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CAPITAL BUDGETING DECISIONS AND SMALL FAMILY BUSINESSES: THE CASE OF KOSOVO

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Abstract

Family-owned businesses are one of the pillars of many economies around the world. Similarly, in Kosovo, family-owned represent about 80 per cent of businesses. Therefore, this study presents a comprehensive analysis of the governance of Kosovo's family-owned small businesses. More specifically, it examines the relationship between family ownership and capital budgeting. The study was done using both primary and secondary research. The study is based on data collected through an online survey, semi-structured interviews, and literature. Among other findings, the author found that the more educated top management in family-owned businesses are more likely to employ sophisticated capital budgeting techniques.

Keywords: Family Business, Small and Medium Enterprises, Capital Budgeting, Investment Decisions, Payback Period, Net Present Value, Financial Literacy.

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Introduction

The economy of Kosovo is mainly composed of micro and small businesses with fewer than 49 employees. Access to capital for many small businesses is still limited, with many initiatives being implemented by the European Union (EU) to offer financial advice and guidance as they play a significant role in the economy of Kosovo. In addition, being a region with political tension, the strength and competitiveness of small and medium enterprises (SMEs) across the region become of utmost importance for economic development and improvement of relations between the countries. To foster growth, SMEs need capital budgeting decisions to justify their investments and improve access to finance. However, the characteristics of the small businesses make it difficult to apply the capital budgeting theory into practice.

Moreover, If the business is a family-run business, these characteristics become even more noticeable, hampering their ability to evaluate projects, access to capital, and growth. Moreover, recent studies show that small businesses use less sophisticated capital budgeting methods when making investment decisions than larger businesses (Brincks et al. 2020). However, in this research, I look at the relationship between family ownership and capital budgeting. In detail, I investigated whether family-owned businesses use less sophisticated capital budgeting techniques than non-family-owned businesses, and if the level of education of family members at top management is positively related to the use of more sophisticated capital budgeting techniques.

This research paper will be structured and divided into four parts. The first part will present a literature review by presenting similar research papers and explaining the main concepts discussed throughout the paper. The second part will present the methodology used. The third part will

present and elaborate on the results and findings. Lastly, the fourth part will present the discussion and conclusion.

Literature Review

Capital Budgeting

During the lifecycle of the business, one of the most important parts of the financial managers is to determine which projects or investments to undertake to increase the value of the company. This becomes increasingly important in a business environment where company growth is an important component of survival, competitiveness, and success. As such, capital budgeting is the process of analyzing investment opportunities and deciding which ones to accept. It starts with forecasting the future consequences for the firm if the project is undertaken, e.g., revenues and costs (Berk and DeMarzo 2014). There are several capital budgeting techniques, including Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, Profitability Index, Discounted Payment Period, and Modified Internal Rate of Return. For this research, the following seven quantitative investment techniques are analyzed: Cash Flow Analysis, Quantitative Market Research, NPV, IRR, Payback Period, Profitability Index, and Return on investment (ROI).

Quantitative Market Research: Market research can provide useful data to help managers make better decisions. In detail, it can help evaluate the potential and find gaps in the market, which are among the first steps on investment project analysis.

Cash Flow: Project expected cash flow analyses are made to understand if a project is feasible or not for the business, and what measures can be taken to enhance the project feasibility (Fight 2005). As a result, cash flow analysis aids businesses in determining whether or not a project will be a smart use of their funds, and it is typically one of the first steps in the appraisal of new investments.

Net Present Value: Often labelled as the "golden rule" of financial decision-making, NPV is the difference between the present value of investment benefits and its cost. It is calculated by forecasting the future cash flows (Berk and DeMarzo 2014). The NPV rule states that any project with a positive NPV increases the firm's wealth today and should be taken.

Internal Rate of Return: IRR rule is based on the average return of the investment opportunity, and that is compared to the return of alternatives in the market with equivalent risk and return – e.g., cost of capital (Berk and DeMarzo 2014). In this case, as a rule, the investment opportunity should be taken if the average return is greater than the cost of capital.

Payback Period: The payback period rule is a less sophisticated method adopted by small businesses for evaluating small investments. It states that an investment should be accepted if its cash flows pay back the initial investment within a prespecified period (Berk and DeMarzo 2014). The company decides the length of time depending on their strategy and expectations, and it can differ between companies for the same projects.

Profitability Index: When evaluating different projects with positive NPV but with limited company resources, profitability index ranks the projects based on the highest value created in terms of NPV per unit of resource consumed (Berk and DeMarzo 2014). As a rule, the company should take the projects based on the ranking from highest to lowest until the resource is consumed. Regarding these methods, SMEs use the less sophisticated methods, including the Payback Period and Profitability Index, compared to large firms that use NPV and IRR (Morris and Scott 2006).

Return on Investment: ROI is a metric used to evaluate the profitability and efficiency of an investment. It can be used to evaluate any business expenditure (Curry and Birken 2021). Depending on the desired rate of return of the businesses, a good ROI can vary from business to business, depending on project risk and their return percentage goal.

Family Business

Family Business is a unique blend of family, management, and ownership. What differentiates them from management-controlled businesses are intensions, values, and strategies that influence the interactions of owners who are members of the same family (Poza 2010). For this research, the common European definition of a family business will be used, which identifies a family business if:

(1) The majority of decision-making rights are in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child, or children's direct heirs; (2) The majority of decision-making rights are indirect or direct; (3) At least one representative of the family or kin is formally involved in the governance of the firm; (4) Listed companies meet the definition of family enterprise if the person who established or acquired the firm (share capital) or their families or descendants possess 25 per cent of the decision-making rights mandated by their share capital (European Commission 2009).

