CHAPTER VI

ANALYSIS AND INTERPRETATION OF DATA: ASSOCIATION BETWEEN GROWTH RATES AND MARKETING PRACTICES

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6.1 INTRODUCTION

In the present chapter that analysis and interpretation of data are undertaken with the help of regression technique. An attempt is made to explain the variance of growth rate in relation to the marketing practices. That is, measure the overall strength of association between growth rate and the full set of marketing practices. As the analysis of regression is undertaken stepwise, the contribution of each of the marketing variables to total explained variation in growth rate is described.

The approach used here is, to first of all ascertain the presence of relationship between the criterion (growth rate) and predictor variables (marketing practices), and then proceed towards prediction. The former is established by correlation and the latter by regression.

Before going on to describe and interpret the data, the symbols indicating the different variables need to be clarified to avoid any confusion. In the present chapter, the following are used:

Y	:	Criterion variable: Variable 1: Growth rate.
X_1	:	independent variable: Variable 2: marketing concept adoption in competitive and demand practices (CDP)
X_2	:	independent variable: Variable 3: marketing concept adoption in product/service practices (PDP).
X_3	:	independent variable: Variable 4: marketing concept adoption in new product/service practices (NPP).
X_4	:	independent variable: Variable 5: marketing concept adoption in pricing practices (PRP).
X_5	:	independent variable: Variable 6: marketing concept adoption in promotion practices (PMP)
a	:	Constant (intercept)
b_1	:	regression co-efficient or beta weight for the first predictor variable X_1
b_5	:	regression co-efficient or beta weight for the fifth predictor variable X_5.

The alpha reading in the regression equation is merely a constant, which determines the general level of the line. The b co-efficient gives the slope of the regression line and denotes a ratio. It tells how many units Y increases with every increase of one unit in X. It needs to be note here that the value of multiple R has been examined for its significance. This is done with the help of F-ratio test.

While interpreting the results, the levels of confidence arbitrarily fixed by the investigator are .01 and .05 levels of significance, and all the results are adjusted to the relevant degrees of freedom.

The analysis and interpretation of data is described in two sections. In the first section the regression technique is applied to the data pertaining to the entire sample and the significant predictor variables are drawn out. In the present study marketing variables CDP and PMP have been found to be significant and contributing to explaining the variation in growth rate. Therefore in the next section i.e. section two, each of the groups is taken up for analysis at a time and regression technique applied, to find out, to what extent these variables, i.e. CDP and PMP, contribute in explaining the variation in growth rate.

SECTION – I

6.2 STEPWISE REGRESSION APPLIED ON ENTIRE SAMPLE

(a) Correlation of all variables

As a first step correlation between all the 6 variables are worked out. (refer Table –VI-1).

Table VI-1

Correlation Matrix of all the six variables (n=52)

	Var.1	Var.2	Var.3	Var.4	Var.5
Var.2	.531*				
Var.3	.385*	.560*			
Var.4	.236*	.341**	.555*		
Var.5	.301*	.348**	.342**	.175*	
Var.6	.420*	.507*	.554*	.466*	.472*

* Significant at .01 level.

** Significant at .05 level.

Correlation expresses the degree of relationship or association between two variables. Sacncheti and Kapoor have provided the student with broad categories for interpreting the results of correlation, the details of which are to be found in Table VI-2.

Table VI-2

Interpretation of correlation results

	Direction	
Degree	Positive	Negative
Perfect	+1	-1
Very High	+.75 to +1	-75 to –1
High	+.50 to +.75	- .50 to -.75
Low	+.25 to +.50	-.25 to - .50
Very Low	0 to +.25	0 to - .25
Absent	0	0

Of the many categories described in Table VI-2, for the purpose of the present study, the category, which indicates a high degree of correlation, is chosen. Accordingly in Table VI-1, there are five readings which lie between +.50 to +.75. These correlations are:

Growth rates is correlated highly with marketing concept adoption in competitive and demand practices only. The correlation of .531 indicates that the growth rate increases as the organization goes in for greater scientific decisions in competitive and demand practices.

Two variables are highly correlated with competitive and demand practices, they are product/service practices (.560), and, promotion practices (.507). But, the relationship between CDP and PMP is less (marginally) than the relationship between CDP and PDP.

