FINANCIAL GOALS CHOICES AND PERFORMANCE OF FIRMS IN MALAYSIA

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Abstract

The objectives of the study are (a) to ascertain the financial goals pursued by companies in Malaysia and (b) to find out the relationship between firms' financial performance and stated financial goals. Data on the financial goals are collected from 41 KLSE listed firms through a questionnaire. An analysis of the relationship between the financial goals pursued by these firms and their actual performance is conducted using dummy variables for financial goals.

The results of the questionnaire analysis are: (a) Firms in Malaysia follow multiple financial goals. (b) A very few firms consider maximization of market value per share as their primary goal in the financial decision-making. (c) From the overall rank ordering of the financial goals, the following four goals could be isolated as more important in practice: (i) maximization of operating profit before interest and taxes (PBIT); (ii) maximizing the rate of return on equity (ROE); (iii) maximizing the growth rate in earnings per share (EPS); and (iv) ensuring that funds are available.

The cross section study of the selected sample companies reveals that the pursuit of the goal of maximizing PBIT is positively related to the accounting-based financial performance. However, pursuing the goal of maximizing ROE has no relationship with the actual performance measured by ROE, and it has a negative relationship with the financial performance measure of ROA. The financial goals pursued by firms in Malaysia have no relation with market-to-book value as a measure of performance.

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INTRODUCTION

Financial goals are the subset of the firm's corporate goals system, and relate to its financial condition, performance and the management of corporate funds (Donaldson, 1984). Financial goals provide direction and context to a firm to operate efficiently. The financial goal of profit maximization has been the basis of the theoretical and empirical economics for a long period. With the development of financial economics as a separate body of knowledge, the focus shifted to the goal of shareholders' (owners') wealth maximization (SWM). It is now considered as the key financial goal that governs or ought to govern the financial decision-making.

Most firms in reality may pursue a goal other than SWM, and even, multiple financial goals. The postulation that firms do or should follow the single objective of SWM, rather than multiple financial goals, has been questioned in the literature. Even though some managers may strive for SWM goal, others may be guided by strategic and operational goals (Cyert and March, 1963; Donaldson, 1967; Grossman and Stiglitz, 1977; Williamson, 1964).

RESEARCH BACKGROUND AND OBJECTIVES

There is a growing body of literature in the fields of accounting, finance and management that explores the financial goal systems and management practices. In the West, over the past three decades or so, a number of studies have focused on the financial goals pursued by firms. Mao (1969) provided evidence in favour of multiple goals being considered in capital budgeting decisions by the US firms. In a personal interview with eight medium and large companies, he found that managers did not explicitly consider maximization of value as a financial goal of their firms.

Stonehill *et. al.* (1975) found that different national preferences existed for corporate financial goals in financial decision making in France, Japan, the Netherlands, Norway, and the United States. The study indicated that finance executives showed a clear preference for the financial goal of maximizing growth in corporate earnings, either in total (France, Japan, and the Netherlands, Norway), or per share (United States). The US managers supported a financial goal of maximizing market value of shares plus dividends. The results also suggested that firms in the five countries pursued multiple financial goals.

In a survey of Fortune 500 companies, Petty, Scott and Bird (1975) discovered that managers preferred several other goals to be more important than the maximization of the share prices. The study identified maximizing the percent return on total asset investment, achieving a desired growth rate in earning per share, and maximizing aggregate dollar earnings as the three most important goals. Share price maximization followed these three goals in order of importance.

Donaldson (1984), in a study of a few large U.S. matured industrial firms, found out that firms applied multiple financial goals in the process of decision-making. Further, firms strived to maximize corporate wealth. According to Donaldson, corporate wealth is not the same thing as the shareholders' wealth, rather it is the wealth 'over which management has effective control and which is an assured source of funds, at least, within the limits of meaningful strategic planning rather than maximizing shareholder wealth'.

Results for the largest UK companies (Pike and Dobbin, 1986) showed that the maximization of share price had low priority in term of importance. Maximization of return on assets (58.4 percent) and maximization of EPS (43.8 percent) were the two most preferred financial goals of the UK managers.

