

# The Influence of Family Ownership on Budgeting Practices in Czech Firms

[Rodinné vlastnictví a jeho vliv na rozpočtové praktiky v českých firmách]

Lenka Strýčková<sup>1</sup>

<sup>1</sup>*Technical University of Liberec, Faculty of Economics, Studentská 1402/2, 461 17 Liberec  
Email: lenka.stryckova@tul.cz*

**Abstract:** The financial decision-making processes in family-owned enterprises have become a prominent subject due to the notable influence these businesses exert on national economies. This article seeks to identify and compare the standard budgeting practices of family and non-family firms within the Czech Republic, addressing a considerable gap in research and empirical confirmation concerning family businesses. While no significant differences were found in most financial management tools, the study identified differences in budgeting instruments, particularly in preparing income statements and the frequency of budget monitoring and control. Family businesses tend to involve owners in budget preparation, whereas non-family firms delegate this task to financial departments. Despite the lack of statistical significance in many areas, the study suggests that family businesses may face unique challenges in financial management due to factors like family dynamics and succession planning. Traditional budgeting methods remain dominant, with minimal adoption of modern approaches such as activity-based or flexible budgeting. The study employs statistical analysis to identify potential familial impacts on different budgeting facets to accomplish this objective. The empirical research has been conducted through a questionnaire survey. Overall, the study provides valuable insights into the budgeting principles employed by Czech family businesses, encompassing the influence of family involvement, traditional budgeting criticism, ownership structure, financial decision-making, and business stability.

**Keywords:** budgeting, business performance, corporate strategy, family ownership, financial decision-making, strategic planning, traditional budgeting.

**JEL classification:** G32, M21, L25

© 2024. School of Business Administration in Karviná, Silesian University in Opava, Author(s). This is an open-access article licensed under the Creative Commons Attribution-NonCommercial-NoDerivs License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Introduction

The research significance of this paper lies in examining the budgeting principles utilised by family firms in the Czech Republic, specifically focusing on identifying common patterns in financial budgeting among family businesses compared to non-family firms. This issue addresses a notable gap in family business research and empirical validation. The scientific problem addressed encompasses the impact of family ownership on companies' budgeting, with the literature hypothesising significant diversities as family managers tend to base their financial decisions on the effects of family control rather than on a comprehensive assessment of complex economic issues.

Budgeting is a vital part of the financial management of each company. The focus on family businesses is an important issue as they are becoming an economically relevant global phenomenon, are widespread in all business sectors and have various legal forms. From the general perspective, family firms are crucial sources of employment in most countries and create substantial parts of the national GDPs.

The study offers valuable insights into the budgeting principles employed by Czech family firms, considering factors such as family involvement, ownership structure, financial decision-making, and business stability. It also highlights criticisms of traditional budgeting models,

emphasising the need to move away from conventional budgeting approaches in response to escalating environmental uncertainty.

## 1 Literature review

Although the budgeting literature offers a plurality of theories, the specific views are very diverse and complex, and a single cohesive theory of budgeting still does not exist today (Kenno et al. 2018). Budgeting is used in all types of organisations and is an essential topic in accounting research. The central issue of the budgeting literature is examining the role of budgeting on resource allocation, production, and reporting decisions of companies.

The term “budget” is taken from English, but it seems that its origins are in Old French, where “budget” (*petite bourse*) represents a small market, a sum of money, often insufficient. The budgeting system emerged during the Great Depression in the USA in the 1920s-1930s to assist companies in overcoming critical situations characterised by reduced consumption, deflation, and declining profits (Du Pont and General Motors). Subsequently, this approach was adopted by companies in France (Saint Gobain and EDF) and Germany (Siemens) (Ionescu 2014). The traditional corporate budgets succeeded, and only a few years later, they became the most essential tool for management control. In fact, since then, the terms “management control” and “budgetary control” have been synonymous (Lorain 2015).

Budgetary systems were seen as a combination of information flow, administrative processes and procedures, and part of businesses’ short-term planning and control system (Merchant 1981). In the first half of the twentieth century, budgets were considered the most famous instruments in business management (Weber and Linder 2005).

Since the 1990s, traditional budgeting systems have faced increasing criticism in the literature (Neely et al. 2003, Eckholm and Wallin 2000). Notable critics such as Hope and Fraser (2003) introduced the “Beyond Budgeting” model, highlighting the costs associated with budget preparation, negotiation, and follow-up. They also emphasised the danger of gaming, where goals set low intentionally should ensure easy achievement. Furthermore, they argued that traditional budgeting is unsuitable for dynamic competitive environments, enveloped under more stable conditions.

More and more authors confirmed the necessity of abandoning the traditional budgeting approach with an argument of increasing environmental uncertainty. Bogsnes (2009) argued that detailed budgeting was meaningless in uncertain business environments where it is impossible to predict each line item a year (or more) in advance. Comparable critiques are found in other Beyond Budgeting research (Bunce 2003, Player 2003).

However, despite these critical voices and opinions, budgeting remains essential to corporate governance. This is proved by the reality of today’s companies and by studies conducted. For example, Libby and Lindsay (2010) reported that budgeting is still being considered an essential means for implementing strategy by respondents of their questionnaire. It plays a valuable role in doing so. They also pointed out that the question is not whether traditional or “Beyond Budgeting” is better for a company’s success. Still, to move the budgeting research agenda forward, it is necessary to utilise both approaches.

The literature in the Czech Republic has extensively examined budgeting practices, acknowledging the unique aspects of the Czech economy compared to other nations. As a former socialist country with an open economy and significant foreign capital influx, the Czech

Republic exhibits distinct characteristics that differ from traditional market economies, where budgeting evolved differently.

In 2009, Fibírová and Šoljaková (2009) conducted a study to assess the continued use of budgets in Czech companies, the adoption of new budgeting trends, and the perspectives of financial and non-financial managers on the role of budgets in corporate governance. Their findings revealed that Czech companies still place great importance on budgeting processes, with minimal influence from the “Beyond Budgeting” movement. Instead of moving away from traditional budgeting, companies have incorporated additional techniques and analytical details to enhance their budgeting practices.

