

The role of financial statement analysis in the decision making procedures of hotel units

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Abstract: The objective of this paper was to study the utility of methods of financial statement analysis in business decision-making, and the extent of their use by the administration of Greek hotel units. The issues taken into consideration were: The investigation about whether accounting provides the suitable tools to contribute to the effectiveness of hotel business administration. The research about the extent of application of financial analysis methods of statements, issued or not, by the Greek hotel enterprises.

Keywords: Decision Making, Financial Management

Financial statements illustrate the enterprise's financial position and performance. Apart from their elaboration which is mandatory by the legislation in effect, financial statements aim at a further study and analysis of the data included in them, in order to identify the strengths and weaknesses of an economic unit as well as to determine the level of financial strength and profitability of this unit in relation to other enterprises of the same sector, and whether its financial position is enhanced or declines throughout time (Efthymioglou, 1999).

Hotel industry is a particular sector of the economy with a multiform and vulnerable product. A hotel enterprise in order to plan its activities for achieving its goals should be aware of its strengths and weaknesses. The use of financial tools is one of the fundamental means contributing towards this direction. Through the study of accounting statements, the analysis of financial position, the investigation of relations between the elements that compose them and the efficiency are achieved.

In order for this objective to be achieved, financial statements provide information about the following elements of the enterprise:

- assets,

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- liabilities,
- owned capital,
- income and expenses,
- profits and loss,
- cash flows

According to the Greek and International Accounting Standards, the financial statements include the following:

Table 1: Financial statements in effect according to the EGLS (Greek General Accounting Plan) and the IAS

| Greek Accounting Standards | International Accounting Standards |
|--|---|
| Balance sheet | Balance sheet |
| Statement of Operating Results | Statement of Operating Results |
| Statement of General Operating Results | Statement of Changes in Owned Capital |
| Appropriation Account | Cash Flow Statements |
| Appendix | Notes |

According to the Greek standards, out of the five financial statements the three first which are considered fundamental, are mandatorily issued by the Greek enterprises according to the legislation being in effect for the S.A. and the Ltd liability co. (Protopsaltis, 1999:14).

1. METHODS OF FINANCIAL STATEMENT ANALYSIS

Financial statement analysis examines the relations of their economic elements they contain either in a given time (study of elements of a fiscal period), or diachronically (study of elements of two or more fiscal periods).

In this way, comparisons are made between what happens during the analysis and what should have happened, comparing the elements with a typical or standard size. For a more complete analysis, comparisons should be made with other enterprises of the same sector or with the average of the sector to which the enterprise belongs (Niarhos, 2004:32).

Financial statements are actually documents referring to the past. They present what has happened during a certain time period. However, people who study financial statements are interested in what will happen in the future. For example, shareholders are interested in knowing the future profits and dividends, creditors want to know about the enterprise's ability of satisfying its liabilities, the administration is interested in knowing if the enterprise is able to finance its future expansion. Financial statements can provide valuable information concerning all these questions (Garrison et al. 2003:792).

The most widely used methods of analysis of accounting statements are:

1. Stratified or common size analysis

2. Comparative cross-time analysis
 3. Cross-time ratio analysis
- Stratified or common size analysis**

Balance sheets and statements of operating results are comprised in the common size analysis, in percentage of the total of their size (Walton, 2002:281).

The elaboration of common size analysis is known as vertical analysis since it is carried out vertically (Garrison et al. 2003:796). Common size statements are also called component percentages, because the items of each statement are reduced to a percentage basis (Efthymoglou et. al. 2000:61).

The common size analysis is used to facilitate the comparison between the data of an enterprise during a number of years, as well as between enterprises of different scale.

In this analysis, the accounts of the Balance sheet statement are divided by total Assets or Liabilities, while each Operating Results account is divided by turnover and multiplied by 100.

Using this method, regarding the Balance sheet, the enterprise's capital financing in a percentage of total Liabilities, the asset capital allocation, as well as their importance compared to the total Assets can be determined.

Regarding the Operating Results, the turnover percentage covered by the expenses can be determined.

2. Comparative cross-time or horizontal analysis

The comparative cross-time analysis studies the changes that take place diachronically in the various elements of the financial statements and of the enterprise's financial position. The horizontal analysis is measured in relation to:

- a) a previous period.
- b) a standard period (trend ratios).

2.1 Horizontal analysis in relation to a previous time period

Elements presenting a change from a time period to the next are studied in this analysis. Namely, it should be examined whether these changes have positive or negative effect to the enterprise. Furthermore, the enterprise's policy is outlined regarding its financing and investing activity.

In their simplest version, comparative statements can compare the figures of two or more successive time periods. The importance of these statements can be enhanced further by presenting the various items' level of change, that is, the variation degree, as well as the variation rate from one time period to the following. In this way, major changes can be easier identified (Nikolaou, 1999:104).

To calculate the variation percentage, the value of the absolute rise or fall of each account is divided by the balance of the respective account of the previous time period, which is used as comparison basis.

2.2 Horizontal analysis in relation to a standard time period (Trend ratios)

Trend ratios illustrate more vividly the variations of the financial elements through time and facilitate their horizontal analysis and study. Comparing the trend of various

financial figures, the analyst forms an opinion about whether there are any favourable future trends or not. The presentation of the variation percentage throughout the years helps the analyst obtain a perspective and estimate the importance of these variations. For example, an increase of 1 million € in sales presents a greater importance if the sales of the previous year were 2 million € (50% increase) rather than if the sales of the previous year were 20 million € (5% increase) (Garrison et al. 2005:794).

To calculate the trend ratio, the value of one figure in the examined year is divided by the respective value during the base year (Niarchos, 2004:221):

$$\text{Trend Ratio (T.R.)} = 100 \times \frac{\text{Value of the figure in the examined year}}{\text{Value of the figure in the base year}}$$

the trend value of the

The base year is usually the first year of the time period to be studied, and every financial figure is presented in 100. When the absolute value of a figure is lower than the one in the base year, then the trend ratio will be less than 100, while the opposite happens when its absolute value is higher than this of the base year.

The percentage increases are calculated by subtracting 100 from the successive trend ratios, while the percentage decreases are calculated by subtracting each trend ratio from 100 (Niarchos, 2004:222).

3. Ratios

For the drawing of conclusions from the analysis of the enterprises' annual or periodical financial reports (balance-sheet, statements of operating results), financial ratios play also major part (Gropelli et al. 2002: 408).

The administration and the owners of a hotel enterprise need information regarding the enterprise's operation. The collected information is used for the evaluation of previous years and the determination of their trends, so that appropriate decisions to be made for the following fiscal period.