A study by Pandey and Bhat (1990) for the Indian companies revealed that Indian managers followed multiple financial goals. It is also indicated that these financial goals interacted with each other, and pursuing them simultaneously explained a significant impact on the financial performance across the sample companies.

The previous research has shown that companies in developed and developing countries follow multiple financial goals, and that the shareholders wealth maximization goal is not a common financial goal. The present study attempts to document the practices of the Malaysian listed companies vis-à-vis financial goals pursued by them. Specifically, the study aims, first, to identify financial goal(s), which the Malaysian managers consider important, both in absolute and relative terms, in financial decision-making, and, second, to examine whether the financial goals considered important are related to the actual financial performance of the companies.

DATA AND METHODOLOGY

This study followed an approach similar to the study of Pandey and Bhat (1990). A questionnaire method was used to ascertain the financial goals pursued by Malaysian companies. Questionnaires were sent to 192 companies - 100 companies that form the KLSE Composite Index and 92 other companies. The criteria for selecting companies were that they should be listed on the Kuala Lumpur Stock Exchange (KLSE) and should have financial data for a long period of time. In all, 41 usable questionnaires were returned that made up for a response rate of about 21 percent. The previous research studies have used smaller sample sizes than this study. The respondent companies belong to diverse industries. The industry-wise classification of the respondent companies is as follows: industrial products: 10 (24.5%), consumer products: 8 (19.5%), trading and services: 7 (17.1%), plantation: 5 (12.2%), properties: 4 (9.8%), finance: 3 (7.3%), hotel: 2 (4.9%), construction: 1 (2.4%), and technology: 1 (2.4%).

The questionnaire contained 15 financial goals that were selected from goals identified in prior research (Pandey and Bhat, 1990; Ferri and Jones, 1979; Stonehill et. al., 1975). Goals were listed randomly so as to minimize any influence on the respondent's choice. Each respondent company was asked to check (yes or no) from the list of the financial goals that it considered in making financial decisions. If the company pursued multiple goals, it was asked to rank the goals in term of their importance to the company. Following Stonehill *et.al.* (1975), each goal checked and ranked by the respondent company was assigned points as follows: 5 points if ranked as first or second; 4 points if

ranked 3 or 4; 3 points if ranked 5 or 6; 2 points if ranked 7 or 8; 1 point if ranked 9 or above, and zero point for non-response.

The methodology and results of the relationship between the stated financial goals and the actual performance of the respondent firms are discussed in a later section.

RESULTS OF FINANCIAL GOALS SURVEY

The financial goals as reported by the respondent companies in the questionnaires are grouped into four categories as follows (Pandey and Bhat, 1990): (a) *maximizing the level of* (i) book value of ordinary share, (ii) market value of ordinary share, (iii) cash flow per ordinary share, (iv) operating profit before interest and tax, and (v) economic value added (EVA); (b) *maximizing the ratio of* (i) return in equity, (ii) shareholders' market rate of return, (iii) price-earnings ratio, (iv) return on investment, (iv) net profit margin, and (v) market share; (c) *maximizing the growth in* (i) earning per share, (ii) sales and (iii) total assets; (c) *ensuring that funds are available* and (d) others.

We found that in practice the respondent Malaysian firms followed multiple financial goals. About one-fourth of the firms stated that they pursued two to four goals; approximately half five to nine goals and one-fourth ten or more goals. The cumulative percentage of firms using at least two or more financial goals was 100 percent.

What is the level of importance accorded by the respondent firms to the selected financial goals? Table 1 gives the overall ranking, the mean scores and standard deviations of the financial goals. Table 1 shows that of 41 respondent firms, there were 14 firms (34 percent) that accorded top importance (first and second ranks) to the goal of maximizing the level of operating profit before interest and tax (PBIT), and 12 firms (29 percent) considered maximization of return on equity as a top priority (first and second ranks) in decision-making. It is interesting to note that of these 26 companies, none had both goals as their highest preference (first and second). These two goals belonged, respectively, to the first (level maximization) and the second (ratio maximization) categories. In the third category of goals (growth maximization), there were ten firms (25 percent) that provided

high priority in decision-making to the goal of maximization of earnings per share. Six firms (16 percent) granted high importance to the fourth category goal of ensuring that funds are available. Only four firms (10 percent) conferred high importance to the goal of maximizing the firm's share value in the financial decision-making. It is notable that fourteen firms pointed out that they considered the maximization of economic value added (EVA) at different levels of importance in their decision-making. Six firms ranked it at first or second place. It is significant to notice that a very low priority was given by the respondent firms to the goals of maximizing the growth in total assets and price-earnings ratio.