In their analysis of traditional budgeting limitations, Popesko et al. (2015) found no significant issues with budgeting flexibility, suggesting a higher level of stability within the Czech business environment. The stability observed may be due to the unique client structure of Czech firms, which are closely integrated into the supply chains of foreign manufacturers and less engaged in the retail market. This finding aligns with the findings of Libby and Lindsay (2010), which indicated a strong link between budgeting and corporate strategy, contrary to much of the existing literature. Popesko et al. also noted the prevalent use of budgets as performance targets, a practice frequently criticised in the literature. This situation suggests a need for more awareness about the limitations of traditional budgeting and a limited familiarity with alternative performance measurement methods. While Czech firms showed adherence to specific modern budgeting trends, such as plans to modify current budgeting systems and robust integration of budgeting with strategy and performance, they often overlooked other contemporary trends. These include issues related to budgeting flexibility and the time invested in budget preparation activities.

In their study of budgeting practices in contemporary Czech companies, Dokulil et al. (2017) found that medium-sized and large firms primarily use budgets typically structured around the calendar year. The most common reasons for discrepancies between budgeted and actual outcomes were unexpected events and customer behaviour.

Further research by Dokulil et al. (2020) examined specific aspects of budget preparation in Czech companies, highlighting the critical role of ownership structure in the budgeting process. Their findings indicated that the proportion of foreign capital did not significantly affect the time spent on budget preparation. Statistically, the extent of foreign capital demonstrates its impact on companies’ autonomy during the budgeting process.

Petera and Soljakova (2020) investigated strategic management accounting (SMA) techniques in the Czech Republic. They revealed that the three most commonly employed SMA techniques are strategic planning and budgeting, customer accounting, and target costing. This underscores the strong position of budgeting within Czech companies.

Overall, the literature provides a lot of knowledge and evidence on the limitations of traditional budgeting and presents various alternatives, e.g., Beyond Budgeting or Activity-Based Budgeting. These alternatives are expected to replace conventional budgeting techniques and shift the control process to a performance measurement system. Nevertheless, a specific issue of budgeting within family businesses has not been addressed in the literature so far. Therefore, this gap presents an opportunity for further investigation.

However, family businesses cannot typically adopt the financial behaviours common in non-family businesses (López and Sánchez 2007). The goal of preserving family control over generations restricts their financial resources and overall financial behaviour. Family managers often prioritise decisions that maintain family control over those based on comprehensive economic analysis (Croci et al. 2011).

Family businesses are becoming an economically significant global phenomenon. They are prevalent across various sectors and legal forms, from small and medium-sized enterprises to large publicly traded companies. They frequently contribute to over half of a nation's GDP and serve as a significant source of employment in numerous countries.

In the Czech Republic, an official definition of a family business was established in 2020 when the Government of the Czech Republic approved a resolution (MPO 2020). Before this, no official data existed on the number of family businesses in the country. The definition was proposed by the Czech Association of Small and Medium-sized Enterprises and Crafts, based on the guidelines established by the European Family Business Federation.

According to this specification, a family enterprise in the Czech Republic encompasses a family business corporation or a family trade. A family business corporation denotes a corporate entity where more than half its members belong to a single family. Additionally, at least one family member holds a position in its statutory body, or the family, directly or indirectly, controls a majority of voting rights. Moreover, in such a corporation, if the majority of voting rights are wielded by a trust fund or its trustee on behalf of one family, at least one family member must serve on the trust fund's statutory body or act as a trustee. A family trade involves at least two family members in its operations or ownership. Furthermore, at least one family member must possess a trade license or similar authorisation or have the legal capacity to engage in business for other legitimate reasons. The definition of family members encompasses spouses or partners who work jointly, along with their relatives up to the third degree, individuals related by marriage up to the second degree, and relatives in direct lineage or siblings. In cases where a family member is underage or lacks total legal capacity, a legal guardian represents them in voting processes (MPO 2020).

Financial decisions in family businesses have been extensively examined through empirical studies across Europe and globally. Previous research has primarily focused on comparing family businesses' business performance or leverage with non-family enterprises (Ampenberger et al. 2013, Gottardo and Moisell, 2014, William 2018).

Family businesses operate based on distinct values and preferences compared to non-family firms, leading to different decisions and behaviours. For instance, Chua et al. (1999) highlight that family businesses are managed to realise the vision of family members sustainably across generations. The level of family ownership is also a defining characteristic of family firms. When family members control the company, such as when the CEO is a family member, a longer-term perspective for success is often pursued (Ulrich and Rieg 2020).

Koropp et al. (2014) suggest that family firms' decisions, particularly in finance, are primarily influenced by family norms, attitudes, perceived behavioural control, and behavioural intentions. As a result, the financial characteristics and decision-making processes of family firms differ from those of non-family businesses.

The budgeting literature reflects diverse and intricate perspectives, lacking a unified budgeting theory. Nevertheless, budgeting remains crucial in accounting research, particularly when investigating its influence on a company's resource allocation, production, and reporting decisions. In contrast, family businesses demonstrate unique financial behaviours, where decisions by family managers often prioritise factors impacting family control rather than conducting comprehensive economic assessments. This tendency can result in limitations in financial resources and distinct financial behaviours within family businesses.

In the Czech professional literature, initial attention was directed towards establishing a general definition of a family business, understanding its role in the economy, and examining succession dynamics. Recently, several empirical studies have explored corporate financing and the financial performance of family firms, even within the Czech Republic (Petlina and Korab 2015, Rydvalova et al. 2016, Breckova 2016, Machova and Tausl Prochazkova 2017, Petru and Tomaskova 2020). However, neither of these studies specifically focused on identifying budgeting patterns within family firms. This highlights a significant gap in family business research, leaving unanswered questions regarding crucial financial aspects, including budgeting.

