

INSIGHT INTO BUDGETING PRACTICES: EMPIRICAL STUDY OF THE LARGEST MANUFACTURING COMPANIES IN LITHUANIA

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Abstract

Many research studies have identified an increasing number of disadvantages that arise from using traditional budgeting methods that must be addressed in order to achieve better performance management. The aim of this research is to investigate the current budgeting practices of the largest manufacturing in Lithuania and to find out if the budgeting practices of Lithuanian companies lead to the issues that can be observed in literature and foreign studies. The main objective of the research is to identify the prevalent budgeting trends in the largest manufacturing Lithuania companies and to compare these results with the results of the research accomplished in other countries.

The design of the study is based on empirical study-questionnaire. A questionnaire for the assessment of the current budgeting practices used by the largest Lithuanian companies was created. A cross-sectional analysis of the results has been performed.

The performed questionnaire-based survey indicates certain trends in budgeting practices in Lithuania. The cross-analysis results show that companies with highly rated budget have more sophisticated budgeting methods and, conversely, companies that rated their budget with the average rating, have more traditional budgeting methods. The most important aspects which affect the effectiveness of budget are indicated.

The research points out the necessity of adopting more sophisticated budgeting aspects which contribute to greater satisfaction while using budgets for better performance management. This study reveals which budgeting aspects make a significant impact on the satisfaction and the effectiveness of budgets. The interpretations of results allowed to define the main trends of budgeting in companies of Lithuania. The results of previous researches from Czech Republic companies, Luxembourg companies, South African Republic companies, Spain companies, Canada companies, Malaysia companies, Australia companies and a study conducted by Quantrix, which were accomplished by other authors were presented and these results were compared with the results of the research accomplished in Lithuania. Such course of investigation allowed to identify the following most important aspects that affect budgeting efficiency and satisfaction: strategic goals set in the company; the budgeting period; including employees in the budgeting process; the period of the budget created for the operating activities of the company; flexibility of budgets; the frequency of budget review; using and including key performance indicators.

The findings of empirical analysis revealed that Lithuanian companies do not use all listed main aspects that affect budgeting efficiency and satisfaction. So it is important for these companies to include these aspects into budgeting process.

Keywords: budgets, management accounting, Lithuania.

JEL Codes: M10, M41.

Introduction

Budgeting is considered to be one of the most important and useful tools and techniques in management accounting. It is used to plan, coordinate and assess performance, to motivate employees and maintain the internal control system of an organisation. There are various traditional and modern budget models available for companies. Recently, more and more flaws in traditional budgets have been identified, which should be addressed in order to achieve the results. Having taken into consideration the quickly-changing external and internal corporate environment, traditional methods are no longer sufficient, thus some companies are willing to essentially change their entire performance management system to achieve performance efficiency. In order to address these flaws, modern models or using alternate performance planning and coordination methods instead of budgeting are proposed.

Budget creation is usually considered to be the main element of management accounting. Budgeting is one of the most important and useful tools and techniques in management accounting. Properly prepared budget models in companies are used for planning, coordination and performance assessment, employee motivation and the maintenance of the internal control system of an organisation. Almost 90 percent of companies in developed and developing countries use budgeting in their activities to assess estimated results (Goode and Malik, 2011; Pietrzak, 2013).

The budgeting process is an essential component of management accounting and is an efficient system that allows management to successfully *plan, coordinate and control* (Singh and Yadav, 2011). The entire process encompasses setting and achieving goals as well as short-term and long-term financial plans. Companies often link their budgets to strategies. However, the research shows that using budgets to assess efficiency is not universal and is not suitable for each case (Libby and Lindsay, 2010; Leon et al., 2012; Sponem and Lambert, 2015).

