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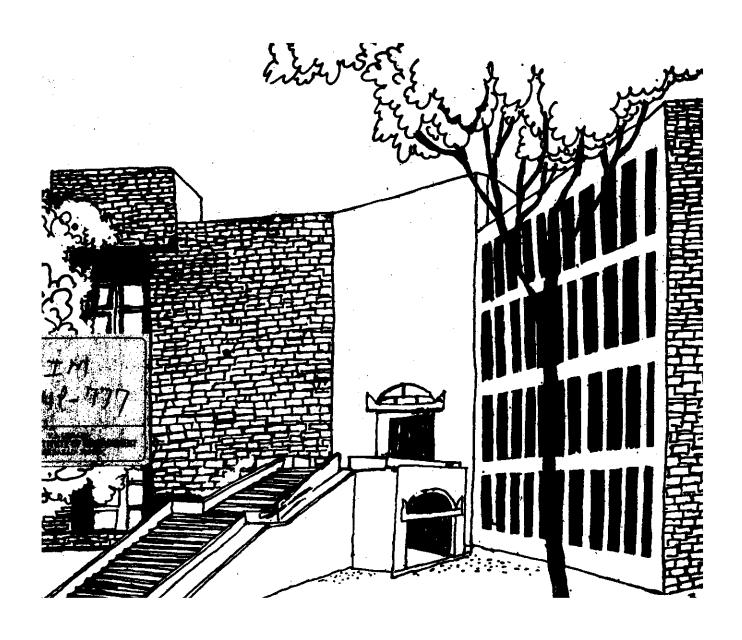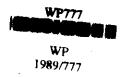
FINANCIAL GOALS AND COMPANY PERFORMANCE
A STUDY OF COMPANIES IN INDIA

By

I.M. Pandey

Ramesh Bhatt

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage.

ABSTRACT

The objectives of the study were (a) to find out the financial goals structure and the relative significance of the financial goals pursued by companies in India and (b) to examine if a company's financial performance was related to the goal structure it follows. A questionnaire was sent to each company listed in the Investors' Guide of the Economic Times. Sixty one questionnaires were received back, of which fifty seven were found useable for analysis. The information about the actual financial performance for 42 of these companies, for which complete data were available, was obtained from the Bombay Stock Exchange Official Directory. An analysis of the relationship between the goals pursued by them and their actual performance ' was conducted using dummy variable regression analysis method.

The results of the study are:

(1)   Companies in India follow multiple financial goals.
(2)   Out of the total respondent companies, only 2.4 per cent inter-alia consider maximization of market value per share in the financial decision-making.
(3)   From the overall rank ordering of the financial goals the following four goals could be isolated as more prevalent in practice:

    (a) maximization of operating profit before interest and taxes;
    (b) maximizing the rate of return on investment;
    (c) maximizing the growth rate in sales; and
    (d) ensuring that funds are available.
(4)   An international comparison of financial goals reveals that

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'guarantee funds are available' and 'maximization of profit before interest and taxes' are considered of high importance in France, Norway and India. Unlike in France, Netherlands and USA, Indian managers do not deem 'growth in earnings per share' of much importance. Further, Indian managers' views on financial goals are significantly correlated with that of France, Japan and Norway.

(5) The cross section study of 42 companies reveals that two goals viz. **maximizing the growth in sales** and **ensuring that funds are available** are significantly related with the actual financial performance of the companies. On the other hand, a week association was found between the goals of 'maximizing profit before interest and taxes' and 'maximizing the return on investment' and the financial performance. However, the relationship between financial goals and the company performance is significant when the four goals are considered together.

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I.M.Pandey
Ramesh Bhat

Indian Institute of Management
Ahmedabad

January 1989

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I INTRODUCTION

The process of financial management involves the direction of a corporation towards its financial goal(s) within the constraints imposed by other corporate aims. The profit maximization as a financial goal dominated the economics literature for a long period. The goal was however challenged, which led to a shift to the maximization of shareholders' wealth, reflecting a greater concern for the long-term benefits of financial policies to the firm's owners. The text books suggest the shareholders' wealth maximization (SWM) as the key financial goal that should discipline short- and long-range financial planning and decision making. SWM as a normative goal is central to the modern finance theory.

In recent years, the subject of corporate financial goals has attracted much attention as the importance of an organization's interactions with its uncertain environment and concern for the welfare of individuals and groups of which it is composed have been generally recognized. In an uncertain environment and multiple constituencies of the firm, the process of setting the financial goals from managerial perspective is unlikely to be directed exclusively towards SWM. For example, Crew(1975) points out the following in this regard:

> ....the objective traditionally assumed to be pursued by industrial organizations was the maximization of profits. However, recent thinking has emphasized the fact that the benefit created by a firm accrue to not only to shareholders but also to employees, the government, the community, suppliers, customers. This has led to the amendments in traditional theory. Modern financial theory has substituted maximization of wealth or value added as the firm's objective and recent research by behavioral scientists, system

analysts, economists and accountants has undermined the theory that firms presume a single financial objecctive.