The marketing practices related to product/service decisions are highly associated with new product/service practices and promotion practices, the strength of the former relationship is .555, while that of the latter is .554. From these figures one may say, that, the relationship of PDP with NPP is more or less the same as that of PDP and PMP.

(b) Regression of Variable : 1 (Growth rate) on Variable : 2 (CDP)

The first predictor variable turns out to be variable 2, namely, marketing concept adoption in competitive and demand practices. The result of the regression are give in Table VI-3.

Table VI-3

Contribution of predictor variable 2 (CDP)

Variable	Multiple (R)	F Value	Significance
CDP (X_1)	.531	19.58	P<.01

Regression of variable 1 (growth rate) on variable 2 (CDP) yields a multiple R of .531. In order to find out the significance of multiple R the F – ratio test is applied and the value of F is found to be 19.58 which is significant at .01

level. The result may be interpreted by squaring multiple R and then expressing it as a percentage.

i.e. Multiple R	=	.531
R^2	=	.282
$R^2 \times 100$	=	28.2%

Thus, it may be stated that 28.2% of variation in variable 1 (growth rate) is explained by predictor Variable 2, namely, marketing concept adoption in competitive and demand practices.

The alpha reading and the beta weight are required to express the result in the form of a regression equation. The relevant details for regression line of Y on X is found in Table VI-4.

Table VI-4

Regression of Variable 1 (Growth rate) on Variable 2 (CDP)

Variable	Multiple (R)	Alpha Value	Beta Value
CDP (X_1)	0.531	-2.918	1.356

Hence the regression line of Y on X may be written as,

$$Y = a + b_1 X_1$$

Substituting,

$$Y = -2.918 + 1.356 \times X_1 \ldots\ldots (1)$$

(c) Regression of Variable 1 (Growth rate) on variable 2 (CDP) and 6 PMP

Regression analysis is continued and the next variable found significant is stepwise regression is PMP. This means to say that, after CDP, it is PMP that contributes most towards the explanation of variation in growth rate. (Refer Table VI-5).

Table VI-5

Contribution of Variables 2 (CDP) and 6 (PMP)

Variable	Multiple (R)	F Value	Significance
CDP and PMP (X_1 and X_5)	.546	11.12	P<.01

From the above Table, it is found that Multiple R reads as .546, and the F test proves it to be significant at .01 level. As the square of multiple R is .298, it may be stated that 29.8% of variation in criterion variable 1 (growth rate) is explained by predictor variables CDP and PMP.

By adding variable PMP the contribution has moved from 28.2 to 29.8%. That is, an addition of 1.6% made by variable PMP.

The regression line incorporating both of these variables (i.e. CDP and PMP) may be written after ascertaining the alpha and beta values which are given in Table VI-6.

Table VI-6

Regression of Variable 1 (Growth rate) on Variable 2 and 6 (CDP and PMP)

Variable	Beta Value	Alpha Value	Multiple (R)
CDP (X_1)	1.092		
		-6.004	.546
PMP (X_5)	0.469		

Thus, the regression of Y on X is written as :

$$Y = a + b_1 X_1 + b_5 X_5$$

Substituting,

$$Y = -6.004 + 1.092 X_1 + 0.469 X_5 \quad .....(2)$$

(d) Regression of Variable 1 (Growth rate) on Variable 5, 3 & 4 (PRP, PDP & NPP)

The next variable that came up in the stepwise regression is marketing concept adoption in pricing practices. The multiple R after adding Variable PRP reads as .562 and when adjusted to the relevant degrees of freedom reads as .537. The adjusted multiple R of .537 (after adding variable PRP) is noted to be lower than the multiple R of .546 contributed by inclusion of variables CDP and PMP (put together). Thus, it may be concluded, that, inclusion of predictor variable PRP does not contribute towards explaining the variation in criterion variable growth rate. Likewise, it is found that other predictor marketing variables PDP and NPP did not contribute towards explaining the criterion variable growth rate. As additional predictor variables are added R^2 cannot decrease but usually diminishing returns set in, so that, in most applications it is rare to find much increase in R^2 beyond the first several predictor variables. (In this case only two variables). The regression equation therefore ends with the addition of variable 6 (PMP).