Family Businesses and Small Firms in Kosovo

Not only are SMEs the backbone of the European economy, but that is the case for Kosovo too, with the SMEs representing a remarkable 99.8 per cent of registered enterprises and generating approximately 75 per cent of the employment in the country (Vlajcic 2019). In comparison, SMEs account for 99 per cent of all enterprises in the EU (25 million), employing nearly 100 million people (2 out of 3 jobs) and accounting for 50 per cent of Europe's GDP (European Commission 2020). These are small firms but essential to Kosovo and Europe's competitiveness and prosperity. According to the Ministry of Trade and Industry in Kosovo, an SME is defined if the business organization has an annual turnover of up to 1 mil (OECD et al. 2019). Nevertheless, it is unclear how many can be classified as family-owned businesses. However, it is estimated that around 80 per cent of businesses in Kosovo are family-owned (Abdixhiku et al. 2015), compared to 60 per cent of businesses in Europe that are family-owned (European Commission 2009). Due to the

importance for the Kosovo Economy, programs such as The Kosovo Credit Guarantee Fund (KCGF) is boosting the demand for loans among SMEs while also facilitating SMEs access to credit – a common problem among small businesses in Kosovo and a barrier to their growth (OECD et al. 2019). Adding that Kosovo is ranked in the lower half of the region in key areas that facilitate access to finance (OECD et al. 2019), capital budgeting becomes of utmost importance for small businesses to justify investments, improve their access to finance, and foster their growth.

Family Businesses, Small Firms, and Capital Budgeting Techniques

To date, little is known on the difference in the capital budgeting techniques used by small family-owned businesses compared to non-family-owned businesses. Furthermore, previous research focuses on large companies' investment decisions (Raj 1980). Nevertheless, there has been research on the capital budgeting techniques used by small businesses compared to large ones. E.g., according to (Morris & Scott 2006), the characteristics of small businesses such as short operating histories, low number of colleges educated owners, informality, incomplete management teams make it difficult to apply the capital budgeting theory into investment decisions. This is supported by (Barjaktarovic et al. 2015) in the survey done with SMEs in Serbia – the neighbouring country of Kosovo. The results listed lack of education and inefficient capital market as the main reasons for using less sophisticated capital budgeting techniques such as payback period. Furthermore, regarding education, previous research highlights the positive association that CEOs education has on the choice of using sophisticated capital budgeting methods and better growth opportunities for firms in the US, Netherlands, Germany, and France (Hartwig 2011; Graham and Harvey 2001, as cited Daunfeltd and Hartwig 2014). In addition, the results of (Barjaktarovic et al. 2015) raised the issue and highlighted the need to improve the business environment in Western Balkans by initializing workshops and programs to familiarize small businesses with more

sophisticated capital budgeting techniques, which in turn would positively contribute to more sustainable investments. It is difficult for small businesses to continue to use less sophisticated methods for evaluating projects, then obtaining new loans or attracting investors to realize their full potential. Adding to this the lack of access to capital markets, the allocation of capital for small businesses becomes one of the most strategically important decisions within the company. As such, to date, past research has looked only at the firm size and capital budgeting, but not family ownership and capital budgeting.

Methodology

The study is based on primary data collected through an online survey specifically commissioned for this study, semi-structured interviews, and already published data from national and international reports. The survey aimed at understanding the use of sophisticated capital budgeting techniques of small family-owned or non-family-owned businesses from the managers and owners in Kosovo. The online survey contained mainly close-ended questions with few open-ended questions. The open-ended questions have been used in cases where additional explanation is needed behind a rating, or when the respondent's opinion is not included as an option in the multiple-choice questions.

After reviewing the survey in terms of clarity and content, a pilot testing of the survey with five businesses was done to evaluate the logic flow and the quality from the perspective of the respondent to prevent potential issues with the survey during the study. The pilot test also enabled the establishment of the reliability of the survey and measured the time required to complete an interview. The finalization stage of the questionnaires produced the final versions of the survey in two languages, English and Albanian.

In total, 120 small businesses (sample size) have been part of the online survey. The method used to survey businesses was through an online survey platform (Google Forms) sent to businesses by using convenience sampling through email and other communications platforms. The collected data were then exported to a rigid cleaning program that thoroughly checks for three main principles: logic, consistency, and permissible data options and congruency. After the quality control phase check was finished, the data were exported to STATA software to further analyze the data.

In addition, in-depth research was conducted through individual conversations with family-owned business owners and non-family-owned businesses, all operating in different business sectors in Kosovo (seen in Figure 3).

Model

This study explores the capital budgeting techniques of family businesses in Kosovo. Therefore, I surveyed family businesses to understand the extent to which they use capital budgeting techniques, risk adjustment techniques, and working capital management techniques. I show the relationship between the level of education of the top management in family-owned businesses and the use of more sophisticated capital budgeting techniques and general quantitative investment planning techniques. I also examine whether family-owned or non-family-owned businesses use more sophisticated capital budgeting techniques. The two main objectives of this study are A) To understand the financial management techniques in small family-owned businesses in Kosovo; B) To examine the association between level of education of top management in small family-owned businesses and use of sophisticated capital budgeting or quantitative planning techniques, and C) To examine whether small family-owned businesses use less sophisticated capital budgeting techniques compared to non-family-owned small businesses.