Further, it is unlikely that managers in practice set the financial goals in precisely defined terms in a dynamically changing environment. It is a common knowledge that in companies shareholders contribute the equity capital and therefore are its legal owners. One may thus be tempted to argue that the firms financial goals should be set keeping in mind only the shareholders' interest. Even if this were true, the lack of knowledge about shareholders and their preferences is one of the problems in setting the financial goals. There is no systematic study which attempts to highlight the concerns of the shareholders. One preliminary attempt in this direction is by. Fisons Limitd (UK). The two surveys conducted by the company revealed that its shareholders were primarily concerned about the dividends and growth, Fisons' reputation, and its means of achieving the results. Further, the results suggested that improved shareholders' relations had beneficial effects on the company's share price. The Fisons study also attempted to reconcile its shareholders' goals with the company goals. Growth in earnings per share was agreed by both the Fisons management and institutional shareholders as being primary. The other goal for judging Fisons' performance was stated to be the return on capital employed (ROCE), followed by the goals of share price appreciation and increase in dividends.

Other surveys conducted in the USA and the UK are replete with the observation about the companies following multiple financial goals, and the shareholders wealth maximization goal not being the dominant one. The present study presents Indian experiences about the financial goals pursued by companies. The specific objectives of the study are: First, to identify financial goal(s) which the Indian managers consider important, both in

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absolute and relative terms, in financial decision making. Second, to examine whether the financial goals considered important in practice are related to the actual financial performance of the companies.

II FINANCIAL GOALS STRUCTURE IN PRACTICE

METHODOLOGY AND SAMPLE

A questionnaire, containing a list of fourteen goals, was sent to all companies listed in the Investors' Guide of the Economic Times. The questionnaire was designed: (i) to test the existence of multiple financial goals, and (ii) to find out the relative significance of the financial goals pursued by companies in India (for questionnaire, see Appendix 1).

The questionnaire was addressed to the chief executive of each company. The respondent was asked first to check from the list of fourteen financial goals the ones that his/her company pursue in making the financial decisions, and then to rank those goals in terms of their relative importance.

Sixty one questionnaires were received back, of which fifty seven were found useable for analysis. The industry-wise classification of the responding companies is provided in Table 1. The sample contains good mix of companies belonging to different industry groups. The respondent companies also belong to various size categories as shown in Table 2. Sales is used as a proxy for the size of the firm. The sample includes a smallest company with a sales of Rs. 40 millions and a largest company with a sales of Rs.7080 millions. This pattern of response indicates the importance of financial goals in financial decision making situations across small as well as large companies. Further, Table 3 classifies respondent companies according to

market capitalizations (that is, the market value per share multiplied by the companies number of shares). We find that companies are reasonably distributed to various capitalization ranges. Looking at the industry and size profiles of respondent companies, it may be stated that they fairly represent the experiences of the varied companies in the corporate sector.

RESULTS

MULTIPLICITY OF GOALS

For the purpose of analysis, we have classified the goals as given in the questionnaire into the following five groups:

A.   Maximizing the levels of :

1. Book value of net worth (NW)
2. Market value per share (MV)
3. Cash flow per share (CF)
4. Operating profit before interest and tax (PBIT)

B.   Maximizing the ratio of :

1. Price-earnings (P/E)
2. Market rate of return (ROR)
3. Return on investment (ROI)
4. Net profit to net worth (NP/NW)
5. Net profit margin (NP/SA)
6. Market share (MS)

C.   Maximizing the growth in :

1. Earnings per share (EPS)
2. Total assets (TA)
3. Sales (SA)

D.   Ensuring that funds are available

E.   Others

The results presented in Table 4 specifically bring out that no company in practice follows a single financial goal. The cumulative percentage of companies using two or more financial

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goals is 100 percent; about two-thirds of companies pursue five to nine financial goals and about one-fourth ten or more goals. Table 5 presents the information about the number and percentage of companies considering a specific financial goal in their decision-making. Column 3 of the table thus shows that about more than 80 percent companies consider each of the following four goals: (a) return on investment, (b) ensuring that funds are available, (c) maximizing the growth rate in sales, and (d) maximizing profit before interest and taxes. Out of total respondent companies, only 19.3 per cent of the companies inter-alia consider maximization of market value per share in their financial decision-making. The table suggests that this goal is least considered in financial decisions. The maximization of operating profit before interest and taxes gets highest consideration in the first group. Maximizing the return on investment seems to influence the financial decisions in great deal. The three goals, viz. maximization of net profit to net worth, net profit margin and market share seem to be equally popular in second group of goals. In third group of goals, maximizing the growth in sales is followed by most of the Indian companies. About 87.7 per cent of companies ensure that funds are available at the time of making any financial decision. Similar conclusions are derived from the column four of the table where percentage of a specific goal to the total goals considered by the sample companies is given.