Existing literature and empirical studies on budgeting and family firms suggest that family businesses in the Czech Republic tend to outperform non-family firms. This advantage could be ascribed to their ownership or management by family members with a vested interest in the long-term continuity of the business. Family members are often assumed to act altruistically towards one another, guided by higher moral obligations. Machek, Brabec, and Hnilica (2013) conducted a meta-analysis of 78 studies examining the impact of family involvement on business performance, laying the groundwork for academic discussions on family businesses in the Czech Republic.

The aim of this study is to identify typical patterns in family businesses' financial budgeting compared to non-family firms, thereby addressing a significant gap in family business research and empirical verification. Given the limited previous findings regarding family ownership in empirical studies, the following hypotheses concerning budgeting have been formulated:

*H1: Family involvement does not significantly impact the use of business financial management tools.*

*H2: Family involvement does not significantly impact the budgeting instruments used in the company.*

*H3: Family involvement does not significantly impact the budget preparation process, monitoring, and control.*

*H4: There is no significant difference between family and non-family firms in the issue of using modern budgeting methods.*

## 2 Methodology

To increase the relevance of this research, data and contact information for the subjects were gathered from MagnusWeb, a database encompassing all registered business entities in the Czech Republic. The study population included all economically active businesses in the country, from which a sample of two thousand non-family firms was randomly selected using a random number generator. These firms were then invited to participate in the survey. The subsequent stage involved creating and disseminating the questionnaire, directed towards the management and financial departments of the selected companies. The questionnaire inquired about various aspects, such as the essential budgeting tools used, who is responsible for budget



preparation, factors influencing the budgeting process, budget implementation control, and modern budgeting techniques. Responses were collected using an online form from October 2021 to January 2022.

A total of fifty-nine completed questionnaires from non-family companies were gathered. The sample of family firms consisted of businesses listed in the Registry of Family Firms, managed by the Association of Small and Medium-Sized Enterprises and Crafts of the Czech Republic. Inclusion in this registry requires adherence to the Definition of a Family Business as per Government Resolution No. 330, dated 13 May 2019. From the dataset of 255 family firms, 25 completed questionnaires were collected. Overall, 2,255 companies were contacted, yielding 84 completed questionnaires and a response rate of 4%. Data evaluation utilised descriptive statistical methods.

The questionnaire also gathered demographic information about the participating firms. Table 1 shows the demographic specification of the samples by company size (based on the number of employees and EU standards), legal business form, ownership structure, and business sector. Of the eighty-four respondents, 25 (30%) were identified as family businesses according to Government Resolution No. 330 of 13 May 2019, while the remaining 59 firms were classified as non-family businesses.

**Table 1:** Demographic specification of the samples

Company classification	Category	Family firms		Non-family firms		Total	
		N	%	N	%	N	%
Company size (number of employees)	0-9 employees (micro-sized enterprise)	13	52	12	20	25	30
	10-49 employees (small-sized enterprise)	10	40	13	22	23	27
	50-249 employees (medium-sized enterprise)	1	4	15	25	16	19
	250 and more employees (large-sized enterprise)	1	4	19	32	20	24
Company size (EU standards)	micro (balance sheet total or turnover $\leq$ 2 mil. EUR)	14	56	18	31	31	37
	small (balance sheet total or turnover $\leq$ 10 mil. EUR)	8	32	14	24	22	27
	medium-sized (balance sheet total $\leq$ 43 mil. EUR or turnover $\leq$ 50 mil. EUR)	2	8	10	17	12	14
	large (balance sheet total $\geq$ 43 mil. EUR or turnover $\geq$ 50 mil. EUR)	1	4	17	29	18	22
Legal form of business	Joint-stock company	0	0	14	24	14	17
	Limited liability company	17	68	39	66	56	67
	Other	8	32	6	10	14	17
Ownership	Domestic capital	24	96	23	39	47	56
	Foreign capital (wholly or partly)	1	4	36	61	37	44
Business sector	Agriculture	2	8	0	0	2	2
	Manufacturing	5	20	14	24	19	23
	Construction	3	12	7	12	10	12
	Services	8	32	34	58	42	50
	Other	7	28	4	7	11	13

Note: All companies  $N = 84$ ; Family firms  $N = 25$ ; Non-family firms  $N = 59$ .

Source: own elaboration

A limited liability company is statistically the most frequently significant legal form of business, accounting for 67% of the total sample and 68% within the family firms' sample. Notably, no family businesses were structured as joint-stock companies, whereas 24% of the non-family firms were. There was no statistically significant difference in the distribution of respondents by the number of employees or company size according to EU standards. The sample included businesses ranging from micro-sized firms to large enterprises. However, there was a considerable difference in the size distribution between the two groups: 92% of family firms were either micro or small-sized. In contrast, only 42% of non-family firms fell into these categories. Large companies (over 250 employees) constituted 32% of the non-family firms. Ownership data highlighted the low internationalisation of Czech family firms, with 96% owned by domestic capital. Conversely, 61% of non-family firms had foreign ownership (either wholly or partially). The most prevalent business sector among the sample was Services for both groups. It is important to acknowledge that the structure of the respondents can influence the results of the investigation.

For the statistical evaluation of empirical results, contingency tables were used. These tables allow the combining and processing of large datasets (Hindls et al. 2007). Typically, two-dimensional and containing categorical variables, contingency tables can include numeric variables in what is known as a correlation table. They help test the dependency between variables. Chi-square tests of independence or goodness-of-fit tests compare observed frequencies with expected frequencies under the assumption of independence. The chi-square test of the independence and Fisher's exact test if the first condition was not met were used to search for dependencies between the two nominal variables. A significance level of 5% was defined to assess the hypotheses (i.e. the probability that the null hypothesis will be rejected). P-values below 0.05 were marked in red, indicating significant relationships between variables.

The chi-square test is widely recognized for its robustness in analyzing categorical data. The test's ability to compare observed and expected frequencies makes it a valuable tool for hypothesis testing. Fisher's exact test was employed as an alternative. This test is particularly useful for small sample sizes or when data is sparse, ensuring that the analysis remains valid and reliable. The analysis was conducted using MS Excel and R Studio.

