

# THESIS OF THE DOCTORAL (PhD) DISSERTATION

# EXAMINATION OF CAPITAL STRUCTURE AND INDEBTEDNESS OF LOCAL GOVERNMENT OWNED BUSINESS ORGANIZATIONS

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## 1. INTRODUCTION

The aim of the policy makers – after the regime change – was to develop a local government system in which local governments are able to determine freely the method of the given tasks and the development of an enterprising local government model.

The former and current municipal law did not specify - only certain sectorial law (eg. waste management) – how local governments have to perform their public service, thus local authorities are responsible for organizing the service. This means that the local authority is responsible for ensuring that the public service is implemented and reach the users. One way is to involve local government owned business organizations which operates the necessary infrastructure, but is also entitled to income from the owner or from consumers. The extrabudgetary participants play an important role in the economy, which are - on the basis of a statutory provision – municipal companies with more than 25 % share<sup>1</sup>. Extra-budgetary participants are government or local government owned organizations which perform public service but not managed according to the rules of budget management but on the basis of the business organizations rules, typically users of public funds directly or indirectly.

Previous research has clearly demonstrated that financial, operational risks of local governments are not just present in the local government system, but also in the local government-owned companies as well. The primary reason for the existence of such risks that government companies data are not adequately presented in the municipal accounts, thus management risks, operational difficulties do not appear in the output of the information system.

During my research – for the years 2006-2013 - I studied government-owned companies. A number of system-wide changes took place in the local government subsystem during this period, such as:

- bond issue and debt wave of creditworthy governments;
- the Fundamental Law, the Act CLXXXIX.of 2011 on Local governments in Hungary and a number of cardinal Act came into force, in particular the 2011 CXCIV. Hungary's economic stability Act of 2011 CXCVI. Law of national monies (hereinafter: NVT.) and a number of sectoral laws that transformed the local government sub-tasks and the powers and funding;
- The government debt consolidation that took place in 2011-2013.

The debt consolidation of municipal-owned companies have not happened with a few exceptions, so the risk factors are in the extra-budgetary segment of the local government subsystem.

In my opinion, the great weight of the risk is from the growing debt of local government enterprise.

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<sup>&</sup>lt;sup>1</sup> According to the Act 2004. XXXIV. 3. §

Another source of risk, as I reflected on it, due to inconsistencies in the reporting system accounting principles deviation, which is due to the local economic actors relations with each other insufficiently transparent and is not consolidated. Therefore, aggregate information regarding off budget tasks is not available.

#### 1.1.Research goals and hipotesises

#### Goal 1.

The first objective of my research was examining the management of local government-owned companies from 2006 to 2013. In doing so, I analyzed the aggregated data from the company's accounts and examine it by settlement, according to profitability, tasks and GDP as well as by companies. The focus of my research is the aggregate data of the liability side of companies.

Regarding the examined eight years, I try to explain the trends on the basis of the liabilities with two factors:

- Roxburgh (Szemán) hypothesis,
- Investment cycle impact

**Roxburgh et al.** (2010) hypothesis (studied in Hungary: Szemán, 2013) discovered, that in case of an economic crisis, economic actors tend to carry out a delayed decrease in their liabilities. (Although the recent domestic events of the condition of the three-year decline in GDP is not satisfied). Due to this, in my sub-hypothesis I assumed that the aggregate values of liabilities increased until 2010 and then a declining trend can be seen.

**Investment cycle impact:** liablilities increase in election years, then decrease and start increasing again once election comes, that trend is observed in local governments as wel (Vigvári, 2009).

#### Goal 2.

I group the companies by capital structure and their operation. To this end, I examine the liability structure, profitability, liquidity and other typical indicators of a company, and classify them by operational and debt perspectives.

Data from the classification is analyzed by special branches, city, firms in the panel as a whole, and identify the best performing companies.

#### Goal 3.

I study whether the factors influencing capital structure can be detected regarding local government enterprises. The key question is whether there is connection between the level of municipal property and capital structure and introduce which factors influence the capital structure of the analyzed companies, and the adequacy of the capital structure theories.