Therefore, the main hypothesis tested are:

H1: The level of education of the top management in family-owned businesses is positively related to the use of more sophisticated capital budgeting techniques.

H2: If a business is family-owned, they use less sophisticated capital budgeting techniques compared to non-family-owned businesses.

To reach the objectives mentioned above, I estimate regression models of the use of sophisticated capital budgeting techniques and use of quantitative investment techniques and measure the effect of the level of education and status of the businesses on these outcomes. The regression models are reduced form which are presented below:

use of sophisticated capital budgeting technique_i

$$= \beta_0 + \beta_1 Education + \beta_2 experience + \beta_5 Gender + \beta_6 firmage + \beta_7 tenure + \beta_7 familybusiness + \varepsilon_i$$

use of quantitative investment budgeting technique_i

$$= \beta_0 + \beta_1 Education + \beta_2 experience + \beta_5 Gender + \beta_6 firmage + \beta_7 tenure + \beta_7 familybusiness + \varepsilon_i$$

$$frequency_i = \beta_0 + \beta_1 Education + \beta_2 experience + \beta_5 Gender + \beta_6 firmage + \beta_7 tenure + \beta_7 familybusiness + \varepsilon_i$$

Data and Methods

The primary dependent variable in the study is “use of quantitative investment techniques”, which is a dichotomous (dummy) variable indicating if the company uses quantitative investment techniques or not (0 and 1). The second dependent variable is “use of sophisticated capital budgeting techniques”, which is a dichotomous (dummy) variable indicating if the company uses capital budgeting techniques or not (0 and 1). The third dependent variable is “frequency”, a

dichotomous (dummy) variable indicating whether the company uses quantitative methods often or always or otherwise. Independent variables include numerous company characteristics and demographic variables of the questionnaire respondents, mainly the owner. One important independent variable is the potential experience, which is standard in research on returns to schooling and was calculated age minus years of schooling minus six. Other independent variables include characteristics likely to influence a company's decision to use quantitative investment budgeting techniques or sophisticated capital budgeting techniques. These control variables include whether the business is family-owned or not, the respondent's experience, gender, level of top management education, tenure, and the number of employees. In this study, variables indicating other characteristics about the company do not have much variation; thus, I did not use them in the model. However, I have provided information regarding such variables using descriptive statistics. See Appendix II for definitions of these variables and summary statistics.

Data Analysis

I conducted the empirical analyses in two phases using descriptive and inferential statistics. Descriptive statistics are used to describe the basic features of the data from this study by providing summaries about the sample and the measures together with graphics analysis. For inferential statistics, I estimate three multivariate regression models to examine the effects of education in the use of sophisticated capital budgeting techniques for family-owned businesses and the use of quantitative investment budgeting techniques simultaneously controlling for characteristics of the respondent and the company they represent. In the third regression, I examine whether experience and level of education have an effect in the frequency of use of quantitative investment methods. In addition, the models help estimate whether small and family-owned businesses use less sophisticated capital budgeting techniques than small and non-family-owned businesses.

Limitations

Convenience sampling: Since this study is done using convenience sampling, there are several disadvantages that readers should be aware of before interpreting the results. These include the possibility of under or over-representation of the population. Specifically, there is a lack of variation in education where 87 per cent of the sample has a college degree. This study used convenience sampling because of the COVID-19 restrictions, short time, and lack of budget. As such, results from this study are easy to analyze but hard to replicate, making it hard to generalize these results to the larger population.

Many definitions of family businesses: Many definitions regarding what is considered a family business are still a limitation on conducting comparative studies and getting quantitative information about the number of family businesses that operate in the market. However, in the questionnaire, the common European definition of Family Business was provided to respondents to classify their business as a family-owned or professionally managed business.

Online survey method: Although the online survey method is an easier and faster method of collecting data, it still has limitations such as inflexibility and lack of depth. Inflexibility in terms of not being present to clarify questions that the respondents may misunderstand, whereas lack of depth in terms of generalized questions that need to be asked to make it as simple and as understandable for the respondents. As a result, this may lead to survey results being less valid compared to other data collection research methods.

Low sample size: Because of the low sample size (120), these findings should be interpreted carefully because it can produce inconclusive results.

Results

Descriptive Analysis

In total, 120 companies answered the survey, with 74.2 per cent of the respondents being the business owner, 7.5 per cent as financial director, 4.2 per cent as treasurer, and other positions with a smaller percentage (Figure 1). Of 120 respondents, 61.7 per cent were family-owned SMEs, whereas 38.3 per cent were non-family-owned SMEs (Figure 2).

Figure 1. What is your title at the company? (N=120)

