A Study on Budgeting and Its Role in Achieving the Objectives, Planning and Performance Improvement of SAIPA Corporation

Abbas Farsi¹, Hamid Salmani²,³, Seyed Reza Mousavizadeh³, Mohammad Reza Arabkhani⁴

¹ MBA (Marketing), SAIPA Co., Tehran, Iran
² Master of Executive Management (Strategic), Mazandaran Science and Research Branch, Management Dept., Islamic Azad University, Sari, Mazandaran, Iran
³ Business Administration (Ph.D.), Assistant Professor, Management Faculty, Payam-e Noor University, Tehran, Iran
⁴ DBA Student, SAIPA Co., Tehran, Iran

ABSTRACT

The aim of this study is to investigate the role of budgeting in achieving the objectives, planning and performance improvement of SAIPA Corporation. The study is conducted through a descriptive survey method. A standard questionnaire is used to collect data depending on the type and nature of the study. The Statistical Package for Social Sciences (SPSS Ver. 16) is used to analyze the data. Statistical analysis includes the calculation of descriptive statistics such as frequency distributions, percentage frequency, mean and inferential statistics including Kolmogorov–Smirnov normality detection data and the one-sample t-test to infer the presence or absence of significant differences between variables. The results show what has the desirable effect on budgeting for achieving objectives, planning and performance improvement of SAIPA Corporation.

KEYWORD

Budget, budgeting, performance improvement, SAIPA Corporation

INTRODUCTION

Budget is a report about the future. Budget relates proposed expenses to the anticipated events in the future; therefore, budget shall consist of a set of programs and plans. In these plans and programs, it is tried to define and determine the status of future issues through existing measures. Accordingly, budget is a set of forecasts. [1] Since resources are more limited than wants, budget has become Managers should take advantage of budget as a mechanism for resource allocation. Managers should take advantage of budget as an important tool to make decisions more easily and correctly.

In other words, budget and budgeting system should bring about better and faster ways for managers to make decisions. [2] In addition, a correct budgeting system makes it easier to control the execution of budget as well as improvement of management. [3] The budget which is prepared and set based on deep study, research and participation of personnel in an organization, delineates the management planning and provides a favorable coordination between all activities. If management is defined by its tasks, then it is both the science and art of allocating resources, coordination, leadership and controlling group activities for achieving the favorable goals with maximum performance. Therefore planning, decision making, and controlling are of the fundamental tasks of managers. [4] One of the common methods of planning, decision making and controlling amongst managers is the use of budget. In order to make the most of resources with tools and techniques applied in management, budget and budgeting are in fact the tools for specifying all the management plans by which all organizational activities are coordinated. Efficacy of the tools depends on active participation in budgeting, motivation for this purpose and being comprehensive as well as pervasive in all organizational levels. To achieve an efficient and effective budgeting system, participation of all divisions is required so as to make the managers plan and decide on overall objectives of the relevant division as per their views. [5] There are some roles expected from a favorable budgeting system to be played among which are the following: precision, accuracy, speed, timeliness, transparency, relevance and comprehensiveness of the provided data, assistance to long-term planning.
optimal resource allocation of organization, coordination and integration of different divisions of organization, ability to forecast performance, efficient tool in making the most of circumstances, drawing the attention of executives for agreement and support, using the past performance as a guideline for the future, controlling present performance and determining the forecast deviation. [6] Efficiency of the budgeting system is measured by the roles it plays. [7]. According to the above, the main aim of this study is to develop and improve the budgeting methods in the Iranian organizations. This would assist managers in planning elements such as access to precise, accurate and timely information necessary for long-term corporate planning as well as coordination and control. Results of previous performances play different roles such as guidelines to the future, hands-on means to optimal resource allocation for different divisions, assistance to the management in controlling process, access to monitoring tools, controlling current performance and finally the ability to forecast deviations as well as performances in advance. It would also have some advantages for corporate managers which will enable them to decrease prices of the company's products, maintain their customers satisfied and recognize their weaknesses and strengths. Furthermore, they would be able to notify budgeting divisions of the importance and position of appropriate budgeting techniques.