In my analysis, I examine the company size, liquidity ratios, and profitability impact on capital structure variables.

#### Goal 4.

My aim was to investigate whether there is a link between liability structure indicators of local government companies and operational indicators of the local government sector, which means there is statistical relationship between the two segments of municipal management.

#### Hypothesis1.

Taking into account the government-owned companies, the aggregate long and short-term liabilities increased throughout the period (2006-2013).

## Hypothesis 2.

Regarding the operational characteristics of the companies<sup>2</sup>, the vast majority are companies with proper management parameters.

H2a. The capital structure point of view, based on my previous assessment, the favorable capital structure companies - characterized by an equity ratio that exceeds 50% rate - can be considered dominant.

The results of the earlier studies showed that the capital structure in terms of the three sector firms are businesses with a majority of favorable capital structure. I assume that favorable capital ratio meet the conditions for the entire population. (M7).

H2b. Looking at the operational difficulties my former examination still stands, which shows that companies with proper capital parameters<sup>3</sup> dominate based on the claster and the number of firms qualified into the more favorable clusters is higher.

My hypothesis is based on that one of my former research shoed that most of the analysed utility companies have a favorable equity ratio but appeared the liquidity and profitability problems in their management, but despite this the majority of companies characterized by good management indicators.

Hypothesis 3. I assumed that the general factors that affect the capital structure are valid for local government-owned companies.

Hypothesis 4. There is a relationship between the main parameters of local government management and local government-owned companies debt in the analyzed period, thus it can be proved that local government management influences local government companies' capital structure indicators<sup>4</sup>.

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<sup>&</sup>lt;sup>2</sup> I mean capital structure, rentability, liquidity indicators,

<sup>&</sup>lt;sup>3</sup> I mean equity ratio of over 50% profitable operation and stable liquidit.

<sup>&</sup>lt;sup>4</sup> The literary sources studied transfers and revenues -from business organizations- impact on local government management and revenues, eg.. Stumm (1994); (1997); Arapis (2013)

## 2. MATERIAL AND METHOD

During my research, profit and non-profit business organizations of county towns, capital and capital districts were analyzed. The examined segments (the county towns and the capital city and its districts) were added up and I concluded that 3.725 million people live in the area of the analyzed about 46 municipalities based on the Central Bureau of Statistics for the 2013 year. In the capital — with a growing population - 1,735 million, while in the county towns in the examined period, following a constant downward trend 1.990 million people lived in 2013. So the examined local governments provide near 37 % of the total population with public service.

The examined local governments' companies were selected from the database of the municipalities, which covers all the companies, so every operating company was involved. Unlike typology used by the Vigvári (2008), a more detailed corporate sector were taken into account in determining the investigated companies. Not only companies with more than 25 % share were involved but every other with more than 5 % share. This is due to the relatively small nature of the investment portfolio in the government sector, and the capital structure may be interesting compared to the average groups. The database includes the balance sheets, notes and income statements of the examined companies. The data is from the Ministry of Justice Company Information and Electronic Company Registration Electronic Service Reporting Portal in the period of 2006-2013. One of the main reason for the chosen period is that the debt wave of local governments started in 2006, so I want to make the processes and the determining factors of the fiscal and quasi-fiscal sectors comparable. From the macroeconomic point of view, the economic and financial crisis was the main reason. The activities of these companies were also significantly affected by the crisis, as fund raising or capital structure or function with regard to inspect them.

Since the database is not available from other sources, I could not overcome two deficiencies, so these will be limitations.

One of the problem of the database that only a small number of companies operate in the form of a holding company and submit consolidated accounts, thus the data available are also non-consolidated, and in case of companies with simplified annual reports, information is not sufficient to examine liabilities completely.

The other problem is that the majority of the examined companies are not obliged to audit, so we are talking about non-audited data.

