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Impact of school management on legally adequate content of a budget plan: The evidence from Slovenia

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ABSTRACT
Management of a primary school in Slovenia is binded to preparing content of budget plan by law and by legal requirements of a local community. Budget plan is a result of financial planning. By Slovenian law management of a primary school is responsible for preparing for budget plan. Management of a primary school in Slovenia is actually a headmaster, usually elected by teachers and thus having no preliminary financial education. The only employee in school, assisting management in budget plan preparation, is an accountant. In our study, we tested if attitude of management to planning together with communication between management and accountant, impacts legally adequate content of schools’ budget plans. This was tested on a sample of public primary schools in Slovenia with the t-test for independent samples and the principal components analysis. We found that only communication between the management and accountant impacts legally adequate content of these plans. These findings suggest more financial trainings for schools’ management and increased role of local communities, as well as state’s institutions, in controlling if plans are law-compliant. Since schools are major consumers of public money, inadequate schools’ plans impact negatively local community’s and state’s budgets.

1. Introduction

In Slovenia, a key role in preparing the content of a budget plan in a public primary school has a principal or headmaster, as the highest and the only management body in primary school, together with an accountant as a financial expert. From our observation method used at trainings and auditing in the role of State internal auditor of public schools and kindergartens for more than 15 years (population is more than 800 educational institutions per year), we noticed that although content of financial plans is determined by law, it is not adequate with the law. We also noticed that the...
management mostly does not have attitude towards legally adequate content of budget plans and that there is simultaneously bad communication with accountants. That is why we consider it is important to study this topic. In addition, there is another reason why we consider this topic to be important. In Slovenia, management of a school consists of a headmaster usually being a former teacher with no preliminary management or financial education. By our knowledge based on training principals and auditing schools, this is the main reason why management of primary school leaves preparation of budget plan to an accountant. Therefore we suggest that the attitude of management towards budget plan is a crucial factor in legal adequacy of school’s budget plan. There is an increasing support to the importance of the principal’s leadership for school effectiveness (Wildy & Dimmock, 1993). Many authors studying problems of planning a budget have rated the attitude of school management towards planning as one of the most important in a budget planning process and legally adequate content of a budget plan in primary schools. Koontz and Weihrich (1988, p. 58) consider that planning includes a selection of mission, objectives and activities to achieve them; required to make decisions, it is a choice between alternatives direction of future operations. Sivabalan et al. (2009, p. 849) show that organisations’ regard to budget plans is more important for planning and control than evaluation itself.

Accountants are committed to participate in a preparation of a budget plan, so budget planning counts as part of an accounting function (Kavčič, 2006, p. 14). Accounting and finance officer in primary schools is crucial, and often the only expert, in an institution. In preparation of a budget plan accounting and finance officer should necessary participate with management providing information necessary for budget planning. The reason is that management of a school consists only of principal with usually no preliminary economic or financial education. Thus, we believe that different elements of communication between management and accountant are crucial factors for providing legally adequate content of budget plan.

In Slovenia, a founder of primary school is local community and consequently, primary school is financed mostly by local community. Spending local community’s financial sources means in fact spending public finances. Spending of financial resources by a primary school must therefore be scheduled by budget plan. School budget plan is a part of local community’s budget plan, and local community’s budget plan is a part of state’s budget plan. Management of primary school is responsible to local community regarding legitimacy and the purpose of disposing financial resources. In Slovenia, primary school runs nine years educational cycle, starting when children are six years old and lasting until children are 15. Schools are public institutions should therefore be also socially responsible. Social responsibility is defined as a social obligation of a subject setting goals, accepting decisions and performing activities in line with expectations and values of society (Maignan & Ferrell, 2004, p. 4).

As public finances in Slovenia are legally regulated, content of a budget plan of a school should be legally adequate. This means that it must be structured according the statutory content, defined by law and in accordance with legal requirements of a local community. The main and the major part of it are planned accounting statements. School’s budget plan is supervised by local community.

The focus of our research is the school year 2010/2011 when Slovenia has still been impacted by the economic crisis and consequently there were the highest public education expenses from the state budget in the last 10 years (see Table 1) together with rising budget deficit. In
situation when the country is confronted with a growing budget deficit, together the fact that public education represents a major financial burden, budget planning falls within priorities of each primary school and its founder – local community. Due to increasing economic uncertainty and consequently increasing complexity in predicting future activity events, great development in content of budget plans can be seen for more than two decades (Makridakis & Wheelwright, 1982, p. 5). We believe that due to financial uncertainty of local communities in Slovenia, budget planning is of an exceptional importance. Namely in Slovenia, local communities continue to restrict budget expenses despite better economic indicators in 2016 while the government did not comply with their demands for higher budget resources from state budget.

This study examines the impact of management, its attitude and communication with accountant, on legally adequate content of budget plans in primary schools in Slovenia.