RANKING OF GOALS

It is clear from the preceding analysis that managers follow multiple financial goals in practice. Do they show preferences for those goals? Tables 6 and 7, which summarize the results of overall rank ordering of financial goals, provide answer to this question. In first group of goals, the most preferred goal is the maximization of operating profit before interest and taxes;

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as many as 24 companies (42 percent) have ranked it in first and second place. It is significant to notice that only one company has given first rank to the goal of maximization of market value of shares. This finding is quite contrary to the normative goal on which the modern finance theory is founded. All other goals also get low preferences in this group. In second group, the maximization of return on investment goal gets the highest priority. Other goals in this group have low priorities; only three companies have given first rank to the goal of maximization of market rate of return and no company has given first rank to the price-earnings multiple. The maximization of the growth in sales is preferred by a large number of companies in different degrees in third group of goals. Similarly in fourth group, a significant number of companies consider funds availability as important financial goal.

Table 8 contains mean scores and standard deviations of financial goals. Based on this information and preceding analysis, the following four financial goals, one from each group, may be isolated as the most prevalent in practice:

(1) Maximization of operating profit before interest and taxes
(2) Maximizing the rate of return on investment
(3) Maximizing the growth rate in sales
(4) Ensuring that funds are available

In case of the goal of maximizing the growth rate in sales, it may be noticed that, on an average, larger number of managers consider it more often in their decision making than the goals of maximizing EPS or total assets; however, there exists significant variations in their preferences for this goal (notice that this goal has higher mean score but also higher standard deviation).

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We would like to reemphasis that our results reveal that the goals which depend on the market-determined variables such as maximization of market value per share, price-earnings multiple and market rate of return get the low priority in the financial decisions of the Indian companies. In fact, companies in practice seem to define financial goals in terms of variables on which they have control. For example, one of the sample companies summarizes its multiple financial goals and their interaction in the following words:

The growth coupled with healthy return on investment has been main financial goal with more emphasis on asset management. The debt-equity ratio, current asset ratio, stock turnover and working capital control are of special importance to the company.

Yet another company has clearly brought out the dynamic process of determining financial goals as given below:

In a country such as ours, which is subject to government regulations, the financial goals tend to be a lot more "flexible" than a country with free economy. The financial goals are seen in such a manner which ensures (a) the optimum intrinsic value of assets; (b) optimum post-tax returns on investments subject to proper adjustments for timing of inflows and outflows; (c) optimum balance between profitability, liquidity and security. The investment in welfare (e.g., employees' housing) and social responsibility (e.g., pollution control) are more prompted by our desire to be good corporate citizens and our genuine concern for the employees and the society. In such areas, non-financial goals are important.

A few sample companies also stated pursuing the financial goals not included in the questionnaire. They referred to the financial goals such as maximization of the product-wise sales margin, minimizing of overhead costs, emphasis on average collection period, maximization of value added, payback period etc. One company observed that it puts emphasis on maintaining the debt-equity ratio within the range of 45 per cent.

INTERNATIONAL COMPARISON

Over the past two decades, a number of studies on the financial goals systems and management practices have been conducted in the USA and other countries. In personal interviews of eight medium and large US firms conducted during 1969, Mao found that managers in general do not explicitly state that the goal of the firm is to maximize the market value of its common equity. This observation has been substantiated by Petty, Scott and Bird (1975) in a survey of Fortune "500" companies in 1975. Their study showed that managements consider several other goals to be more important than the maximization of share prices. The respondents in their study identified the following three goals as being most important to their firms:

1. To maximize the percent return on total asset investment;
2. To achieve a desired growth rate in earnings per share;
3. To maximize aggregate dollar earnings.

Share price maximization followed these three goals in order of importance. Operationally, the finance function in large enterprises appear to be multi directed. Pike in his survey, reported in Pike and Dobbins (1986), asked finance directors in the largest UK companies to rank specified goals in order of importance. The following results were obtained:

The Importance of Financial Goals in Largest UK Companies

Financial Goal	Very Important(%)
1. Maximization of return on assets	58.4
2. Maximization earnings or EPS	43.8
3. Target share of market	18.3
4. Maximization share price	17.9
5. Target EPS growth rate	12.3

Source: Pike and Dobbins (1986), pp. 5

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The maximization of share price was found to be the poor fourth listed financial goal in terms of importance attached by the finance directors in the UK. The maximization of shareholders wealth, then, is not so much a reflection of how investment and financing decisions are made, but rather a normative goal for how companies should operate.

In Pike's study the maximization of the rate of return on investment seems to be the most prominent among the financial goals. Solomon (1966) explains the practical importance of this goal in the following words:

> The rate of return on investment is a key concept which is widely used for a number of significant business and financial purposes. It is of central importance for the evaluation of an individual investment project, the financial evaluation of a company's performance, the evaluation of managerial efficiency for a division, or a product line, and finally, as a guide for establishing ceiling prices in the regulated industries.