The examination of the mean scores (Table 1) shows that the goal of maximization of PBIT has the highest mean value (3.00). However, in the second category of goals, the goal of maximization of ROI, ranked as high importance goal only by six firms, has higher mean value (2.61) than the goal of maximizing ROE (2.46). ROI is ranked as a secondary (medium level of importance) goal by a large number of firms; fifteen firms ranked it at third or fourth place. The goals of maximization of EPS and ensuring that funds are available, respectively, have next highest mean scores (2.36 and 2.07).

RELATIONSHIP BETWEEN FINANCIAL PERFORMANCE AND STATED FINANCIAL GOALS

Does the choice of financial goals influence the financial performance of firms? We have carried out a regression analysis in this section to focus on this question. As stated earlier, most of the survey companies (26 of 41) reported, *inter alia*, their primary financial goal either as the maximization of operating profit before interest and taxes or the maximization of return on equity. None of them stated both these goals *together* as their top financial goals (first or second rank). This implies that the survey companies either followed the goal of PBIT maximization as a primary goal with other goals, or ROE maximization with other goals. Thus, we test the following hypothesis:

Firms that pursue the goal of maximizing operating profits before interest and taxes (PBIT), or return on equity (ROE) show better financial performance.

Dependable variables: Our dependent variable is the firm's financial performance. We use three measures of financial performance: (1) before tax return on assets (ROA), viz., profit before interest and taxes divided by total assets; (2) return on equity (ROE), viz., net profit after tax divided by shareholders' funds and (3) market-to-book value, viz., market value of the firm's share divided by its tangible book value. The first two performance measures are accounting-based and the third measure, which is a rough proxy for Tobin's Q, appraises the market-based performance and is an indicator of wealth maximization. The performance measure of before-tax ROA is not influenced by the differences in debt policies and effective tax rates of firms. ROE is the ultimate accounting-based performance measure as it indicates the return of owners (shareholders) of the firm. Further, to remove the possibility of influences arising from the occurrences of extra-ordinary events, both PBIT and PAT are calculated before any adjustment for extra ordinary items. The financial performance measures have been estimated over a time period of five years and a simple 5-year average has been used to smooth the short run fluctuations, to keep unusual circumstances away from dominating the variables and to reflect on the long-term profitability of firms.

Independent variables: Our independent variables are the financial goals stated to be pursued by firms. As per the survey results reported earlier, we could divide the respondent companies into three broad categories. The first category is of the firms that consider the goal of maximizing PBIT as their primary goal; second category considers maximizing ROE as the primary goal; and the third category considers all other goals as their primary goals. These three alternative financial goal systems can be expressed by two dummy variables. D1 and D2 representing dummies, respectively, for the financial goals of maximizing PBIT and ROE. A value of '1' is assigned if a firm considers the financial goal in its decision-making; otherwise, it is assigned a value of '0'. It may be noted that the completed questionnaires provided information on financial goals of a 'yes' or 'no' type. For this reason, the goals selected as independent variables make them readily usable as dummy variables.

Control variables: The performance of firms may be influenced by their characteristics (Arlow and Ackelsberg, 1991; Branch, 1973; Foo and Chan, 1994; Gupta, 1967; Horowitz, Loughran and Savin, 2000; Pandey and Bhat, 1990; Ranganathan, 1995; Thomsen and Pedersen, 2000). The most important characteristics include size, risk, growth and ownership. In order to control for the influence of these firm characteristics on the financial performance, we have introduced them as control variables in the regression model. These variables are defined as follows:

Size (S) is measured as natural log of sales. It is hypothesized that size would be an important source of influence on the type of goal structure a firm may pursue and on company's financial performance.

Risk (R) is measured by the coefficient of variation of sales over the last five years. It is used as a proxy for business risk (variability). Higher sales variability could lead to poor financial performance.

