following tasks should be given priority in public sector controlling systems:

- mitigation of risks in financial management,
- assistance in applying the benefits of the project approach and management,
- measuring the quantity and quality of organisational performance, and ensuring the conditions and implementing methods of performance measurement and accountability,
- making the efficient and cost-effective use of budgetary resources possible,
- supporting fiscal planning in conjunction with performance planning, facilitating the flexible harmonisation of available resources.

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