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**RESEARCH OF THE CONTROLLING FUNCTIONS' ROLE IN THE FINANCIAL  
MANAGEMENT SYSTEM**

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**Komáromi Kálmán**

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**School of PhD Studies:** **PhD School of Management and Business Administration**

**Discipline:** **Management and Business Administration**

**Head of PhD school:** **Dr. István Szűcs**  
**Doctor of HAS, professor**  
**Faculty of Economics and Social Sciences, SZIU**  
**Institute of Business Methodology**

**Consultant:** **Dr. habil. Zoltán Zéman**  
**Associate Professor**  
**Faculty of Economics and Social Sciences, SZIU Institute of**  
**Finance and Accounting**

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Approval of the head of the  
PhD school

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Approval of the consultant

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## **1. INTRODUCTION**

In the last decades the tasks and responsibilities of financial management have increased in an accelerating measure. So have the set of information required increased also. These have led to the necessity of using, developing, improving different informational systems.

The foresight of companies was considerably deteriorated by the financial troubles and rapid changes of macroeconomic and financial positions in Hungary emerged from the 2008 financial crisis. The crisis of the financial sector widened rapidly to a general crisis that has led winding— up many companies through market disorders, order-book delays and slump of consumption. Circumstances like the market changes high interest rates the hectic fluctuation of exchange rates pinch of financier possibilities stricter loan conditions costs increase, uncertain supplier-buyer relations motivated the management to reduce cost to improve more stable financial positions through the development and preservation of solvency conservative financier strategies and optimal financial structure. (Bod et al. 2009)

Financial management doesn't have long traditions. The tasks and tools of companies' financial management have gone through many changes until reaching its scheme of our times. The main reasons of this improvement were the economic, company and financial sciences' development. Financial tasks became more complex.

At the beginning of the 20th century financial management's task was to secure the adequate amount of capital and liquidity. This task became more stressful at the end of the 1920s. From the 1950s the expansion of financial field's tasks can be observed. (e.g. capital budgeting, financial sources allocation, risk and return relationship). Nowadays the supervision and control of financial transactions, securing of money circulation and cash-flow, being in rapport with banks, securing the financial sources of company's functioning, invoicing and verification, clearing the accounts, financial planning, analysis, evaluation of investments became a part of financial management's range of duties beside the procurement of capital and securing the liquidity. (Sóvágó, 2006)

Not only have the duties of the financial management increased but the responsibilities also. Nowadays financial management acts as a strategic partner of the top management besides it fulfills the roles the financial stability and safety's guard and the provider of information. It has to take part in strategic planning in making the investment decision, secure the regularity of the administration, transparency of the company, legality.

To fulfill this expanded range of duties financial management has to gather internal and external information and register, interpret, react to changes. This puts stress on problem solution and on the necessity of providing adequate information. It raises the value of confirmed information and the role of the information system that is in use. Information systems in fact do the jobs of data collection, systematization, data storage and verification and provide up- to- date data to produce purposeful information according to the needs of the decision making's preparation process and forward it to the responsible decision maker. (Raffai, 2003)

Controlling is a decision preparatory information system that does the planning, plan-fact analysis functions and coordinates the company toward the effective execution of the required objectives. (Horváth, 1990)

Controlling is a young company function, and special literature representatives place its formation at the beginning of the 20th century. According to the system theory it is an information system (Gál, 1997) so it has to link up with the needs of decisions' preparation and follow the changes in the information request. Upon that controlling is defined as a managerial task, a part of the management process. (Bodnár, 1997)

The development of controlling has followed the changes in the managerial requests and so were the main functions (planning, plan- fact analysis, information support) established. Moreover as companies have developed and their sizes have grown, the importance of specific functional areas has increased so functional controlling activities have emerged.

Financial controlling is a functional controlling area, but derived from the interdependence of the company management it cannot be parted from controlling in general. This can be noticed in the controlling definitions of special literature representatives. These definitions contain methods that can be used in supporting the financial management more or less.

Controlling in its financial aims has to secure the necessary information for the execution of financial management's strategic and operational objectives with using methods of financial planning measuring and analysis.