### 3 Empirical results

The questionnaire survey included specific questions about budgeting patterns, used budgeting instruments, budgeting preparation, implementation, and control, factors that affect company budgeting in general, and the approach towards modern budgeting methods, with relevance to the stated hypotheses.

Table 2 presents the quantitative evaluation and statistical test results for hypothesis H1: "Family involvement does not significantly impact the use of business financial management tools." A statistically significant difference (p-value 0.036) was found between family and non-family firms concerning using the "analysis of variances" financial management tool. Specifically, 24% of family businesses use variance analysis for budgeting, compared to 51% of non-family firms. This indicates that nearly 68% of family firms do not utilise this financial management tool, with 8% of family businesses not responding to the question.

No statistically significant differences were found between family and non-family companies using other financial management tools. The null hypothesis of no significant impact of family involvement on the use of most financial management tools cannot be rejected at the level of significance  $\alpha = 0.05$ ; it can be rejected only for the use of "analysis of variances".

Family and non-family firms state they use financial management tools, from financial accounting (92% of family firms; 98% of non-family firms), managerial accounting (60%; 78%) and cost management (72%; 88%) to annual plans and budgets (64%; 83%). These findings were expected. However, only 40% of family firms prepare strategic plans and budgets; the ratio is slightly higher for non-family firms (63%). The balanced scorecard is the least popular tool by both groups; it is used only by 4% of respondent family firms and 15% of respondent non-family firms.

**Table 2:** Financial management tools used in family and non-family firms

Financial management tools	Family firms	Non-family firms	P-Value*
	%	%	
Financial accounting	92	98	0.300
Managerial accounting	60	78	0.300
Cost management	72	88	0.300
Annual budgeting (for one year)	64	83	0.300
Strategic planning and budgeting (2 to 5 years)	40	63	0.300
Analysis of variances	24	51	<b>0.036</b>
Flexible budgets	24	36	0.400
Balanced Scorecard	4	15	0.600

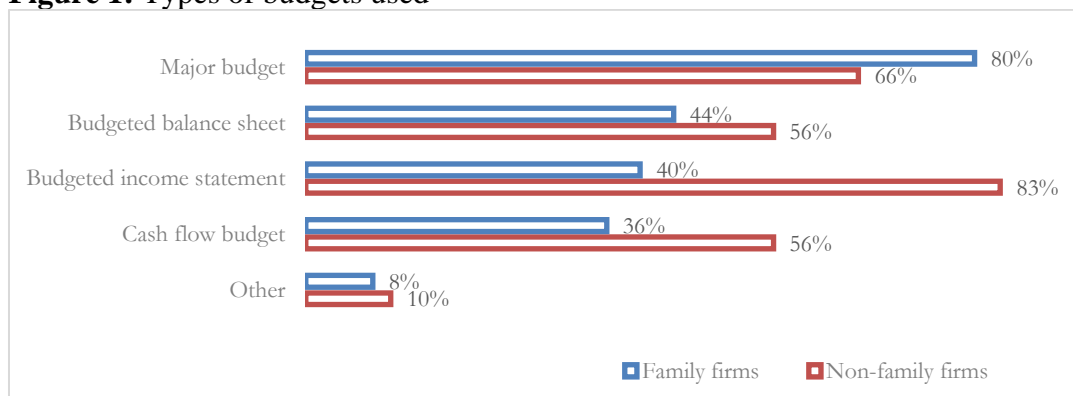
*Note: All companies N = 84; Family firms N= 25; Non-family firms N= 59. % - is the percentage of concordant answers to the question: "Are the listed financial management tools used in your company?"; \* indicates significance level at 0.05 level.*

*Source: own elaboration*

The H2 hypothesis, "Family involvement does not significantly impact the budgeting instruments used in the company", could not be tested by the chi-square tests of independence due to the possibility of multiple answers to the questions in the questionnaire. Figures 1 and 2 illustrate the structure of answers to questions about what types of budgets are compiled in the company regarding their use (Figure 1) and the budget periods (Figure 2).

The major budget is used by the majority of the family (80%) and non-family businesses (66%). The second most frequent type of budget was the budgeted balance sheet, used by 44% of the family and 55% of non-family businesses. A significant difference between family and non-family firms was identified in the use of the budgeted income statement. In comparison, 83.1% of non-family companies prepare budgeted income statements, but only 40% of non-family companies. In addition to the budgets mentioned above, respondents also create cash flow budgets (36% of family firms; 56% of non-family enterprises). The "other" category included the investment budget, production plan, personnel plan, or stock inventory. Respondents could have chosen more than one possible answer, so the sum of responses' percentages in Figure 1 is more than 100%.

**Figure 1:** Types of budgets used

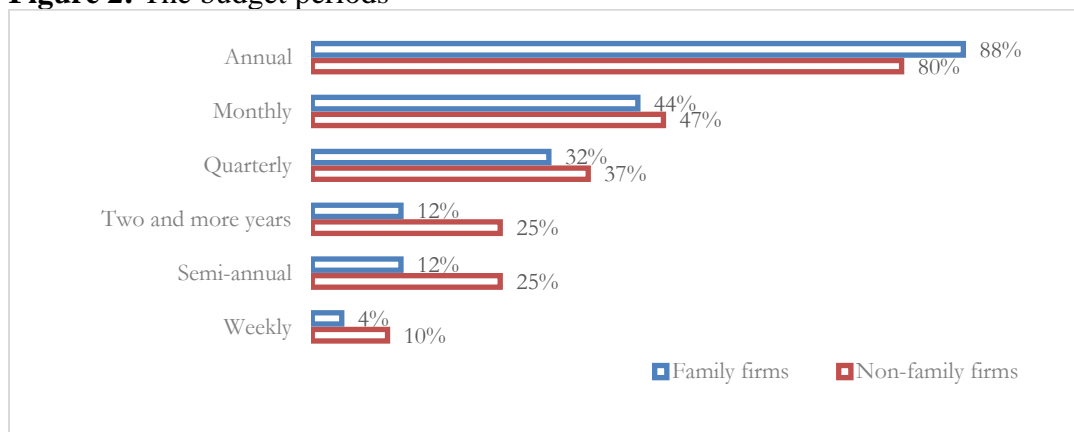


*Source: own elaboration*



Figure 2 outlines budget periods - the typical times covered by the budgets - structured according to family involvement. A quick review of the results suggests no significant difference between the answers of family and non-family firms. Annual budgets are the most represented periods, and they are used across both groups of companies (by 88% of family firms and 80% of non-family enterprises). Next in line with the frequency of responses are monthly budgets (used by 44% of family firms and 47% of non-family firms) and quarterly budgets (32%; 37%). Only 6% of family firms (and 10% of non-family firms) prepare the budgets weekly. The “other” category included a long-term strategic budget as well. Respondents could have chosen more than one possible answer, so the sum of responses’ percentages in Figure 2 is more than 100%.