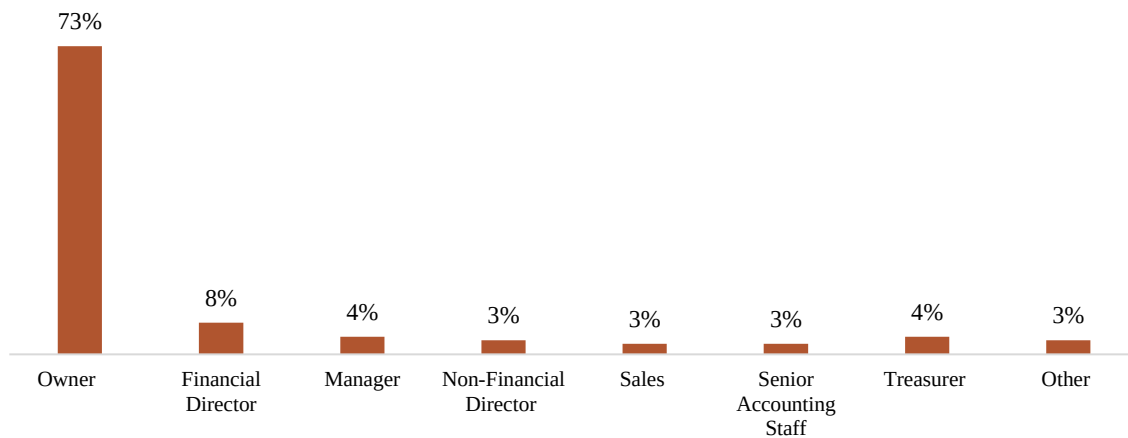
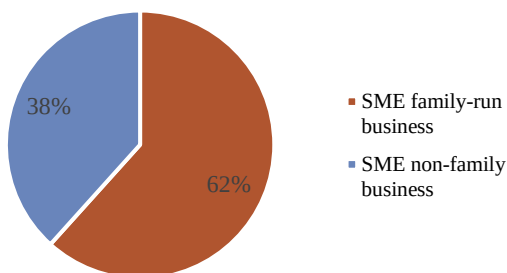
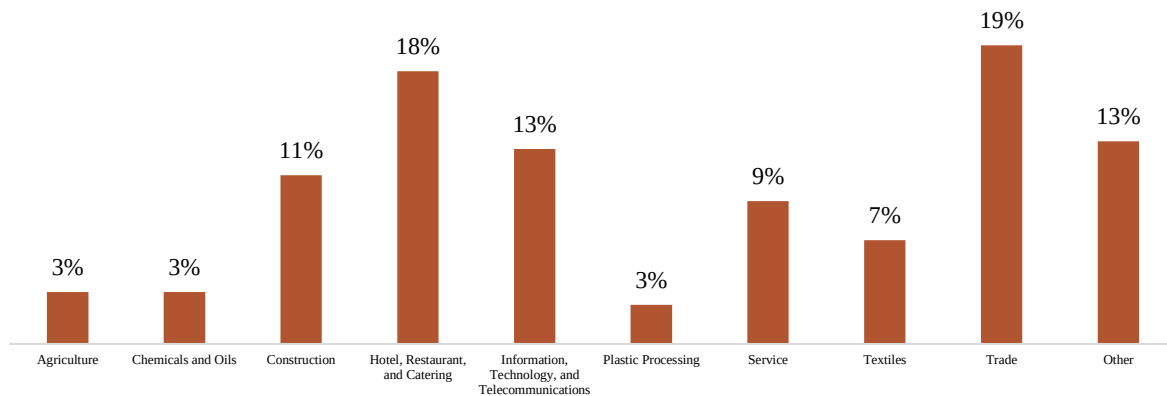


Figure 2. What type of business is this? (N=120)



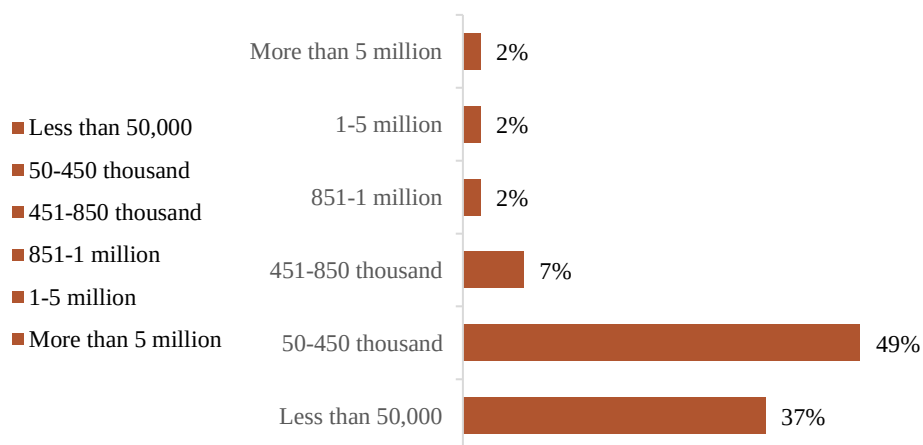
Regarding business sectors, 19.2 per cent were in the trade sector, followed by 17.5 per cent in the HORECA sector, 12.5 per cent in the Information, Technology, and Telecommunication sector, 10.8 per cent in the construction sector, and other sectors with 13 per cent (Figure 3).

Figure 3. In which industry is this business? (N=120)



The highest number of respondents were businesses with less than 9 employees. In detail, 61.7 per cent of businesses had less than 9 employees, 28.3 per cent had between 10-49 employees, 3.3 per cent had between 50-80 employees, and 6.7 per cent had over 80 employees. Furthermore, most of the businesses have been operating for an average of 12 years, whereas respondents have been in their current position for an average of 6 years. In terms of the capital budget size per year, 49 per cent of the companies had a budget between 50-450 thousand, followed by 37 per cent with a budget of less than 50 thousand, and 7 per cent with a budget between 451-850 thousand. (Figure 4).

Figure 4. Capital budget per fiscal year (N=94)



Part of the objective of this study was to evaluate the investment decisions of the family-owned businesses in Kosovo compared to non-family-owned businesses. After defining businesses as family-owned vs non-family-owned, respondents were asked regarding investments characteristics such as the size of budget, evaluation techniques, and decisions. Results of the survey show that 89 per cent of the companies plan for investment.