In my opinion if controlling serves the needs of financial management it contributes the execution of financial management's objectives to reach the required liquidity (short and long term) the profitability the financial stability and increasing the corporate value.

The objective of my dissertation is to explore and interpret the connection system of financial management and controlling. Financial management duties are determined by the size and complexity of the company, because it increases the number and complexity of financial processes and decisions parallel. As the complexity of financial management's tasks increase so must the controlling conform to the financial management's decision making requirements.

I composed the following assumptions in relation to my examinations:

1. The complexity of financial management's functions and financial flexibility are more developed according to the size of the company.
2. The size of the company influences the financial side of controlling positively, and improves the effectiveness of financial management.
3. The growth of financial management's informational- coordination tasks results the application of controlling system from the financial side.
4. The need for flexibility results the application of controlling system from financial side both the operational and strategic levels, that is presented in
  - a. the controlling tasks, and
  - b. the methods, that are used.

In accordance with my assumptions I've accomplished a questionnaire survey among middle- sized and big companies based on the procession of special literature and interviews. The aim of the survey was to explore the characteristics of the controlling function that supports the financial management. I processed the replies with SPSS (ver. 16) statistic software package. In my examination I've focused on the financial management's level of development, the flexibility of financial management, the information systems, controlling's support of financial tasks, controlling's effect on financial effectiveness and the financial methods that are used by the controlling. I used these view points and several additional criteria to make clusters, and I described the interdependences among factors with help of path modeling based on linear regression analysis.

## 2. SOURCES AND METHODS

### 2.1. Procession of Scientific literature

As a base for my dissertation I have used Hungarian and international scientific literature. The objective and task characteristic of financial management is discussed in many scientific sources. In the course of processing the scientific literature I aimed for defining financial management, financial controlling and identifying their interdependences, the evolution of their duties. Moreover I examined the Hungarian controlling theories in accordance to their aim of serving the financial management.

### 2.2. Review of own research

Following the scientific literature's examination I've accomplished semi structured interviews with big companies' (e.g. Wallis Zrt., Budapesti Elektromos Művek NyRt (Electric Company Budapest, Tesco-Global Áruházak Zrt, Budapesti Közlekedési Központ ZRt), chief-executives, chief financial executives, chief operating officers. Summarizing my findings I've assembled a questionnaire.

The questionnaire survey was accomplished in several channels. On the one hand it was queried through the Magyar Controlling Egyesület and Budapesti Vállalkozásfejlesztési Központ online, on the other hand on professional programs personally. The numbers of appreciable responses were 128. The questionnaire was queried among middle-sized and big companies with headquarters on Budapest. In the structure of the questionnaire I have made three major parts. The first part contained questions about the financial management, second about a controlling function, the third about a employed controlling methods and in the fourth part I asked for company information.

For the procession of the questionnaires I've used the Statistical Package for Social Sciences (SPSS v 16.0). To uncover the interdependences among the answers I've used statistic methods; **factor analyses (principal component method)**, **cluster analysis**, **analysis of variance**, **cross tabulation**, **regression analysis**. (Figure 1)