(e) Interpretation of Regression results for the entire sample

The purpose of regression equation is to make prediction on a new sample of observations from the findings on a previous sample of observations. Therefore from the regression equation (2) one may say that for every unit increase in marketing practices relating to competitive and demand decision growth rate go up by 1.1 units and for every unit increase in promotion practices, growth rate goes up by half a unit (.5). The multiple R of .540

indicates that 29.8% variation in growth rate can be explained by competitive and demand practices and promotion practices.

It will be of relevance to discuss at this juncture, as to what are the different aspects that are covered under variable CDP and PMP that make it so significant.

6.3 DISCUSSION ON VARIABLE TWO (CDP)

As variable 2, marketing concept adoption in competitive and demand practices, is found to be a significant contributive factor to growth rates, a discussion on the several aspects involved in this variable is enter herein. The salient results of field survey pertaining to CDP will be discussed here.

A distinguishing characteristic of the financial service organization, is their responsibility for interpreting conditions in the marketplace. Critical to the success of most marketing program is a careful analysis of demand. There are two broad classes of services that have distinct demand characteristics – firstly, consumer finance and secondly, industrial finance. Consumer finances are rendered to households or individuals, while industrial finances are given to business firms. Industrial finance includes term loan, cash credit etc. Their demand is influenced significantly by factors such as economic outlook, technological changes etc.

It is found that 8 (15.4%) of the 52 units are involved in the services of consumer finance, while 44 (84.6%) units are involved in the services of industrial finance.

There are two basic problems faced by servicing firms in analyzing demand. Firstly, identifying and locating the buyer or market and secondly the services they will be required.

From the survey it is found that not all the financial service organizations know their target market. The revelations are as under, (Table VI-7).

Table VI-7

Identification of the target market

Particulars	Consumer finance group(n = 8)	Industrial finance group (n = 44)
Target market identified	3 (37.5%)	15 (34.1%)

Figures in parenthesis indicate percentages to group totals.

The classification used in describing the various results of the field survey here are the two main groups – consumer finance group & industrial finance group.

From a sample of 8 involved in the consumer finance group only 3, i.e, 38% have been able to identify their target market. Among the industrial finance only 15 (34%) organizations have been able to identify their target market.

The next aspect that is being discussed is market demand. The survey tried to ascertain as to how many organizations indulge in the practices of estimating and forecasting total market demand. The relevant details are shown in Table VI-8.

Table VI-8

Estimate and forecast of total market demand and market share.

Particulars	Consumer finance group (n = 8)	Industrial finance group (n = 44)
1. Practice regarding estimate and forecast of total market demand	4 (50%)	18 (40.9%)
2. Practice regarding estimate and forecast of total market share	2 (25%)	11 (25%)

Figures in parenthesis indicate percentage to group totals.

It is found that 50% of financial service organizations of consumer finance group and 41% of organizations of industrial finance group follow the marketing practice of estimation of the present market demand and forecast the probable total market demand three years hence. It must be noted that, it

is not possible to make generalizations on this practice, as each product/service is highly individualistic when it comes to demand analysis.

Often a firm's sales does not reveal how well the company is doing relative to its competitors, as, increase in a firm's sales could be due to economic conditions or improved performance in sales itself. For this reason the organization needs to keep track of its market share. If the firm's market share goes up, the firm is gaining on its competitors, if it goes down, the firm is losing relative to its competitors. The extent of this practice among the organizations is given in Table VI-8.

From Table VI-8 it is found that the percentage of financial service organizations who practice estimation and forecast of market share in both consumer finance group and industrial finance group is identical, that is, 25%.

There are yet two additional forces that are of concern to the management in the matter of problems associated with demand analysis. They are, firstly, the interpretation of individual buyer behavior, and, secondly, the assessment of competitive behavior. A few aspects of the letter have been included in the present survey.

A firm's marketing system is surrounded and affected by a host of competitors. These competitors have to be identified, monitored and outmaneuvered to gain and maintain consumer loyalty. The aspects included

in the questionnaire are : the financial services organization has to keep track of the

- present production/services of competitors,
- Market share of each competitor,
- Promotional activities undertaken by each of the competitors,
- The quality of the product/service maintained by each competitor.