However, to the best of our knowledge, there is no study investigating the impact of management on the legally adequate content of budget plans in public primary education in Slovenia or in other countries. This study is an attempt to fill the research gap in the public financial planning literature, especially in the legal adequacy of contents of school’s budget plans in Slovenia and abroad. Namely, in Slovenian education we found mainly research based on the quality of education (Zvorc, 2013, p. 4). The aim of this paper is to draw attention to schools’ management and their founders on key points for better (more legally adequate) content of school’s budget plans.

Following this section, we present a theoretical background of possible linkages among management and budget plans in Chapter 2. Chapter 3 introduces data and empirical strategy. The results of the analysis are discussed in Chapter 4. The last chapter is reserved to summarise our findings and draft recommendations.

2. Literature survey

2.1. Background data and literature review

According to data from the Slovenian Statistical Office, total public expenditure for formal education in Slovenia in the last 10 years was growing from 2006 to 2011, while from 2012 to 2015 it decreased (Statistical Office, Republic of Slovenia; the latest available data was for 2015.). In 2006, total public expenditure for formal education was 1.774 billion EUR or 5.7% of the GDP and reached the highest level in 2011.
(2.053 billion EUR or 5.7% of the GDP), then from 2012 it was decreasing towards 1.907 billion EUR in 2015 and reached the lowest level of 4.9% in the last 10 years (see Table 1). The largest part of public expenditure for education is spent on primary education.

In our study we focused on the school year ‘September 2010 - August 2011’ and on public primary school education for two reasons: since the expenditures for formal education were the highest in 2011 (See Table 1) and since the primary education recorded the highest expenditures within formal public education during all ten years. These expenditures reached the highest level during the last ten years in 2011 with 884 million EUR (Ministry of Finance of Republic of Slovenia, 2011), despite the fact that in 2009 there were visible signs of financial crisis and that the state budget, and consequently the school budget, had been prepared in advance. The budget plan is a document which, according to the Slovenian Accountancy law, must be kept permanently and always accessible. Therefore, we claim that there are no problems with the time lag and memory gaps of respondents in making our survey. In 2011 Slovenia was in the middle of the global economic and financial crisis, that first became evident in the third quarter of 2008, particularly in manufacturing and construction (Arzenšek & Musek Lešnik, 2016, p. 105) as well as in private sector spending. Namely, private spending is one of the key drivers for the economic growth and stability (Maccek & Bobek, 2015, p. 58). In 2009, GDP declined by 7.8%, which was the first annual decline of GDP since 1992 (Arzenšek & Musek Lešnik, 2016, p. 105).

Primary education in Slovenia is being financed mostly by public sources from local community’s budget and also by the Ministry of Education of Republic of Slovenia, which both are being financed by the state budget. Primary school could have also other budgetary resources, for example from parents, donations, selling goods and services and other sources. Let us explain that from the state budget sources (sources of the Ministry of Education), salaries of staff with social contributions and taxes as well as other employee benefits on the basis of systemisation of jobs pursuant to the law, norms and standards, and collective agreement are being financed (Zvorc, 2013). The local community also finances buildings, equipment, all investments, material and service costs of a primary school. The public institution is a holder of the right to manage and dispose of assets (Brezovnik, 2016, p. 13).

Primary schools have to accurately plan their financial sources and spending in accordance with the law. As said before, management play a crucial role in defining the appropriate budget plans.

2.1.1. Legally adequate content of budget plans of primary schools

The concept of legally adequate content of budget plan of primary school is defined by law and by legal requirements of local community (the founder of the school). A local community is the founder of a primary school, so they have to prepare their own budget plan as a part of the state budget. The main citation of “legally adequate content of budget plan” of primary school derives from The Budget Implementation Act of the Republic of Slovenia (61. Article, 5th paragraph). This act also states in 79\textsuperscript{th} Article that a management of public institution, like primary school, will be resolved (loss of job) if a budget plan will not be adequate to law and founder’s requirements. The content of budget plan must also comply with the Law on public finances, Law on institutions, Accounting Law and other Slovenian legal acts and
regulations. One of the relevant tasks is that local community should finance its primary education whereby the requirements of Financing of Local Communities’ Act and other regulations must be followed.

Despite the fact that the content of a plan is legally mandatory, our survey shows (see Table 2) that schools’ budget plans do not contain all required components.

In Table 2 all thirteen components of a budget plan that must be included in order to have a legally adequate content of a budget plan are shown. Legally adequate school’s budget plan should be in accordance with legal regulations and legal requirements of a local community (primary school’s budget plan is mostly a subject to a local community’s budget plan). Table 2 shows which components should a good legally adequate content of budget plan have. The components of a budget plan required by a local community are the following: basic information about a school with a summary of objectives and strategies, explanations of foreseen budget plan’s categories, investment and maintenance plan, human resource plan and training plan (see Table 2). Other components of a budget plan in Table 2 are defined by law. Apart from this Table 2 shows how many primary schools in numbers and share have included individual components into their budget plans (these results were collected with the survey described below).