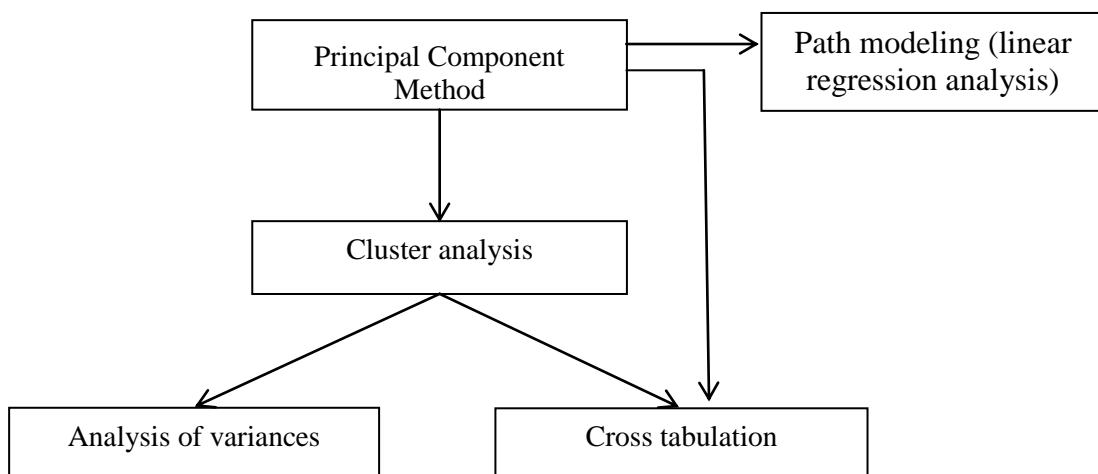


Figure 1: The course of statistic research Source: Own construction

I used the **Kaiser- Meyer- Olkin (KMO)** criteria, the **Bartlett-test** to examine the suitability of data for the principal component method analysis and **Cronbach alfa** to test the

stability of the principal component. I've based the creation of principal components on scientific literatures and didn't aim to identify more dimensions beside these. I focused on assembling balanced principal components including variables with adequate weights (I've used the weight of 0.45 as a limit.) and communalities (Limit was 0.25).

As a next step I did cluster analysis. To group the answers of the query I've used the principal components. Because of the number of answers I've used the **K-means clustering method** (non- hierarchical) to assemble the clusters.

Based on the before mentioned methods I've used analysis of variance and cross tabulations to get more characterized results.

To check the results of the analysis of variance I've used the F-test and the level of significance (0.05). To check the results of cross tabulation I've used Pearson's Chi-Squared test.

At the end of my examination I've used **path analysis**. Path modeling is a multiple regression analysis, where I've used the principal components to explore the correlations between one (or more) exogenous variable(s) that has a direct and indirect effect on more dependent or endogenous variables. The models were built up on logical effect mechanism. To characterize the path models I've used the path coefficients. Coefficients show the possible causal linkage between statistical variables.

The connection between the exogenous variable and the endogenous variables can be evaluated with the  $\beta$  (beta). Beta shows an acceptable result in case its significance is or under 0.05 (T- test).

The fit of the model can be evaluated by looking at the difference between the observed correlation and the implied correlation which is showed by the adjusted  $R^2$ .

### **3. RESULTS OF OWN RESEARCH**

#### **3.1. Results of the financial management research**

As a first step I investigated how the financial management uses the different strategic and operational tasks. To reduce the number of variables I have created two principal components: the strategic financial tasks (total variance: 46.389, factors: long term financial planning, shaping financial politics, capital structure/capital investment, risk management, optimization of risks and returns) and operational financial tasks (total variance: 42.072, factors: procession of transactions, working capital management, short term financial planning, reporting, cost management internal audit).

I used these principal components to make cluster, so I've created the clusters with Developed (n: 53) the Operatively developing (n: 26) Undeveloped (n: 26) financial management. The sample proved the growing role of financial management that appears in the range and amount of information collected and provided and in its role in strategic decision making.

Moreover I have examined the cluster groups' intersection with company size and realized the 64.4 percent of the big companies belong to Developed financial management cluster, and 63.3 percent of the middle-sized companies belong to Undeveloped financial management cluster. This means that bigger companies have more developed financial management. Among the clusters with financial management's different level of development I haven't found any relevant differences in the usage of result plan (Undeveloped: 4.66 Operatively developing: 4.85, Developed: 4.71) balance sheet plan (Undeveloped: 4.21 Operatively developing: 4.35, Developed: 4.47) and cash- flow plan (Undeveloped: 4.32 Operatively developing: 4.46, Developed: 4.47). These are commonly used.

In the companies with Developed financial management also find it important to use the financing plan (4.35), investment plan (4.59) and financial risk plan (4.12). This demonstrates that development appears in more complex treatment of financial matters.

To fulfill these involved tasks developed financial management needs wide-ranging information. Usages of different information system conform also to these needs.