Traditional budgets have been used in companies for a long time, but they have attracted a lot of criticism recently. Very important investigation related to traditional budgeting usage during financial crisis have been done by others researchers (Lorain et al., 2014). The main reason for this criticism is the inability to adapt to unexpected market conditions and the annual nature of the reference period which does not reflect the current, ever-changing business environment (Libby and Lindsay, 2010; Antić and Novičević, 2011; Sandalgaard, 2012; Ilchikabir, 2013; Cardos et al., 2013; Srinivasan and Ganapathi, 2014; Dokulil, 2016).

Studies conducted in the US, Canada, India, Denmark and other foreign countries show that almost 90 percent of companies in developed and developing countries use budgeting in their activities to assess estimated results (Goode and Malik, 2011; Pietrzak, 2013). It is therefore essential to address the flaws of budgets and provide companies with methods that could significantly affect performance results. Due to this, modern budgets have appeared on the market

(Antić and Novičević, 2011; Janjić, 2011; Ekholm and Wallin, 2011; Singh and Yadav, 2011; Ionescu, 2014; Radu and Giju, 2015; Sponem and Lambert, 2015; Popesko et al., 2016; Shcherbina and Tamulavičienė, 2016). The latest research (Bogsnes, 2009; Frow et al., 2010; Poppendieck and Poppendieck, 2010; Østergren and Stensaker, 2011; Cardos et al., 2013; Henttu-Aho and Järvinen, 2013; Bourmistrov and Kaarbøe, 2013; Heinzelmann, 2015; Mejzini and Seidel, 2015; O'Grady and Akroyd, 2016) shows that a company will achieve better results by using the beyond-budgeting management system which applies 12 leadership and process principles (Vaznonienė and Bendaravičienė, 2012; Vaznonienė ir Stončiuvienė, 2012; Benefits of Beyond..., 2013; Ton-Nu, 2014; Mejzini and Seidel, 2015).

Budgeting is often criticised for taking up a lot of time, encouraging individual logic and short-term approach as well as providing unnecessary information to users (Østergren and Stensaker, 2011; Henttu-Aho and Järvinen, 2013; Bourmistrov and Kaarbøe, 2013). It is, however, still widely used in many organisations and has an important role in the corporate management system (Libby and Lindsay, 2010). Each company has to select a budget model that is best suited to it, having assessed corporate culture, history, its IT infrastructure and other needs (Cardos, 2014).

Nation-wide, management accounting as a whole is analysed more often than its separate elements (Strumickas and Valančienė, 2009). Klimaitienė (2011) has carried out a study of preparation and application of budget models, the results of which demonstrated that Lithuanian companies are not willing to stop using budgets. Vaznonienė and Stočiuvienė (2012), Vaznonienė and Bendaravičienė (2012) have studied budget models at the company level. Klimaitienė and Jočys (2014) have described the methodology of introducing the beyond-budgeting management in a company.

This study aims to investigate the current budgeting practices of the largest Lithuanian manufacturing companies and to find out if the budgeting practices of Lithuanian companies lead to the issues that can be observed in literature and foreign studies. *The main objective* of the research is to identify the relevant modern budgeting trends in the largest Lithuania companies. The scientific novelty of the research is that study-questionnaire, which was based on the researches carried out in different countries allowed to cover all the picture regarding budgeting process and to include into questionnaire all the main issues which are facing large companies from different countries. Furthermore, the interpretations of results allowed to define the main trends of budgeting in companies of Lithuania and these results were compared with the results of the research accomplished in other countries.

Research Methods

The design of the study is based on empirical study-questionnaire. A questionnaire for the assessment of the current budgeting practices used by the largest companies was created.

The main research method for the analysis of the survey results in this research is a cross-sectional analysis of the results, which has been performed.