**Figure 2:** The budget periods



Source: own elaboration

Regarding the impact of family involvement on budgeting instruments, substantial differences were identified in the answers to questions about the types of budgets compiled in the company. Regarding the budget periods, there were no significant differences in responses. The null hypothesis H2, therefore, cannot be confirmed or rejected. There is insufficient evidence to accept or reject the null hypothesis.

Tables 3 and 4 provide the quantitative evaluation of the results of hypothesis H3: “Family involvement does not significantly impact the budget preparation process, budget monitoring and control”. The chi-square test of independence didn’t find a statistically significant difference between family and non-family firms in the factors influencing budget preparation (Table 3). The null hypothesis, stating no significant impact of family involvement on budget preparation, cannot be rejected at the level of significance  $\alpha = 0.05$ .

Linkage to strategic planning proved to be the most important factor affecting the budgeting process for the family firms (with an overall rating of 2.72 in Table 3). At the same time, it was slightly more important for non-family enterprises (rating 2.83). The second most important factor for both groups of firms was the utilisation of budgets to evaluate business performance (rating 2.39 – family firms, 2.78 – non-family firms). This factor was more important for non-family firms as well. The changes in customer demand were also significant for family firms (rating 2.24) and less significant for non-family firms (rating 2.15). For non-family firms, coordinating the activities of involved cost centres was more important factor (rating 2.29) than changes in customer demand. Statements having a distinctly low impact on the preparation of budgets in family firms were identified as follows: “The budgeting process motivates the managers of cost centres to achieve the objectives set by the budget” (rating 1.28), and

“Technological developments in the area of provided products or services” (1.32). Those factors were more critical for non-family firms (ratings 2.10 and 1.81, respectively).

The connection between budgets and strategic planning and evaluation of business performance (questions a) and b)) proved to be the most critical factors affecting budgeting in both samples when only evaluations 3 and 4 are considered. 64% of family firms and 69% of non-family firms evaluated the connection to strategic plans with the highest scores; 56% of family firms and 71% of non-family firms considered budgets valuable for business performance evaluation. In family firms, the budgeting process is more affected by changes in customer demand (48% of family firms; 42% of non-family firms), the development of customer preferences over time (40%; 29%), and changes in the market for competing products or services (35%; 29%). In contrast, the technological developments in the area of provided products or services, government and legislative interventions, and labour market situation are more significant factors for budgeting by non-family firms (see % in Table 3).

**Table 3:** Survey responses to the question: “What factors play an important role in the budgeting of your company?”

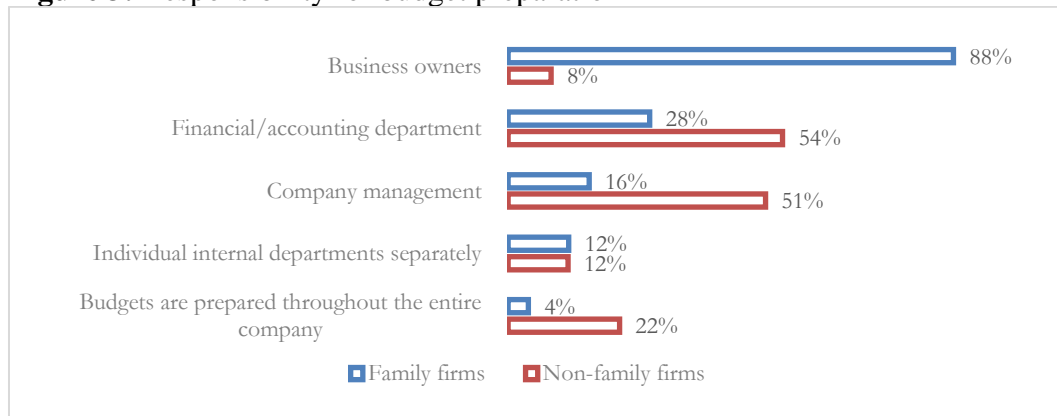
	Factors influencing budgeting	Family firms		Non-family firms		P-Value*
		%	Mean	%	Mean	
a)	Budgets are linked to strategic planning.	64	2.72	69	2.83	0.600
b)	Budgets help evaluate business performance as a whole.	56	2.38	71	2.78	0.500
c)	Budgets help coordinate the activities of cost centres involved in creating and implementing the budget.	40	1.64	51	2.29	0.400
d)	The budgeting process motivates the managers of cost centres to achieve the objectives set by the budget (managers are involved in the preparation of the budget).	16	1.28	42	2.10	0.300
e)	Changes in customer demand.	48	2.24	42	2.15	>0.9
f)	Development of customer preferences over time.	40	2.08	29	1.81	0.800
g)	Changes in the market for competing products/services.	36	1.88	29	1.83	0.800
h)	Technological developments in the area of provided products or services.	12	1.32	29	1.81	0.600
i)	Government and legislative interventions.	20	1.68	42	1.98	0.300
j)	Labour market situation (employees).	28	1.64	34	1.88	0.600
k)	Availability of materials and other resources for production.	40	1.36	37	1.85	0.400

Note: All companies N = 84; Family firms N= 25; Non-family firms N= 59. % - is the percentage of scores 3 – important and 4 – most important. Mean is the average score for each question. Responses on Likert Scale 0 – 4. \* indicates significance level at 0.05 level.