Data in Table 2 show that 27% of primary schools do not provide for preliminary accounting statements of revenues and expenditures and 36% of primary schools do not provide for preliminary accounting statements by cash flow. More than 90% of primary schools include the following two items into their budget plan: revenues and expenditures by sources and investment as well as maintenance plan. Between 80 in 90% of primary schools include basic information about a school with a summary of objectives and strategies, legislative and other basis, annual objectives, basic starting points for planning, explanations of planned budget categories and preliminary accounting statements that are prepared according to economic classification of accounts. In Table 2, the number of schools having all mandatory components in budget plan, is shown (these budget plans were observed as with legally adequate content).

Table 2. Legal adequacy of content of budget plans of primary schools.

<table>
<thead>
<tr>
<th>Components in a content of budget plan</th>
<th>Frequency</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Preliminary accounting statement – Revenue and expenditure statement</td>
<td>108</td>
<td>40</td>
</tr>
<tr>
<td>Preliminary accounting statement – Revenue and expenditure statement by the cash flow</td>
<td>95</td>
<td>53</td>
</tr>
<tr>
<td>Basic information about the school with a summary of objectives and strategies</td>
<td>131</td>
<td>17</td>
</tr>
<tr>
<td>Annual objectives</td>
<td>129</td>
<td>19</td>
</tr>
<tr>
<td>Legislative and other basis</td>
<td>123</td>
<td>25</td>
</tr>
<tr>
<td>Basic starting points for planning</td>
<td>129</td>
<td>19</td>
</tr>
<tr>
<td>Explanations of planned financial categories</td>
<td>125</td>
<td>23</td>
</tr>
<tr>
<td>All revenue and expenditure by sources</td>
<td>140</td>
<td>8</td>
</tr>
<tr>
<td>Investment and maintenance plan</td>
<td>140</td>
<td>8</td>
</tr>
<tr>
<td>Human resources plan</td>
<td>75</td>
<td>73</td>
</tr>
<tr>
<td>Training plan</td>
<td>63</td>
<td>85</td>
</tr>
<tr>
<td>Preliminary accounting statements include data for last, current and next year</td>
<td>110</td>
<td>38</td>
</tr>
<tr>
<td>Preliminary accounting statements, prepared according to economic classification of accounts</td>
<td>119</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: Authors’ survey and calculation.
2.1.2. The management’s attitude towards budget planning

Attitude of a management towards budget planning in public primary school is very important in Slovenia, especially because it mostly does not have economic or management education background. In the survey of problems in number of American and other organisations with planning it has been found out that attitude of management towards planning represents the most important factor (Steiner & Schöllhammer, 1975), according to Rudi Rozman, Kovač, & Koletnik, 1993, p. 277–278). Henry (1977) assesses the attitude of a management towards planning as the most critical factor for successful planning and implementation of plans. Keppler, Bamberger, and Gabele (1979) also established that in German organisations, support of management for planning and content of planning on the basis of goals and ideas, were also extremely important, but rare. As it was found in the survey on budget planning in local community’s governments by Poister and Streib (2005, p. 45), managers were enthusiastic about their experiences with strategic planning and largely satisfied with their achievement of goals and objectives.

Martin (1979) assesses that an attitude of management towards planning is problematic in 40% of organisations with formally initiated planning. The survey of Al-Bazzaz and Grinyer (1980) has shown, that the interviewees in English organisations were not satisfied with the attitude of management towards planning. Moreover, attitude of management towards planning is addressed as the most critical factor for successful planning by Henry (1977) who correlates success of planning directly to the rate of active integration of a headmaster in planning. At the same time Keppler et al. (1979) assess that there is often a lack of support of management for planning in German organisations.

Because of the complexity, scope and proficiency of planning, managers assign a significant part of tasks to planners or those who are in charge of planning. Consequently, this can lead to separation of functions of management and planning, as a manager leaves all the planning to others and does not engage in one of principal’s activities (Rozman et al., 1993, p. 123). A management is, next to an accountant, supposed to have a leading role in planning or preparation of a financial package. It could be concluded that some authors researched management’s attitude towards budget planning, but we could not find the theoretic basics of management’s attitude towards legally adequate content of school’s budget plans. With our research we wanted to fill this research gap. If a budget plan is not legally adequate, then management will be resolved.