Table 1. Detailed Statistics for Respondents of the Survey

Question	Generalised answers
Meeting the criteria for a large manufacturing company	100 percent
Position at the company	2 – company executives 3 – financial directors 2 – accountants 4 – other: 1 head of the IT division 1 deputy financial director 1 manager of the economics division 1 economist
How long have you held this position?	5 – up to 3 years 4 – more than 4 years 2 – did not answer
Does your company make plans, predictions, strategic goals?	All companies that prepare budgets make plans and predictions, 7 companies have strategic goals, 1 does not and does not plan to do so in the future
Does your company use budgets?	9 companies use budgets 2 companies do not use budgets
For how long has your company used budgets?	1 company has been using budgets for 1 to 3 years 1 company has been using budgets for 4 to 6 years 7 companies have been using budgets for more than 7 years
Do you participate in the budgeting process?	8 participate 1 does not participate (head of the IT division)
Have budgets been used in your company previously, but the budgeting process is currently discontinued?	Companies that do not use budgets did not provide answers

In order to evaluate the budgets applied in Lithuanian companies, a group of respondents was chosen – manufacturing companies operating in Lithuania Kaunas county. As it will be mentioned later the main problem regarding budgeting researches is the quantity of the data gathered through the questionnaire. Kaunas county was chosen because it was necessary to ensure for researches to get in touch easily with respondents. The responses to the questions are usually more accurate, when it is possible to meet with the company representative. Dai et al. (2019) stressed one additional important aspect in getting in touch with interview-based data tends to be an inspiring experience for the researcher. Authors are sure, that spending time with people in the field who reflect on careers, trends and challenges within their own domain is always a precious moment, allowing the researcher to connect, in some ways, with the interviewees interpretive schemes.

The respondents of the study were selected on the basis of two criteria:

- companies that operate in the manufacturing area;
- companies registered in Kaunas county.

On the basis of the selected criteria it was determined that 22 large manufacturing companies operate in the production sector in Kaunas county. As part of the empirical study, 22 questionnaires were sent out. 11 companies responded. As it can be seen, the questionnaires were sent to all manufacturing companies, which are operating in Kaunas county, still half of the companies did not answer. The main reasons for not answering the questionnaire are following: 1) these companies do not have budgets or 2) they are not willing to share the information. There is no doubt, that the result would be more accurate, if all companies answered the questionnaire.

Secondary, it is very important to acknowledge, that the study results which are related to budgets are limited by the quantity and quality of the data gathered through the questionnaire. Answers in the questionnaire are mostly based on the personal opinions of the surveyed persons, which in addition did not have to be sufficiently experienced and educated to consider objectively the actual situation inside the organization. However, the similarity of research tasks with similar foreign studies allows accepting these results as appropriate and relevant (Popesko et al., 2015).

The questionnaire also seek to evaluate the budget system from the personal satisfaction of the respondent with the use of budgets. In this way, selected research method – cross-sectional analysis, allows to determine if more sophisticated methods which are used within budgeting process increases satisfaction.

The characteristics of companies that participated in the empirical study, listed in Table 1, show that 64 percent of respondents that filled out the questionnaire hold high-level positions at their companies (heads of companies, financial directors and their deputies, head of the IT division). The remaining 36 percent of respondents are accountants, managers or economists. 46 percent of respondents have held their position for a short period (up to 3 years) and 36 percent have held their position for more than 4 years.

The assessment method was developed on the basis of the questionnaire in order to offer as succinct and simple a questionnaire as possible so that respondents would be willing to fill it out or to answer. It was decided on a questionnaire that contains up to 20 questions. The majority of the questions are closed-ended, meaning that the respondent simply has to choose the suitable answer. But still part of the questions were opened questions, in order to track all issues, which companies faces while using budgets. The presentation of the questionnaire is summarised in Table 2.

Table 2. Presentation of the Questionnaire

No.	Questionnaire section	Research objectives/the aim of the questions
1.	General section	Questions in the general section aim to verify that the respondent represents a large manufacturing company, to identify the respondent and find out their role in the budgeting process. There is also a question whether there are plans, predictions and strategic goals made in the company since it is often closely related to budgeting.
2.	Organisational section	The organisational section of the questionnaire aims to identify which divisions of the company participate in the budgeting process.
3.	Methodical section	The methodical section of the questionnaire contains questions that best identify the features of budgets used in the company.
4.	Technical section	The technical section of the questionnaire assesses how much the company has invested into its budget models.
5.	Respondent's assessment	The respondent's assessment section contains two questions, the responses to which assess the satisfaction with the budgets and possible ways of addressing the flaws.