In 1973, Osteryoung (1973) also provided evidence in favour of multiple goals being considered by 500 Fortune companies in their capital budgeting decisions.

In an international survey, Stonehill, et. al. (1975) examined the practices of financial goals in five countries viz. France, Japan, Netherlands, Norway and United States. The respondents in these countries were asked to check from a list of ten goals those which they considered in financial decision-making. Each respondent was also asked to rank the goals. The following procedure was adopted in assigning the score to each goal:

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Ranks Assigned	Score
1 or 2	5
3 or 4	4
5 or 6	3
7 or 8	2
9 or 1Ø	1
Blank	Ø

In order to make our study comparable with that of Stonehill et.al. (1975) we adopted the same method of assigning the scores to each financial goal. Since in our case the list of goals were more than ten, (viz. fourteen) the rank 9 or above were assigned score of 1, wherever applicable. Table 9 presents the comparison of average scores obtained in our study with that of other five countries.

Maximization of growth in EPS appears to be the most important goal in France, Japan, Netherlands, and USA. Other studies also substantiate this goal to be of high importance in case of USA. The Indian managers do not see this goal to be of great importance. "Guarantee funds are available" is considered an important financial goal by managers of all referred countries. In fact, excepting the managers of the US companies, it has been ranked quite high by managers of other countries. "Maximization of return on equity" is yet another financial goal which is generally preferred by managers of all countries. Maximization of PBIT gets quite high scores in France, Norway and India. In India, this goal is considered as the most important.

In order to see which two countries' managers are close to each other with regard to their views on financial goals, we obtained rank correlations between countries' average scores. Rank correlation matrix is presented in Table 1Ø. It is indicated that Indian managers' views on financial goals are significantly correlated with that of France, Japan and Norway. We also find a

significant correlation between views of France's and USA's managers.

III ASSOCIATION OF FINANCIAL GOALS WITH FINANCIAL PERFORMANCE

Are the financial goals pursued by a company related to its financial performance? We have carried out an analysis in the present section to focus on this question. In this regard the following hypothesis has been tested:

Firms which maximize operating profits before interest and taxes (PBIT), or maximize return on investment (ROI), or maximize growth in sales (GSALES), or ensure that funds are available (FUND) or pursue all four goals would show better financial performance.

REGRESSION MODEL

The following regression model using financial goals as dummy variables has been estimated in testing this hypothesis:

$$ROCE_{i} = \beta_{0} + \beta_{1} PBIT_{i} + \beta_{2} ROI_{i} + \beta_{3} GSALES_{i} + \beta_{4} FUND_{i}$$
$$+ \beta_{5} SIZE_{i} + \beta_{6} RISK_{i} + \beta_{7} CI_{i} + \mu_{i}$$

where ROCE is return on capital employed measuring financial performance; PBIT, ROI, GSALES, FUND are dummy variables assuming value of '1' if firm considers that as financial goal in their decision making; SIZE, RISK, and CI represent the firm characteristics viz., size of the firm, its riskiness, and capital intensity; μ is the effect of all unspecified variables, the disturbance term, that are assumed to be randomly distributed with a zero mean and constant variance.

The proposed hypothesis has included the four goals because they have been found relatively more important in our survey discussed

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in the preceding section. It may be noted that the completed questionnaire provided information on financial goals of a 'yes' or 'no' type. For the goals selected as independent variables the type of response obtained from the respondents makes them readily usable as dummy variables.

The dependent variable, return on capital employed (ROCE), has been used as a measure of financial performance. This is calculated by dividing the profit before interest and taxes(PBIT) by the capital employed(CE). For the reasons of differences in the application of accounting policy and procedures for depreciation, an alternative measure of financial performance measured by profit before depreciation, interest, and taxes to capital employed (PBDIT/CE) has also been used. The interest component has been kept away from the financial performance measurement for the reasons of differences in debt policies. Further, to remove the possibility of influence arising out of occurrence of unusual events, the PBIT or PBDIT is before any adjustment for non operating surplus and deficits. Furthermore, the financial performance measure has been measured over a time period of five years and a simple average of PBIT and CE has been used in computations so as to minimize the short run fluctuations and keep unusual circumstances away from dominating the variable.

In theoretical finance literature, the maximization of the firm's market value of equity share is considered as a valid criterion for measuring the financial performance. However, the present study for the following reasons uses the financial statement based variables to measure the financial performance:

    (a)   as revealed in our survey, the corporate financial managers give least importance to the financial goals based on value of shares;

    (b)   shareholders know little about the financial goals pursued by the company;

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(c)   the market presumably will value the share on the basis of investors' satisfaction, in the light of their expectations, with the financial results in terms of profits earned by the company;

(d)   financial results are more likely to be affected by the actual goals structure pursued by the company.

We have also included the most important company characteristics viz., size, risk, and capital intensity as control variables in the regression model. They are defined as follows:

SIZE is the average of five years net sales. It is hypothesized that size would be an important source of influence on the type of goal structure the company may pursue and on company's financial performance.