**LITERATURE REVIEW**

Many researchers state that the role and efficiency of budget, to a great degree, affects organizations. In a research as regards the controlling role and efficacy of budget on governmental companies (particularly subsidiaries of IDRO), which has been conducted by Hamid Ali Bakhshi in 1995, as his thesis for master's degree, budgeting difficulties and scientific status of budgeting process were studied in the governmental organizations and industries. Results of the research are as follows:

1. Budgeting process within governmental companies does not have scientific features.
2. Budgeting plays an important role in planning and control of the operations in governmental companies.
3. Performance-based budgeting does not have a significant relationship with actual results of performance in governmental companies.
4. Budgeting in governmental companies does not have an important role in the accuracy of macroeconomic budgeting and planning. In another research conducted by Taheri in 1995, it is shown that the use of comprehensive budgeting has a significant effect on the performance improvement of companies and institutions and causes improvement in companies' efficiency. Perhaps, the most important part of budgeting is the human relations, which should be taken into consideration because of its completely dismal, solid and mechanical nature; however, it is essential to those individuals who have executive responsibilities because their actual performance is evaluated and compared with the forecast budget. Therefore, collaboration of managers in the preparation of budget brings about more awareness about objectives of their company and makes them find out more about their organization's problems and the bottlenecks. Some researches, like the one conducted by Ahmadpour in 1998, demonstrate results exactly otherwise. They claim that existing circumstances relevant to budgeting and cash management within a studied company, as compared to the favorable situation depicted by studied individuals, are not of satisfactory value. Some comments have been noted for the improvement of the above said factors as regards the importance and efficacy of such factors in optimal decision making by managers in budgeting and controlling cash management and accordingly economic and financial position of the company. Since, the statistical population and above studied company differ from statistical population and the company studied in this research, namely SAIPA, results of the above research and the current research cannot be homogeneous. In 2004, the result of Zahra Khosravi's research about methods proportionate to the setup of a flexible comprehensive budget in Iran Khodro Company, which was conducted to study the role of comprehensive budget and its flexibility within automotive companies, show that the major bottleneck of budgeting system in Iran Khodro is the lack of some tables to determine the changes in any items of cost against and corresponding to changes in the operation volume within each division. This in turn demonstrates the lack of access to clear and transparent information concerning the structure and behavior of cost in a competitive situation within automotive industry.

In 1999, Iraj Yek Kalam conducted a study on reasons of the lack of reliability of budgets in the TSE (Tehran Stock Exchange) listed companies. It was a thesis for his master's degree which was done to recognize the weak points, both internal and external factors, of the budgeting within the TSE listed companies.

Internal factors might be, for instance, the forecast cost items in current budget forms exclusively based on the information and figures of previous years. There are no internal directives or instructions to specify tasks and duties for different divisions to prepare the budget. Due to short-term tenure of management, the opportunity for preparing budget and reasons of deviations are rather impossible. External factors, due to instability of sovereign economy, cause unpredictability of future conditions. Abundance of directives in organizations makes it impossible to predict the future. Moreover, interference and imposition of some pricing cost centers may cause unpredictability of future conditions. Both internal and external factors are causes that
impede the preparation of an efficient comprehensive budget which should be proportionate to the future needs of companies. Subsequently, we would try to define some professional words used in the budgeting process and then put forth the hypotheses.