The questionnaire consists of 5 parts: general, organisational, methodical, technical and assessment. Questions in the general section aim to verify that the respondent represents a large company which exceeds at least two of the following criteria on the last day of the financial year:

- the value of the assets listed in the balance-sheet is at least EUR 20,000,000;
- net sales income during the reference financial year is at least EUR 40,000,000;
- the average annual number of employees during the reference financial year is at least 250.

The general section also lists questions that allow to identify the respondent, asking for how long the respondent has held the current position, as well as to assess if there are plans, predictions and strategic goals made in the company. These aspects are important since budgeting is often closely related to corporate strategy and planning.

Results

The performed questionnaire-based survey shows certain budgeting trends in Lithuania. The results of previous researches from Czech Republic companies (Popesko et al., 2015), Luxembourg companies CFO Budgeting Survey (2012, 2015), South African Republic companies (Maduekwe, 2015), Spain companies, Canada companies, Malaysia companies (Ahmad, 2012), Australia companies and a study conducted by Quantrix (2012), which were accomplished by other authors are presented below and these results are compared with the results of the research accomplished in Lithuania.

82 percent of the respondents answered positively and 18 percent answered negatively to the question *Does your company use budgets?* The further analysis of the empirical study is carried out on the basis of the answers provided by those respondents that use budgeting. The cross-sectional analysis in this study is carried out on the basis of the assessment of the applied budget models provided by the respondent. In response to the question *Are the budget models in the company satisfactory?*, 56 percent of respondents gave the budgets implemented in their companies the highest rating (9-10) and the remaining 44 percent gave them the average rating (6-8). Respondents did not give the lowest rating (1-5) to the budget models. A similar distribution of satisfaction with budget models was seen in a study of Czech companies – only 2.82 percent of respondents rated the budgets from 1 to 5, 49.15 percent gave them the average rating (6 to 8) and 42.9 percent of respondents have them the highest rating.

100 percent of companies that create budgets also make plans and predictions in their operating activities. 100 percent of companies that gave their budget models the highest rating also set strategic goals; however, only 50 percent of companies that gave their budget models average rating do that. 25 percent plan to start doing so in the future and 25 percent do not.

78 percent of companies have been creating budgets for more than 7 years, 11 percent of companies have been doing that for 4 to 6 years and 11 percent – for less than 3 years. As a result of long-term budgeting experience, companies can make relevant decisions to improve the model. In order for the newly introduced budget model to be efficient for the company it should be used for more than one year.

The results of the cross-sectional analysis show that 100 percent of companies that gave their budget models the highest rating have been using them for more than 7 years. 50 percent of companies that gave their models the average rating also have long-term experience in the budgeting process. 25 percent of companies have been creating budgets for a short (1 to 3 years) and average period (4 to 6 years). Cross-sectional analysis has shown that long-term budgeting experience can lead to a more efficient practical application of budgeting.

In order to assess the budgeting process in accordance with the approach to budgeting and to find out which divisions are included in the process, the respondents were asked *Which divisions participate in the budgeting process?* Only 11 percent of respondents said that employees from all levels participate in the budgeting process, meaning that only a small part of companies follow the bottom-up budgeting approach. In 67 percent of companies only top-level executives, including heads of companies, heads of financial divisions and their deputies, heads of all divisions and their deputies, participate in the budgeting process. 22 percent of companies include managers and project managers in the budgeting process. A study conducted by Quantrix (2012), has produced similar results. The results showed that despite companies trying to include more employees in the budgeting process, it still remains a task for the top-level executives and the financial division.