RISK is measured by the standard deviation of net sales over the last five years. Financial theory is replete with the assumption of premium for the amount of risk. It would be thus anticipated that companies with higher risk characteristics would exhibit higher financial performance. Several empirical studies show positive relationship between risk and return.

CI, capital intensity, is measured by average of yearly depreciation to average gross fixed assets. The capital intensity factor may be a variable in determining the performance. As this variable is more or less industry specific, the objective of including this in the model is to account for differences arising out of industry characteristics.

All the financial items used in computing the dependent and independent variables in regression equation are simple averages of five-year data points. The initial sample consisted of 57 companies which had sent usable questionnaires. However,

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complete data for all the five years was available only for 42 companies (for the list of companies see Appendix II). The data were collected from the Bombay Stock Exchange Official Directory.

RESULTS

The specified regression equation estimated in two forms explained a good amount of variation in financial performance measure. The unbiased multiple coefficient of determination was 0.2414 in first case and in alternative formulation the coefficient was 0.2329. The estimation of the regression equation in its various forms is given in Tables 11 and 12. The partial correlation coefficients between the financial performance and the various independent variables is produced below:

Partial Correlation Coefficients

Independent Variable	Financial Performance Measure	
	ROCE	AROCE
SIZE	-0.408	-0.432
RISK	0.401	0.429
CI	-0.164	-0.146
Financial Goals		
PBIT	0.202	0.165
ROI	0.146	0.108
GSALES	-0.501	-0.480
FUND	0.409	0.423

Examination of the regression results and partial correlation coefficients provide some interesting results. "Growth in sales" and "ensuring that funds are available" came out two dominant financial goals significantly related with the financial performance. Partial correlation coefficients measure the effect of various independent variables on financial performance which

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is not accounted for by the other variables in the model. In terms of relative importance GSALES and FUND variables account for 25 and 17 percent of variation in performance measure respectively. The contribution of other financial goals is not that significant.

The regression results as reported in Tables 11 and 12 also reveal the same story. Using the dummy variable approach the coefficients of each variable measure the differential impact between the companies considering the goal and the category of those not considering it. As a result, t-value tests the null hypothesis that companies considering the particular goal and those not considering it have identical impacts on the financial performance. The specification of the model estimated assumes that it is intercept that changes for each group but not the' slope coefficient. Looking at the t-values one finds that goals GSALES and FUND are significant at 5 percent level where as the two other financial goals are not significant. However, the inference drawn on the basis of t-values may get distorted if the heteroscedasticity is present. This occurs when the variance of the error is larger for higher values of the independent variable than it is for smaller values. To overcome this problem, alternatively, heteroscedastic-consistent variance matrix as suggested by White (1980) has been used in estimating the standard error of the parameters. These value are given beneath the t-value estimated without using this method in Tables 12 and 13. The results are not significantly different. Chow and Goldfeld-Quandt tests (see Pindyck and Rubinfeld 1981) statistics also did not suggest significant heteroscedasticity.

The financial goal of maximizing the growth in sales has sign which is opposite of those expected. This may be perhaps because companies which maximize the growth in sales get lower margins and hence the goal is pursued at the cost of lower financial

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performance. Whereas the goal which ensures that funds are available is considered to be most critical in influencing the financial performance. In no case the signs of other financial goals not found significant have opposite signs. They are positively related with the financial performance but not in a significant way.

The results point out that financial performance is related with the firm's goal structure, and particularly the "maximization of growth in sales" and "ensuring that funds are available" have been found significant. Further, the firm characteristics also account for the variation in performance measures. The risk of a company as measured by the standard deviation of sales is significant in the regression equation. The relationship between financial performance and risk is negative implying that riskier firms have higher returns. Specifying the regression in alternative form did not change the results.

One very interesting feature of the results is that the moment goals are regressed independently in the equation the t-values turns out to be not significant. This again reveals that multiplicity of goals is important and perhaps the goals to some extent are complementary. Regressing each goal independently also reduces the explanatory power of the equations significantly.

IV MANAGERIAL IMPLICATIONS

The results of the study show that managers in practice follow multiple financial goals. The four relatively important goals pursued by the companies in India include ensuring that funds are available, maximizing growth rate in sales, maximizing operating profits before interest and taxes, and maximizing rate of return on investment. It is also shown that these financial goals

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interact with each other and pursuing them simultaneously explains significant amount of variation in the financial performance across the sample companies. It is pertinent to know that companies strive to maximize growth rate in sales in spite of the fact that it is negatively related to financial performance. Thus it may be stated that managers in practice prefer to achieve higher sales growth even at the cost of poor profitability. Yet another notable finding of the study is that managers in practice do not aim at the maximization of the market value of their companies' shares while making financial decisions.

Why maximizing the value of market value of share is not considered in practice? Is this on account of a divergence between the business reality and the assumptions on which the modern finance theory is founded? What are the practical necessities of managers which drive them to pursue the financial goals such as the ones revealed by the present study and other studies?