**BUDGET**

Budget for a plan is a quantitative amount of resources in a business for the purpose of utilization during a specific period, so it is: 1. a quantity, 2. related to a business, and 3. used during a period of time in the future. (Shabahang, 2008)

**BUDGETING**

Budgeting consists of financial and non-financial aspects of planned operations. Budget for a period, on the one hand, is an instruction for completing the operations and on the other is a forecast of the future results of operations. To put it briefly, budgeting is the process of organizing budgets. (Shabahang, 2008)

**SYSTEM**

A system is a set of components, and relations among them, which are connected together by specific and mutually related features to make a whole with their environment. (Alvani, 2003)

**RESEARCH METHOD**

This research is conducted to study the budgeting and its role in achieving planning and performance improvement of SAIPA in a descriptive method; given that, the tool used for gathering data is a questionnaire, it is a survey. The questionnaire has been arranged on 5-point likert scale in a way that has the capability to evaluate all elements of objectives, planning and performance improvement for managers. The statistical population consists of all managers and experts of different budgeting divisions who have enough information and knowledge about the issue. Since the number of individuals in the population is limited, census has been chosen as method for data gathering and sampling. By this method, all experts of divisions have been invited to answer the questionnaire. The aim is to pick out most possible numbers of experts or managers which would include 60 individuals and a margin of error of 5%.

**EFFICIENCY**

Efficiency is the realization of organizational goals with minimum cost and least unfavorable consequences. This can be studied by a comparison between the result of operation and the amount of resources used. Accordingly, it is a ratio of used resources over the result of operation. (Alvani, 2003) Based on the above, following are the hypotheses of the research:

- Budgeting system of SAIPA Company has a favorable role in achieving its short-term, mid-term and long-term objectives.
- Managers of SAIPA are able to use the comprehensive budget as a planning and controlling tool.
- SAIPA benefits from correct and reasonable features in its budgeting.
- Annual budgeting in SAIPA has an effect on the performance of the Company.

Descriptive method is used to analyze the data with one-dimension tables to study the status of each replier of the questionnaire in the descriptive findings (such as gender, age, education, and job) which would be shown in tables and charts. All calculations and statistical analyses are done by means of Microsoft Excel and SPSS software. Both validity and reliability of the standard questionnaire have been tested and taken into account while arranging; however, to better make sure that questions are valid, they have been presented to and affirmed by relevant managers and experts of SAIPA. Cronbach's alpha has been used as an estimate of the reliability of data. The calculated values of Alpha are greater than 0.7 for each examinee. Accordingly, a sample of 60 individuals, out of the population, is chosen to answer the questions and finally all the questionnaires are collected. The Cronbach's alpha coefficient values have been greater than 0.7 for each examinee. This indicates the reliability of the items examined.

<table>
<thead>
<tr>
<th>Indices</th>
<th>No. of Questions</th>
<th>Question Numbers</th>
<th>Coefficient of Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaire</td>
<td>30</td>
<td>1-30</td>
<td>0.90</td>
</tr>
<tr>
<td>Role of budgeting system in SAIPA to achieve short, mid and long-term objectives</td>
<td>7</td>
<td>1, 3, 5, 11, 16, 23 &amp; 28</td>
<td>0.81</td>
</tr>
<tr>
<td>Utilization of comprehensive budget by managers as a tool for planning and control</td>
<td>8</td>
<td>2, 9, 12, 13, 17, 24, 26 &amp; 30</td>
<td>0.68</td>
</tr>
<tr>
<td>SAIPA's correct and reasonable budgeting</td>
<td>10</td>
<td>4, 6, 7, 8, 14, 18, 19, 20, 22 &amp; 29</td>
<td>0.75</td>
</tr>
<tr>
<td>Effect of annual budgeting on performance improvement of SAIPA</td>
<td>5</td>
<td>10, 15, 21, 25 &amp; 27</td>
<td>0.53</td>
</tr>
</tbody>
</table>
DATA ANALYSIS

Method used to select repliers is sampling. Majority of samples is related to men, which is due to the greater number of men as compared to women.

As it is demonstrated above, 93 percent of repliers are men and 7 percent of them are women. This is better shown in the Chart.1 below:

REPLIERS' EDUCATIONAL STATUS

Education is one of the parameters, which could have an effect on the quality of gathered data. The higher the educations of repliers, the better the questions are answered. This enhances the quality of gathered data.