2.1.3. The impact of communication between an accountant and management on budget planning

Concept of »communication« derives from Latin word »communicare« and means to consult, to discuss or to ask for an advice. This means that by communicating, participants exchange information, knowledge and experiences (Možina, Tavčar, Zupan, & Knežević, 2004, p. 20). Different authors define the term communication differently, but their explanations are similar. They all emphasise that it is a process of communication, the essence of which is, that persons who communicate, should be similarly oriented to reach a purpose and goal of communication. Communication is also important in planning, as the preparation of budget plan requires an exchange of information and coordination between accountant and management in different areas
(Žvorc, 2013). It is important that a manager can invest enough attention to recognise good worker’s performance (Halac & Prat, 2016, p. 3104). Dolenc and Laporšek (2013, p. 236–237) imply that enhancement of workers’ skills knowledge can result in an increase of the human capital and therefore stimulate productivity.

Management of school, in accordance to the Public Education Institutes Act, organises and leads the work and operation of a public institution, represents and defends the interests of public institution and is responsible for legality of work of a public institution. An introduction into Slovene Accounting Standards also defines that management (in case of primary schools this is a principal) is responsible for drawing up and presentation of budget accounts, budget plans and accounting statements. Slovene accounting standard 30.16 defines that management is also responsible for real and honest provision of accounting information to external users. Management, as a responsible leader, and accountant, as a financial expert, should co-operate in preparation of a budget plan. While a budget plan is a result of work of two persons, its adequacy depends on mutual communication of both participants. That is why we want to point out the important communication between management and accountant.

Contacts, such as a flow of information and communication, are typical for people-to-people contacts. For communication to be successful, tendency towards problem identification and problem solving, respecting views expressed, mutual help and cooperation, have to be its predominant part (Možina et al., 2002, p. 552).

Slovene surveys (Lipičnik, 1998, pp. 263–265) show that trust, honesty, feeling of freedom and a possibility of cooperation, have a significant effect on efficiency of communication. Survey among primary schools show that an element of trust, coupled with support, and a collaborative working relationship, is necessary in achieving accountants’ performance (Namango & Bichanga, 2014, p. 482). One of the qualitative surveys with the help of in-depth interviews among principals has shown that the importance of good relationships was also emphasised in some of the participants’ reflections (i.e. principals) on who should be informed about their respective schools’ finances (Motsamai, Jacobs, & De Wet, 2011, p. 114). Surveys of financial management in public schools also show that there is a lack of honesty, openness and trustworthiness in financial management (Rangongo, Mohlakwana, & Beckmann, 2016, p. 1).

On the basis of theoretical definitions, the following elements of communication between management and accountant, which we believe are important for legally adequate content of budget plan in practice, are going to be highlighted: communication (discussion), cooperation, respect, flow of information, peer support and confidence.

It could be concluded that some authors researched an impact of communication between an accountant and management on budget, but we could not find the theoretic basics of the impact of their communication on legally adequate content of school’s budget plans. With our research we want to fill also this research gap.

3. Hypothesis, methodology and data

Based on the above listed literature, our research has been conducted on two hypotheses. Data were collected through a survey sent to all accountants of all primary schools in Slovenia. We surveyed just accountants and not management of primary schools in order to get objective and fair answers about legal adequate content of budget plans. At the same time, we did not want managers to evaluate themselves.
Accountants, also by our experience as State internal auditor, help school’s management to prepare and implement a budget plan, but the final accountability of the content of the budget plan is on management. As following, we set two hypotheses.

Hypothesis No. 1: Attitude of school’s management towards budget planning impacts legal adequacy of a budget plan.

Accountants were questioned about the extent of active involvement of management into budget planning as stipulated by law and local community. Attitude of management to planning has been empirically demonstrated as a critical factor for successful planning and consequently for legal adequacy of budget plans. The question asked was the following: »Estimate management’s attitude to planning in primary school«. The respondents could select one of five answers in the form of 5-point Likert scale. Schools rated their answers from 1 to 5, where 1 meant that the attitude of principals to planning does not exist, and where 5 meant that the extent of active involvement of principals in planning very intensive. Steiner and Schöllhammer (1975) found out by the study of planning problems in a series of American and other companies that, according to the importance, the principals’ attitude to planning is the most important. Henry (1977) evaluates the attitude of principals to planning as “the most critical factor for successful planning and implementation of plans”.

Hypothesis No. 2: Communication between an accountant and management impacts legal adequacy of a budget plan.

It was investigated, how communication between school management and accountant had an effect on legal adequacy of a budget plan. Communication has been empirically confirmed as the important factor of budget planning. Accountants were asked about communication, cooperation, respect, flow of information, peer support and confidence between accountant and management. The question asked was the following: »Estimate each form of communication between management and accountant in your institution«. Respondents could select one out of five answers in form of 5-point Likert scale. Respondents have rated communication from 1 to 5, where 1 meant inadequate assessment and 5 excellent rating. Management and accountant should communicate during the preparation of a budget plan. Studies have already shown that effectiveness of communication has been impacted by factors such as confidence, respect, cooperation and opportunity to participate. In preparation of a budget plan discussion, exchange information, knowledge and experience is of great importance. Following that, better than communication on content between an accountant and management, the content of budget plan will be more legally adequate.