Cross-sectional analysis has shown that budgeting is more effective when as many employees and divisions are included in the process as possible. As for the highest-rated budget models, 20 percent of respondents follow the bottom-up approach and employees from all levels participate in the budgeting process. In 80 percent of respondents' answers it was noted that managers and deputies of all divisions, financial director and the management of the company participate in the budgeting process. It was also noted that the financial division is the basis of the process but production, logistics and other divisions participate as well. With regards to the creation process of budgets with average ratings, only top-level executives and the financial division usually participate in the budgeting process (75 percent). Based on the data of the cross-sectional analysis, it can be concluded that the more employees are included in the budgeting process, the more accurate and efficient the applied budget models are.

To assess the level of detail of budgets of the companies, the respondents were asked *for what period budgets for all operating activity of the company, separate projects and separate products are created.* 100 percent of companies create budgets for all operating activity of the company, out of which 67 percent create annual budgets and the remaining 33 percent create short-term budgets, using them to compile annual budgets.

Over the course of the cross-sectional analysis it was determined that 100 percent of companies that gave their budgets average ratings create annual budgets. Budgets that were rated the highest are prepared for shorter periods (60 percent use monthly budgets and 40 percent – quarterly and half-year budgets) which are used to compile the annual budget. Having assessed the results of the cross-sectional analysis it can be stated that budgets for all operating activities are more effective when they are created for periods shorter than one year.

78 percent of companies create budgets for separate projects when necessary, 11 percent create monthly budgets and the remaining 11 percent do not create a separate budget for projects. It was determined that a similar portion of

companies create budgets for separate projects when necessary (75 percent of companies with the average budget rating and 80 percent of companies with the highest budget rating). 25 percent of companies with the average budget rating do not create budgets for separate projects and 20 percent of companies with the highest budget rating create monthly budgets. Having assessed that, it can be concluded that satisfaction with the used budget model does not depend on whether there is a budget for each separate project.

33.3 percent of companies create budgets for separate products when necessary, 22.2 percent create annual budgets, 11.1 percent – quarterly budgets, 11.1 percent – monthly budgets and 22.3 percent of respondents do not create budgets for separate products. The results of the cross-sectional analysis show that a similar number of companies create budgets for separate projects when necessary (75 percent of companies with the average budget rating and 80 percent of companies with the highest budget rating). 25 percent of companies with the average budget rating do not create budgets for separate products and 20 percent of companies with the highest budget rating create monthly budgets. Having assessed that, it can be concluded that satisfaction with the used budget model does not depend on whether there is a budget for each separate product.

In order to assess what budgets do companies create in terms of the relationship with the previous periods, the respondents were asked *What data do you use to create a new budget?* 44.4 percent of companies said that they create zero-based budgets, when the new budget is created without taking into consideration the previous budgets. 44.4 percent of companies create budgets on the basis of relative deviations from previous periods. 11.2 percent of companies consider the actual situation when creating a new budget and, as a result, create both zero-based and incremental budgets. The situation regarding budgeting in terms of the relationship with the previous periods is similar – some companies create zero-based, some companies create incremental budgets. The results in the United Kingdom and the South African Republic were the opposite – *the majority* of companies that participated in the studies used the data from previous years when creating the new budget.

In order to assess budgets of companies in terms of correcting them, the respondents had to agree with or deny the statement *'when the budget is approved, the data can be amended'*. 33 percent of companies do not amend the approved budgets (fixed budget) while 67 percent amend them (flexible budget). Similar results were obtained in studies conducted in Spain, Canada, Malaysia and the Czech Republic: the majority of companies that participated in these studies used flexible budgets. The opposite was noticed in companies operating in the US and the South African Republic where the majority used fixed budgets in their activities. It can be concluded that the ability to adapt to the quickly changing environment is becoming an important issue in the current market.

Over the course of the cross-sectional analysis it was determined that 80 percent of companies with the highest budget rating create flexible budgets. The distribution of companies with average budget ratings in terms of correcting the budgets is the same – 50 percent of companies create flexible and fixed budgets each. The data allows to conclude that quick response to the current market situation and adapting to it contributes to the effectiveness of budgets in the company performance.