AGE SPECIFIC ANALYSIS OF REPLIERS:

Age is one of the variables, which has an effect on the quality of data gathered. Individuals with professional experience would be able to answer the questions much better than those with less experience. The age status of repliers is shown in the Tab.4 below:

As it is demonstrated in Tab.3 above, most SAIPA experts have got bachelor's degree. It is emphasized by the researcher to pick out those repliers who at least have bachelor's degree.
It is better demonstrated in the above chart that due to the random selection of sample, the distribution of repliers, from age point of view, is almost normally spread.

**Status of repliers by their professional experience**

Professional experience is an important factor in determining the quality of data gathered. Those who have more professional experience would be able to analyze the status of their organization much better. In the chart below, you can easily observe the distribution status of repliers’ professional experience.

As it is seen, minimum years of experience in the above table, is less than 3 years of which no repliers have been selected. All repliers have more than 3 years of professional experience among which more than 55 percent have more than 10 years of experience.

With regard to the above table, role of budgeting system in achieving short, mid and long-term objectives in SAIPA has got the highest mean (3.48); correct and reasonable budgeting in SAIPA stands second (mean=3.35). In testing the hypotheses, we intend to study the normality of data; because it is the prerequisite for applying the tests. When distribution of data is normal (i.e. level of significance is more than 0.05), we apply parametric tests to hypotheses; otherwise, (i.e. level of significance is less than 0.05), non-parametric tests are applicable.

**ANALYSIS OF PARAMETERS**

In this section, distributions of all parameters are studied and for each of which statistical descriptive indices are calculated to make the overall status of variables and data distribution clear.
In order to study the hypotheses and evaluate the role of budgeting system in achieving the short, mid and long term objectives in SAIPA, one-sample t-test is applied; because in this hypothesis, we would like to compare the calculated mean with the population mean. The mean of population, as regards scoring of the questionnaire and 5-point likert scale equals 3.

Tab.8. Results of one-sample t-test to study the role of budgeting system in achieving the short, mid and long-term objective in SAIPA

<table>
<thead>
<tr>
<th>Variable</th>
<th>QTY</th>
<th>Mean</th>
<th>S.D.</th>
<th>F</th>
<th>t</th>
<th>L.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role of budgeting system in achieving short, mid and long-term objectives in SAIPA</td>
<td>60</td>
<td>3.48</td>
<td>0.45</td>
<td>59</td>
<td>8.37</td>
<td>0.00</td>
</tr>
</tbody>
</table>

With regard to the results shown in the above table, level of significance of the test is p=0.001 and which is less than 0.01. So, it could be inferred that the test is significant (i.e. difference between the calculated mean and the population mean is significant). It could also be reasoned that replies of the individuals in relation to the role of budgeting system in achieving short, mid and long-term objectives in SAIPA plays a favorable role in achieving short, mid and long-term objectives of the company. One-sample t-test is used to study and analyze the utilization of comprehensive budget as a tool for planning and control by managers. The aim of this hypothesis is to make a comparison of both means, i.e. the mean of calculated budget and the mean of the population. The mean of population, as regards scoring of the questionnaire and 5-point likert scale equals 3.

Tab.9. Results of one-sample t-test to study the utilization of comprehensive budget as a tool for planning and control by managers

<table>
<thead>
<tr>
<th>Variable</th>
<th>QTY</th>
<th>Mean</th>
<th>S.D.</th>
<th>F</th>
<th>t</th>
<th>L.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilization of comprehensive budget as a tool for planning and control by managers</td>
<td>60</td>
<td>3.23</td>
<td>0.41</td>
<td>59</td>
<td>4.4</td>
<td>0.001</td>
</tr>
</tbody>
</table>

With regard to the results shown in the above table, level of significance of the test is p=0.001 and which is less than 0.01. So, it could be inferred that the test is significant (i.e. difference between the calculated mean and the population mean is significant). It could also be reasoned that replies of the individuals in relation to the utilization of comprehensive budget as a tool for planning and control by managers and the population mean are statistically different. Since the calculated mean (m=3.23) is greater than the population mean (m=3), it could be inferred that, from repliers' points of view, managers have been able to utilize the comprehensive budget as a tool for planning and control. One-sample t-test is used to study and analyze the correct and reasonable budgeting in SAIPA. The aim of this hypothesis is to make a comparison of both means, i.e. the mean of calculated budget and the mean of the population. The mean of population, as regards scoring of the questionnaire and 5-point likert scale equals 3.