Table VI-9 indicates to what extent the financial service organizations are really competitive.

Table VI-9

Information on Competitors

Particulars	Consumer finance group (n = 8)	Industrial finance group (n = 44)
Information Compiled on Competitors	4 (50%)	5 (11.36%)

Figure in parenthesis indicates percentage to group totals.

The financial service organizations involved in the consumer finance group seem to be more aware of the importance of compiling information on competitors since nearly 50% follow this marketing practice as against only 11% in the industrial finance group.

The above are some of the major aspects dealt with in study, under the variable, marketing concept adoption in competitive and demand practices (variable 2).

The discussion that follows relates the marketing concept adoption in promotion practices (variable 6).

6.4 DISCUSSION ON VARIABLE : 6 (PMP)

Promotion stands for the various activities the firm undertakes to communicate its product/service's merits and to persuade target customers to buy them, i.e. it encompasses all forms of communication that a firm uses in promoting its product/service. The primary function of promotion is to move buyers along a continuum of product/service knowledge to product/service purchase.

From the present survey a few of the result are discussed here. The first aspect covered in the discussion is the importance of communications. In the financial service organizations the capability to spend on the 'promotion' tool is limited but all the same it is very important for the financial services organizations to realize the need for communication, so that they may use their limited resources in the best possible promotion strategies. Communication performs the function of –

- giving information about the existence of the product/service,

- describing product/service features and how these would benefit the buyers,
- gaining confidence of the different market segments,
- establishing a reputation for the firm regarding its trust – worthiness and progressiveness,
- building confidence in its customers, etc.

The results of the survey indicate, as to how many of the financial service organizations, realize the purpose served by communication (refer Table VI-10). Promotion is an essential tool in realizing better sales, which eventually lead to the goal of higher profits.

Why does a firm need to communicate with its target market? This is understood by only 13% of consumer finance group and 30% of industrial finance goods.

Table VI-10

Promotional Aspects

Particulars	Consumer finance group (n = 8)	Industrial finance group (n = 44)
1. Need for communication	1 (12.5%)	13 (29.5%)
2. Recognition of the Utility of advertising	1 (12.5%)	5 (11.4%)
3. Evaluated the response on promotion expenditure	4 (50%)	29 (65.9%)

Figures in parenthesis indicate percentages to group totals.

There is a lot of misconception among the organizations and often the word communication denotes 'advertising' and advertising stands for communication through the print media only (i.e. news papers and magazines). Thus the financial service organizations are unable to deploy their resources in the appropriate strategies.

Advertising in one of the elements of the communication mix and it serves many purposes such as building up a brand image, creating an image for the firm, apart, from other aspects such as, giving information about the product/service and its features. The utility of this tool is recognized by only a small section of the financial service organizations. Table VI-10 tells us as to what is the position in financial service organizations.

The table reveals that only 13% of CFG of and 11% of IFG are capable of appreciating the utility of the promotion tool – advertising.

The aim of communication is to move the buyer along the continuum of product/service knowledge to product/service purchase. Yet in this study each response in the continuum is treated separately, to find out if there are any specific problem areas. The results are tabulated in Table VI-11.

Table VI-11

Response sought through communication

Response sought	Consumer finance group (n = 8)	Industrial finance group (n = 44)
Exposure	6 (75%)	15 (34.1%)
Attention	5 (62.5%)	27 (61.4%)
Comprehension	5 (62.5%)	15 (34.1%)
Favorable Attitude	5 (62.5%)	26 (59.1%)
Weaken doubts of customers	3 (37.5%)	21 (47.7%)

Figures in parenthesis indicate percentage to group total.

It is found that wide disparity in responses sought exists between the two groups in the two stages, namely, 'exposure' and 'attention'.

(a) The organizations (75%) of consumer finance group are looking for more exposure for their product/service while it is not the case among industrial finance group (34%).

(b) A greater percentage (63%) of consumer finance group were bothered about explaining their product/service and have the buyers comprehend their product/service, while the percentage among the industrial finance group is only 34%.