Respondents were asked *How often do you review budgets?* in order to find out when the budgets are reviewed and updated. 33 percent of companies review their budgets quarterly, 33 percent – every six months. Similar results were obtained in a study conducted in Spain: the results showed that 38 percent of companies reviewed their budgets quarterly. 17 percent of Lithuanian companies claim that they review their budgets annually (it should be noted that these companies create their budgets monthly) and 17 percent review them when necessary. A study conducted by Quantrix (2012) – respondents from more than 50 countries, showed that 19 percent of companies reviewed their budgets monthly and 13 percent reviewed them annually, however, larger companies said that they had to review their budgets more often than usual.

The cross-sectional analysis has shown that budgets based on models that were given average ratings are reviewed quarterly or when necessary. Budgets that were rated the highest are usually reviewed every six months (50 percent), 25 percent of companies review them quarterly. Companies that create monthly budgets review them annually. The analysis allows to conclude that the frequency of budget review contributes to the effectiveness of budgets.

The question *Does your company use key performance indicators (KPIs)? Are they included in the budgeting process?* aims to find out which financial and non-financial indicators are used in budgeting most often. It was determined that 89 percent of companies include at least one KPI in their budgeting process. A study conducted in Spain showed that 71.8 percent of companies use KPIs and include them in their budgets while 83 percent of companies do the same in the South African Republic.

In terms of KPI groups, 89 percent of respondents use at least one financial indicator and include them in their budgets, however, 11 percent of companies neither use financial performance indicators nor include them in their budgets. Net profit (89 percent of respondents) and EBITDA (56 percent of respondents) are financial indicators that are included in the budgeting process most often. About a half of the respondents use ROI, ROA and ROE to assess their performance but do not include these profitability indicators in their budgeting process. 67 percent of companies do not use the P/E (price/earnings ratio) indicator and does not include it in their budgets. In the South African Republic, the following financial indicators are used the most often: sales growth, cash flow, operating income, net profit margin, ROI; in Malaysia, sales income, sales growth and ROI are used the most often.

Non-financial performance indicators were divided into three groups – customer service, marketing results and employee performance assessment. 56 percent of respondents include at least one non-financial KPI. After distributing the indicators according to the relevant perspectives, 23 percent of companies include at least one indicator pertaining to customer service and marketing results in their budgets and 33 percent include employee performance assessment

indicators. The following non-financial indicators are included the most often: market share (33 percent), market share growth (33 percent), income from sales per one employee (33 percent) and the number of customer complaints (23 percent). Non-financial performance indicators most often used in the South African Republic are: customer satisfaction, employee turnover (income from sales per employee), employee satisfaction; in Malaysia, such indicators are the production defect indicator, customer satisfaction and employee turnover.

The cross-sectional analysis has shown that 100 percent of companies that rated their budget models highly include at least one KPI in their budgets. The following KPIs are most often included: net profit (100 percent), EBITDA (60 percent), ROI (40 percent). Meanwhile only 75 percent of companies that assessed their budget models include financial performance indicators, such as net profit (75 percent) and EBITDA (50 percent).

Unlike companies that gave their budget models average ratings, companies with high ratings include customer service KPI in their budgets (40 percent) as well as indicators pertaining to marketing results (60 percent). Usually, KPIs relating to the market share and market share growth (60 percent) and the number of customer complaints (40 percent) are included. At least one indicator of employee performance is included by 25 percent of companies with the average budget rating and 40 percent with a high budget rating. It can be concluded that the number of financial and non-financial indicators used for performance and budgeting is important when assessing the effectiveness of the created budgets.

In the technical section, the question *What application do you use for budgeting?* shows how much the company has invested into the budgeting process. 80 percent of companies use *Excel*, 10 percent of companies use *Excel* and financial software to create budgets and the remaining 10 percent have invested into a specific application that is specifically adapted to the budgeting process. Similar results were obtained in a study conducted in Luxembourg: the majority of companies that participated in the study (69 percent) used *Excel* and 19 percent used specific applications.