Tab.10. Results of one-sample t-test to study the correct and reasonable budgeting in SAIPA

<table>
<thead>
<tr>
<th>Variable</th>
<th>QTY</th>
<th>Mean</th>
<th>S.D.</th>
<th>F</th>
<th>t</th>
<th>L.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct and reasonable budgeting in SAIPA</td>
<td>60</td>
<td>3.35</td>
<td>0.35</td>
<td>59</td>
<td>7.64</td>
<td>0.001</td>
</tr>
</tbody>
</table>

With regard to the results shown in the above table, level of significance of the test is p=0.001 and which is less than 0.01. So, it could be inferred that the test is significant (i.e. difference between the calculated mean and the population mean is significant). It could also be reasoned that replies of the individuals in relation to the correct and reasonable budgeting in SAIPA and the population mean are statistically different. Since the calculated mean (m=3.35) is greater than the population mean (m=3), it could be inferred that, from repliers' points of view, the budgeting in SAIPA is correct and reasonable. One-sample t-test is used to study and analyze the effect of annual budgeting on performance improvement of SAIPA. The aim of this hypothesis is to make a comparison of both means, i.e. the mean of calculated budget and the mean of the population. The mean of population, as regards scoring of the questionnaire and 5-point likert scale equals 3.

Tab.11. Results of one-sample t-test to study the effect of annual budgeting on performance improvement of SAIPA

<table>
<thead>
<tr>
<th>Variable</th>
<th>QTY</th>
<th>Mean</th>
<th>S.D.</th>
<th>F</th>
<th>t</th>
<th>L.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of annual budgeting on performance improvement</td>
<td>60</td>
<td>3.22</td>
<td>0.38</td>
<td>59</td>
<td>4.46</td>
<td>0.001</td>
</tr>
</tbody>
</table>
With regard to the results shown in the above table, level of significance of the test is \( p = 0.001 \) and which is less than 0.01. So, it could be inferred that the test is significant (i.e. difference between the calculated mean and the population mean is significant). It could also be reasoned that replies of the individuals in relation to the effect of annual budgeting on performance improvement of SAIPA and the population mean are statistically different. Since the calculated mean \( (m=3.35) \) is greater than the population mean \( (m=3) \), it could be inferred that, from repliers' points of view, the annual budgeting has an effect on performance improvement of SAIPA.

**CONCLUSIONS**

**HYPOTHESIS 1: ROLE OF BUDGETING SYSTEM IN ACHIEVING SHORT, MID AND LONG-TERM OBJECTIVES IN SAIPA**

Results of the research show that there is a relatively strong relationship between budgeting and the objectives of the company in short, mid and long terms. In addition, annual budgeting has a significant effect on the performance improvement of SAIPA. Replies to the questionnaire, in relation to the role of budgeting and its related factors in SAIPA, show a higher value than mean value. The effect is on the following areas:

1. Budgeting forms a base for planning as well as an infrastructure for future activities of the company.
2. Budgeting forms a significant relation between activities and daily plans of the company with the mid and long term strategic planning.
3. Budgeting provides the possibility for recognizing deviations from the company's predetermined objectives and plans.
4. Budgeting and its resulted reports have an effective and favorable role in achieving the company's short, mid and long term objectives.