Source: own elaboration

The observations in Figure 3 illustrate the responsibilities for budget preparation in family and non-family firms. The chart confirms the fundamental principle of family firms: the company owners make all essential financial and business decisions (the ratio of the answer “business owners” to the question “Who prepares budgets in your company?” was 88%). In contrast, the responsibility for budget preparation in non-family companies lies primarily on financial or accounting departments (chief financial officer) (ratio 54%) or management of the company (ratio 51%). It should be noted that respondents could have chosen more than one answer option. Conclusions in Figure 3 contradict the H3 hypothesis of no significant impact of family involvement on budget preparation.

**Figure 3: Responsibility for budget preparation**



Source: own elaboration

Table 4 presents the quantitative evaluation of the impact of family involvement on budget monitoring and control. The statistically significant difference between family and non-family firms (p-value 0.006) was identified in the answers to the question, “Is there regular monitoring of budget compliance in your company?”. A substantial share of family businesses (60%) reported that they regularly monitored and controlled compliance with the budget. Still, the ratio of non-family firms performing monitoring and control is much higher, about 88%. The results simultaneously imply that almost 36% of family firms do not monitor and control budgets at all. In contrast, only 9% of non-family firms do not observe and manage budgets at all. The remaining 4% of family businesses and 9% of non-family firms couldn’t provide a relevant answer to this question.

No statistically significant differences were found in the answers to questions: “How often does your company adjust the budgets?” and “What factors cause the differences between the actual and the planned budget in your company?” (Table 4, sections 2+3).

Family and non-family firms usually adjust their budgets ad hoc, as required by the situation (36% of family firms; 41% of non-family firms; Table 4, section 2). If we only want to keep track of regular adjustments, then, the most frequently stated answers were annual adjustments by family firms (24%) and monthly adjustments by non-family firms (15%).

Typical reasons for incurred budget variances are analogous for family and non-family companies (Table 4, section 3). The explanations provided with the highest importance (scores 3 and 4) were mainly unexpected events (52% of family firms; 66% of non-family firms), technical problems in production or other processes (12%; 41%), the impact of competition (16%; 48%), and the government actions (40%; 27%).

The null hypothesis of no significant impact of family involvement on budget monitoring and control (H3) cannot be rejected at the level of significance  $\alpha = 0.05$ ; it can be rejected only in the field of regular monitoring and control of compliance with the budget.

**Table 4: Budget monitoring and control**

Budget monitoring and control category	Family firms	Non-family firms	P-Value*
<i>Section 1 - Regular monitoring and control of compliance with the budget</i>	%	%	
Regular monitoring and control of budget compliance	60	88	<b>0.006</b>
<i>Section 2 - Frequency of budget adjustments</i>	% **	% **	
Ad hoc – as required	36	41	0.400
Annually	24	12	
Semi-annually	12	5	
Quarterly	16	10	
Monthly	0	15	
In case of significant changes	12	10	
Other	0	7	
<i>Section 3 - Reasons for incurred budget variances</i>	% ***	% ***	P-Value*
Unexpected events	52	66	0.800
Technical problems in production, process, etc.	12	41	0.400
Poorly drafted budget-based action plans	4	10	>0.9
The company did not react flexibly enough to adjust to the changes during the reporting period	8	17	>0.9
Causes on the side of employees	8	10	0.600
Customer causes	4	31	0.500
Impact of competition	16	48	0.700
Government actions	40	27	0.400
Other	36	22	>0.9

Note: All companies  $N = 84$ ; Family firms  $N = 25$ ; Non-family firms  $N = 59$ . % - is the percentage of concordant answers to the question: "Is there regular monitoring of budget compliance in your company?". %\*\* - is the percentage of concordant answers to the question: "How often does your company adjust the budgets?". %\*\*\* - is the percentage of scores 3 – important and 4 – most important to the question: "What factors cause the differences between the actual and the planned budget in your company?"; responses on Likert Scale 0 – 4. P-Value\* - indicates a significance level of 0.05.

Source: own elaboration

Table 5 presents the quantitative evaluation of the results of hypothesis H4: "There is no significant difference between family and non-family firms in the use of modern budgeting methods". The chi-square test of independence didn't find a statistically significant difference between family and non-family firms in answering the question: "Do you actively use modern budgeting methods in your company? Choose the importance of the factor from 0 - not at all, and we are not even considering it, to 4 - definitely yes, we have used them for a long time now". The null hypothesis of no significant impact of family involvement on budget preparation cannot be rejected at the level of significance  $\alpha = 0.05$ .

Based on the evaluation of average responses (mean in Table 5), it can be stated that modern budgeting methods is not very popular in any group of companies. This can be deduced from the fact that most of the factors were evaluated with a mean score of less than 1.5. The mean scores are even lower for the family firms. For example, zero-based budgeting or rolling budgets are used by only 4% of respondents (of the group of family firms). By non-family firms, the most popular modern methods of budgeting are indicative budgets (29% of non-family respondent companies), activity-based budgets (27%), and flexible budgets (25%).

**Table 5:** The use of modern budgeting methods

	Family firms		Non-family firms		P-Value*
	%	Mean	%	Mean	
Flexible budgets	8	0.90	25	1.45	0.3
Zero-based budgeting	4	0.52	14	0.76	0.6
Rolling budgets	4	0.86	22	1.09	0.7
Activity-based budgets	12	1.01	27	1.34	0.6
Indicative budgets	16	1.19	29	1.32	0.5

*Note: All companies N = 84; Family firms N= 25; Non-family firms N= 59. % - is the percentage of scores 3 – important and 4 – most important. Mean is the average score for each question. Responses on Likert Scale 0 – 4. \* indicates a significance level of 0.05.*

*Source: own elaboration*

## 4 Discussion

The study's results shed light on the impact of family involvement on the use of financial management tools, budgeting instruments, budget preparation, and budget monitoring and control in Czech companies. The findings challenge the existing literature, which suggested a significant impact of family involvement on financial management tools and budgeting instruments, indicating the need to reevaluate the alleged influence of family involvement on budgeting practices in the Czech Republic.