Growth (G) is measured as compound growth in sales over the last five years. A semi-log model, $Y_t = Y_0 (1 + g)^t$, is used to calculate growth. It is expected that high growth firms should have higher performance. If growth rates are assumed to be industry-specific, our growth variable could be interpreted as a proxy for industrial differences.

Ownership has two proxies – percentage of foreign shareholding (FS) and percentage of directors' direct shareholding (DS). Performance should be higher for the firms that have high foreign and inside (directors') shareholdings.

The dependent variables, ROA, ROE and MB and independent variable, size (S) are simple averages of five-year data points. For FS and DS we use the current year data. Our sample consists 38 non-finance Malaysian firms that had returned usable financial goal questionnaires. We excluded three finance firms from analysis as their financial data format differed from remaining non-finance firms.

Our regression models are as follows:

$$\begin{aligned} & \textit{Model 1:} \\ & \textit{ROA}_{i,t} = a_0 + a_1 D l_{i,t} + a_2 D 2_{i,t} + a_3 S_{i,t} + a_4 R_{i,t} + a_5 G_{i,t} + a_6 F S_{i,t} + a_7 D S_{i,t} + e_{i,t} \\ & \textit{Model 2:} \\ & \textit{ROE}_{i,t} = a_0 + a_1 D l_{i,t} + a_2 D 2_{i,t} + a_3 S_{i,t} + a_4 R_{i,t} + a_5 G_{i,t} + a_6 F S_{i,t} + a_7 D S_{i,t} + e_{i,t} \\ & \textit{Model 3:} \\ & \textit{MB}_{i,t} = a_0 + a_1 D l_{i,t} + a_2 D 2_{i,t} + a_3 S_{i,t} + a_4 R_{i,t} + a_5 G_{i,t} + a_6 F S_{i,t} + a_7 D S_{i,t} + e_{i,t} \end{aligned}$$

All variables are as defined earlier and e_{i,t} is error term.

RESULTS

We first regress the independent dummy variables with the each dependent performance variables and use the following estimation equations:

$$ROA_{i,t} = a_0 + a_1Dl_{i,t} + a_2D2_{i,t} + e_{i,t}$$

$$ROE_{i,t} = a_0 + a_1Dl_{i,t} + a_2D2_{i,t} + e_{i,t}$$

$$MB_{i,t} = a_0 + a_1Dl_{i,t} + a_2D2_{i,t} + e_{i,t}$$

Note that the intercept term, a₀ represents the expected value of the performance measures when firms follow 'other financial goals' (viz., other than maximizing PBIT or ROE). The coefficient, a₁, of the first dummy variable (D1) signifies the difference in the performance if firms pursue 'other financial goals' rather than 'PBIT maximization goal'. The coefficient, a₂, of the second dummy variable (D2) implies the difference in performance if firms pursue 'ROE maximizing goal'. 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 variables than it is for smaller values (Greene, 1999). To overcome this problem, we have used White's

heteroscedastic-consistent variance matrix in estimating the standard error of the parameters in our estimation of all equations.

Table 2 shows results for the regression of financial goals with performance measures. When we regress dummy variables with the performance variable of ROA, the coefficients of dummy variables, D1 and D2, are significant respectively at 15 percent and 10 percent. The sign of coefficients for D1 and D2, respectively, are positive and negative. It is indicated that the average performance of firms (ROA) increases when they pursue of financial goal of maximizing PBIT, but it declines if they follow the goal of maximizing return on equity.

Next we regress dummy variables with the performance variable of ROE. The coefficient of dummy variable D1 is positively significant at 10 percent while the coefficient of dummy variable D2 is insignificant. Thus, it is shown that pursuing the goal of maximizing PBIT leads to a better performance also in terms of ROE. The regression between the dummy variables and MB (market-to-book value) as the performance variable shows that pursuing the goal of maximizing PBIT or ROE has no effect on this performance measure.