The finance theory implies that owners have the primary interest in the firm, and therefore the sole financial goal of the firm should be the maximization of their wealth. It is implied that market value of the firm's shares is the measure of the owners' wealth. The shareholders' wealth maximization goal is derived on the assumption of efficient capital market. The empirical studies do not universally and unequivocally support the efficient capital market hypothesis, particularly in the developing economies. The financial economists do recognize the capital market imperfections. However, those imperfections are considered within a theoretical system in which the capital markets are otherwise considered efficient. To quote Bradford and Shapiro (1983):

> .....The SWM goal was useful and probably necessary in the early stages of the development of corporate

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finance theory (just as the assumption of no friction may be useful as a first step in the study of physical systems).

As regards the product markets, it is well known from the empirical economics literature that they are not perfect. Thus in reality managements consider markets - product and capital - as imperfect and changing. Therefore they develop strategies to manage their firms in uncertain and imperfect market conditions and environment.

Even if it is assumed that the capital markets are efficient, it does not necessarily follow that shareholders are the only interest group whose goals should be pursued by the firm. There are many other influential constituencies such as lenders, employees, customers, suppliers, competitors, government, and society. Managements in practice are under an obligation therefore to develop financial goals which protect and integrate the interests of various constituencies. Suppliers, competitors, and customers together determine the product market domain of the firm which broadly defines the economic environment within which the firm has to operate. Managements must ensure the survival of the firm in the product market environment which may be continually threatened by existing or potential competition. By ensuring that funds are available management shall be able to maintain and enhance its company's competitive position. Funds mean purchasing power and include cash, credit, and other potential funds. Thus funds provide competitive vitality and strength to the firm. A large amount of funds at the disposal of management would diminish the chances of failure and provide a lot of innovative flexibility to the management, other things being equal.

Managements generally have direct influence over the flow of funds. On the contrary the shareholders' wealth as reflected by

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the market value of shares is uncontrollable and unpredictable by management. As explained by Donaldson (1984):

> Stock market values are prospective, uncertain and determined in great part by parties external to the business organization itself. Market values remain intangible until and unless the shareholders decide to exercise their claim on the company by selling their stock. In this sense their wealth becomes real only when it has been separated from the company; it is wealth the management must do without.

Focussing on the funds availability, management can achieve a number of advantages which satisfy the various constituencies of the firm. It helps the firm to expand and grow which is essential to maintain market position and serve the customers with the quality products, attract and retain excellent managerial force and help management to maintain independence and self-sufficiency. Growth in sales should in turn result into sufficient generation of funds i.e. it should be self-sustainable to a large extent. In practice, as revealed by the present and earlier studies, managers also concentrate on maximizing profits before interest and taxes through cost and asset management. Thus sales growth and return on investment are the financial goals which provide operational guidance to the managers. Does this imply that the market value of the firm's shares is of no use or consequence in financial decision making? Undoubtedly, capital market is a dominant constituency of the firm. Therefore the shareholders' and lenders' interests have to be focused on, particularly when the firm depends in a significant manner on the capital market for obtaining funds for its growth. The managers in practice ensure this by focussing on the maximization of growth and profitability on the one hand, and by minimizing cost of external funds on the other. If the firms' long-term profitability is higher than the cost of funds, the market value of the shares should increase. However, the manager may not consider the impact of share value each time he makes a decision;

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if he improves the quality of the product-market decisions by properly controlling the flow of funds, the long term market value of the firm's share should impound this information.

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TABLE 1

INDUSTRY-WISE CLASSIFICATION OF
RESPONDENT COMPANIES

Industry	No. of companies	%
1. Cement	4	7.0
2. Textiles	4	7.0
3. Paper, Pulp and Hardboard	3	5.3
4. Electric Equipment and Cables	5	8.8
5. Aluminum Metals, Alloys, Metal Products and Structural	6	10.5
6. General Engineering	11	19.3
7. Chemicals, Dyes, Pharmaceuticals, Refineries and Plastics	15	26.3
8. Sugar and Breweries	2	3.5
9. Miscellaneous	'7	12.3
	57	100.0

TABLE 2

SIZE-WISE CLASSIFICATION OF
RESPONDENT COMPANIES

Sales (Rs. millions)	Number of Companies	Number of Companies as % of Total
Above 2000	7	12.3
1000 - 2000	14	24.6
500 - 1000	9	15.8
100 - 500	8	14.0
Below 100	19	33.3
	57	100.0

TABLE 3

FREQUENCY DISTRIBUTION OF RESPONDENT COMPANIES
ON THE BASIS OF THEIR MARKET CAPITALIZATION RANK

Market Capitalization (Rs. in Millions)	Number of Companies	%
0 - 100	3	5.3
100 - 1000	15	26.3
1000 - 2500	15	26.3
2500 - 5000	9	15.8
5000 and above	15	26.3
	57	100.0

Note : Market Capitalization is based on the average market
price per share in December 1985. See Piparaiya(1986).