The methodological toolbox is aligned with the areas to be examined, in my analysis I used the books of Szelényi (2004), Szucs (2004), Székely -brown (2004), Cheese - Mitev (2007), Ghauri - Gronhaug (2011) and Babbie (2001).

In case of the analysis of the aggregated information obtained from the individual reports I draw my conclusions. In the analysis, descriptive statistical methods were used, such as chain and base ratio and distribution ratio, the arithmetic mean and standard deviation. The secondary data was used for trend analysis. The chain ratios show the changes of the given variable compared to the previous year, the base ratio represents a chosen date. The distribution rate tells you how to relate to that part of the entire data. The trend analysis is intended to put a straight trend line using the given data, the better degree of fit the line shows the better forecast we can get (the higher the R<sup>2</sup> is, the more exact the trend will be).

Multivariate methods were used for businesses characterization, cluster analysis was carried out in three respects. The goal of the cluster analysis is to discover the natural groups of the units (Ghauri – Gronhaug, 2011). The hierarchical methods of merging procedures called Ward procedure was applied, one of the most commonly used method, which brings together those clusters which gives the smallest variance in internal growth. The advantage of hierarchical clustering methods to ensure the form of a graphical display of dendrogram, which help in the number of clusters in the selection and interpretation of the results. (Cheese - Mitev, 2007; Brown 2004)

To manage outstanding values financial index values are considered to be abnormal were excluded from the capital structure analyzes, in case of the values of liabilities which exceeded 1, and negative equity rate.

In order to determine the final number of elements in the cluster combined with the hierarchical and non-hierarchical methods, I determined the final number of clusters, and clusters of listed companies. Thus, using the Ward method the centers of the clusters were identified, and not the hierarchical method, using K-means cluster analysis clusters were fixed, as the literature suggests especially Cheese - Mitev (2007).

The first clustering serves the delimitation of enterprise size, clusters were identified using hierarchical clustering, Ward method. The variables involved in study were the sales, equity, fixed assets and total assets of natural logarithm.

The second clustering was carried out in order to classify the risk and capital structure of companies in respect of the years examined in 2006, 2008, 2010, and 2011 and 2013. The reason for the years examined is that these years were reversal, brought a significant change. During the cluster analysis the hierarchical and non-hierarchical methods were applied in a combined way.

To the capital structure tests the following capital structure variables were used:

- Equity ratio indicators (the acronym in the analysis is starány),
- proportion of long-term liabilities (the acronym in the analysis is HLKperÖF)
- proportion of short-term liabilities (the acronym in the analysis is RLKperÖF)

During the third clustering analysis I aimed the analysis of company risk and used the following variables:

- Equity ratio indicators (the acronym in the analysis is starány),
- Ratio of debt (the acronym in the analysis is kötarány)
- Liquidity ratio (current assets / current liabilities, the acronym in the analysis is LM)
- quick ratio (current assets less inventories / short-term liabilities, the acronym:GYR);
- ROA (net profit / total assets);
- Growth Equity ratio (profit or loss / equity);
- Financial stability ratio (equity / capital, the acronym:PÜem).

In order to find the existence of the relationship of capital structures I used correlation analysis. I used Correlation Analysis to compare the factors influencing capital structure, municipal sector and quasi fiscal sector, using a two side Pearson test.

Correlation analysis determines the relationship and direction between two quantitative variables, years taken into account (2006,2008,2010,2011,2013). The municipal data is originated from the National Regional Development and Spatial Planning Information System (hereinafter abbreviated TEIR), and the average value taken into account for the years 2010-2012.

I carried out my research using SPSS 20 software package, and the Microsoft Office suite.

#### 2.1. Presentation of the group of companies analyzed

Enterprises includes all the companies of the locl govenrments, so that I consider it a crowd from which we can determine the characteristics of the companies of county towns, Budapest, and the districts of Budapest.