As stated earlier, the firm characteristics may have influence on performance. Does the financial goals differential remain significant if proxy variables for the firm characteristics are introduced in the regression estimations? When we estimate the regression equations with independent variables of firm characteristics, two variables - growth (G) and directors' shareholding (DS) - performed very poorly. These two variables cause adjusted R-squared to decline. This could be on account of the problem of collinearity. As the correlation matrix in Table 3 shows, both growth and directors' shareholding are correlated with each other as well as with risk. We drop growth and directors' shareholding variables from our estimations, and estimate the following revised equations:

$$ROA_{i,t} = a_0 + a_1D1_{i,t} + a_2D2_{i,t} + a_3S_{i,t} + a_4R_{i,t} + a_5FS_{i,t} + e_{i,t}$$

$$ROE_{i,t} = a_0 + a_1D1_{i,t} + a_2D2_{i,t} + a_3S_{i,t} + a_4R_{i,t} + a_5FS_{i,t} + e_{i,t}$$

$$MB_{i,t} = a_0 + a_1D1_{i,t} + a_2D2_{i,t} + a_3S_{i,t} + a_4R_{i,t} + a_5FS_{i,t} + e_{i,t}$$

The results of estimation of regression equations are given in Tables 4. Looking at the t-values, we find that goal of maximizing PBIT is positively related to both ROE and ROA and the relationship is significant at (less than) 10 percent. There is an insignificant relationship between goal of maximizing PBIT and MB as a financial performance indicator. Pursuing the goal of maximizing ROE has no relationship with both the performance measures in terms of ROE and MB. However, it is negatively related to ROA and the relationship is significant at 10% level. Thus, the results point out that financial performance as measured by ROA or ROE is influenced by the firm's goal structure. Pursuing the goal of maximizing PBIT leads to better ROI and ROE performance. However, following the goal of maximizing ROE in financial decision-making could cause overall performance measured by ROA to fall. Further, it is an important finding that pursuing the goal of maximization of PBIT or ROE has no effect on MB, a wealth maximizing financial performance indicator.

The firm characteristics as control variables improve the estimation. The interesting feature of the results is that when financial goal dummy variables are regressed independently (without other explanatory variables) to the financial performance measures, the adjusted R-squared drops significantly. Of the three independent variables, only foreign shareholding is a significant determinant of performance measures, ROA and ROE at 10 percent and MB at 15 percent. As explained earlier, two independent variables, growth and direct shareholding of directors make no contribution; rather they result in weaker overall estimation of equations. Also, regressing each goal independently reduces the explanatory power of the equations significantly.

CONCLUSIONS

The results of the study show that managers in Malaysia follow multiple financial goals. The four relatively important goals pursued by them include maximizing operating profits before interest and taxes, maximizing return on equity, maximizing growth rate in EPS, and ensuring that funds are available. The goals of maximizing PBIT and ROE are two top ranked goals. Those firms that pursue the goal of maximizing PBIT also perform better in terms of their accounting returns (ROA and ROE). Firms that consider the goal of maximizing ROE in decision-making have better overall firm profitability, viz., ROA. Yet another notable finding of the study is that managers in Malaysia do not aim at maximizing the shareholders' wealth (market value of shares) while making financial decisions. It is found that pursuing stated financial goals of maximizing PBIT and ROE does not lead firms to wealth creation or maximization. Our results show that irrespective of the goals pursued, the market-to-value ratio remains unaffected.

A comparison of the financial goals systems practiced in different countries reveals that most countries, except the United States, consider the goal of ensuring funds availability as an important goal. Maximization of profit before interest and tax gets the highest attention in Malaysia and India and considerable importance in France and Norway. Maximization of return on equity is another important goal that is generally preferred by managers in all countries and is rated very high in Malaysia. Managers in the United States only support the financial goal of maximizing market value of ordinary share.

REFERENCES

Arlow, P. and Ackelsberg (1991), "A Small Firm Planning Survey: Business Goals, Social Reponibility, and Financial Performance", *Akron Business and Economic Review*, Vol. 22, No. 2, 161-172.

Branch, B. (1973), "Corporate Objectives and Market Performance", *Financial Management*.

Cyert R.M. and March J.G. (1963), *A Behavioral Theory of the Firm*, Prentice-Hall, Englewood Cliffs, New Jersey, USA.

Donaldson, G. (1967), "Financial Goals: Management vs. Stockholders", *Harvard Business Review*, May-June.