Evaluation of any strategy is essential in order to obtain a feed back on the effectiveness of the same. Thus, it is desirable that organizations evaluate the response got by way of increased sales (or otherwise) on their promotion

expenditure. As to how many the financial services organizations follow this marketing practice is given in Table VI-10.

It is revelation worthy of future investigation, as it is found that nearly 64% (i.e. 33/52x 100) organizations have reported that carry out an exercise to find out the effect of promotion expenditure got by way of increased growth rate. From the industrial finance group as much as 66% take the trouble to find out the extra sales they made by spending on a particular promotion strategy as against 50% among consumer finance group.

Nevertheless during personal interviews the investigator found that financial services organizations do find an effective way of spending their promotion budgets (example, like advertising in industrial directories, industrial manuals and periodicals etc.) The discussion moves to significance of the very same contributive prediction variable 2 and 6 among the different groups of classification.

SECTION – II

6.5 REGRESSION ANALYSIS – CONTRIBUTION OF SIGNIFICANT VARIABLES 2 AND 4 IN THE DIFFERENT GROUPS OF CLASSIFICATION.

(a) Introduction

Compare and contrast tend to bring out better results and for the purpose of the same the sample is divided into different groups on the basis of 4 types of classification. These have already been discussed in the chapter on methodology but for the present the groups are repeated to facilitate recall –

- risk taker group
- safe player group
- professionally managed group
- traditionally managed group
- fund based services group
- Fee Based/Advisory Services" group,
- private organizations group
- nationalized organizations group.

In the preceding sub-section 6.2 (c) it is found that the most contributive marketing variable in explaining the variation in growth rate are variable CDP and PMP. It is the endeavor or the investigator to find out if these two variables have the same significance when applied to the different groups. In

other words, the contribution of variables 2 (CDP) and 6 (PMP) to each group of classification is being examined.

The discussion will follow the patterns of first giving sample correlation between the criterion variable and predictor variables in the respective group and then describing the extent to which predictor variables 2 and 6 (together) contribute to criterion variables Growth rate.

(b) Risk Taker Group (RTG)

The simple correlation between growth rates (var. 1) and marketing practices (variable 2, 3, 4, 5 and 6) are presented in Table VI-12.

Table VI-12

Simple Correlation in the Risk Taker Group (n = 34)

Variable	Correlation	Significance
1 x 2	.5251	P < .01
1 x 3	.3735	P < .05
1 x 4	.2174	Not Significant
1 x 5	.2702	Not Significant
1 x 6	.4089	P < .01

Looking at the above table and referring to Table VI-12 in the interpretation of correlation results, it may be said that a high positive correlation of .2551 exists between growth rate (variable 1) and marketing concept adopting in

competitive and demand practices. For the results in regression, Table VI-13 may be referred.

The multiple R of .510 brought out by the regression analysis is found to be significant at .01 level. Thus, the variation in growth rate is explained to the extent of 26% (R^2 x 100) by Table VI-13.

Table VI-13

Regression of Variable 1 on Variable 2 and 6 in the Risk taker group.

Variable	Beta Value	Alpha Value	Multiple R	F Value	P Value
PMP (X_5)	.511				
		-9.993	.510	6.792	.004
CDP (X_1)	1.345				

Marketing concept adoption in competitive and demand practices and promotion practices.

The regression line of Y on X for the risk taker group is written as

$$Y = a + b_1 x_1 + b_5 x_5$$

Substituting,

$$Y = -9.993 + 1.345 x_1 + .511 x_5 \quad .....(3)$$

The beta co-efficient of CDP and PMP taken from regression equation 3 brings out the following with respect to RTG group. Thus it may be said that for every unit increase in CDP, growth rate increases by 1.3 units and for every unit increase in PMP, growth rate increases by half a unit.