The cross-sectional analysis has shown that all budgets that were given the average ratings are created using the *Excel* application and only 10 percent of companies with the highest budget rating use special applications. This leads to the conclusion that the technical side of the budgeting process does not significantly affect the effectiveness of budgets in Lithuanian companies.

Budgets can be used as a diagnostic or interactive control system. A diagnostic system usually sets goals, assesses efficiency, calculates deviations etc. An interactive control system can be defined as information that managers use to significantly and continuously participate in the decision-making process and company activity, thus engaging and motivating more and more employees at various levels. A study conducted in Australia (Shen and Perera, 2013) has shown that interactive usage of budgets in a stable environment motivates employees more than diagnostic usage. However, when the environmental stability is low, budgets should be used as a diagnostic control system in order to achieve high employee motivation.

Budget also stimulates activity across the entire organisation (Abogun and Fegbemi, 2011). The budgeting process defines a set of rules based on which managers from different hierarchical levels share information about projects with each other. The creation process is also dynamic and shifting and encompasses information flow in an organisation (Pfeiffer and Schneider, 2010). Targeted budgeting is useful in cases when a better-informed manager spreads information to others. Targeted budgeting can also *increase the motivation* of managers and *engage employees* at all levels to achieve the set goals (Kopel and Riegler, 2014). Considering the information provided by the analysed sources, the authors have distinguished the main functions of budget models which are listed in Table 3.

Table 3. Main Functions of Budget Models

Function	Comment
1. Planning	The most important task is to provide reliable information which helps to make predictions. It would allow companies to implement an effective planning process, for example, could organise and structure actions to achieve strategic goals. However, planning is one of the most criticised functions in the current ever-changing market since budgets become obsolete and require updates.
2. Control	Budget management (control) not only allows to understand business process, but also to control resource consumption and to stay on track. The analysis of deviations helps to determine their causes. Using resources according to the plan helps to avoid waste or inefficient consumption.
3. Employee motivation	This function defines the behaviour of the manager. Having defined certain goals, project managers are motivated to achieve them with minimum costs. Budgets help to express the commitment of a manager to achieve the set goals.
4. Activity coordination	Budgets help to coordinate all areas of activity, divisions and activities, since it integrates a plan that drives toward achieving the set goal.
5. Employee engagement	Once a budgeting system for employees at all levels is introduced, the employees are included in planning and coordination. Employees that have the most actual knowledge are included in the budgeting process. Employees at various levels communicate with each other so that the most accurate budget is created for the upcoming period.
6. Identifying problems	Once goals are set in a company, the budget is created according to the current situation, it is thoroughly analysed and flaws as well as problematic areas that interfere or prevent from achieving goals are identified.

Respondents were asked *For what purpose are budgets most often used in your company?* Having assessed the main goals for budgeting in the scale from 1 (not important) to 5 (very important), the following assessments can be distinguished.

Based on the data of the questionnaire, the goals can be listed in the following order by priority: planning and control (4.44 points), coordination of activity (4.11 points), identifying problems (3.78 points) are important, employee motivation and engagement are neither important nor unimportant (3 points each). Companies still view budget as a tool for planning and control (the traditional approach). The same results were obtained in studies conducted in the South African Republic, the United Kingdom, Canada, the US, the Czech Republic, Germany, Austria and Switzerland. However, the attitudes were different in a study of production companies in India – as many as 88.5 percent of respondents do not link budgeting and control of corporate activity.

In accordance with the provided assessment scale, the cross-sectional analysis showed that respondents who rated their budgets the highest found all budgeting functions to be important: planning, control and performance coordination were seen as the most important, however, the difference between these goals and identifying problems, employee engagement and motivation was not significant.

It is important to notice, that budgeting became more important for planning and resource allocation, but less important for performance evaluation in companies effected more strongly by the 2008 economic crisis (Becker et al., 2016).