<b>Examined years</b>	<b>County towns</b>	Capital	Districts	Total
2006	149	29	42	220
2007	153	30	44	227
2008	209	33	68	310
2009	221	34	76	331
2010	243	38	81	362
2011	245	41	85	371
2012	250	34	89	373
2013	254	34	91	379

**Table 1.: Presentation of the group of companies (unit: piece)** 

Source: own research,, 2016

Regarding the analyzed companies we can find transformed businesses and ones established without predecessor. As we can see in the municipal workforce numbers followed steadily increasing trend of county towns and in particular the dynamic growth in the districts. The number of companies operating in the capital did not decrease even though many local government holding companies were established (BKV), these companies were only taken into account as a parent company due to the consolidated statements like in the case of every other holding companies. A two-way process took place among the municipal companies, firstly took place the foundation of companies in 2008 and on the other hand the organization of local government into holding companies. The municipal companies, two-way process took place in a part of the wave of company foundation, which showed strength in 2008, on the other hand, the organization of local government into holding companies generally profitmaking circle.

The new firms were primarily started in the non-profit sector (social employment, culture). Also typical in city development companies or tourist purposes.

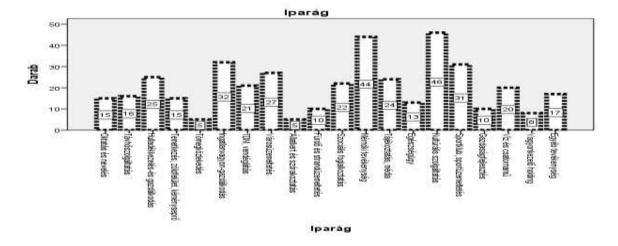


Figure 1.: Companies by industry Source: own research, 2016

Figure 1 shows a total of 406 examined companies according to industry classification, without taking into account the individual years, the classification was carried out by the company's core business activity and what local government functions is the company involved in, so based on the TEOR number of the analyzed companies and Mötv<sup>5</sup> in force, I wanted to characterize them by quasi-specialized tasks with a few exceptions (eg. Zoos and baths, which appear as self-imposed tasks).

In case of teaching education sector the Regional Integrated Vocational Training Centres, in the tourism destination management sector tourism information offices and in case of technical activities city development companies appear. In case of funeral, green space sector the companies with classical urban management activities were classified, in case of the city maintanance activities were not diversified. Information and media sector of local television, newspapers are, as were the cultural service culture houses and theaters.

There were only eight functioning as parent companies (local government holdingcompany) in the analysis, economic development activities in respect of companies were classified that as an industrial park, tender as a center function. Other activities, not listed in the above mentioned -supporting municipal operations (eg. IT), or property for investment purposes is shown.

The public services are grouped according to Dicső (2010) to human, social, and technical public services by local governments and companies operating in their possession.

<sup>&</sup>lt;sup>5</sup> 2011 CLXXXIX. law

#### 3. RESULTS

The aggregate analysis of local government companies revealed that use of external resources is significant (even before 2012). Total liabilities increased by close to 2.5 times, however, the debt of local government did not produce an increase in long-term liabilities but the increase is still, however, been drastic. A sectoral analysis thus showed that, after the municipal debt consolidation the biggest risk was delegated to the quasi-fiscal sector.

Due to the results of the county towns companies it can be concluded that the observed aggregate data of the companies shows a dynamic growth in liabilities, which in total exceeds the value of the equity at the end of the period. Based on the trend there is a turn in the equity in the liabilities favor.

Compared to the data of companies, processes are similar (increase in liabilities, tendency of long-term liabilities and the increase of assets), with a significant difference that in the case of the capital structure of liabilities, long-term liabilities represent the biggest part.

In case of aggregated data of the Metropolitan Municipality, from several perspectives the aggregate data shows better results than in county towns.

Looking at the data of the districts, it can be stated that it gives the slightest proportion of the total corporate circle, but processes are also interesting. On the one hand it is favorable that equity rose strongly. If we look at value in 2012 has exceeded the aggregate amount of capital companies. Which again makes operational processes interesting from the capital structure perspective is that in contrast to the other two settlements, no shifts could be experienced in the long-term liabilities, ergo there was no decrease in equity in the last year, while the increase in short-term debt rather stagnated.