**RESULTS OF HYPOTHESIS 2: BUDGETING IS A TOOL FOR PLANNING AND CONTROL BY MANAGERS IN SAIPA**

Results show that managers have been able to utilize the budget as a tool for planning and control. This has made it possible for them to achieve budgeting objectives. The most important aspects of budgeting as a tool for planning and control are as follows:

1. Clear response of responsible managers, at different levels, to related authorities
2. Optimal management of resources (financial and non-financial)
3. Intended for different controlling purposes in the organization
4. Evaluating performance in different divisions of the organization and providing them with feedbacks.
5. Identifying accurate and precise decisions made by different individuals/divisions for the improvement of the organization.
6. Supplying information required by internal divisions and users of the company

**RESULTS OF HYPOTHESIS 3: CORRECT AND REASONABLE BUDGETING IN SAIPA**

Results show that there is a relative satisfaction among managers of the company in line with correct and reasonable budgeting and that it is particularly correct in realizing the objectives of the company. Following are some of its tangible results:

1. Budgeting reports comply with the reality within the company.
2. It is possible to make a logical and significant comparison of actual and budget figures.
3. Benefits from budgeting are much more than their related costs.
4. Budgeting includes clarity and transparency.
5. Budgeting evaluates the responsibilities of different divisions in optimizing management of resources.
6. Budgeting closely examines deviations of actual performance from budget figures

**RESULTS OF HYPOTHESIS 4: EFFECT OF ANNUAL BUDGETING ON PERFORMANCE IMPROVEMENT OF SAIPA**

Results show that budgeting has an effect on performance improvement in the company. Accordingly, the hypothesis is confirmed. Improvement in performance has been as follows:

1. Budgeting brings about both cooperation and harmony in different plans and objectives of the company.
2. Budget has the requisite comprehensiveness, which includes all important aspects of performance and other activities of the company.
3. Budget impedes any deviations towards irrelevant targets.
4. Budget plays an effective role in identifying and planning essential processes.
APPLIED RECOMMENDATIONS BASED ON RESULTS OF HYPOTHESIS 1:

- Analyzing actual monthly results in line with the objectives and approaches stipulated in the strategic planning.
- Controlling results of operation and production activities instead of controlling the process.
- Employment of experienced professionals to increase the chance of success in the company’s budgeting.

APPLIED RECOMMENDATIONS BASED ON RESULTS OF HYPOTHESIS 2:

- Deployment of divisional planning, particularly where the sources and uses exist so that they are comparable and consistent with actual objectives to become a tool for planning and control.
- Deployment of a flexible budget along with the operational budget so as to make it possible to compare the actual performance and the company’s objectives and finally make it a tool for controlling.
- Utilization of revolving budget in the budgeting system, which according to latest changes, constantly or within two or three month period updates all revised information, would make the annual budget available as a revision budget.

APPLIED RECOMMENDATIONS BASED ON RESULTS OF HYPOTHESIS 3:

- Using activity based budget means realizing the relation between costs and activity levels. In the traditional budgeting method, costs would be concentrated based on processes.
- Close relations with other divisions involved in the operational budget and setting a schedule for weekly meetings in order to make the budget as efficient and effective as it should.

APPLIED RECOMMENDATIONS BASED ON RESULTS OF HYPOTHESIS 4:

- Optimal utilization of resources and existing production capacities in adjusting budgeting structure and its execution.
- Precise separation of production and operation costs based on indices defined for automotive industry to impede deviations in the cost price of products.

As recommendations for future study, you may:

1. Study the role of budgeting in other automotive companies to determine objectives and strategic approaches for improving organizational operations.
2. Study the role of budgeting in optimum resource allocation within different divisions to support managers in planning and control in the automotive companies and finally make a comparison of this study with their ones.
3. Study the effect of budgeting on controlling of costs and correct uses of resources in performance improvement within other companies and compare the results with this study.
4. Study the role of budgeting in different organizational divisions and prioritize their efficiency levels on the organization's performance.
5. Study the role of budgeting in reliability of budget through TSE listed companies.
6. Study the effect of budgeting on the features of performance within manufacturing and service-rendering companies.
7. Study the role of budgeting in giving clear response to the authorities by managers responsible at different levels.
8. Study the role of budgeting in supplying informational needs of intra and extra organizational users.

REFERENCES