A method that is usually used for the examination of the conditions of enterprises' financial operation is the financial ratio analysis. This method is indicated in cases where the analyst has no further information about financial operation conditions of the enterprises (Efthymoglou et al. 2000:97).

The basic types of ratios are the following:

- Liquidity Ratios: determination of an enterprise's short-term financial position and its ability to respond to the short-term liabilities.
- Activity Ratios: measurement of an enterprise's effectiveness level in the use of its assets.
- Profitability Ratios: measurement of an enterprise's efficiency, its profit dynamics and management capacity.
- Capital structure and viability Ratios: estimation of an enterprise's long-term capacity to satisfy its liabilities and indication of the creditors' protection degree.
- Investment Ratios: are used by the investors when they are to decide whether they should buy, sell or maintain their investment in equity securities of the enterprise.

3.1 SPECIAL HOTEL INDICES

Hotel enterprises usually evaluate management, based on profitability indices or other indices of efficiency measurement (Geller, 1985b).

The above indices, in their majority can be calculated and analyzed also by interested parties that do not belong to the administration of hotel enterprises. The information can be drawn easily from the financial statements that are issued and can be accessed by all the external analysts. However there are indices, which can be calculated only by internal analysts (hotel administration), since they contain data to which only they have access.

Such indices are the following:

- Occupancy index (measurement of the success of sales).
- Income index (measurement of the personnel's competence in the room, food and drink sections).
- Cost index (investigation whether the realised costs evolve according to (or not according to) the costs anticipated or indicated by the statements).
- Profit index (determination of the most profitable sections of a hotel).

3.2 STATE OF THE ART

A major change in recent years is that "self-accounting" (preparing all their own accounts, including tax calculations) is gradually replaced by a group-centred approach promoted by branding which requires systems and procedures that maintain brand standards from an operational as well as a marketing perspective.

This tendency is also present into the accounting area, since the progress of technology allows the off-site "centralisation" and "automatisation" of processes. However, the analysis of performance still remains in the unit. The implementation of recent legislation and standard reporting requirements has also resulted in more head office accounting to ensure that the most stringent principles are applied. (Burgess 2007).

As a result, strategic management accounting plays a major part in planning and ad hoc exercises on the market conditions and competitor analysis. In this sector at least, it is no longer in what Bromwich and Bhimani[3] described as its "infancy", but has been incorporated in the services provided by the finance function to decision makers. The widespread adoption of strategic management accounting is consistent with the open and homogeneous nature of the industry and the high degree of competitiveness among the hotel groups in the market. (Collier, P. and Gregory, A. 1995).

Furthermore, it is apparent that in the near future hotel profitability will be directly influenced by technology. Hotel management will be based on an accounting practice deeply affected by three main features: the impact of corporate governance legislation, the need to maintain profitability and the effect of technology. (Burgess 2007).

3.3 OTHER METHODS AND TECHNIQUES OF FINANCIAL MANAGEMENT

3.3.1 Break even point analysis

Most of an enterprise's administrative decisions refer to cost, sales and profit issues. It is highly important for the internal, as well as the external analyst, to be able to identify the relations between those figures as well as their effects on the enterprise's results. The analysis of the relation of cost, size of sales and profits is also very important in the stage of planning an enterprise (Kantzios, 2002:313).

The hotel enterprise has to deal with high and steady expenses due to the structure of its operational cost. The analysis of revenue and operational expenses in relation to the various levels of turnover is referred as break even point analysis (Sotiriadis, 2005:119).

The calculation of the break even point in a hotel unit, according to Collier et al. 1995, is a complex procedure. This is due to the fact that the way of cost allocation per cost centre and the revenue calculation per operation section are difficult and require thorough examination of all the procedures through an accounting plan adapted to the hotel sector.

Break even point analysis is important for the development of the enterprise's business policy, its product pricing, cost control and decision making about expansion programmes (Kiochos et al. 2002:280).

3.3.2 Budgets

Budgets are programmes referring to the anticipated revenue, expenses and operating results estimated for a certain time period. Budgets are usually formulated per section or project. They are summed up to an overall budget which is presented for approval to the Board of Administration (Laloumis, 2002:193). Budgets, since they include organisational targets and anticipated future events, can be used as financial performance models. They are also very useful to planning procedure (Montana et al. 1993:312).

Within the framework of long-term financial plans, the creation of a budgetary control system is necessary. This system will ensure the elaboration of detailed plans for each year. In fact the long-term plans will be specified within a yearly time horizon. However, the budgetary control is an instrument of short-term planning (Sotiriadis, 2005:33).

Budgets can be prepared by the senior administration and then imposed to every level of the organisation (top down budgeting), or prepared by junior executives and presented for approval to senior administration (bottom up budgeting).

3.3.3 RESEARCH METHODOLOGY

The objective of this research was the expansion of the use of financial analysis by Greek hotel units. It is examined which hotel categories are engaged in practices of financial analysis and in general to what extent hotel enterprises apply these practices.

For this research a questionnaire had been drawn up, which was addressed to general and financial managers of hotel units.

This questionnaire consists of issues regarding:

1. The basic features of a hotel enterprise
2. Profitability/efficiency data
3. Control methods of financial progress

The types of questions are different according to the question's structure. There are closed and open questions, multiple choice questions and questions formulated based on scaling techniques and in particular on Semantic Differential in a 1 to 5 scale (Vitoulatidis, 2000:104). In particular, the closed type questions that were used were (Christou, 1999: 152-153):

1. Multiple choice questions:
2. Dichotomous questions:
3. Semantic Differential questions:
4. Importance scale questions:

In the first part, the basic features of the enterprises examined are described regarding the type of enterprise (Individual, S.A. etc.), the location (by the sea, in a city), the hotel category (stars), the ownership, the capacity and number of facilities, the client base and the workforce. In the second part, the hotel's profitability and efficiency elements are presented, as well as the sales trend and the revenue contribution percentage of the main and secondary sections. Furthermore, it investigates the satisfaction level regarding the hotel efficiency in the three last years and compared to the competitors of the sector, as well as the possible problems emerged and how serious these were. The third part is divided in three separate subunits. The first subunit refers to financial information provision and to what extent it supports the decision making and the monitoring of hotels' financial position. The extent of use of the various methods of financial analysis is examined and how useful these are considered for the control of hotels' financial performance. The second subunit refers to the frequency with which hotels examine their financial course in relation to the applied practices. Finally, the third subunit examines the use of budget by the hotels, the budget formulation methods and its purpose.