Companies that gave the average rating to their budgets view planning and control as the most important functions whereas performance coordination and identifying problems are seen as less important. Employee motivation and engagement are focused on the least. The cross-sectional analysis allows to conclude that in order to achieve higher budgeting efficiency, more attention should be given to employees, their engagement and motivation.

Conclusions and Discussion

The research points the necessity of adopting more sophisticated budgeting methods, which contribute to greater satisfaction while using budgets for better performance management. This research revealed which budgeting aspects have a significant impact on the satisfaction and the effectiveness of budgeting processes.

It should be identified and acknowledged that some limitations of a study could have impacted the findings from this research. Considering the impact of research weakness it should be noticed, that conducting a study, it is important to have a sufficient sample size in order to conclude a valid research result. Statistical tests require a larger sample size to ensure that the sample is considered to be representative. The studies results which are related to budgets are usually limited by the quantity of the data gathered through the questionnaire. However, the similarity of research tasks with similar foreign studies allows accepting the interpretations of the results as appropriate. Still, it was critically important to be striving to minimize this limitations throughout research process by getting as many as possible questionnaires, by persuading companies that the results will be aggregated across all manufacturing companies, without no intention to single out specific companies.

The interpretations of results allowed to define the main trends of budgeting in companies of Lithuania. The results of previous researches from Czech Republic companies, Luxembourg companies, South African Republic companies, Spain companies, Canada companies, Malaysia companies, Australia companies and a study conducted by Quantrix, which were accomplished by other authors were presented and these results were compared with the results of the research accomplished in Lithuania.

- A similar distribution of satisfaction with budget models was seen in a study of Czech companies.
- A study conducted by Quantrix, has showed that despite companies trying to include more employees in the budgeting process, it still remains a task for the top-level executives and the financial division.
- The situation regarding budgeting in terms of the relationship with the previous periods is as follows – some companies create zero-based, some companies create incremental budgets. The results in the United Kingdom and the South African Republic were the opposite – *the majority* of companies that participated in the studies used the data from previous years when creating the new budget.
- In order to assess budgets of companies in terms of correcting them, the majority used flexible budgets in their activities. Similar results were obtained in studies conducted in Spain, Canada, Malaysia and the Czech Republic. The opposite was noticed in companies operating in the US and the South African Republic where the majority used fixed budgets in their activities.
- It was determined that the majority of companies include at least one KPI in their budgeting process. A study conducted in Spain and in the showed that the majority of companies use KPIs and include them in their budgets while the majority of companies do the same in the South African Republic.
- The majority of companies use Excel for creating budgets. Similar results were obtained in companies of Lithuania and in the study conducted by Quantrix.

The cross-sectional analysis on the basis of the assessment of budget used in companies allows to summarise the following most important aspects that affect budgeting efficiency:

1. Strategic goals set in the company.
2. The budgeting period.
3. Including employees in the budgeting process.

4. The period of the budget created for the operating activities of the company.
5. Flexibility of budgets.
6. The frequency of budget review.
7. Using and including key performance indicators.

In conclusion, this study shows that the global trends in budgeting practices, which are confirmed by research projects conducted worldwide, are generally followed by the Lithuanian companies. Although some of the trends were indicated. In order to achieve higher budgeting efficiency, it is recommended for companies that they should pay more attention to employees, their engagement and motivation. It can be concluded that the number of financial and non-financial indicators used for performance and budgeting is important when assessing the effectiveness of the created budgets. The analysis allows to conclude that the frequency of budget review contributes to the effectiveness of budgets. The ability to adapt to the quickly changing environment is becoming an important issue in the current market. The findings of empirical analysis revealed that Lithuanian companies do not use all above listed main aspects that affect budgeting efficiency and satisfaction. So it is important for these companies to include these aspects into budgeting process.

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The article has been reviewed.
 Received in October, 2018
 Accepted in March, 2019

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