The accounting system is used by all of the companies in the sample more or less for these purposes. (Undeveloped: 4.00 Operatively developing: 4.92, Developed: 4.41) The developed financial management can be significantly separated from operatively developing financial management and undeveloped financial management clusters by comparing the information system usage. Among the developed financial management cluster the management accounting system (Undeveloped: 3.98, Operatively developing: 4.04, Developed: 4.53), reports of other functional (company) areas (Undeveloped: 3.55, Operatively developing: 3.73, Developed: 4.24), data storage systems (Undeveloped: 3.12, Operatively developing: 3.36, Developed: 4.00) and controlling system (Undeveloped: 3.92, Operatively developing: 4.39, Developed: 4.59) have reached the highest average points from answers. I haven't found significant differences among the clusters in case of the frequency and reliability of the reporting system. Companies in the sample used yearly, half-yearly, quarterly and monthly reports most frequently. Companies with developed financial management are more satisfied with the reliability of the reports on a par, which can be derived from the used systems' higher level of coordination.

The next important question about financial management focused on the change following ability. For the beginning I've reduced the number of variables by making principal components. I've created the operational tendencies (total variance: 59.075, factors: the

complexity of financial management's tasks increased, the functional areas' management have come in closer connection with financial management, the operational information need (frequency and amount) of financial management has increased) and the directing and organizing tendencies (total variance: 61.622, factors: the importance of financial information and financial management has increased, the coordination tasks of financial management have increased, the strategic importance of financial management has increased, the role of financial management's supporting information systems have increased) I've created clusters from the sample with the principal components made according to the tendency perceiving ability: Tendency followers (n: 18), Moderately followers (n: 53), Non followers(n: 50). 63.2 percent of the big companies belong to the cluster of Tendency followers, 21.1 percent to the Moderately followers. 46.1 percent of the middle-sized companies belong to the Non followers, and almost the same percentage (48%) to Moderately followers.

I could significantly separate these groups from each other according to the employed information system in the case of controlling system (Tendency followers: 4.71, Moderately followers: 4.06, Non followers: 3.96), management accounting system (Tendency followers: 4.71, Moderately followers: 4.06, Non followers: 3.96), accounting system (Tendency followers: 4.56, Moderately followers: 4.17, Non followers: 3.72) and reports of other functional (company) areas (Tendency followers: 4.38, Moderately followers: 3.71, Non followers: 3.56). By all information systems the Tendency followers have gave the highest average points. As consequence it can be declared that the cluster of Tendency perceivers and followers use more information systems to collect and process the information to their decisions. The role of the controlling system has to be emphasized, because its major role is to detect changes and generate reactions.

I have examined the two before mentioned cluster groups' intersection, and I have realized that 64.7% of the developed financial management cluster belongs to the Tendency followers and 23.5% to the Moderately followers. The half of the operatively developing financial management cluster belongs also to the Non followers. And also the half of the undeveloped financial management cluster belongs to the Non followers and moderately followers. 68.8 percent of the Tendency followers have Developed financial management, and 59.5% percent of the Non followers have Undeveloped financial management. **The development of the financial management makes the better change perceiving ability possible.**

### 3.2. Results of the controlling's financial activity research

The controlling definitions of scientific literature representatives contain financial planning, analysis methods more or less so financial controlling cannot be separated completely from controlling overall. Moreover the controlling system of the company has to fulfill the financial controlling activity in case it's needed. This kind of financial orientation can vary in wide scale according to needs of the practice.

In this second part of my research I focused on the examination of controlling's financial contents. For the examination I've used two groups of questions and created two and two principal components. One of the first pair was the Financial orientation of controlling (total variance: 58.70, factors: controlling decomposes the numbers of financial plans to functional areas and management levels and reviews them, controlling demonstrates the effects of financial decisions in the financial plans, controlling makes financial processes and their results understandable, financial oriented controlling is needed to secure management's successfulness, controlling can support the strategic decisions of the financial management with adequate information, controlling can show the connection between the financial processes and the company's value) principal component. The other of the first pair was the

controlling's effect on financial management's successfulness (factors: controlling can support the operational decisions of the financial management with adequate information, controlling improves the profitability, controlling reduces the financial risks, controlling improves keeping the adequate liquidity, controlling secures the intervention possibility to the financial cash-flows for financial management according to the needs, the interaction between controlling and the financial plans secures the financial management's successfulness) principal component.