The results of the cluster analysis on capital structure are summarized below:

- As a general trend it can be observed that the companies with favorable capital structure parameters show a steadily increasing trend, but it is less than half of the number of companies in each year, contrary to the assumed and former research results in the utility sector
- Although the proportion of companies in the clustering shows a positive trend, excluding the newly established and companies with negative equity the positive tendency is not that promising.
- While examining the trend of the growing number of companies, the number of loss-making enterprises showed a negative trend. At the same time it can be stated that the proportion of favorable capital structure of companies increased. The number of companies financed by liabilities also increased steadily, and shows the highlights of the 2013 year;
- Due to the crisis in waste management and district heating sector also deteriorated in the company's capital structure, ignoring the waterworks sector, this can be seen at the sectoral analyzes;
- There is no association of municipalities in terms of population size and risk of capital structure of firms.

So a large proportion of the business circle has negative capital structure and is reflected in the management of companies due to the crisis. Those companies with increasing long-term liabilities will be a major risk, mainly for the owner local governments.

Summing up the results of the cluster analysis of operating factors, a number of risky processes can be observed. These include that:

- Constantly increasing the number of the examined companies, and with them the number of risky firms.
- Among the companies struggling with operating problems, large enterprises increased,
- Examining the risk factors, the major risk factor is not liquidity, but profitability and capital structure

I cannot prove the theory fully of the enforcement of capital structure, however, the results can be an interpretation of negative relationship of liquidity ratios with liabilities, and profitability ratios (ROE and GST) negative relationship with capital leverage and the proportion of long-term debt, which suggests that some elements in the pecking order theory are met. In my opinion, it is not clear evidence. In summary it can be stated that several attributes of company sizes influence the life of local government companies, but the relationship is average or weaker. Regarding their orientation, they behave according to the literature.

Favorable link can be demonstrated between support expenditures and loans in terms of liabilities, while developing the role of capital structure can be indirectly detected.

## 4. CONCLUSIONS AND RECOMMENDATIONS

The results of the hypothesis are summarized in the table below.

Hypothesis	Used methods	Results
H1: Taking into account the government-owned companies, debt increased, similarly to the owner local governments	aggregation chain ratio base ratio	Accepted
<b>H2</b> : Regarding the operational characteristics of the companies <sup>6</sup> , the vast majority are companies with proper management parameters.	claster analysis	Partially accepted
H3: I assumed that the general factors that affect the capital structure are valid for local government-owned companies.	correlation analysis	Accepted
H4: There is a relationship between the main parameters of local government management and local government-owned companies debt in the analyzed period, thus it can be proved that local government management influences local government companies' capital structure indicators	correlation analysis	Accepted

Table 2.: The results of hypothesis

Source: own research, 2016

The first hypothesis was accepted based on the fact that liabilities increased to 2,62-fold within the examined local government companies using base ratio, from this portfolio of long-term liabilities have tripled in the case of short-term liabilities, the increase was 2.11. However, the base ratios only from 2008 show a steady increase in total liabilities, other liabilities behave differently.

In case of the second hypothesis, I assumed that the majority of management of the companies were favorable in the analyzed period, both capital structure, liquidity, rentability and creditworthiness.

The hypothesis was based on that the 2011 data (also 2009 and 2010) included companies with favorable capital structure and operating characteristics, so I assumed that this situation exists throughout the corporate assessment. The hypothesis was partially accepted as one of the sub-hypotheses was fulfilled. In the "a" sub-hypothesis I predicted the dominance of appropriate capital structure, which was fulfilled only in one year and the values varied

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<sup>&</sup>lt;sup>6</sup> I mean capital structure, rentability, liquidity indicators,

around 58-60%, the rate is lower if we consider only the number of companies used in the cluster. If we take into account the companies that are excluded from the study, the result is even lower so the hypothesis H2 is rejected. Hypothesis "b" showed that clusters qualified favorable were higher in each year than the risk I determined. Although it is inferior to the results of my previous studies, and a deteriorating trend, however, I accepted the hypothesis H2b. Based on the cluster analysis, it can be concluded that companies with unfavorable capital structure were dominant in the analyzed years and based on liquidity, creditworthiness, rentability companies showed a better picture.