### 3.1. Methods

For the analysis, 451 primary schools were selected according to the data provided by the Slovenian Ministry of education for the school period 2010/2011 (Ministry of Education & Science & Sport of Republic of Slovenia, 2010). Population represents all primary schools in Slovenia. The survey was sent to all e-mail addresses of accountants in primary schools in Slovenia. The questionnaire is in appendix 1. The sample includes all those who completed the survey.

The first hypothesis has been tested by t-test for independent samples, whether the average impacted d relationship in management planning differ between those schools having all the contents of the budget plan, and those that do not. Legal adequacy of the budget plan was measured in this way: A value of 0 has been attained to those schools lacking at least one
content while a value of 1 to those where budget plan included all elements and contents. If there is a difference between the averages on the level of significance of 0.05, then the hypothesis is confirmed. Steiner and Schölhammer found, through a survey of planning problems in a series of US and other companies, that, according to the importance, the principals’ attitude to planning is the most important. Henry assesses principals’ attitude to planning as “the most critical factor for successful planning and implementation of plans”.

The second hypothesis has been verified with the principal components method. For all elements, such as communication, cooperation, respect, flow of information, peer support and confidence, we have performed a principal component analysis. Based on the results of this method, dimensions have been formed. Then t-test for independent samples has been performed whereas value 1 (meaning that entire content is legally adequate) has a higher average than those with 0 (meaning that at least 1 element has been lacked). With the t-test for independent samples it has been checked whether the average dimensions differ among those accountants who have entire contents of the budget plan, and those who do not. If the differences among averages for the level of significance exceed the value of 0.05, hypothesis is confirmed. We looked at the surveys that some principals strive to establish positive working relationships with their accounting officers, but other principals mention mistrusted working relationships (Motsamai et al., 2011, p. 105).

3.2. Data collection and sample

Budget plans are not publicly available, so we decided to collect data with a survey. The working instrument of research was a questionnaire where respondents were asked about budget planning, legally adequate content of budget plans, attitude of management to planning, as well as communication between accountant and management. For the survey, we have based our decision on assumption that many schools would not be willing to send us their budget plans for the analysis in order not to reveal schools’ sensitive financial data.

The survey has been available online meaning that respondents did not need to send it anywhere, but just to fill out the required data when the survey has been automatically saved. Closed and semi-open type of questions were used. By e-mail we have also sent a link to the online survey and accompanying letter explaining the theme of the survey, clarifying that it is completely anonymous and assuring that results would be used strictly for research purposes. Budget plans are in practice usually prepared by accountants, so the survey has been addressed to them.

The questionnaire sent to 451 primary schools has been completed by 148 of them, while 185 of them just clicked on the announcement or just began filling out the survey. Level of responsiveness including only completely filled out surveys, has reached 32.82% what was evaluated as suitable for further consideration. This was a probability sample, since each unit (each primary school) in the population of all primary schools in Slovenia has the same chance of being included in the sample. In addition, each unit in the population has a predetermined and non-zero probability of selection in a sample. These are arguments from the theory of statistics, so we consider the sample to be representative.

Most of primary schools responding to this questionnaire have below 400 pupils (58.8% of the sample), the rest of responding schools have more than 400 pupils. Depending on demographic environment of primary schools, 66 schools are located in rural areas
(44.6% of the sample), 29 are located in suburbs (19.6%), and 53 (35.8%) are located within city. 93.2% of schools’ surveys were filled out by accountants, and 7.8% by other employees related to accounting. Among the respondents, there were 95.3% of women and 4.7% of men. Data show that financial accounting departments at primary schools in Slovenia are strongly dominated by women.

Among respondents, more than 70% of those are over 41 years old. Secondary, or low education level have 75% of all respondents, only 12.8% have high level whereas 11.5% are with university or higher education level.

4. Results and discussion

In this chapter analysis of the survey data and interpretation of results is presented. By using a survey, we wanted to explore management’s factors of impact on the legal adequacy of budget plans. Using survey and data analysis, we found out that all primary schools responding to the questionnaire, were preparing budget plans. We used the statistical data processing package SPSS (Statistical Package for the Social Sciences).

4.1. The impact of management’s attitude towards planning a budget on legal adequacy of a budget plan

The attitude of management towards budget planning could be explained as a scope of active involvement of management in preparing schools budget plan as stipulated by law and local community. The average estimate of the extent of attitude towards legally adequate content of budget plans, according to our own survey, has been 3.83 with the standard deviation of 1.05 (SD = 1.05) on a 5-point Likert scale.

The extent (attitude) of active involvement of management preparing legally adequate content of budget plans compared with legally full ones and those with legally incomplete budget plan are shown in Table 3.