Some of the questions used constituted the fundamentals for studies by other researchers, (Atkinson and Brown, 2001). However their use in this research considered necessary, due to the important issues related to the management of hotel enterprises.

The questionnaire collection took place either personally, or through computer. The examination of the statistical data of the research took place with the use of website SurveyConsole, where all the research questionnaires were included and then the statistical elaboration of the questions was made. The questioned was asked to fill in the questionnaire at the website SurveyConsole, in order for the research data to be updated on-line. In cases that questionnaires were personally collected, their registration in the SurveyConsole form followed.

For the research, four and five-star hotels were selected, of 100% Greek ownership, located in big coastal and urban centres of Greece. The lower category hotels were deliberately excluded from the research, since in Greece at least, it is rather unlikely to systematically and methodically use techniques of financial analysis in their management practice.

The majority of the hotels that participated in the research are mainly from Athens, Thessaloniki, Corfu, Crete and Halkidiki. A major effort was carried out to collect as many questionnaires as possible in order for the research conclusions to be more solid, but unfortunately the hotel units at that time were at the peak season with high work load, conventions and conferences, events, celebration nights, etc, and with 100% occupancy. As a result, out of the thirty five (35) hotels which originally were willing to fill-in the questionnaires, twenty five (25) responded. However, two hotels from the

sample were excluded because the questionnaires were not properly filled-in. The sample was constituted by 23 hotels.

4. RESEARCH RESULTS

4.1 BASIC FEATURES OF HOTEL ENTERPRISES

4.1.1 Hotel profile

Regarding the location of hotels, eleven of them (47.83%) are city hotels, that is, they are in big urban centres, while twelve (52.17%) are vacation hotels located mainly by the sea. The sample mainly includes independent hotels (56.52%), while a great percentage (34.78%) represents hotels, which are part of a chain. Only two (8.70%) are Franchise hotels. All of the twenty-three hotels are 100% of Greek ownership. The sample includes seventeen (73.91%) five-star hotels, and six (26.09%) four-star hotels (Chart 6.5). As reported before, lower category hotels were deliberately excluded from the research, due to the fact that comparison with higher category hotels might not be possible (Table 2).

Table 2: Hotel sample profile

| | | | |
|--------------------|------------------------|-------------------|--------------------|
| PREMISES LOCATION | 47,83% In a city | 52,17% By the sea | |
| TYPE OF MANAGEMENT | 34,78% Part of a chain | 8,70% Franchise | 56,52% Independent |
| OWNERSHIP | 100% Greek | | |
| CATEGORY | 73,91% 5* | 26,09% 4* | |

4.1.2 Hotels' main client base

In the total of the sample, the highest percentage of the hotels' client base concerns recreational tourism, in an average (in Av.) of 64%, business clientele follows with 35% and the average rate of clientele for other reasons is almost zero, representing just 1% (Chart 1).

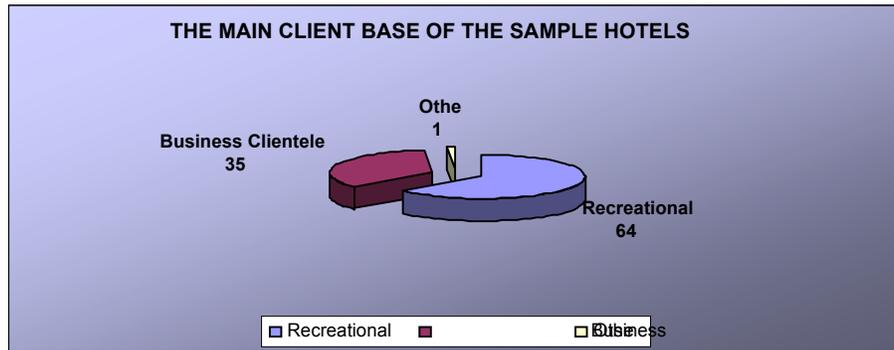


Chart 1 Hotels' main client base (in Av.)

4.1.3 Workforce

According to the information of Chart 2 presenting the average of people employed in hotels (permanent and seasonal staff), 61% of the workforce is seasonal (121 people in average) while 39% is permanent staff (78 people in average).

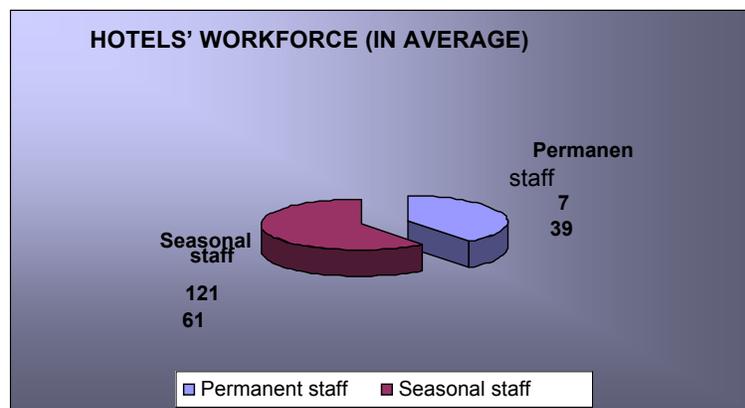


Chart 2: Workforce of the sample hotels

4.2 PROFITABILITY / EFFICIENCY DATA

4.2.1 Turnover trend

The turnover in most of the hotels (43.48%) of the sample is 4 to 10 million €. Six hotels (26.09%) follow with sales revenue 2 to 4 million. €. In two hotel cases (8.70%), the turnover varies from 10 to 20 million € and in other two from 1 to 2 million €. Only one hotel (4.35%) had a turnover of 20 to 40 million €, while two (8.70%) did not define their turnover (Chart 3).

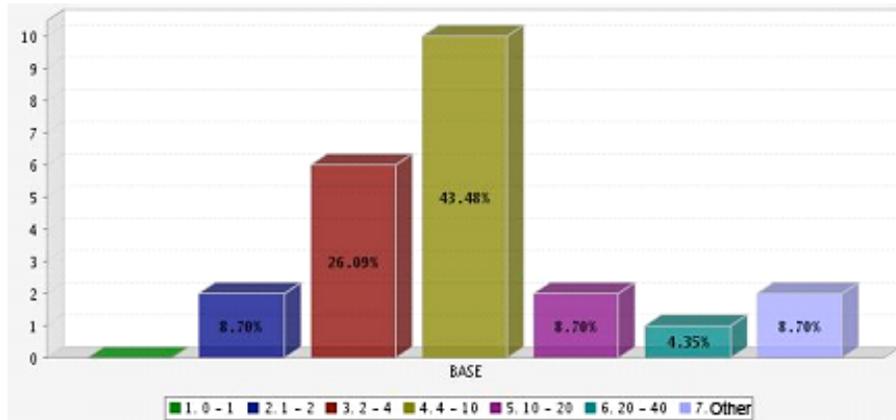


Chart 3 Hotels' turnover in million €

In most of the hotels (91.30%) rising turnover trend was present. Only one hotel (4.35%) presented a fall, while another one presented a sales decrease during the last three years (Chart 4).