I accepted the third hypothesis, as impact on capital structure can be clearly observed but weaker than average. It can be concluded that there is no significant difference between local government owned and non-government-owned companies in terms of how assets influence capital structure or the relationships are equally valid in the case of companies belonging to the local government as well.

It was not one of the hypotheses closely, but one of mine was to examine the impact of municipal property and enforcement of capital structure. In order to reach this point, I would like to highlight two tests, first I examined the correlation coefficient in all companies, which showed that there is no link between the capital structures. The other form of the assessment was to divide municipal share in companies. Thus, minority-owned firms were considered as the control group as the sizes were distributed to 90-10 ratio in municipal property. Minor differences were observed in the non-municipal companies, they showed weak intensity but negative relationship, thus the impact of share on capital structure could not demonstrated, so further research results were unable to be proved (Krénusz, 2005; Gál, 2013).

The capital structure theories were also studied to see which ones are responsible for the results. It seems to be the choice theory and can be concluded that the rate of natural logarithm of asset items and long-term liabilities and capital leverage have a strong relationship but in other cases there was no appropriate development of the capital structure theories of the relationship.

I decided in favor of the fourth hypothesis, since the correlation analysis clearly showed that relationship can be proved between the equity and the ratio of liabilities of local government management indicators. It is favorable that strong connection can be detected at the connection points, so support loans and non-state funds (table 35).

Due to the analysis it can be concluded that the risk of local government companies increased, handling the case, the solution is essentially transparent to batch. This in my view, two solutions are possible, but both practices are not feasible without changes to existing regulations. There is no alternative relationship between the two measures, realization I think it would be a good step towards transparent operation. In the first case, fiscal and quasi-fiscal sector could be brought closer to each another by modifying the third part of the Civil Code in force with the creation of a public service company that would be more similar regarding the rights and obligations of the municipalities. This would avoid the adverse selection and implantation of paratroopers into municipal companies, however, it may be question professionalism. In addition, the mode of payment of dividends can be regulated and the possibility of accounting for grants.

The introduction of the new accounting system (see para. Government Regulation 3/2014) is displayed next to the accrual accounting. There are numerous accounts that affect the operation of local government, so the warranty is shown in the municipal balance sheet. Unfortunately, only book value and depreciation of shares of local government owned

companies must be presented. I think the new accounting system does not create fully the possibility of consolidation, however, local government shares more than 25% should be included in the notes and presentation and evaluation of the local government. Funds given to organizations, grants (as it is recorded) should also be presented in the notes in order to make the quasi-fiscal sector and fiscal sector more transparent.

I agree with the State Audit findings that owner's control, inspection of companies also need to be strengthened. This is confirmed by my own experience, as previously I interviewed several municipal managers, and our respondents confirmed a lack of ownership control. The practice is that the financial statements of companies are accepted by the general assembly, but this is merely a formality, since there is no specific examination, as there is no report on the management, not even in long-term loans. To strengthen this, risk analysis, continuous monitoring of the companies should be carried out. In the thesis I present the local economy and system of relations. After analyzing the local economy, I attempt to examine the debt process of municipalities. Then, another segment of the local economy, introduction of non-budget sector is presented. The key issue of the dissertation is that debt of companies owned by local governments have increased. In addition, the relationship between the two segments of local government economy is examined.