Furthermore, companies were asked whether they use any quantitative analysis for their investment decision. As a result, 89 per cent of them plan for investment also use quantitative analysis before making the final decision (Figure 5).

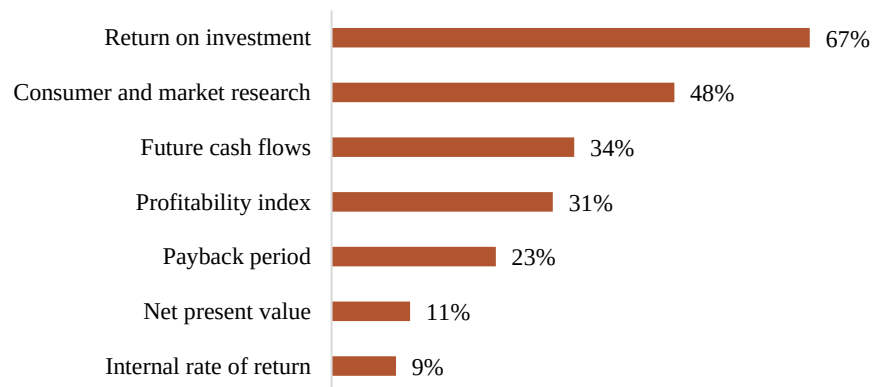
Figure 5. *Do you use any quantitative analysis when you plan for investments? (N=107)*



Companies that did not use quantitative analysis claimed that the reasons for not using include lack of familiarity with the methods (62%), followed by the complexity of the methods (31%). In addition, companies that did not use quantitative analysis were asked to choose what other qualitative analysis they use for an investment decision. Hence, results show that personal judgment (58%), customer satisfaction (50%), and competitive advantage (42%) are the main qualitative techniques used for investment decisions. Businesses that plan and use quantitative analysis for investments were then asked to choose among quantitative techniques they use for investment decisions to better understand the capital budgeting practices. Results show that less sophisticated capital budgeting techniques lead as techniques of investment analysis for SMEs in Kosovo. In detail, 67 per cent use return on investment, 48 per cent use consumer and market research, 34 per cent use future cash flows ignoring the time value of money, and 23 per cent use

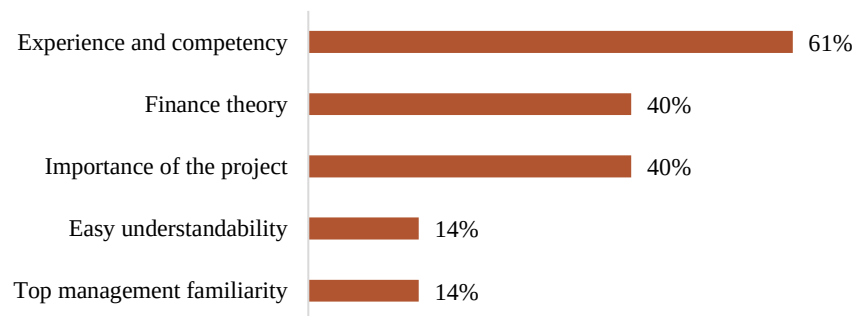
payback period. More sophisticated capital budgeting techniques such as net present value was only used by 11 per cent of the respondents, and 9 per cent used internal rate of return (Figure 6).

Figure 6. Which technique do you use when making quantitative analysis? (N=94)



To further understand the reasoning behind the chosen technique, respondents were asked to choose the main factors that contribute to deciding which quantitative technique to use. As a result, experience and competency come first as a factor with 61 per cent, followed by finance theory with 40 per cent, and the importance of the project with 40 per cent (Figure 7).

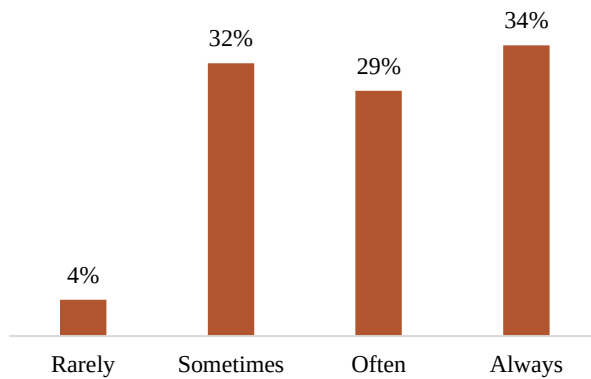
Figure 7. Factors for choosing the technique for quantitative analysis (N=94)



To further understand the frequency of using the quantitative analysis, 34 per cent of the respondents claimed that they always use the quantitative analysis, 32 per cent sometimes use

quantitative analysis, and 29 per cent often use quantitative analysis. Only 4 per cent of the respondents rarely use quantitative analysis. (Figure 8)

Figure 8. *How often do you use quantitative analysis methods? (N=94)*



Multivariate Regression Results

Reduced form of regressions

Table 1 depicts the results of the multivariate models with the “use of sophisticated capital budgeting technique” as the dependent variable. For this regression, I use the linear probability approach in which the dependent variable is a discrete measure, the “use of sophisticated capital budgeting technique” (e.g., 1 or 0, if the sophisticated capital budgeting technique is used or not, respectively) and regressing on a set of independent variables.