Nevertheless, the study's results open avenues for future research to delve deeper into the specific aspects of family involvement in budgeting, considering family businesses' unique values and preferences compared to non-family firms and the potential implications for long-term financial decision-making and sustainability across generations. These results contribute to the evolving perspectives on budgeting and family business research, yet, at the same time, they offer a foundation for verification and further investigation of the specific impact of family involvement on budgeting practices and financial decision-making in Czech family firms.

## Conclusion

This study aimed to address the notable gap in family business research, specifically examining the influence of family involvement on budgeting practices in the Czech Republic. By providing empirical evidence on the budgeting decisions of family firms compared to non-family businesses, it makes a significant contribution to the literature. To the author's knowledge, this is the first study to analyse the budgeting patterns of family firms in the Czech Republic. Family businesses face unique challenges, such as family ties, succession processes, and risk attitudes, which complicate financial management.

Empirical findings from the survey revealed differences in the use of financial management tools between family and non-family firms. For instance, 92% of family firms and 98% of non-family firms use financial accounting; 60% of family firms and 78% of non-family firms use managerial accounting; 72% of family firms and 88% of non-family firms use cost management; and 64% of family firms and 83% of non-family firms engage in annual budgeting. However, only 40% of family firms prepare strategic plans and budgets, compared to 63% of non-family firms. The balanced scorecard was the least popular tool among both groups, used by only 4% of family firms and 15% of non-family firms. The statistical analysis found no significant differences between family and non-family firms for most financial management tools. Therefore, the null hypothesis H1 (no significant impact of family involvement on using financial management tools) cannot be rejected at the 0.05 significance level. Nevertheless, it can be rejected for "analysis of variances" where the impact was confirmed.



Regarding the impact of family involvement on budgeting instruments, substantial differences were identified in the answers to questions about the types of budgets compiled in the company. The majority of both family- (80%) and non-family (66%) businesses use major budgets. The budgeted balance sheet is the second most common type of budget, used by 44% of family firms and 55% of non-family firms. A significant difference was found in using budgeted income statements: 83% of non-family firms prepare them, compared to only 40% of family firms. Regarding budget periods, no significant differences were noted; annual budgets were most common, followed by monthly and quarterly budgets. Thus, hypothesis H2 (impact of family involvement on budgeting instruments) cannot be confirmed or rejected due to insufficient evidence to accept or reject the null hypothesis.

Hypothesis H3 (family involvement has no significant impact on budget preparation) was tested by examining various budgeting factors. Although no statistically significant effects were found, 88% of family businesses reported that owners prepare the budgets, compared to non-family firms, where budget preparation is typically handled by financial or accounting departments or company management. The impact of family involvement on budget monitoring and control was also examined under hypothesis H3. A substantial share of family businesses (60%) reported regularly monitoring and controlling budget compliance. The ratio of non-family firms was higher (88%). Additionally, 36% of family firms do not monitor budgets at all. The family impact on budget monitoring and control was also tested statistically by the chi-square test of independence. No statistically significant differences were found in the answers to questions about the frequency of budget adjustments and causes of budget variances.

The null hypothesis H3 of no significant impact of family involvement on budget preparation cannot be confirmed or rejected. There is insufficient evidence to accept or reject the null hypothesis. The null hypothesis of no significant impact of family involvement on budget monitoring and control cannot be rejected at the level of significance  $\alpha = 0.05$ ; it can be rejected only in the area of regular monitoring and control of compliance with the budget.

As proposed by the literature, traditional budgeting methods are still prevalent in the Czech business environment. This empirical investigation confirmed these conclusions. All survey respondents identified a considerable reluctance to use modern budgeting methods, as the overall percentages of those who use modern budgeting methods were minimal. A slightly higher rate of non-family companies have already adopted modern budgeting forms; the most popular methods are indicative budgets (16% of family firms; 29% of non-family firms), activity-based budgets (12%; 27%), and flexible budgets (8%; 25%). The rate of family firms using any modern budgeting method is relatively low. Nevertheless, the statistical testing did not reveal any significant difference between family and non-family firms in using contemporary budgeting methods. The hypothesis H4 cannot be rejected at the level of significance  $\alpha = 0.05$ .

Overall, the study indicates notable differences between family and non-family firms in budgeting approaches, with statistically significant differences in the use of variance analysis and regular budget monitoring and control. However, these results are based on a questionnaire survey, which involves subjective responses and has certain limitations, and it is important to acknowledge that the structure of the respondents can influence the results of the investigation.

Future research could explore the financial patterns of family firms more precisely and investigate how decision-making processes are carried out within these businesses to gain a deeper understanding of their characteristics.