TABLE 4

MULTIPLE GOALS IN FINANCIAL DECISIONS

Goal(s)	Number of companies	Number of companies as % of total
Single Goal	0	zero
2 - 4 Goals	8	14.0
5 - 9 Goals	36	63.2
10 and above	13	22.8
	57	100.0

TABLE 5

GOAL CONSIDERED IN FINANCIAL DECISIONS

Financial Goals	Number of companies	Number of companies as % of total sample companies	Specific goal as % of total number of goals checked
A. Maximizing the levels of:			
* Book value of net worth	29	50.9	6.4
* Market value per share	11	19.3	2.4
* Cash flow per share	13	22.8	2.9
* Operating profit before interest and taxes	45	78.9	10.0
B. Maximizing the ratio of:			
* Price-earnings multiple	14	24.6	3.1
* Market rate of return	18	31.6	4.0
* Return on Investment	53	93.0,	11.8
* Net profit to net worth	35	61.4	7.8
* Net profit margin	37	64.9	8.2
* Market share	36	63.3	8.0
C. Maximizing the Growth in:			
* Earnings per share	31	54.4	6.9
* Total assets	28	49,1	6.2
* Sales	45	78.9	10.0
D. Ensuring that the funds are available	50	87.7	11.1
E. Other	5	8.8	1.2
Total	450		100.0

TABLE 6

OVERALL RANK ORDER OF FINANCIAL GOALS

Rank	Maximizing the levels of				Maximizing the ratios of						Maximizing the Growth in			Funds availability
	NW	MV	CF	PBIT	P/E	ROR	ROI	NP/NW	NP/SA	MS	EPS	TA	SA	
1	4	1	–	10	–	3	18	5	2	1	–	–	9	4
2	–	1	–	14	2	1	12	3	5	4	4	3	3	5
3	1	1	–	5	3	1	8	3	8	5	5	1	6	9
4	2	2	2	3	–	3	1	6	4	3	5	6	9	10
5	4	1	–	7	–	1	3	1	5	4	3	6	10	6
6	4	–	1	3	2	2	4	5	4	8	2	4	2	4
7	4	–	–	3	–	3	4	4	4	5	4	1	4	5
8	5	2	–	–	2	2	1	3	3	4	4	1	1	4
9	2	2	3	–	3	1	–	2	–	1	3	4	–	1
10 & above	3	1	7	–	2	1	2	3	1	1	1	2	1	2

TABLE 7

IMPORTANCE OF FINANCIAL GOALS

	Level of Importance					
	Low	Slight	Moderate	Fair	High	No Response
1	5 (8.8)	9 (15.8)	8 (14.0)	3 (5.3)	4 (7.0)	28 (49.1)
2	3 (5.3)	2 (3.5)	1 (1.8)	3 (5.3)	2 (8.5)	46 (80.7)
3	10 (17.5)	0 (0.0)	1 (1.8)	2 (3.5)	0 (0.0)	44 (77.2)
4	0 (0.0)	3 (5.3)	10 (17.5)	8 (14.0)	24 (42.1)	12 (21.1)
1	5 (8.8)	2 (3.5)	2 (3.5)	3 (5.3)	2 (3.5)	43 (75.4)
2	2 (3.5)	5 (8.8)	3 (5.3)	4 (7.0)	4 (7.0)	39 (68.4)
3	2 (3.5)	5 (8.8)	7 (12.3)	9 (13.8)	30 (52.6)	4 (7.0)
4	5 (8.8)	7 (12.3)	6 (10.5)	9 (15.8)	8 (14.0)	22 (38.6)
5	1 (1.8)	7 (12.3)	9 (15.8)	12 (21.1)	8 (14.0)	20 (35.1)
6	2 (3.5)	9 (15.8)	12 (21.1)	8 (14.0)	5 (8.8)	21 (36.8)
1	4 (7.0)	8 (14.0)	5 (8.8)	10 (17.5)	4 (7.0)	26 (45.6)
2	6 (10.5)	2 (3.5)	10 (17.5)	7 (12.3)	3 (5.3)	29 (50.9)
3	1 (1.8)	5 (8.8)	12 (21.1)	15 (26.3)	12 (21.1)	12 (21.1)
1	3 (5.3)	9 (15.8)	10 (17.5)	19 (33.3)	9 (15.8)	7 (12.3)

Figures in the parentheses indicate the percentages.

* The level of importance for each financial goal has been obtained on the basis of ranks provided by the respondent companies. Companies ranking any goal at first two places has been put in high category rank, 3-4 in fair category, rank 5-6 in moderate category, rank 7-8 in slight and finally all other ranks in none category.