In the model, I have held constant for several factors that can influence the use of sophisticated capital budgeting techniques and the respondent's demographic characteristics (financial employee or owner of the surveyed companies) such as education, gender, and years of experience.

Based on the results of the estimated linear probability model (shown in Table 1), I can see that the level of education of the top management in family-owned businesses is positively related with sophisticated capital budgeting techniques. If the top management of the family-owned businesses has finished university or more, the probability of using sophisticated capital budgeting techniques

increases by 17 per cent. The p-value is lower than 0.05, meaning that the effect is statistically significant.

Furthermore, an additional year of experience increases the probability of using sophisticated capital budgeting techniques by 0.1 per cent. Also, if top management in family businesses is female, it decreases the probability of using sophisticated capital budgeting techniques by 0.6 per cent. Moreover, an additional year of firm age increases the probability of using sophisticated capital budgeting techniques by 0.2 per cent. These variables have a p-value greater than 0.05, meaning that the effect is not statistically significant. Therefore, I cannot conclude if those variables have a positive or negative effect on the use of sophisticated capital budgeting techniques.

Based on the results of the estimated linear probability model for quantitative investment planning (shown in Table 1), an additional year of experience of the top management in family-owned businesses increases the probability of using quantitative investment planning by almost 2 per cent. In addition, an additional year of tenure from the top management in family-owned businesses decreases the probability of using quantitative investment planning by 3 per cent. These variables have a p-value lower than 0.05, meaning that the effect is statistically significant.

Table 2 depicts the effect results for both family-owned and non-family-owned businesses that participated in the survey. If the top management of a company has finished university or more, the probability of using sophisticated capital budgeting techniques increases by 13 per cent. The p-value is lower than 0.05, meaning that the effect is statistically significant.

For instance, if the surveyed company is a family-owned business increases the probability of using sophisticated capital budgeting techniques by 7 per cent. Given that this variable has a p-

value greater than 0.05, it means that the effect is not statistically significant, and I cannot conclude if it has a positive or negative effect on the use of sophisticated capital budgeting techniques.

Table 1. *Reduced form Regression for family-owned businesses*

<i>Variables</i>	<i>Sophisticated (robust S.E.)</i>	<i>Quantitative (robust S.E.)</i>
<i>Education</i>	0.17** (0.08)	0.096 (0.132)
<i>experience</i>	0.001 (0.005)	0.015*** (0.06)
<i>Gender</i>	-0.006 (0.14)	0.045 (0.10)
<i>firmage</i>	0.002 (0.004)	0.001 (0.002)
<i>tenure</i>	-0.012 (0.01)	-0.03** (0.01)
Sample size	57	66

Notes: Significant level: *=10%; **=5%; ***=1%

In Table 2 can be seen that if the financial employee or the owner is a female, it decreases the probability of using quantitative investment planning by 12 per cent. In addition, an additional year of tenure from the top management decreases the probability of using quantitative investment planning by 1 per cent. These variables have a p-value lower than 0.05, meaning that the effect is statistically significant.

Table 2. *Reduced form Regression for family-owned and non-family-owned businesses*

<i>Variables</i>	<i>Sophisticated (robust S.E.)</i>	<i>Quantitative (robust S.E.)</i>
<i>Education</i>	0.13*** (0.05)	0.093 (0.106)
<i>familybusiness</i>	0.07 (0.07)	-0.051 (0.062)
<i>experience</i>	-0.0008 (0.004)	0.012 (0.004)
<i>Gender</i>	0.036 (0.125)	-0.12* (0.09)
<i>firmage</i>	0.002 (0.004)	0.002 (0.002)
<i>tenure</i>	-0.01 (0.007)	-0.014* (0.008)
Sample size	94	107

Notes: Significant level: *=10%; **=5%; ***=1%

As seen In Table 3, the level of education of top management in businesses is positively related to the frequency of use of quantitative investment planning. As such, if the top management of a business has finished university or more increases the probability of using quantitative investment planning often or always by 13 per cent. The p-value is lower than 0.05, meaning that the effect is statistically significant.

Table 3. *Reduced form Regression for family-owned and non-family-owned businesses*

<i>Variables</i>	<i>frequency (robust S.E.)</i>
<i>Education</i>	0.13*** (0.05)
<i>familybusiness</i>	0.07 (0.07)
<i>experience</i>	-0.0008 (0.004)
<i>Gender</i>	0.036 (0.125)
<i>firmage</i>	0.002 (0.004)
<i>tenure</i>	-0.01 (0.007)
Sample size	93

Notes: Significant level: *=10%; **=5%; ***=1%

Discussion – Semi-Structured Interviews

Prior to starting the discussion, participants were informed about the overall objectives of the study together with the topics for discussion which were:

- The type of ownership of the business (family-owned vs non-family owned) and the reasons for choosing one over the other, and
- Investment decisions of the business and the techniques used for evaluating projects.

Business representatives started the discussion with a simple introduction, the sectors they were operating on, and their capital budget per year.

Topic I: Type of ownership structure of the business (family vs non-family) and the reasons for choosing one over the other.

Business representatives were first asked to explain their business ownership type and the reasons for staying as a family business, changing from family business to non-family business, or starting as a non-family business.

- Why did you decide to start this way, stay as inherited, or change the business ownership structure?