Donaldson, G. (1984), Managing Corporate Wealth, Praeger Publishers. 1984.

Foo C.T. and Chan Y.K. (1994), "Organizational Size and Profitability: A Longitudinal, Multi-Sectorial Perspective", Singapore Nanyang Technological University Working Paper.

Grossman, S. J. and Stiglitz, J.E. (1977), "On Value Maximization and Alternative Objectives of the Firm", *Journal of Finance*, Vol. XXXII, No. 2.

Gupta, M. C. (1967), "The Effect of Size, Growth, and Industry on the Financial structure of Manufacturing Companies", *Journal of Finance*, pp.517-529.

Horowitz, J. L., Loughran, T., and Savin N. E. (2000), "Three Analyses of the Firm Size Premium", *Journal of Empirical Finance*, 7, pp. 143-153.

Greene, W. H. (2000), Econometric Analysis, Prentice-Hall, p.408.

Mao, J.C.T. (1969), "Survey of Capital Budgeting: Theory and Practice." Journal of Finance, 25, 2, pp.349-60.

Osteryoung, J.S. (1973), "A Survey into the Goals Used by Fortune's 500 Companies in Capital Budgeting Decisions." *Akron Business and Economic Review*, Fall, pp.34-35.

Pandey, I. M. and Bhat, R. (1990), "Significance of Financial Goals Pursued by Companies in India: Survey Findings", *International Review of Finance*, July-December.

Petty, J.W., Scott, D.F., Jr., and Bird, M.M. (1975), "The Capital Expenditure Decision-making Process of Large Corporations." *Engineering Economist*, Spring, pp.159-172.

Petty, J.W., and Scott, D.F. (1981) "Capital Budgeting Practices in Large US Firms: A Retrospective Analysis and Update." in F.G.J. Derkindern and R.L. Crum (eds.), *Readings in Strategy for Corporate Investment*, Pitman, pp.9-28.]

Pike, R. and Dobbins, R. (1999), *Investment Decisions and Financial Strategy*, Prentice-Hall.

Ranganathan, S. (1995). The Effect of Industry Size and Growth on the Corporate Performances of Malaysian Companies. MBA Thesis, University Science of Malaysia, Penang.

Shetty, Y.K. (1979), "New Look at Corporate Goal", *California Management Review*, 22, 2, 71-79.

Stonehill, A., *et.al.* (1975), "Financial Goals and Debt Ratio Determinants: A Survey of Practice in Five Countries." *Financial Management*, autumn, pp.27-41.

Thomsen, S. and Pedersen, T. (2000). "Ownership Structure and Economic Performance in the Largest European Companies." *Strategic Management Journal*, 21, 689-705.

Williamson, O. E., (1964), *The Economics of Discretionary Behavior: Managerial Objectives in a Theory of the Firm*, Englewood Cliffs, N.J., Prentice-Hall Inc.