With these before detailed principal components I've created two clusters as a result: Controlling with financial content (n: 68), Controlling without financial content (n: 56). 82.4 percent of the big companies have a Controlling with financial content and 60.7% percent of the middle-sized companies belong to the cluster Controlling without financial content.

The usages of different financial plans significantly characterize the cluster Controlling with financial content. The result plan (4.436), balance sheet plan (4.375), cash- flow plan (4.161), financing plan (4.161) and investment plan (4.385) were conspicuous among these (with relatively low deviation) so controlling serves these planning activities well.

I have found significant differences in the case of financial controlling functions. In the cluster of Controlling with financial content the analyzing (3.911) and monitoring (3.911) of financial plans and financial processes have reached the highest averages. Conspicuous was the planning function's controlling support. Less characteristic were the making of financial diagnosis, financial analysis and making precautionary proposals.

In the case of the employed information system the clusters were significantly separable. The members of cluster Controlling with financial content has reached significantly higher averages. The most conspicuous was the use of controlling system that strengthens the assumption that financial controlling and controlling cannot be separated.

Moreover I've analysed how controlling supports the operational and strategic financial tasks. To reduce the variables I've created a principal components for controlling support of strategic financial tasks (total variance: 57.77, factors: securing the optimal financial structure, the adequate level of capital cost, effective employment of capital, returns of fixed asset investment, increase of company value, securing an adequate level of profitability, managing the inflation, the connection between the cost of capital and the turnover of assets) an another one for controlling support of operational financial tasks (total variance: 53.93, factors: conformity of asset and capital structures, conformity of receivables and suppliers (account payables), adequate inventory level, adequate and conformed days of inventory, sales and payables outstanding, securing the adequate level of cash-flow, measuring and management financial risks, securing the required level of liquidity).

With these principal components I've created the clusters Without controlling support (n: 20), Moderate controlling support (n: 49), Strong controlling support (n: 37). 61.1 percent of the big companies are in the cluster Strong controlling support. 51.1 percent of the middle-sized companies belong to the cluster Moderate controlling support.

In the cluster Strong controlling support the controlling system (4.47) the reports of other functional (company) areas (4.41) the management information system (4.29), the management accounting system (4.26), accounting system (4.11) are the most important information systems. The other clusters showed significantly decreasing averages according to the less extent of controlling support. Not significant were the management accounting system and the controlling system.

I've found significant differences among these clusters according to financial planning and the controlling support of financial controlling functions.

In the case of Strong controlling support financial planning the result plan (4.541), balance sheet plan (4.649), cash- flow plan (4.432), financing plan (4.568) and investment

plan (4.487) were conspicuous. So controlling plays an important role in making these financial plans. Less important was the plan of financial risks (3.722).

The execution of financial controlling functions were the most expressive in the before mentioned cluster. (analysing (4.108) and monitoring (4.243) of financial plans and financial processes, review of financial plans and processes (3.946) making financial diagnosis (3.919))

Finally I have made crosstabs with controlling support clusters and financial management's change perceiving ability clusters. Among 73.3 percent of the Tendency followers the controlling support of financial tasks is strong. Among the Non followers the controlling support is rather moderate (51,2%) or it doesn't appear (30.2%).

### 3.3. Results of the controlling's method and implements research

The research of the controlling methods and tools is a diverge problem and would account for another research because controlling has to provide the adequate information requested by the management's decisions. Controlling can use many methods and implements in accordance the management hierarchy.