With the t-test for independent samples it has been verified whether the average estimate of the extent of attitude towards legally adequate content of budget plans differs among those schools having legally complete ones and those having legally inadequate (incomplete) budget plan.

First, with Levene’s test we checked whether the assumption of equal variances applies. In our research, this was not the case, so we used a variant of the t-test which did not

| Table 3. The attitude of management towards legally adequate content of budget plans. |
|--------------------------------|---------------|---------------|---------|---------|
| The attitude of management towards legally adequate content of budget plans | N | Arithmetic mean | Standard deviation | t | p |
| The legally inadequate content of the budget plan | 120 | 3.78 | 1.04 | -1.68 | 0.098 |
| The legally adequate content of the budget plan | 28 | 4.07 | 0.766 |

Source: Authors’ calculation.
assume that. The average estimate of the management’s attitude towards planning a budget among those having legally incomplete budget plan is 3.78 (SD = 1.1), and among those with legally completed budget plan, is even slightly higher at 4.07 (SD = 0.77). The value being slightly above the limit of statistical significance (t = −1.68, p = 0.098), the hypothesis cannot be confirmed with sufficient certainty. A higher risk is also due to the small number of schools with legally complete budget plan, thereby increasing the confidence of intervals, results in the difference that has not been confirmed.

This hypothesis has been tested again with correlation analysis in which a Pearson’s coefficient of correlation has been used as the rate of connection. We have measured the correlation between management attitude towards legally adequate content of budget plans and number of components within the content of budget plans, what is a numerical variable (each respondent marked in the questionnaire which components of 13 mandatory components in the content of school’s budget plan they have). It means the more the manager is involved, more components are included. The value of the coefficient is 0.156, indicating a very weak positive connection being above the level of statistical significance 0.05 (p = 0.058). Thus, the hypothesis that management’s attitude towards planning has an effect on the legal adequacy of a budget plan, cannot be confirmed.

### 4.2. The impact of communication between management and an accountant in budget planning on legal adequacy of the budget plan

We wanted to find out whether communication between management and an accountant impacts legal adequacy of budget plans. The accountants have been asked about communication, cooperation, respect, flow of information, peer support and confidence between them and management. The responds have been evaluated using the five-point Likert scale, where 1 is insufficient assessment and 5 is an excellent one. Average estimates for individual items are shown in Table 5. Average values (answers) are everywhere above 4, the highest average is to be found in the confidence between management and accountant. Two respondents did not provide answer to the questions about communication, so they were eliminated.

Table 4 shows that the highest average estimate is 4.53 regarding confidence (SD = 0.77), followed by the respect with the average estimate of 4.51 (SD = 0.79), cooperation with 4.40 (SD = 0.75), communication with 4.38 (SD = 0.77) and peer support of 4.22 (SD = 0.87). Survey participants provided the lowest estimate for information flow between management and accountants with the average score of 4.16 (SD = 0.81).

<table>
<thead>
<tr>
<th>Communication between management and accountants</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Average Estimates</th>
<th>Standard deviation (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>146</td>
<td>1</td>
<td>5</td>
<td>4.38</td>
<td>0.772</td>
</tr>
<tr>
<td>Cooperation</td>
<td>146</td>
<td>1</td>
<td>5</td>
<td>4.40</td>
<td>0.747</td>
</tr>
<tr>
<td>Respect</td>
<td>146</td>
<td>1</td>
<td>5</td>
<td>4.51</td>
<td>0.790</td>
</tr>
<tr>
<td>Information flow</td>
<td>146</td>
<td>1</td>
<td>5</td>
<td>4.16</td>
<td>0.814</td>
</tr>
<tr>
<td>Peer support</td>
<td>146</td>
<td>1</td>
<td>5</td>
<td>4.22</td>
<td>0.867</td>
</tr>
<tr>
<td>Confidence</td>
<td>146</td>
<td>1</td>
<td>5</td>
<td>4.53</td>
<td>0.772</td>
</tr>
</tbody>
</table>

Source: Authors’ calculation.
Regarding all arguments about communication, cooperation, respect, flow of information, peer support and confidence, principal component analysis allowed us to determine whether these arguments are discussed in the context of one or more dimensions.

Kaiser-Meyer-Olkin (KMO) test of sampling adequacy indicates that the sample is suitable for factorisation, KMO value is 0.906 (see Table 5).

Extent to what part of variance of the particular variables is covered in the model of the main components, is revealed by communality. Usually sufficient value of communality is above 0.5. In our case, the values of all communalities exceed 0.7 (see Table 6) what indicates that all variables in the model are well represented.

The proportion of explained variance with one component is 78%, which indicates a significant correlation among variables (see Table 7). This means that we can consider them in the context of one dimension (see Table 8) which is calculated as the average value of all arguments, called as ‘communicating’. All values of components’ weights are high and approximately equal which means a high correlation of component with all variables.