## References

- [1] AMPENBERGER, M., T. SCHMID, A. K. ACHLEITNER and C. KASERER, 2013. Capital structure decisions in family firms: empirical evidence from a bank-based economy. *Review of Managerial Science*, **7**(3), 247–275. ISSN: 1863-6683.
- [2] BOGSNES, B., 2009. *Implementing Beyond Budgeting – Unlocking the Performance Potential*. New York, Wiley. ISBN: 9780470405161.
- [3] BUNCE, P., 2003. Blow the budget! *Manufacturing Engineer*, **82**(1), 34-37.
- [4] BŘEČKOVÁ, P., 2016. Family Business in the Czech Republic. *European Research Studies Journal*, **19**(4), 3-16. ISSN: 1108-2976.
- [5] CHUA, J. H., J. J. CHRISMAN and P. SHARMA, 1999. Defining the Family Business by Behavior. *Entrepreneurship Theory and Practice*, **23**(4), 19–39. ISSN: 1042-2587.
- [6] CROCI, E., J. A. DOUKAS and H. GONENC, 2011. Family Control and Financing Decisions. *European Financial Management*, **17**(5), 860-897. ISSN: 1468-036X.
- [7] DOKULIL, J., J. ZLÁMALOVÁ and B. POPESKO, 2017. The perception of budgeting in Czech firms — results of a survey. *Oeconomia Copernicana*, **8**(2), 273–285. ISSN: 2083-1277.
- [8] DOKULIL, J., B. POPESKO and J. DVORSKÝ, 2020. The budgeting processes of Czech companies: the role of the ownership structure and foreign capital. *Oeconomia Copernicana*, **11**(4), 779–798. ISSN: 2083-1277.
- [9] ECKHOLM, B. G. and J. WALLIN, 2000. Is the annual budget really dead? *The European Accounting Review*, **9**(4), 519–539. ISSN: 0963-8180.
- [10] FIBÍROVÁ, J. and L. ŠOLJAKOVÁ, 2009. Role of Budgeting in Modern Corporate Governance (Empirical Study in the Czech Republic). *European Financial and Accounting Journal*, **4**(1), 25-36. ISSN: 1805-4846.
- [11] GOTTARDO, P. and A. M. MOISELLO, 2014. The capital structure choices of family firms: Evidence from Italian medium-large unlisted firms. *Managerial Finance*, **40**(3), 254-275. ISSN: 0307-4358.
- [12] HINDLS, R. et al., 2007. *Statistika pro economy*. Praha: Professional Publishing. ISBN 80-86419-59-2.
- [13] HOPE, J. and R. FRASER, 2003. *Beyond budgeting: How managers can break free from the annual performance trap*. Boston: Harvard Business School Press. ISBN 1-57851-866-0.
- [14] IONESCU, A., 2014. The role of the budgetary system in achieving enterprise performance. *Manager Journal*, **19**, 98-108. ISSN 2286-170X.
- [15] KENNO, S. A., M. C. LAU and B. J. SAINTY, 2018. In search of a theory of budgeting: a literature review. *Accounting Perspectives*, **17**(4), 507-553. ISSN 1911-3821.
- [16] KOROPP, C., D. GRICHNIK and F. KELLERMANNNS, 2013. Financial attitudes in family firms: the moderating role of family commitment. *Journal of Small Business Management*, **51**(1), 114-137. ISSN 1540-627X.
- [17] LIBBY, T. and R. M. LINDSAY, 2010. Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. *Management Accounting Research*, **21**(1), 56-75. ISSN 1044-5005.

- [18] LÓPEZ, J. and S. SÁNCHEZ, 2007. Financial Structure of the Family Business: Evidence from a Group of Small Spanish Firms. *Family Business Review*, **20**(4), 269-287. ISSN 0894-4865.
- [19] LORAIN, M. A., A. GARCÍA DOMONTE and F. SASTRE PELÁEZ, 2015. Traditional budgeting during financial crisis, *Cuadernos de Gestión*, **15**(2), 65-90. ISSN 1131-6837.
- [20] MACHEK, O., M. BRABEC and J. HNILICA, 2013. Measuring Performance Gaps Between Family and Non-Family Businesses: A Meta-Analysis of Existing Evidence. *International Academic Research Journal of Business and Management*, 2(3). ISSN 2227-1287.
- [21] MACHOVÁ, K. and P. TAUŠL-PROCHÁZKOVÁ, 2017. Reality of family business in the CR. *Business Trends*, **7**(3), 41–50. ISSN 1805-0603.
- [22] MERCHANT, K. A., 1981. The design of the corporate budgeting system: influences on managerial behavior and performance. *The Accounting Review*, **56**(4). ISSN 0001-4826.
- [23] MPO (2020). Definice rodinného podniku. Retrieved from: <https://www.mpo.cz/cz/podnikani/rodinnepodnikani/definice/definice-rodinneho-podniku--253096/> (6.11.2021).
- [24] NEELY, A., M. BOURNE and C. ADAMS, 2003. Better budgeting or beyond budgeting? *Measuring Business Excellence*, **7**(3), 22-28. ISSN 1368-3047.
- [25] PETERA, P. and L. SOLJAKOVA, 2020. Use of strategic management accounting techniques by companies in the Czech Republic. *Economic Research-Ekonomska Istraživanja*, **33**(1), 46–67. ISSN 1331-677X.
- [26] PETLINA, A. and V. KORÁB, 2015. Family Business in the Czech Republic: Actual Situation. *Trends Economics and Management*, **9**(23), 32-42. ISSN 1810-4967.
- [27] PETRŮ, N. and A. TOMÁŠKOVÁ, 2020. The preferred usage of equity and debt financing in family businesses: evidence from Czech Republic. *Investment Management and Financial Innovations*, **17**(3), 27-39. ISSN 1810-4967.
- [28] PLAYER, S., 2003. Why some organisations Go ‘Beyond Budgeting. *The Journal of Corporate Accounting and Finance*, **14**(3), 3-9. ISSN 1044-8136.
- [29] POPESKO, B., P. NOVAK, S. PAPADAKI and D. HRABEC, 2015. Are the Traditional Budgets still Prevalent: the Survey of the Czech Firms Budgeting Practices. *Transformations in Business & Economics*, **14**(3C), 42-57. ISSN 1648-4460.
- [30] RYDVALOVÁ, P., E. K. HORYNOVÁ and M. ZBRÁNKOVÁ, 2016. Family business as source of municipality development in the Czech Republic. *Amfiteatru Economic*, **18**(41), 168-183. ISSN 1582-9146.
- [31] ULRICH, P. and R. RIEG, 2020. Doing the Unexpected – Why German Family Firms Differ From Non-Family Firms in Management Accounting, Planning, and Risk Integration. *Corporate Ownership and Control*. 18. ISSN 1727-9232.
- [32] WEBER, J. and S. LINDER, 2005. Budgeting, better budgeting, or beyond budgeting. *Cost Management*, **19**(2). ISSN 1092-8057.
- [33] WILLIAMS Jr., R. I., 2018. Measuring family business performance: research trends and suggestions. *Journal of Family Business Management*, **8**(2), 146-168. ISSN 2043-6238.