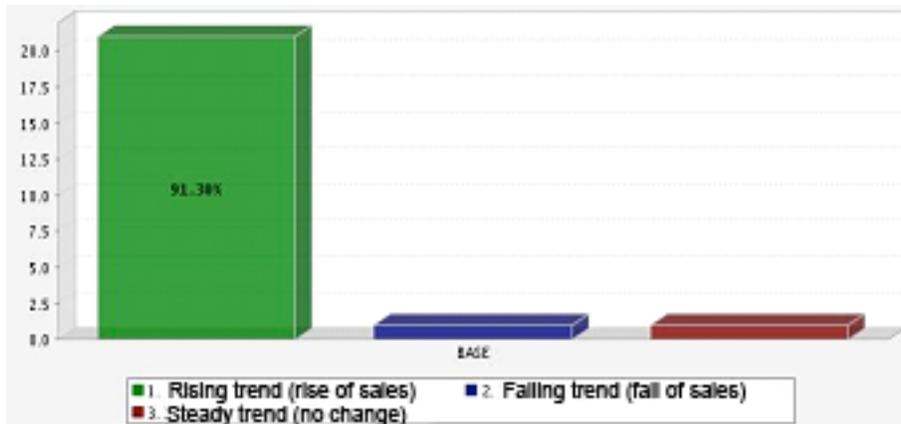


Chart 4 Hotels' turnover trend in the last three years

4.2.2 Profitability

In the last three years, profitability in one hotel was little satisfactory, in ten (43.48%) satisfactory enough, in nine (39.13%) very satisfactory and in three hotels (13.04%) absolutely satisfactory. 82.61% of the hotels consider their performance satisfactory enough to very satisfactory (Chart 5).

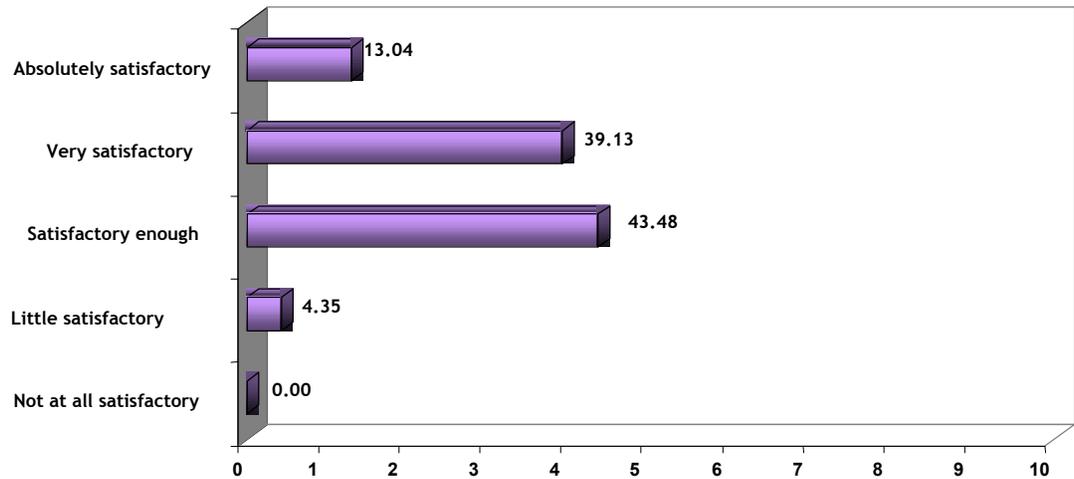


Chart 5: Estimation of hotels' profitability in the last three years

73.91% of the hotels consider their performance satisfactory enough to very satisfactory in relation to similar competitive enterprises, and 26.09% of them absolutely satisfactory (Chart 6).

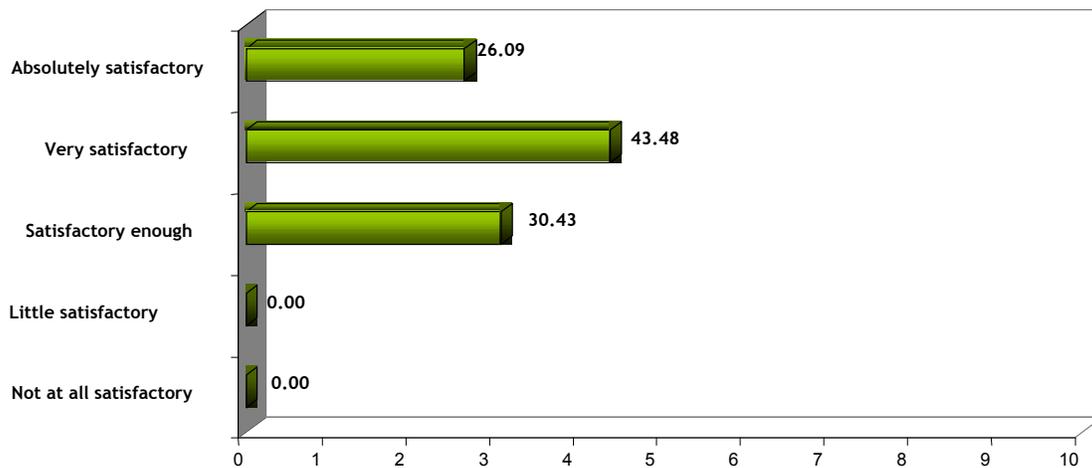


Chart 6: Estimation of performance in comparison to competitors

4.2.3 Revenue structure

Regarding the revenue per hotel section, the highest proportion comes from room revenue with an average of 69%. Food and event organisation revenue cover an average of 11% while the beverage revenue follows with an average of 9% of the total revenue (Chart 7).