Generally, businesses started as or inherited one form of ownership – staying or starting as a family-run or professionally managed business. As such, none of these businesses has changed their ownership structure. This is in line with the data collected from our questionnaire, where out of 120 respondents, only 4 of them were businesses that changed from family to non-family business. Representatives from family-run businesses claimed that one of the reasons for not changing is the fear of losing control over the business and lack of trust for promoting outsiders (Hamiti 2021). In addition, another reason from an inherited family business ownership structure claimed that not changing the structure is also an element of stewardship, hence reflecting the commitment that the second generation has toward the family (Beqiraj 2021). Nevertheless, a representative of a business that started as a non-family run claimed that it is easier to attract talent, make rational investment decisions, hold people accountable for their work, and foster the growth of the business if it is professionally managed from the beginning of its operations (Blakaj 2021). In addition, another non-family business representative highlighted independence in decisions and the distinction of the family from the everyday business, which is one of the reasons for starting as a non-family run business (Ahmeti 2021). However, all business representatives acknowledged the benefits and limitations of each ownership structure to some extent.

Topic II: Investment decisions of the business and the techniques used for evaluating projects.

The other topic discussed with business representatives was investment decisions and their techniques to evaluate which projects to accept or reject.

- How do you evaluate which investment projects to accept or reject? Do you use any quantitative technique for doing so?

Representatives of all businesses stated that they use quantitative techniques before deciding whether to accept or reject an investment project. They relate the size of the project and the investment required with the techniques they decide to use. The participants from a family business ownership structure claimed that if projects are small and the investment required is low, they use less sophisticated qualitative and quantitative techniques such as industry trends or payback period (PBP) (Hamiti 2021). One of the family business respondents highlighted industry trends to decide on investing. He claimed that as a retail seller of sunglasses brands in Kosovo, they must keep track of industry trends. Thus, if customers require a certain style of glasses, they have to order them to have them in their store to increase store traffic.

Nevertheless, if the project requires a highly risky investment, they also incorporate quantitative analysis such as return on investment (ROI) (Daci 2021). However, none of the family business representatives in the discussion did use more sophisticated capital budgeting methods such as Internal Rate of Return (IRR) or Net Present Value (NPV). Still, they all were aware of such methods as capital budgeting techniques. In contrast, a representative of one of the fastest-growing tech businesses in Kosovo who is not family-owned, claimed that since his partners are not located in Kosovo, they require quantitative analyzing techniques for accepting or rejecting investments,

in this case, they also estimate their cost of capital and accept any project with a positive NPV, and IRR higher than their cost of capital. (Breznica 2021).

- Is there any specific reason for not using IRR and NPV in your investment evaluation?

A big part of the reason for not using IRR and NPV in the investment evaluation is the complexity of the techniques, specifically the calculation of the cost of capital and the discount rate that should be used. This was claimed by representatives of both – family-run and non-family-run businesses. Considering the big role of discount rate in evaluating the NPV, the businesses fear that they can reject projects that might otherwise create value for the company (Blakaj 2021). Furthermore, businesses do not have multiple investment projects to choose from given the limited capital budget per year, hence it was claimed that the owners stick with a simple objective, e.g., a minimum of 10% return on investment, and a payback period of maximum 5 years. (Daci 2021). This opinion is supported by the data collected from the survey, where only a limited number of respondents (20%) used more sophisticated capital budgeting techniques such as NPV or IRR.

Overview and Conclusion

My study uses data gathered from the survey of 120 participants from family-owned and non-family-owned SMEs located in Kosovo. The purpose of the study was to examine the relationship between family ownership and capital budgeting. In detail, the use of quantitative analysis and sophisticated capital budgeting techniques for investments from family-owned businesses, and the link of top management education with using quantitative analysis and more sophisticated capital budgeting techniques in family-owned businesses. To test our hypothesis and build the regression model, quantitative analysis techniques for investment were defined as the following: consumer and market research, future cash flows, return on investment, payback period, net present value, internal rate of return, and profitability index. Sophisticated capital budgeting techniques were

defined as net present value and internal rate of return. Regarding top management and education, owners and financial managers were defined as top management and the main decision-makers of investments within these businesses. According to this study, if a business is family-owned, the use of more sophisticated capital budgeting techniques increases by 7 per cent. However, the effect is not statistically significant, and I cannot conclude if it has a positive or negative effect on the use of sophisticated capital budgeting methods.

Based on the estimated linear probability model results, the level of education of the top management in family-owned businesses is positively related with the use of more sophisticated capital budgeting techniques. Regarding top management education, if financial managers or owners of family-owned businesses have finished university or more, the probability of using sophisticated capital budgeting methods increases by 17 per cent. Furthermore, an additional year of top management experience in family-owned businesses increases the probability of using quantitative investment planning by 2 per cent. Another aspect which was analyzed for this study is the level of education of the top management in businesses with the frequency of use of quantitative investment planning. Based on the findings, the more educated the top management is, the higher the probability of often or always using quantitative investment planning.

From my descriptive analysis, I show that 62 per cent of the businesses surveyed were family-owned SMEs, with trust and authenticity (77%) as the main reasons for staying as family-owned, followed by paving the way for the next generation (45%). Regarding education, most of the respondent's highest education achieved was university (66%). In terms of investments, most of the respondents plan for investments (89%), and most use quantitative analysis (88%). Businesses that did not use quantitative analysis claimed that the main reason is lack of familiarity with the methods (62%), followed by the complexity of the methods (31%). Businesses that used

quantitative analysis mostly used return on investment (67%), whereas more sophisticated capital budgeting methods were less used, such as net present value (11%) and internal rate of return (9%). The main factors for choosing the technique were experience and competency (61%), finance theory (40%), and the importance of the project (40%). The main purpose of the investment was the expansion of existing business (73%), new product development (36%), and equipment replacement (34%).