In this part of my research I've only created principal components to prove the relatedness of the sort of implements. This was necessary to help simplify the further researches. Mainly I've queried implements and methods that are in close connection with the financial management. On behalf of this I've created the principal component of the financial planning methods (total variance: 44.72), financial analysing methods (total variance: 51.99), company value oriented methods (total variance: 52.82) cost management methods (total variance: 43.07)

### 3.4. Path modeling for the explanation of financial controlling

In my first path model I started from the assumption that company size affects the controlling activity and the development of financial controlling. Moreover this has an influence on the financial management's successfulness. (Figure 2)

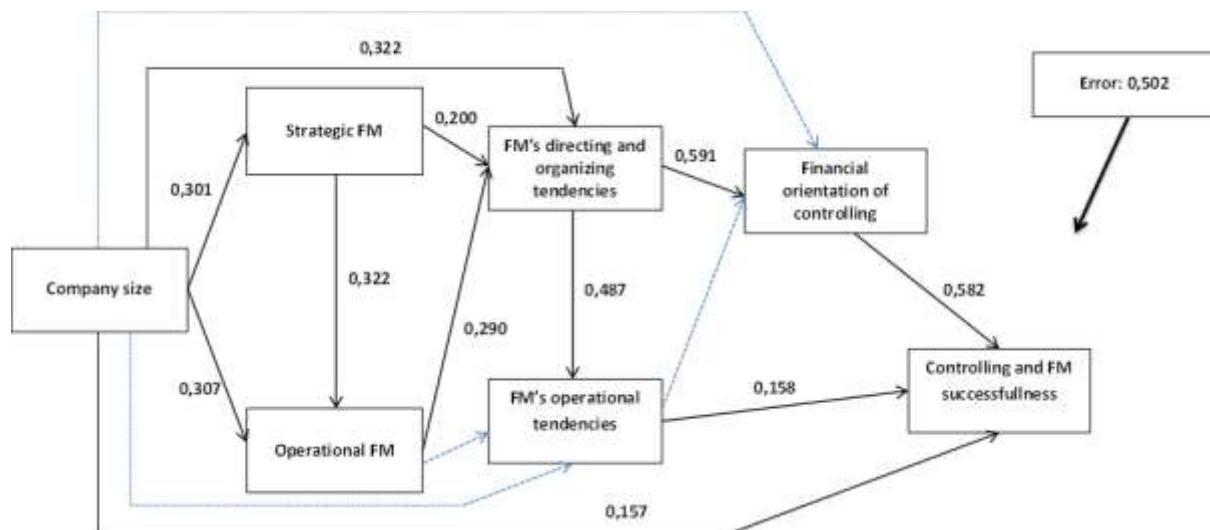


Figure 2: Path model for the explanation how company size affects the controlling support on financial management's (FM) successfulness (The blue dotted line shows a presumed but not proved linkage.) Source: Own construction

The linkage system was constructed theoretical and was tested with linear regression analysis which showed and error of 50.2 percent. This means that the controlling's influence

on financial management's successfulness (as final exogenous variable) is explained by the endogenous variables 49.2 percent.

The final exogenous variable is directly explained by the company size. (beta is 0.157) The indirect effects give a beta of 0.210 altogether. **The company size explains the controlling's effect on financial management's successfulness** with regression coefficient (the direct and indirect effect altogether) of 0.367.

In my second path model I examined the effect of financial management's tendency following ability's principal components on the employed controlling (financial analysis) methods. I found an error of 51.4%, so the endogenous variables explain the exogenous variable 48.6%. I couldn't prove the direct connection, but the model proved the indirect connection with a regression coefficient of 0.340. So **financial management's tendency following ability affects the group of controlling analysis methods employed**.

In the third path model I used the same linkage system only the final exogenous variable was different, because it was the financial planning tools that controlling employs. I couldn't prove a direct connection. The model proved the indirect connection with a regression coefficient of 0.312. So **financial management's tendency following ability affects the group of controlling's planning methods employed**.

### 3.6. New scientific findings

1. I've significantly identified the groups of the strategic (long term financial planning, shaping financial politics, capital structure/capital investment, risk management, optimization of risks and returns) and operational financial tasks (procession of transactions, working capital management, short term financial planning, reporting, cost management internal audit) based on the examination of the questionnaire survey.
2. I have verified the assumption that the financial management's tasks and complexity increases according to the size of the company. This affects the financial management's flexibility positively.
3. I have proved with path modeling that company size influences financial management's successfulness positively both directly and indirectly.
4. I have verified my assumption that the increase in financial management's informational and coordination tasks result controlling information system's growing usage from the financial side.
5. I have proved that financial management's change following requirement affect the financial methods' (planning and analysis) usage in the controlling job. I have established that there isn't significant direct connection between the financial management's directing and organizing tendencies and the use of financial planning, analysis in controlling praxis, so the connection prevails through other principal components (e.g. controlling support of strategic financial tasks, controlling support of operational financial tasks).