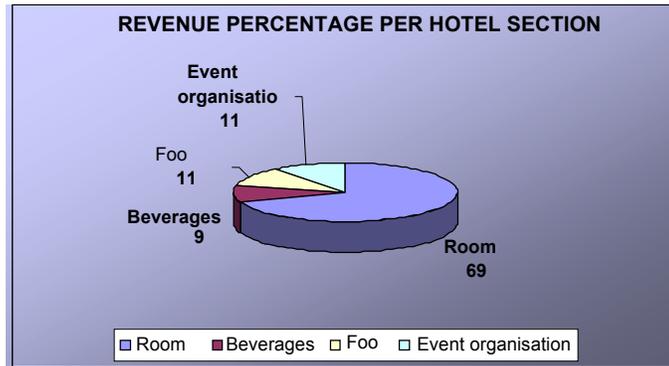


Chart 7 Revenue average per hotel section

4.3 CONTROL METHODS OF THE HOTELS' FINANCIAL PROGRESS

4.3.1 Financial planning instruments

To the question if budgets are formulated, twenty two hotels (95.65%) responded positively and only one (4.35%) responded negatively. To the question if the cash requirements of the following semester are known, twenty two hotels (95.65%) responded positively and only one (4.35%) responded negatively.

A great part of the sample uses financial statement analysis methods. In particular, eighteen cases (78.26%) use analysis techniques while five hotels (21.74%) do not. A Management Information System (MIS) is used by 65.22% of the sample (15 hotels), while it is not used by 34.78% (8 hotels) (Chart 8).

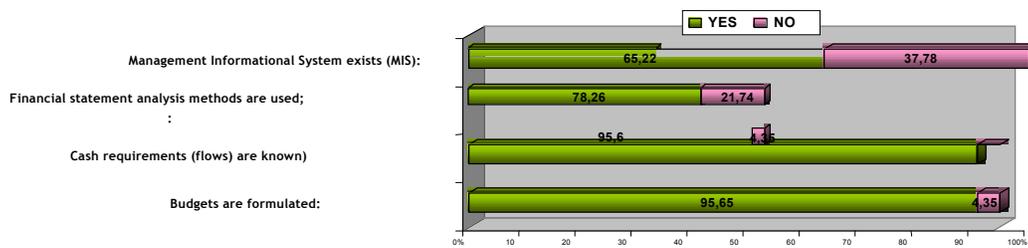


Chart 8: Financial planning instruments

4.3.2 Use of financial statement analysis methods

The common size analysis compared to the horizontal analysis is used by a small part of the sample. It is applied by eleven hotels (47.83%) while it is completely ignored by twelve (52.17%). In the sample examined, a high percentage (78.26%) uses the analysis of ratios as a financial control tool. Only five (21.74%) out of twenty three hotels responded negatively. Although 78.26% of the hotels use some, if not all, of the financial statement analysis methods, only 52.17% proceed to the comparison with financial statement figures of competitive hotels (Chart 9).

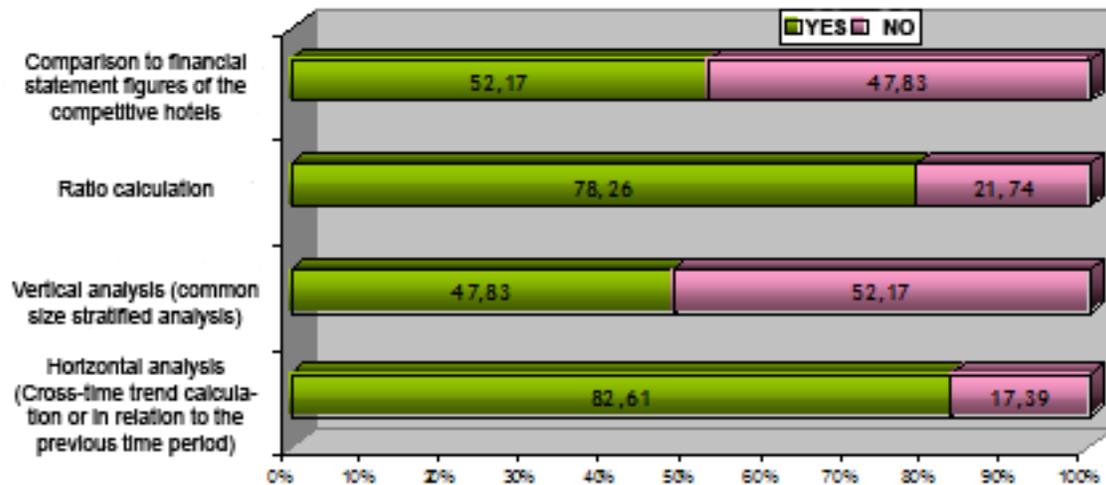


Chart 9: Use of financial statement analysis methods

Regarding the contribution degree of the financial statement analysis methods, the responses varied from “fair degree” (21.4%), “high degree” (52.17%) to “very high degree” (21.74%), where “high degree” (4) prevailed. Only one hotel responded that the above mentioned methods do not help at all in the control of the hotel’s financial course (Chart 10).

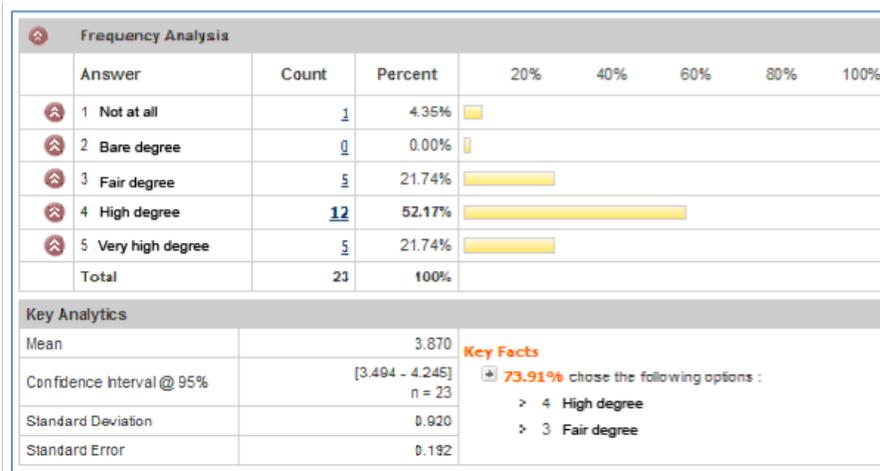


Chart 10 Contribution degree of the financial statement analysis methods in the control of the hotels’ financial course

When the question whether financial statement analysis methods are used is combined with the question about the contribution degree of these methods (Table 3), it comes out that out of the eighteen cases that responded that they use such methods, three (16.67%) believe that these methods help in fair degree, ten (55.56%) in high degree and five (27.78%) in very high degree.