For verification of hypothesis we used the t-test for independent samples (see Table 9), where the basic variant of this test has been applied since the Leven test of equality of variances had been statistically insignificant (variance between the two groups is the same).

Table 5. Kaiser-Meyer-Olkin (KMO) test of sampling adequacy for communication.

<table>
<thead>
<tr>
<th>KMO and Bartlett’s Test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin measure of sampling adequacy</td>
<td>0.906</td>
</tr>
<tr>
<td>Bartlett’s sphericity test</td>
<td>811.9</td>
</tr>
<tr>
<td>chi-square</td>
<td>811.9</td>
</tr>
<tr>
<td>p</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Authors’ calculation.

Table 6. Communication - communalities.

<table>
<thead>
<tr>
<th>Communication</th>
<th>Initial values</th>
<th>Final values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>1</td>
<td>0.824</td>
</tr>
<tr>
<td>Cooperation</td>
<td>1</td>
<td>0.874</td>
</tr>
<tr>
<td>Respect</td>
<td>1</td>
<td>0.756</td>
</tr>
<tr>
<td>Information flow</td>
<td>1</td>
<td>0.732</td>
</tr>
<tr>
<td>Peer support</td>
<td>1</td>
<td>0.744</td>
</tr>
<tr>
<td>Confidence</td>
<td>1</td>
<td>0.786</td>
</tr>
</tbody>
</table>

Source: Authors’ calculation.

Table 7. Proportion of explained variance with one component.

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial values</th>
<th>Final values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Variance %</td>
</tr>
<tr>
<td>1</td>
<td>4.716</td>
<td>78.607</td>
</tr>
<tr>
<td>2</td>
<td>0.445</td>
<td>7.414</td>
</tr>
<tr>
<td>3</td>
<td>0.307</td>
<td>5.109</td>
</tr>
<tr>
<td>4</td>
<td>0.230</td>
<td>3.838</td>
</tr>
<tr>
<td>5</td>
<td>0.172</td>
<td>2.867</td>
</tr>
<tr>
<td>6</td>
<td>0.130</td>
<td>2.166</td>
</tr>
</tbody>
</table>

Source: Authors’ calculation.
The value of the t-test is 1.576 and is not statistically significant ($p = 0.117$). The hypothesis that communication has an effect on the legal adequacy of content, can thus not be confirmed.

Considering this fact however suggests that communication is better between those with legally adequate content of the budget plan, so we also tested the hypothesis by correlation analysis (see Table 10). We checked the correlation between communication and content adequacy of a budget plan which was measured by the number of included mandatory components in the content.

Analysis showed that otherwise very weak correlation is statistically significant ($r = 0.164, p = 0.048$). The value of the coefficient is 0.164, indicating a very weak positive connection being under the level of statistical significance 0.05 ($p = 0.048$). The better is the communication, the more relevant is the legal adequacy of a budget plan. The hypothesis can be confirmed, but with certain reservations.

### 5. Conclusion

With this paper we wanted to emphasise the problem of legally adequate content of budget plans in primary schools. Budget plans in schools are defined by the law and by legal requirements of local community, but nevertheless, we found that very few schools have legally adequate content of the budget plan.

The theoretical basis was firstly researched in literature and tested in a specific environment - in this case primary schools. The main limitations of the research are: very few legal adequate budget plans in Slovenian primary schools within one selected school year. In the research we found out that values of correlation coefficient after

---

### Table 8. Communication - components weights.

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperation between accountant and management is:</td>
<td>0.935</td>
</tr>
<tr>
<td>Communication between accountant and management is:</td>
<td>0.908</td>
</tr>
<tr>
<td>Confidence between accountant and management is:</td>
<td>0.887</td>
</tr>
<tr>
<td>Respect between accountant and management is:</td>
<td>0.870</td>
</tr>
<tr>
<td>Peer support between accountant and management is:</td>
<td>0.862</td>
</tr>
<tr>
<td>The flow of information between accountant and management is:</td>
<td>0.856</td>
</tr>
</tbody>
</table>

Source: Authors’ calculation.

### Table 9. Communication between management and accountant according to the legal adequacy of the budget plan: T-test for independent samples.

<table>
<thead>
<tr>
<th>Number of mandatory components in budget plans</th>
<th>N</th>
<th>Arithmetic mean</th>
<th>Standard deviation</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication between management and accountant</td>
<td>118</td>
<td>4.322</td>
<td>0.72263</td>
<td>−1.576</td>
<td>0.117</td>
</tr>
<tr>
<td>The legally inadequate content of the budget plan</td>
<td>28</td>
<td>4.5536</td>
<td>0.58629</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ calculation.
testing both hypothesis are very close and indicating a very weak positive correlation (after testing first hypothesis it is 0.164 and after testing second hypothesis it is 0.158), but in first case it is above the level of statistical significance 0.05 ($p = 0.058$) and in second case it is under the level of significance 0.05 ($p = 0.048$). That is the reason why we confirmed the second hypothesis, but with certain reservations. We could say research revealed that the attitude of management to budget planning is not related to the legal adequacy of budget plans and showed weak but promising links in communication between management and accountants regarding legally adequate content of budget plans.