#### **4. CONCLUSIONS**

In the course of the financial management's examination the middle-sized and big company practice showed significant groups of financial duties. These groups can be called the strategic and operational tasks and present the role of financial management in the context of company decision making. As a consequence financial management has to collect and process information both from the internal and external environment to get able to fulfill its task effectively. The execution of these tasks makes financial management to become a partner of the top management.

I haven't found any relevant differences in the usage of different financial planning methods (result plan, balance sheet plan and cash-flow plan) among companies in the sample. These are commonly used. In companies with developed financial management I found the usage of the financing plan, investment plan and financial risk plan important too. This demonstrates that development appears in more complex treatment of financial matters. To fulfill these involved tasks developed financial management needs wide-ranging information. Usages of different information system conform to these needs. The accounting system is used by all of the companies in the sample more or less for these purposes. The developed financial management can be significantly separated from "operatively developing financial management" and "undeveloped financial management" clusters by comparing the information system usage. Among the developed financial management cluster the management accounting system, reports of other functional (company) areas, data storage systems and controlling system have reached the highest average points among the answerers. I haven't found significant differences among the clusters in case of the frequency and reliability of the reporting system. Companies in the sample used yearly, half-yearly, quarterly and monthly reports most frequently. Companies with developed financial management are more satisfied with the reliability of the reports on a par, which can be derived from the used systems' higher level of coordination.

Financial management can perceive the internal and external effects affecting the company according to its development the employed information systems and tools. As a reaction financial management can change its own organism and the working processes. The sample has reflected the financial management's growing importance in the company.

I've created clusters from the sample using principal components that were made according to the tendency perceiving ability. (Tendency followers, Moderately followers, Non followers) I could significantly separate these groups from each other according to the employed information system in the case of controlling system, management accounting system, accounting system and reports of other functional (company) areas. By all information systems the Tendency followers gave the highest average points. As a consequence it can be declared that the cluster of Tendency perceivers and followers use more information systems to collect and process the information according to the decisions' needs.

Because of my assumption I have examined the two before mentioned cluster groups' intersection. 64.7% of the developed financial management cluster belongs to the Tendency followers and 23.5% to the Moderately followers. The half of the operatively developing financial management cluster belongs also to the Non followers. And also the half of the undeveloped financial management cluster belongs to the Non followers and moderately followers.

The controlling definitions of scientific literature representatives contain financial planning, analysis methods more or less so financial controlling cannot be separated completely from controlling overall. The second part of my research focused on the

examination of controlling's financial contents. I've created principal components again based on the query answers of the sample and I've formed two clusters as a result. (Controlling with financial content, Controlling without financial content)

The usages of different financial plans significantly characterize the cluster Controlling with financial content. The result plan, balance sheet plan, cash-flow plan, financing plan and investment plan were conspicuous among these (because of the high average points and relatively low deviation).

I have found significant differences in the case of financial controlling functions. In the case of Controlling with financial content the analysing and monitoring of financial plans and financial processes have reached the highest averages. Conspicuous was the planning function's controlling support. Less characteristic were the making of financial diagnosis, financial analysis and making precautionary proposals.

In the case of the employed information system the clusters were significantly separable. The members of cluster Controlling with financial content has reached significantly higher averages. The most conspicuous was the use of controlling system that strengthens the assumption that financial controlling and controlling cannot be separated.

I've created three more clusters to examine the controlling support for strategic and operational financial activities. (Without controlling support, Moderate controlling support, Strong controlling support). I've found significant differences among these clusters according to financial planning and the controlling support of financial controlling functions.

In the case of Strong controlling support the financial controlling functions showed prominent averages. This means that controlling supports the financial management's decisions more expressly.