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Table 3. Contribution degree of the financial statement analysis methods in relation to whether these are used or not by hotels

| | 1 Not at all | 2 Bare degree | 3 Fair degree | 4 High degree | 5 Very high degree | Row Totals |
|----------------|--------------|---------------|---------------|---------------|--------------------|------------|
| YES | 0 | 0 | 3 | 10 | 5 | 18 |
| | 0% | 0% | 16.67% | 55.56% | 27.78% | 78.26% |
| NO | 1 | 0 | 2 | 2 | 0 | 5 |
| | 20% | 0% | 40% | 40% | 0% | 21.74% |
| Column Total | 1 | 0 | 5 | 12 | 5 | 23 |
| Column Percent | 4.35% | 0% | 21.74% | 52.17% | 21.74% | 100% |

From the hotels responded that they do not use the above practices, one hotel (20%) believes that these analyses do not help the control, two (40%) that they contribute in fair degree and finally two (40%) in high degree.

4.3.3 Financial information provision

This question investigated the level of financial information provision through reports.

Between the lowest level and highest level of information provision, the head of the Personnel Department (4.35%) receives lower information, in spite of the fact that three hotels (13.04%) support this department through financial information in a great extent. Financial information provision to general managers and to the Board of Administration varies within high to very high level. The level of information received by the heads of departments is a little lower (Chart 11).

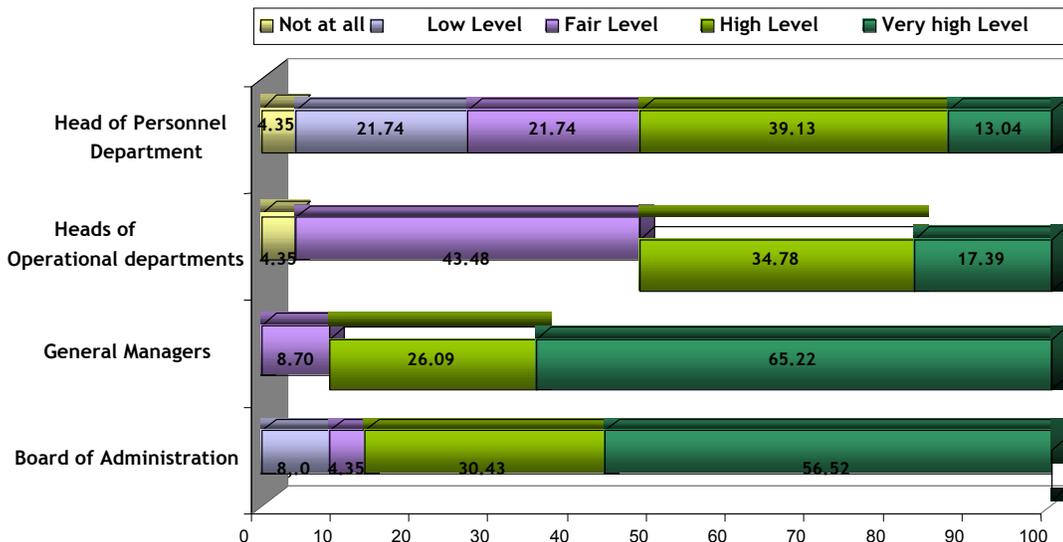


Chart 11: Level of financial information provision

4.3.4 Frequency and ways of measuring financial position

In all of the hotels (with just one exception) liquidity, profitability, various types of

cost and budget are examined during the year for measuring performance. It is worth noticing that ten hotels (43.48%) do not examine the return of capital within the year. In particular, the measurement based on budget is carried out monthly by the majority of the sample (52.17%), although with great variations (1.69), since in five cases (21.74%) budget is examined in less than a month. Great part of the sample (17.39%) measures its performance by examining annually the budgetary data. The measurement based on turnover is carried out monthly by twelve hotels (52.17%), also with great variations (1.50), since five hotels examine their performance through sales in less than four weeks and two hotels (8.70%) bimonthly, one hotel (4.35%) semi annually and three (13.04%) annually. The measurement based on cost figures is carried out monthly (60.87%) by fourteen hotels. Two hotels (8.70%) check their performance based on cost in a period of time less than a week, one (4.35%) between one and three weeks, two (8.70%) bimonthly, one (4.35%) semi annually and finally two (8.70%) once a year. Profitability, taken into account by fourteen cases (60.87%), is examined bimonthly while the rest of the cases present great variations (1.36).

Liquidity measurement also presents great variations (1.46). In three hotels (13.04%) it is examined in a time period less than a week, in other three (13.04%) between one and three weeks, in one (4.35%) bimonthly, in one (4.35%) semi annually and finally in two (8.70%) annually. However, the majority (52.17%) examines liquidity every month. A high percentage does not include the return of capital in the profitability measurement, since 43.48% of the sample does not take it into account. Two hotels (8.70%) examine it in a time period less than a week, two (8.70%) in one to three weeks, six (26.09%) monthly, one (4.35%) bimonthly, two (8.70%) semi annually and none annually (Table 4).

In general, the majority, even though not strong, measures every month its performance through the above mentioned elements, except the return of capital.

Table 4 Frequency and ways of measuring financial position

| | Liquidity (ability of response to short-term liabilities) | | Performance (ability of making profits) | | Turnover (sales) | | Cost Types | | Budget | | Return on invested capital | |
|-------------------------------|---|--------------|---|--------------|---------------------|--------------|-------------|--------------|-------------|--------------|-------------------------------|--------------|
| | N | % | N | % | N | % | N | % | N | % | N | % |
| Never | 1 | 4.35 | - | 0.00 | - | 0.00 | 1 | 4.35 | 1 | 4.35 | 10 | 43.48 |
| ≥ of a week | 3 | 13.04 | 2 | 8.70 | 4 | 17.39 | 2 | 8.70 | 3 | 13.04 | 2 | 8.70 |
| 1 - 3 weeks | 3 | 13.04 | 2 | 8.70 | 1 | 4.35 | 1 | 4.35 | 2 | 8.70 | 2 | 8.70 |
| Monthly | 12 | 52.17 | 14 | 60.87 | 12 | 52.17 | 14 | 60.87 | 12 | 52.17 | 6 | 26.09 |
| Bimonthly | 1 | 4.35 | 1 | 4.35 | 2 | 8.70 | 2 | 8.70 | - | 0.00 | 1 | 4.35 |
| Semi- annually | 1 | 4.35 | 1 | 4.35 | 1 | 4.35 | 1 | 4.35 | 1 | 4.35 | 2 | 8.70 |
| Annually | 2 | 8.70 | 3 | 13.04 | 3 | 13.04 | 2 | 8.70 | 4 | 17.39 | - | 0.00 |
| Mean | 3.87 | | 4.26 | | 4.17 | | 4.09 | | 4.13 | | 2.65 | |
| Standard Deviation | 1.46 | | 1.36 | | 1.50 | | 1.38 | | 1.69 | | 1.75 | |