(c) Safe player group (SPG)

An attempt at simple correlation between growth rate and marketing practices is made to see if any relationship exists between the two (refer Table VI-14)

Table VI-14

Simple Correlation in the Safe player group (SPG)

Variable	Correlation	Significance
1 x 2	.5302	P < .05
1 x 3	.2413	Not Significant
1 x 4	- .0523	Not Significant
1 x 5	.1972	Not Significant
1 x 6	.0393	Not Significant

A high positive correlation is noticed between growth rate (Variable 1) and marketing concept adoption in competitive and demand practices (variable 2), which is significant at the .05 level. The analysis now moves on to regression of variable 1 on variable 2 and 6, in the safe player group. Table VI-15 may be referred for the outcome of the same.

Table VI-15

Regression of Variable 1 on Variable 2 and 6 the safe player group.

Variable	Multiple (R)	F Value	P Value
CDP and PMP ($X_1 \times X_5$)	.434	2.962	.082

The Multiple R of .434 is found to be insignificant which means to say that marketing practices have no bearing on growth rate. These results reveal the way the organizations of safe player group function / manage their organizations.

(d) Professionally managed group (PROF.MG.)

For the professionally managed group also as in the earlier groups simple correlation between the criterion variable and predictor variable are calculated. These are given in Table VI-16.

Table VI-16

Simple Correlation in the Professionally managed group (n=35)

Variable	Correlation	Significance
1 x 2	.519	P < .01
1 x 3	.469	P < .01
1 x 4	.341	P < .05
1 x 5	.309	P < .05
1 x 6	.556	P < .01

All the correlation between growth rate and the five marketing practices are found to be significant, but only two high correlation are noticed.

Thus growth rate is highly correlated with competitive and demand practices (.519) and with promotion practices (.556). This may be interpreted as, high growth rate is accompanied by high scores in CDP and PMP. When these two variables namely, CDP and PMP are entered in the regression, they yielded a multiple R of .586 which is found to be significant at .01 level (refer Table VI-17). This is to say that 34.3% (R^2 x 100) of variation in growth rate (variable 1) is explained by marketing concept adoption in competitive and demand practices and promotion practices (Variable 2 and 6).

Table VI-17

Regression of Variable 1 on Variables 2 and 6 in the Professionally managed group.

Variable	Beta Value	Alpha Value	Multiple R	F Value	P Value
PMP (X_5)	1.071				
		-9.996	.586	9.859	.0005
CDP (X_1)	0.903				

As multiple R is found to be significant the regression equation of Variable 1 on variable 2 and 6 for the professionally managed group may be written as -

$$Y = a + b_1 x_1 + b_5 x_5$$

Substituting,

$$Y = -9.996 + .903 x_1 + 1.071 x_5 \quad .....(4)$$

With respect to PROF.MG. group, it may be said that for every unit increase in PMP, growth rate increases by 1.1 units and for every unit increase in CDP growth rate increases by .9 unit only. (refer regression equation 4).

(e) Traditionally managed group (TRAD.MG.)

It is of importance to find out if there is significant difference in the way from PROF.MG. & TRAD.MG. The analysis follows the same sequence as earlier. As a first step the simple correlation between sales and marketing practices are worked out. These correlations are shown in Table VI-18.

The result of this correlation exercise stands unique in the sense that not evens one correlation turned out to be significant. Nevertheless the regression analysis was applied to ascertain whether the outcome would turn out to be insignificant or not. The results obtained are

Table VI-18

Simple Correlation in the Traditionally managed group (n=17)

Variable	Correlation	Significance
1 x 2	0.398	Not Significant
1 x 3	- 0.339	Not Significant
1 x 4	- 0.298	Not Significant
1 x 5	- 0.177	Not Significant
1 x 6	- 0.030	Not Significant

Presented in Table VI-19.

Table VI-19

Regression of Variable 1 on variable 2 and 6 in the Traditionally managed group

Variable	Multiple (R)	F Value	P Value
CDP and PMP (X_1 and X_5)	.412	2.642	0.106

The regression of variable 1 on variable 2 and 6 yielded a multiple of R of .412, which is found to be insignificant at .05 level. The correlation and regression results confirm the absence of any relationship between growth rate and marketing practices. We may, therefore, conclude that perhaps professionally managed groups are better organizations.

(f) Fund based services group (FBSG)

- It is worthwhile to find out whether ancillary industrial units function in a like manner as Fee Based/Advisory Services" group,

- Are their marketing norms similar to those of Fee Based/Advisory Services" group,? In pursuance of the same simple correlation between growth rate and marketing practices were worked out. The results given in Table VI-20.