In our opinion, the research revealed unawareness of management of primary schools regarding legal adequacy of plans at a time when economic and financial crisis had already begun and when there were austerity measures adopted in public spending. It should be emphasised that without the right attitude of management to budget planning there would be no legally adequate content of budget plans at schools, and no suitable local communities’ and state’s budgets. Local communities and state are preparing legal requirements for the content of primary schools’ budget plans, for these reasons we propose more control, carried out by local communities’ and state’s institutions, regarding control of adequacy by law of its plans. That would stimulate economic growth and encourage good government (Bobek & Maček, 2014, p. 81). Schools are major consumers of public money and inadequate schools’ plans affect the inadequate local communities’ and state’s budgets. We also propose to education ministry and local communities to arrange more financial trainings for school management to increase awareness about the legally adequate content of budget plan. As stated previously, it is a fact that there has not yet been research of this kind performed in Slovenia. Since no-one has addressed this matter so far, there have also been no concrete activities to improve budget plans in schools.

According to Radzi, Ghani, and Siraj (2015, p. 1679), educational management with awareness of financial knowledge is a vital part of educational administration among the state’s strategies focused on upgrading education and curriculum delivery in order to improve effectiveness and efficiency. Since the late 1980s, the schooling agenda for example in Australia has been narrowed to one, giving primacy to purposes of schooling that highlight economic orientations (Cranston, Kimber, Mulford, Reid, & Keating, 2010).

This paper represents an important contribution in the area of budget planning in primary schools, founded by local communities, and draws attention to the difficulties

| Table 10. Correlation between communication and content adequacy of a budget plan. |
|---------------------------------------------------|---------------------------------------------------------------|
| **Communication between management and accountant** | **Number of mandatory components in budget plans** |
| **Pearson’s correlation coefficient** | **Pearson’s correlation coefficient** |
| Communication between management and accountant | 1 | 0.164(*) |
| $p$ | 0.048 |
| $N$ | 146 |
| Number of mandatory components in the budget plan | 0.164 (*) | 1 |
| $p$ | 0.048 |
| $N$ | 146 |

*Significance level at 0.05.

Source: Authors’ calculation.
in planning of public spending for purposes of primary education. Similar research in Slovenia is recommended to be performed in the future, comparing a school year after financial and budgetary crisis has been over. This should be done especially because Slovenia, being an EU member-state, adopted a fiscal golden rule last year which balances revenues and expenditures in municipal and state budgets, making therefore budget planning in education even more important. Future research is also recommended for comparing Slovenian school management from financial view with other countries with similar budget system or to survey school management and accountants in various countries and to compare the results.

References


Appendix 1: the questionnaire

Q1 - The number of pupils in your school (circle the appropriate answer).
   - up to 250 pupils
   - from 251 to 400 students
   - from 401 to 600 pupils
   - of 601 and more pupils

Q2 - The demographic environment in which you work (circle the appropriate answer).
   - countryside
   - suburb
   - place

Q3 - Your work place (circle the appropriate answer).
   - accountant
principal
administrative staff
other:

Q4 - Are you preparing a financial plan at your institution (circle the appropriate answer)?
   yes
   no

Q5 - Who prepares a financial plan (one or more answers are possible)?
   Accountant
   Principal
   Administrative staff
   Other:

Q6 - Assess the principal’s attitude to planning (answer from 1 to 5):
   Active integration of principal in planning is:

Q7 - Evaluate communication between an accountant and a director in your institution (answer from 1 to 5):
   Communication between principal and accountant is:
   Collaboration between principal and accountant is:
   Respect between principal and accountant is:
   Information flow between the principal and accountant is:
   Mutual professional support between the principal and accountant is:
   Confidence between principal and the accounting officer is:

Q8 - Below are the contents that the financial plan should contain, mark the contents in your financial plan (write the answer YES/NO).
   Pre-Budget Statement - IPOs for certain users:
   Prepared statement - IPO of certain users per cash flow:
   Basic information about the institution with a summary of objectives and Strategies:
   Annual goals:
   Legal and other bases:
   Basic starting points for planning:
   Explanations of the planned financial categories:
   All revenue and expenditure (from all budget sources, own revenues, expenses):
   Investment and investment plan:
   Establishment plan:
   Training plan:
   The financial statements contain data for past, current and next year:
   The pre-tax statements are prepared economically classification of accounts (chart of accounts):