Regarding future recommendations for research, the literature highlights the presence of emotional dysfunction in family-owned businesses (Kets de Vries 2021). However, additional research is needed to prove the increased importance of sophisticated capital budgeting techniques in family-owned businesses. Furthermore, this study results show that an additional year of tenure from the top management in family-owned businesses decreases the probability of using quantitative investment planning by 3 per cent. This might result from both intuition and know-how, making a company's top management feel more confident in using less sophisticated capital budgeting techniques in investment decisions (Sadler-Smith and Shefy 2004), but further research is recommended to prove that.

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APPENDIX I – List of questions included in the survey

1. What is your age? (years)
2. Please indicate your sex:
 - Male
 - Female
3. What is your highest education achieved?
 - No education
 - Elementary school
 - High school
 - Vocational education training (VET)
 - University
 - Post-university (post-grad)

Before responding to the survey, please read the Common European Definition of a Family Business:

- 1) The majority of decision-making rights are in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child, or children's direct heirs.*
- 2) The majority of decision-making rights are indirect or direct.*
- 3) At least one representative of the family or kin is formally involved in the governance of the firm.*
- 4) Listed companies meet the definition of family enterprise if the person who established or acquired the firm (share capital) or their families or descendants possess 25 per cent of the decision-making rights mandated by their share capital.*

4. Based on the definition above, what type of business is this?
 - SME family-run business
 - SME non-family-run business
5. Why did this business decide to stay as a family-run business?
 - Trust and authenticity
 - Fear of losing control of the business
 - Paving the way for next generation
6. Was the business before a family-run business?
 - Yes
 - No
7. Why did the business change to non-family business?
 - Attract non-family talent
 - To improve investment planning and management
 - Develop new culture within the business
8. In which industry is this business?
 - Agriculture
 - Wood Processing

- Information, Technology, and Telecommunication
- Construction
- Furniture
- Textiles
- Tourism
- Trade
- Hotel, Restaurant, and Catering
- Chemicals and Oils
- Other:

9. How long has this company been in business? (In years)

10. How many people are employed at this company?

- 1-9 employees
- 10-49 employees
- 50-80 employees
- Over 80 employees

11. What is your title at your company?

- Owner
- Non-financial director
- Financial director
- Treasurer
- Senior accounting staff
- Other:

12. How long have you been in your current position? (In years)

13. Do you have any family connection with the owner of this company?

- Yes
- No

14. What is the family connection with the owner of this company?

- Father or Mother
- Brother or Sister
- First Cousin
- Second Cousin
- Other:

15. What is the CEO's age?

- < 35 years
- 35-44 years
- 45-54 years
- 55+ years

16. What is the CEO's highest education achieved?

- No education
- Elementary school
- High school
- Vocational education training (VET)

- University
- Post-university (post-grad)

17. Does this company plan for investments?

- Yes
- No

18. Do you use any quantitative analysis when you plan for investment?

- Yes
- No

19. What are some of the factors why the company does not do quantitative analysis for investments?

- Lack of familiarity with the methods
- The complexity of analysis
- Does not bring benefits to the company
- Never heard about such methods
- Business is still in the start-up phase
- Other:

20. Which qualitative analysis do you use to evaluate an investment?

- Personal judgment
- Industry trends
- Customer satisfaction
- Competitive advantage

21. Which quantitative analysis do you use to evaluate an investment?

- Payback period
- Return on investment
- Future cash flows
- Consumer and market research
- Net present value
- Internal rate of return
- Profitability index
- Other:

22. How often do you use quantitative analysis for analyzing investments?

- Rarely
- Sometimes
- Often
- Always

23. What are some of the reasons for using quantitative analysis rarely?

- Lack of familiarity
- Complexity of the methods
- Does not bring benefits to the company
- High cost of calculating methods

24. What is the approximate size of the capital budget per year?

- Less than 50,000

- 50-450 thousand
- 451-850 thousand
- 851-1 million
- 1-5 million
- More than 5 million

25. Please state purpose of investment.

- Expansion into new business
- Expansion of existing business
- Investing new facilities
- New product development
- Equipment replacement
- Modernization
- Research and development
- Training and development
- Any other capital projects

26. Factors influencing the choice of quantitative analysis methods.

- Finance theory
- Experience and competency
- Importance of the project
- Easy understandability
- Top management familiarity

27. What are some of the factors why the company does not plan for investments?

- Lack of financial knowledge
- The complexity of the methods
- Does not bring benefits to the company
- Never heard of investment planning
- Lack of time

APPENDIX II - Definitions of the variables and summary statistics

Variables	Description of variables	Sample Size	Mean	Min	Max
Dependent Variables					
use of sophisticated capital budgeting techniques	Sophisticated capital budgeting technique is used	120	35%		
use of quantitative investment planning techniques	quantitative investment planning techniques is used	120	87%		
frequency	the company uses quantitative methods often or always	93	63%		
Independent Variables					
Education	Respondent finished university or more	120	87%		
familybusiness	The surveyed company is a SME family business	120	62%		
experience	Age of respondent	120	11.54	0	48
Gender	The respondent is a female	120	20%		
firmage	Years the surveyed company has been in business	120	12.74	1	64
tenure	Years of experience of respondents in the current position	120	6.85	1	28