TABLE 8

AVERAGE SCORES OF FINANCIAL GOALS

Goal	Mean Score	Standard Deviation
A. Maximizing the levels of:		
* Book value of net worth	1.39	1.63
* Market value per share	0.56	1.33
* Cash flow per share	0.36	0.87
* Operating profit before interest and tax	3.30	1.92
B. Maximizing the ratio of:		
* Price-earnings multiple	0.65	1.36
* Market rate of return	1.00	1.56
* Return on investment	3.84	1.55
* Net profit to net worth	1.98	1.90
* Net profit margin	2.28	1.89
* Market share	1.98	1.75
C. Maximizing the growth in:		
* Earnings per share	1.67	1.79
* Total assets	1.46	1.73
* Sales	2.14	2.68
D. Ensuring that the funds are available	3.02	1.56
E. Others	0.35	1.22

TABLE 9

INTERNATIONAL COMPARISON OF SCORES
IN FINANCIAL GOALS

	France	Japan	Nether-lands	Norway	USA	India
inancial Goal	8	2Ø	13	26	2Ø	57*
(Max.market value plus div. and minimize variance)						
ean	3.88	.10	Ø.ØØ	2.12	2.40	1.ØØ
tandard Deviation	.93	.44	Ø.ØØ	1.85	2.Ø8	1.56
(Guarantee funds are available)						
ean	4.25	1.90	2.62	3.58	1.95	3.Ø5
tandard Deviation	.97	2.21	2.24	1.8Ø	1.86	1.56
(Max. book value of firm)						
Mean	.38	1.1Ø	.92	·1.88	1.65	1.39
Standard Deviation	.99	1.76	1.54	1.65	1.96	1.63
(Max.market value of share)						
Mean	2.63	.10	1.62	Ø.ØØ	2.5Ø	Ø.56
Standard Deviation	1.73	.44	2.Ø6	Ø.ØØ	2.36	1.33·
(Max. liquidation value)						
Mean	.38	Ø.ØØ	.23	.19	.35	−
Standard Deviation	.99	Ø.ØØ	.42	.96	1.11	−
(Max.growth in EPS)						
Mean	4.63	2.95	3.92	1.81	4.39	1.67
Standard Deviation	.7Ø	2.Ø6	1.77	1.52	1.24	1.79
(Max.price/earnings ratio)						
Mean	3.13	Ø.ØØ	1.92	1.42	2.ØØ	Ø.65
Standard Deviation	.93	Ø.ØØ	2.Ø6	1.52	1.76	1.36
(Max. PBIT)						
Mean	3.25	.95	1.46	3.42	1.85	3.3Ø
Standard Deviation	−	1.53	1.99	2.Ø2	1.85	1.92
(Max.ROE)						
Mean	2.25	1.90	2.69	3.73	2.6Ø	1.98
Standard Deviation	.66	1.87	2.23	1.74	1.85	1.9Ø
(Max.return on sales)						
Mean	3.63	2.1Ø	1.69	2.77	2.2Ø	2.28
Standard Deviation	1.58	1.89	2.Ø1	1.83	2.Ø4	1.89
(Max.cash flow per share of common stock)						
Mean	2.63	.55	2.ØØ	1.85	1.45	Ø.36
Standard Deviation	1.11	1.Ø2	2.Ø8	1.81	1.43	Ø.87
(Others)						
Mean	.38	1.ØØ	1.ØØ	.54	1.15	Ø.35
Standard Deviation	.99	1.9Ø	1.88	1.39	2.Ø3	1.22

ote : Figures below each country indicate the sample size .

burce:Financial Management, Autumn, 1975, pp.34 35, except for results for India.

TABLE 10

RANK CORRELATION MATRIX OF THE AVERAGE SCORES OF FINANCIAL GOALS

	France	Japan	Netherlands	Norway	USA	India
France	1.00	0.38 (1.30)	0.43 (1.51)	0.38 (1.30)	0.59 (2.31)	0.60 (2.37)
Japan		1.00	0.56 (2.14)	0.53 (1.98)	0.37 (1.26)	0.64 (2.63)
Netherlands			1.00	0.31 (1.03)	0.51 (1.88)	0.39 (1.34)
Norway				1.00	0.25 (0.82)	0.83 (4.71)
USA					1.00	0.45 (1.59)
India						1.00

Note: Figures in parentheses indicate the t-values.

TABLE 11

SIMPLE CORRELATION COEFFICIENT MATRIX FOR BOTH DEPENDENT VARIABLES

RIABLES	SIZE	RISK	CI	PBIT	ROI	GSALES	FUND	ROCE	AROCE
ZE	1.000								
SK	.413	1.000							
	.093	.117	1.000						
IT	-.145	-.027	-.084	1.000					
I	.129	.030	-.285	.307	1.000				
ALES	-.221	-.152	.074	.452	.106	1.000			
ND	-.102	-.229	-.379	.224	.343	.270	1.000		
CE	-.039	.048	-.385	.180	.173	-.250	.220	1.000	
OCE	-.045	.056	-.324	.161	.129	-.236	.217	.982	1.000