## 5. NEW AND NOVEL SCIENTIFIC RESULTS

- 1. I have compiled a database on the basis of municipal data services, from which I gained important information about the settlement categories and capital structures. During my research I proved that the level of liabilities of local governments grew in the analyzed period. Given the scope and instruments of the local government debt growth it was not the same, and it more individual factors had influence on it. In my opinion, the increase of the equity was due to the use of European Union funds and the company foundations.
- 2. My research proved that the majority of companies have non-favorable capital structure indicators, while based on the operating features, companies with better indicators are in majority. Regarding the capital structure I tried to block out companies with abnormal values, creating a seperate group for them I found that, based on the capital structure characteristics companies with favorable capital structure were in the minority. Also, it can be concluded that the examined units shows less favorable values as compared to the previous studies, taken as the basis the capital structure or operating difficulties.
- 3. I proved statistically that there is a link between local government and non-municipal sector's capital structure characteristics. The correlation analysis pointed out that the connection points of municipal and local government-owned companies have a relationship between the analyzed variables and the liability portfolio ratio. However, there is a weak link with the equity, a stronger connection only found with liabilities.
- 4. My research has shown that examining purely local government items, the factors affecting capital structure apply, but its effect on the capital structure of ownership can not be detected. Based on analysis of the factors I have concluded that the capital structure factors do not affect each other in such a way as would be expected from the literature. I could not detect a connection between shares and capital structure characteristics. The capital structure theories were not detected clearly, in my view, neither the pecking order theory nor the choice theory could be detected.

#### 6. SUMMARY

In the dissertation I tried to introduce the most important literatures and research results. So I introduced in the professional literature the local government economy, public services and asset management. I presented the main trends of management of local governments, particularly the debt wave from 2006 onwards, the recently adopted Fundamental Law, the new Local Government Act (Mötv.) and cardinal laws. I introduced the debt settlement process, resulting that local government debt was taken over by the state budget.

In a separate section, I presented off-budget participant, such as the size of the local government-owned companies, management features, with which I wanted to highlight the relevance of the topic. My literature review then focused on the capital structure theories and both national and international empirical research.

The first part of my research began by presenting the variables, because during the examination period of 2006-2013 the county towns, Budapest and its districts were analyzed. The examined settlements categories were chosen because based on regional characteristics, especially the capital city and the county cities are determinants of the national competiveness and due to their special tasks and responsibilities.

During my research, businesses with more than 5 % local government share were selected to the study. For the analysis, the data is from the Ministry of Justice Company Registration and Electronic Company Registration Service portals. It can be concluded that there is constant growth in the number of firms and non-profit companies. Some companies with minority ownership or portfolio shares are also represented in the study, to make sure all types of shares are represented.

One of the main goal of the study was to examine the capital structure and management parameters, which was carried out by using aggregate data, by settlements, profitability. With regards to the county towns companies, it can be concluded that the observed aggregate data of the companies shows a dynamic growth in liabilities, which in total exceeds the value of the equity at the end of the period. Based on the trend there is a turn in the equity in the liabilities favor. In case of aggregated data of the Metropolitan Municipality, from several perspectives the aggregate data shows better results than in county towns. Looking at the data of the districts, it can be stated that it gives the slightest proportion of the total corporate circle, but processes are also interesting. On the one hand it is favorable that equity rose strongly. If we look at value in 2012 has exceeded the aggregate amount of capital companies. Which again makes operational processes interesting from the capital structure perspective is that in contrast to the other two settlements, no shifts could be experienced in the long-term liabilities, ergo there was no decrease in equity in the last year, while the increase in short-term debt rather stagnated.

Examinations were carried out using multivariate methods, firstly cluster analysis on capital structure and came to the conclusion that based on indicators of the capital structure, companies belonging to the non-favorable groups are in majority, opposite result of what I received from former researches. Regarding the capital structure theories, I found that classical characteristics influence capital structures, but the enforcement of capital structure theories were not seen clearly. I also presented that capital structure characteristics of local government companies and management variables have a relationship.

In summary, risks of local government owned companies are increasing because of the indebtedness of companies, in my opinion, the financial risks of the municipalities in the examined segment are linked to the debt of local government companies and to a lesser extent, their operation. The creditworthiness of the off budget sector (and particularly in the water industry) will not - in my view- substantially affect the operation of local authorities, as the financial institutions trust local governments as owners.

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