From the average of the information of table 5 it arises that the majority uses all the below-mentioned measurements, in a time period equal or less than a week or every month; with an exception of the measurement of the available F&B (Food and Beverage), which is not taken into account by a high percentage of the sample (43.48%).

| | Average room price | | Room revenue / Potential maximum room revenue | | Rooms to let / Available Rooms | | F & B | |
|---------------------------|-----------------------|--------------|--|--------------|--------------------------------------|--------------|-------------|--------------|
| | N | % | N | % | N | % | N | % |
| Never | - | 0.00 | 1 | 4.35 | 1 | 4.35 | 10 | 43.48 |
| ≥ of a week | 10 | 43.48 | 10 | 43.48 | 13 | 56.52 | 2 | 8.70 |
| 1 - 3 weeks | 1 | 4.35 | 1 | 4.35 | 1 | 4.35 | 2 | 8.70 |
| Monthly | 9 | 39.13 | 9 | 39.13 | 5 | 21.74 | 8 | 34.78 |
| Bimonthly | 1 | 4.35 | - | 0.00 | 2 | 8.70 | - | 0.00 |
| Semi-annually | 1 | 4.35 | 1 | 4.35 | - | 0.00 | - | 0.00 |
| Annually | 1 | 4.35 | 1 | 4.35 | 1 | 4.35 | 1 | 4.35 |
| Mean | 3.35 | | 3.17 | | 2.91 | | 2.56 | |
| Standard Deviation | 1.43 | | 1.47 | | 1.44 | | 1.67 | |

Table 5 Frequency and ways of measurement of the use of earnings

Regarding whether the budget is prepared by junior executives and then forwarded for approval to senior administration (bottom - up budgeting), or by senior executives of the administration and then imposed in all levels of the organisation (top - down

budgeting), or finally in a cooperative way (cooperative budgeting), a one (1) to five (5) scale was used (where 1 is Never, 2 is Rare, 3 is Some times, 4 is Many times and 5 Always). Budgets are, in average, a result of a bottom – up procedure (2.61), a top – down procedure (3.57) and a cooperative procedure (4.04) with twelve cases (52.7%) to formulate a budget after cooperation between senior and junior executives (Chart 12).

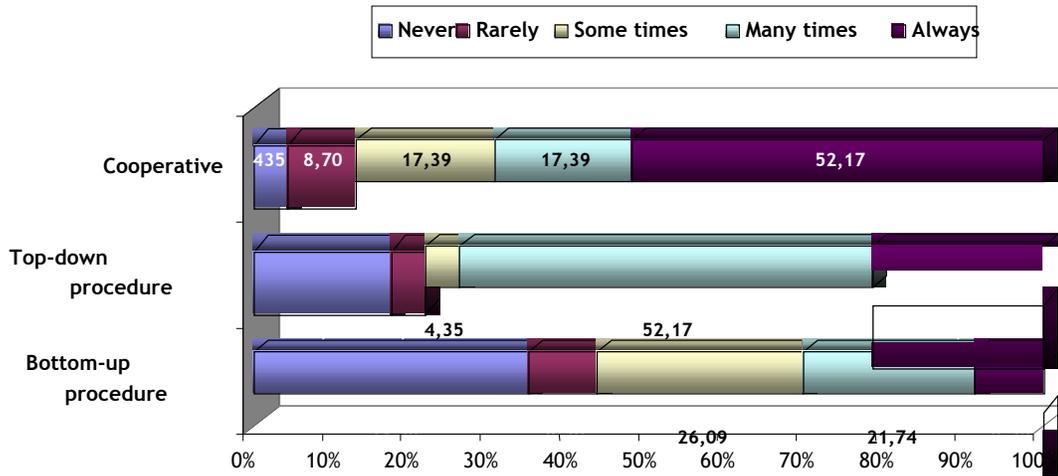


Chart 12: Budget formulation method

5. FINDINGS – RESEARCH OUTCOMES

The size of the hotel, regarding the total number of rooms, is a major factor affecting the use of analysis methods of financial elements. All of the hotels with more than two hundred rooms use the method of cross-time analysis (Horizontal Analysis) (Table 6).

Use of Horizontal Analysis:

Table 6. Use of horizontal analysis of financial statements in relation to the total number of rooms

| Total number of rooms | YES | NO | Row Totals |
|-----------------------|-------------|-------------|-------------|
| | 50-100 | 2 66.67% | 1 33.33% |
| 101-150 | 2 50% | 2 50% | 4 17.39% |
| 151-200 | 5 83.33% | 1 16.67% | 6 26.09% |
| 201-250 | 3 100% | 0 0% | 3 13.04% |
| 251-300 | 2 100% | 0 0% | 2 8.7% |
| 301-350 | 0 0% | 0 0% | 0 0% |
| 351-400 | 2 100% | 0 0% | 2 8.7% |
| 401-450 | 1 100% | 0 0% | 1 4.35% |
| 451-500 | 1 100% | 0 0% | 1 4.35% |
| 501 & more | 1 100% | 0 0% | 1 4.35% |
| Column Total | 19 | 4 | 23 |
| Column Percent | 82.61% | 17.39% | 100% |

A lower percentage of hotels use the common size analysis (Vertical Analysis). If the use of this type of analysis is compared to the total number of rooms of the hotels examined, the results vary and the variations of the responses are different. The fact that it is broadly used in the hotel sector can not be generalized, since the majority of the sample does not use it (Table 7).

Table 7. Use of vertical analysis of the financial statements in relation to the total number of rooms

Use of Vertical Analysis:

| | YES | NO | Row Total |
|-----------------------|---------------|---------------|-------------|
| | 50-100 | 1 33.33% | 2 66.67% |
| 101-150 | 1 25% | 3 75% | 4 17.39% |
| 151-200 | 3 50% | 3 50% | 6 26.09% |
| 201-250 | 2 66.67% | 1 33.33% | 3 13.04% |
| 251-300 | 1 50% | 1 50% | 2 8.7% |
| 301-350 | 0 0% | 0 0% | 0 0% |
| 351-400 | 1 50% | 1 50% | 2 8.7% |
| 401-450 | 1 100% | 0 0% | 1 4.35% |
| 451-500 | 1 100% | 0 0% | 1 4.35% |
| 501 & more | 0 0% | 1 100% | 1 4.35% |
| Column Total | 11 | 12 | 23 |
| Column Percent | 47.83% | 52.17% | 100% |

The research results have shown that the hotels broadly use ratio calculation. Some hotels, which do not use ratio analysis, are of relatively small room capacity. All of the hotels with more than two hundred rooms apply ratio analysis (Table 8).