As a next step I've examined the intersection of the financial management's tendency following clusters and the financial activities' controlling support. A huge percentage of Tendency followers cluster belong also to the Strong controlling support cluster. The most of the Strong controlling support cluster belong to the Moderate followers, and only second is the Tendency followers cluster. This can be explained by the higher presence of middle-sized companies in the sample.

In the final step of my research I've accomplished path modeling based on the before mentioned principal components to reveal the connection between the company size and the controllings' effect on the financial management's successfulness and the connection between the financial management tendency following ability and the employed financial implements in the controlling function.

Between the company size and the controllings' effect on the financial management's successfulness I've found direct and indirect positive connection, so the company size does affect the financial management's successfulness directly and indirectly.

Financial management's tendency following ability doesn't affect the employed financial implements (financial planning and analysing implements) of controlling, but it does indirectly. This indirect connection is positive in both cases.

## **5. SUMMARY**

Economic and corporation development has caused the expansion in the corporations' financial functioning so the decision making roles of the financial managers. Financial management is not only responsible for the liquidity, profitability, and the adequate financing structure or managing the informational systems that are in the sphere of authority of the operational and structural systems. It has come closer to the top management to strategic decision making. So the overall role and responsibility of financial management (Chief Financial Officer- CFO) has become more important not only as an information provider but as a partner also.

At the end of the twentieth century the increasing economic competition resulted by market liberalization and globalization made corporations operate more rational use resources more effectively. The financial/ economic crisis has drawn attention to limited capital sources that raised many challenges to economic actors. The financial crisis had an effect on the real economy, on the consumption, on the economic relations and made corporations to reevaluate their positions. External financial possibilities were restricted obtaining them required stricter conditions; the payment conditions of supplier buyer relations became inflexible; solvency, financial safety became more important. These factors put the financial management under pressure considering its relation to its own organization and to other corporation subsystems. Under these conditions to make financial management able to perform well in decision making and in the execution of corporation objectives informational systems are needed that are capable to process wider range of information according to the requirements of decision making. Controlling is a kind of management subsystem that coordinates the tasks of the information using managers with performing the planning, review and the decision supporting information service. Controlling assists the effective execution of corporation objectives.

In my thesis, the main objective was to explore financial management, the relationship between financial management and its supporting controlling subsystem (financial controlling) with special regards to the effects on the success of financial management.

To explore the relationship adequately I have examined the standpoints and studies of scientific literature representatives both in the field of financial management, and financial controlling. I have discussed the conclusions -using semi- structured- interviews with corporation managers. Combining the results I' have composed a survey that was queried among leading managers of middle- sized and big companies.

The results of the query were processed with SPSS statistical software kit. In the course of the procession I've used principal components method within factor analysis to identify among the different variable groups the most coherent ones. I have used these principal components for determining clusters. To characterize these clusters –beside the generative principal components- I have used analysis of variance and cross tabulation. At the end of my examination I have used path modeling based on linear regression analysis. With these path models I have examined and evaluated the relation of the principal components (illustrative of financial management) and financial controlling.

Based on my analysis I have proved that according to the size of the corporation the tasks of the financial management increase and so does the complexity of the financial function. These result a positive effect on the adaptive ability of the financial function. Those corporations that have a developed financial function are able to perceive the external and internal changes better. In the planning process they take wider range of factors into consideration that affect their financial function and use corporation information systems better, so the controlling system too. I determined that the size of the corporation affects

directly and indirectly the financial role of the controlling system and the success of financial management, as a result.

The growth of the informational and coordination role of the financial management demands the usage of financial controlling in a greater extent. I've found that financial monitoring, plan and process analysis, review and the making of financial diagnosis are the most relevant characteristics of financial controlling from the group of financial controlling duties (according to scientific literature).

I demonstrated that the tendencies that stress financial management affect through the usage of financial controlling on the analysis tools, and financial planning methods that are used by the controlling the most.

## **A DISSZERTÁCIÓ SZERZŐJÉNEK AZ ÉRTKEZÉS TÉMAKÖRÉBEN MEGJELENT KÖZLEMÉNYEK JEGYZÉKE**

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