Table VI-20

Simple Correlation in the FBSG group (n = 23)

Variable	Correlation	Significance
1 x 2	.4869	P < .01
1 x 3	.2639	Not Significant
1 x 4	.0166	Not Significant
1 x 5	.1814	Not Significant
1 x 6	.4566	P < .05

Of the five correlation given above, only two of them are significant (1 x 2, 1 x 6) but neither of them is a high correlation. Despite the same, the regression test of variable 1 on variable 2 and 6 was worked out and the outcome is recorded in Table VI-21.

Table VI-21

Regression of Variable 1 on Variable 2 and 6 in the FBSG group.

Variable	Beta Value	Alpha Value	Multiple R	F Value	P Value
CDP (X_1)	.766				
		-6.129	.530	5.301	.014
PMP (X_5)	.614				

The multiple R of .530 is found to be significant at .05 level. Therefore, it may be stated that, variation in growth rate can be explained to the extent of 28.1% (R2 x 100) by marketing concept adoption in competitive and demand practices and promotion practices. The regression equation is written as,

$$Y = a + b_1 x_1 + b_5 x_5$$

Substituting,

$$Y = -6.129 + .766 x_1 + .614 x_5 \quad .....(5)$$

Referring to regression equation 5, the following may be said about the FBSG group. For every unit increase in CDP, growth rate would increase by .77 units and for every unit increase in PMP growth rate increases by .61 units.

- Fee Based/Advisory Services" group,

One would except a better performance in the marketing variables in Fee Based/Advisory Services group than in fund base services group. Table VI-22 indicates whether it is true.

Table VI-22

Simple Correlation in the ABSG Group (n = 29)

Variable	Correlation	Significance
1 x 2	.530	P < .01
1 x 3	.436	P < .01
1 x 4	.284	Not Significant
1 x 5	.337	P < .05
1 x 6	.379	P < .05

Although four relationships (1x2, 1x3, 1x5, 1x6) are found to be significant only one is found to be of high correlation namely 1 x 2, i.e. correlation between growth rate and marketing concept adoption in competitive and demand practices. In the FBSG group no high correlation between growth rates and marketing practices were found. Perhaps rightly there is high correlation between growth rate and competitive and demand practices in the ABSG group as they have to put up with competition. The analysis now moves to regression and results are shown in Table VI-23.

Table VI-23

Regression of variable 1 on variables 2 and 6 in ABSG Group

Variable	Beta Value	Alpha Value	Multiple R	F Value	P Value
CDP (X_1)	1.445				
		-4.101	.476	5.113	.013
PMP (X_5)	0.132				

Regression of variable 1 on variables 2 and 6 yielded a multiple R of .476 and is found to be significant at .05 level. The square of multiple R expressed as a percentage i.e. 22.7% is the extent to which variation in growth rate is explained by marketing concept adoption in competitive and demand practices and promotion practices. The regression of Y on X is written as,

$$Y = a + b_1 x_1 + b_5 x_5$$

Substituting,

$$Y = -4.101 + 1.445 x_1 + .132 x_5 \quad .....(6)$$

Referring to regression equation 6 it may be said, that for every unit increase in CDP growth rate would increases by 1.45 units and for every unit increase in PMP, growth rate increases by .13 unit.

In the fund based services group variable 2 and 6 marketing practices contributed 28.1% in explaining the variation in growth rate, while in the Fee Based/Advisory Services" group,

contribution is only 22.7%. The FBSG's groups figure is higher than that of ABSG's group figure by 5.4%. This results in contrary to normal expectations as one would expect the fee based/advisory services to have their marketing variable perform better as they have to face with a lot of competition.

(g) Private Organization Group (POG)

Most of the POG organizations follow systematic and effective marketing strategies. It is the endeavor of the investigator to investigate into the performance of marketing practices in the POG. To begin with simple correlation between criterion, variable, growth rate, and predictor variables, marketing practices, are worked out. These are presented in Table VI-24.