Table 8. Use of ratios in relation to the total number of rooms

Use of Ratios:

| | Use of Ratios: | | Row Totals |
|----------------|-----------------------|--------|------------|
| | YES | NO | |
| 50-100 | 1 | 2 | 3 |
| | 33.33% | 66.67% | 13.04% |
| 101-150 | 2 | 2 | 4 |
| | 50% | 50% | 17.39% |
| 151-200 | 5 | 1 | 6 |
| | 83.33% | 16.67% | 26.09% |
| 201-250 | 3 | 0 | 3 |
| | 100% | 0% | 13.04% |
| 251-300 | 2 | 0 | 2 |
| | 100% | 0% | 8.7% |
| 301-350 | 0 | 0 | 0 |
| | 0% | 0% | 0% |
| 351-400 | 2 | 0 | 2 |
| | 100% | 0% | 8.7% |
| 401-450 | 1 | 0 | 1 |
| | 100% | 0% | 4.35% |
| 451-500 | 1 | 0 | 1 |
| | 100% | 0% | 4.35% |
| 501 & more | 1 | 0 | 1 |
| | 100% | 0% | 4.35% |
| Column Total | 18 | 5 | 23 |
| Column Percent | 78.26% | 21.74% | 100% |

It was observed that hotels with a relatively lower % of room revenue (below 60% of the total revenue), and consequently with some other higher revenue sources (food, conventions, etc.), widely use financial analysis methods of financial accounting statements (Table 9).

This is possibly due to the need of those hotel units for close and thorough investigation of each operation in separate.

Table 9 Use of financial statement analysis in relation to the proportion of the room revenue in the total revenue

Use of financial statement analysis methods:

| % of room revenue | YES | NO | Row Totals |
|-------------------|-------------|-------------|-------------|
| | 41-50 | 4 100% | 0 0% |
| 51-60 | 5 100% | 0 0% | 5 21.74% |
| 61-70 | 2 40% | 3 60% | 5 21.74% |
| 71-80 | 3 75% | 1 25% | 4 17.39% |
| 81-90 | 2 66.67% | 1 33.33% | 3 13.04% |
| 91-100 | 2 100% | 0 0% | 2 8.7% |
| Column Total | 18 | 5 | 23 |
| Column Percent | 78.26% | 21.74% | 100% |

6. ANALYSIS OF RESULTS

According to the research results the hotel enterprises make mainly comparisons with the data of the previous year and give less emphasis to benchmarking. The common size analysis is not particularly applied. The difficulty of comparison between hotels of the same sector is confirmed by the fact that the financial statements do not have uniformity, having as a result the lack of comparability.

The value of ratio analysis seems to have been recognized at a large extent by the Greek hotel units of which the majority study them in regular basis for evaluating their financial progress in relation to the past, but also for comparing them to the objectives and the budgetary elements.

Financial control is very important for the evaluation of the performance of an organisation, a fact which is also confirmed by the research. The budgeting is a tool of direct control that seems to be used at a large extent by the hotels.

6.1 CONCLUSIONS-SUGGESTIONS

Regarding the financial planning of hotels, the study concludes that:

- The budget is one of the major points in the action planning.
- They check their performance through indices monthly but also in a shorter time period regarding issues of revenue and cost.
- The horizontal analysis of accounting statements is widely applied for the study

of the data tendency throughout time.

- The biggest the room capacity of a hotel the biggest the need of surveillance of the changes of the data, composing the financial statements.
- However vertical analysis is not broadly applied. The difficulty of comparison between hotels of the same sector is confirmed by the fact that the financial statements of the enterprises do not have uniformity, having as a result the lack of comparability.

6.2 SUGGESTIONS

Following the analysis of the research findings, some suggestions for future strategy to be followed by hotel units in Greece should be proposed, in order to make proper use of the modern instruments of financial management. These suggestions are the following:

- Organization of the accounting information system, in order to provide reliable and comparative information to the administration as well as to the shareholders and the interested parties, in combination with the introduction of a new legal framework which will ensure and facilitate the managers' task of information dissemination.
- Training of the personnel in Economic and Accounts Departments on the specialized methods of financial analysis and administrative accounting, in order to ensure their smooth operation and the required information provision, thus assisting the decision making procedures in the various hotel sections.
- Application of internal control system in order to guarantee the transparency of the exchanges as well as the awareness of the work development and the difficulties emerging in order for the appropriate measures to be taken and decisions to be made for the better organization and improvement of the profitability making use, in the most rational way, of the factors of production.
- Application of group 9 (analytical accounting) (even independently of financial accounts) for the exact cost allocation per section and operation.
- The hotel administration should express its objectives in clear and measurable performance terms (performance standards). Measuring the level of achievement of the objectives helps to:
 1. Define the level of success or failure and compare the real performance with the fixed performance standards.
 2. Compare the current year's performance with that of previous years, to define the perspectives and trends of the hotel enterprise throughout time.
 3. Compare the performance with that of other hotel units to define its course in relation to its competitors.

The modern entrepreneurial environment of the hotel sector requires more financial knowledge and experience than in the past. Today, hotels realise that they should differentiate the products and services they provide and that this differentiation demands a specialized skill of financial decision making. On the other hand, profit margins have become tighter due to high competition leaving no room for financial errors. Financial operation of the hotel enterprises has to be adapted to the continuous changes. Many hotels in their effort to remain competitive and profitable expand their size and activities. All the above have lead to the increasing dependence on financial management signifying its importance for the enterprise.

In order for the accounting information to receive higher value for the administration and the external analysts:

- A new legal framework should be established, so that accounting statements not to be exclusively directed to accounting principles and rules, but to cover the users' interests and needs for financial information.
- A hotel sector accounting plan should be elaborated, taking into consideration the requirements of hotel enterprises.
- The IAS should be gradually adopted by all of the enterprises of the hotel sector. Two-speed enterprises should be eliminated, and users should have a common basis of enterprise comparison

6.3 PERSPECTIVES

A new research that could be carried out in the future so that the advantages and disadvantages of the application of IAS in the hotel sector to be determined, before its overall implementation in all of the hotel enterprises applying today the Greek General Accounting Plan, could examine the influence of the implementation of the International Accounting Standards on the informative content of the financial statements of registered hotel enterprises.

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