Table VI-24

Simple Correlation in the Private organizations Group (n=11)

Variable	Correlation	Significance
1 x 2	.824	P < .01
1 x 3	.517	Not Significant
1 x 4	.453	Not Significant
1 x 5	.477	Not Significant
1 x 6	.653	P < .05

Table VI-24 brings out two (1 x 2 and 1 x 6) significant relationships among the variables. Growth rate in highly correlated with competitive and demands practices and promotion practices. Thus high growth rate is accompanied by high marketing concept adoption in competitive practices. Also, high growth rate is accompanied by high marketing concept adoption in promotion practices. Theses two variables are entered into regression and the results obtained are presented in Table VI- 25.

Table VI – 25

Regression of variable 1 on variables 2 and 6 in the POG..

Variable	Beta Value	Alpha Value	Multiple R	F Value	P Value
CDP (X_1)	3.135				
		-21.342	.779	8.698	.010
PMP (X_5)	0.491				

From the regression table it is found that regression of growth rate on CDP and PMP gives to multiple R of .779 which is found to be significant at .01 level. It may be stated that 60.6% of variation in growth rate is explained by marketing practices described in variable CDP and PMP. Making use of alpha and beta values in the above table the regression equation of Y and X may written as,

$$Y = a + b_1 x_1 + b_5 x_5$$

Substituting,

$$Y = -21.342 + 3.135\, x_1 + .491\, x_5 \quad .....(7)$$

Regarding private organizations group, it may be said that for every unit increase in CDP growth rate increases by 3.14 units and every unit increase in PMP growth rate increases by half a unit. (refer regression equation 7). It

is found that (referring to beta co-efficient) the ratio of growth rates to CDP has been the highest among all the groups (3.14 : 1).

From the above discussion it may be concluded that financial service organizations of POG take care to formulate effective marketing strategies in the sphere of competitive and demand practices and promotion practices which in turn bring about increased growth rate.

(h) Nationalized Organizations Group (NOG)

In order to establish any relationship between growth rate and marketing practices, the rest of simple of correlation was carried out. The results are expressed in Table VI-26.

Table VI-26

Simple Correlation in the Nationalized organizations Group (n=41)

Variable	Correlation	Significance
1 x 2	.4317	P < .01
1 x 3	.2779	P < .05
1 x 4	.0276	Not Significant
1 x 5	.2999	P < .05
1 x 6	.3645	P < .01

The above table reveals that 4 correlation (1x2, 1 x 3, 1x5, 1x6) are significant but none of them were high correlation. They may be described

as relationships of a low degree. Thus there is no strong relationship between growth rate and marketing practices. The analytical exercise is carried further and the test of regression was applied. The results are enumerated in Table VI-27.

Table VI-27

Regression of Variable 1 on Variable 2 and 6 in NOG.

Variable	Beta Value	Alpha Value	Multiple R	F Value	P Value
CDP (X_1)	.416				
		-2.032	.429	5.499	.008
PMP (X_5)	0.235				

The results of regression indicate a multiple R of .429, which is significant at .01 level of confidence. This means to say that variable 2 and 6 as against 60.6% in the private organizations group explains 18.4% of variation in growth rate (variable 1).

The regression of Y on X can be written as

$$Y = -2.032 + .416\, x_1 + .235\, x_5 \quad .....(8)$$

Thus for a unit increase in CDP, growth rate would increase by .42 units and for every unit increase in PMP growth rate would increase by .24 units.

(i) Concluding Remarks in Section II

The maximum contribution of marketing variables CDP and PMP in explaining the variation in growth rate is found in the POG group (61%) followed by PROF.MG. group (34%). This helps us to draw a conclusion that in private organizations group and professionally managed group there is greater adherence to the marketing concept (with respect to CDP and PMP) as contribution to explaining variation in growth rate is a lot higher in these groups than other groups.

The ratio of growth rate to marketing practices in the sphere of competitive and demand decisions is best in the POG group (3.14 : 1) followed by ABSG group (1.45 : 1) and RTG group (1.34 : 1).

The ratio of sales to promotion practices are better in FBSG group (0.6 : 1) followed by RTG and POG groups (0.5 : 1).

Marketing variables CDP and PMP are not significant in SPG and TRAD.MG. groups.