Table 1
Financial Goals: Level of Importance,
Means, Standard Deviation

		Number of Firms & Percentage							
							No		
	Goal	Low	Slight	Moderate	Fair	High	Response	Mean	Stdev.
	Assigned Points	1	2	3	4	5	0		
A.	Maximizing the level of:								
	1. Book value of ordinary share	5	1	3	1	6	25	1.22	1.85
		12.2	2.4	7.3	2.4	14.6	61.0		
	2. Market value of ordinary share	2	5	4	3	4	23	1.37	1.78
		4.9	12.2	9.8	7.3	9.8	56.1		
	3. Cash flow per ordinary share	2	2	2	3	2	30	0.83	1.54
		4.9	4.9	4.9	7.3	4.9	73.2		
	4. Op. profit before interest & tax	1	1	6	8	14	11	3.00	2.02
		2.4	2.4	14.6	19.5	34.2	26.8		
	5. EVA	6	0	2	1	5	27	1.00	1.74
<u> </u>		14.6	0.0	4.9	2.4	12.2	65.9		
В.	Maximizing the ratio of:								
	1. Return on equity	2	1	3	7	12	16	2.46	2.19
<u> </u>		4.9	2.4	7.3	17.1	29.3	39.0		
	2. Shareholders' market rate of return	4	1	2	5	6	23	1.51	1.99
<u> </u>		9.8	2.4	4.9	12.2	14.6	56.1		
<u> </u>	3. Price-earnings ratio	4	3	3	0	0	31	0.46	0.91
<u> </u>		9.8	7.3	7.3	0.0	0.0	75.6		
	4. Return on investment (no.)	3	1	4	15	6	12	2.61	1.94
		7.3	2.4	9.8	36.6	14.6	29.3		
<u> </u>	5. Net profit margin	3	4	3	5	3	23	1.34	1.76
		7.3	9.8	7.3	12.2	7.3	56.1		
<u> </u>	6. Market share	7	1	6	6	4	17	1.73	1.83
L.		17.1	2.4	14.6	14.6	9.8	41.5		
С.	Maximizing the growth in:	_		_					
<u> </u>	Earning per share	3	3	2	8	10	15	2.37	2.10
<u> </u>		7.3	7.3	4.9	19.5	24.4	36.6		
<u></u>	2. Sales	6	3	2	5	4	21	1.41	1.81
<u> </u>		14.6	7.3	4.9	12.2	9.8	51.2	0	0
<u> </u>	3. Total assets	6	0	1	0	0	34	0.22	0.56
L		14.6	0.0	2.4	0.0	0.0	82.9	_	
D.	Ensuring that funds are available	4	4	9	4	6	14	2.07	1.84
		9.8	9.8	22.0	9.8	14.6	34.2		
Ε.	Others	1	0	0	1	1	38	0.24	0.98
		2.4	0.0	0.0	2.4	2.4	92.7		

Table 2
Regressions of Performance and Financial Goals

(White Heteroscedasticity-Consistent Stand. Errors & Covariance)						
	pefficients S			Prob.		
Dependent Variable: ROA						
C	0.1092	0.0122	8.97	0.000		
D2	0.0649	0.0401	1.62	0.115		
D3	-0.0489	0.0260	-1.88	0.068		
R-squared	0.1569 F	0.1569 F-statistic				
Adjusted R-squared	Adjusted R-squared 0.1087 Prob. (F-statistic			0.050		
S.E. of regression	S.E. of regression 0.0848 Durbin-Watson stat			1.631		
Dependent Variable: Re	<u>OE</u>					
C	0.0823	0.0320	2.57	0.0145		
D2	0.1668	0.0979	1.70	0.0973		
D3	-0.0569	0.0637	-0.89	0.3776		
R-squared	0.1340 F	0.1340 F-statistic				
Adjusted R-squared	d R-squared 0.0845 Prob. (F-statistic)			0.081		
S.E. of regression	0.2104 Г	Ourbin-Watso	on stat	1.351		
Dependent Variable: MB						
C	2.8282	0.3245	8.72	0.000		
D2	1.8710	1.6581	1.13	0.267		
D3	-1.3459	1.0784	-1.25	0.220		
R-squared	0.0900 F	0.0900 F-statistic				
Adjusted R-squared 0.0380 Prob. (F-statistic)			0.192			
S.E. of regression	Ourbin-Watso	on stat	1.107			

Table 3
Correlation Matrix

	DS	FS	GROWTH	RISK	SIZE
DS	1.000	-0.024	0.402	0.391	-0.090
FS	-0.024	1.000	0.055	-0.073	0.045
GROWTH	0.402	0.055	1.000	0.330	0.059
RISK	0.391	-0.073	0.330	1.000	0.128
SIZE	-0.089	0.045	0.059	0.128	1.000

Table 4
Regressions of Performance and Financial Goals
And Firm Characteristics

(White Heteroscedasticity-Consistent Stand. Errors & Covariance)							
Variable	Coefficient	Std. Error	t-Statistic	Prob.			
Dependent Variable: ROA							
\mathbf{C}^{-}	-0.2147	0.2721	-0.79	0.436			
D1	0.0646	0.0335	1.93	0.063			
D2	-0.0581	0.0313	-1.85	0.073			
SIZE	0.0252	0.0215	1.17	0.250			
RISK	-0.1270	0.0861	-1.48	0.150			
FS	0.1156	0.0655	1.76	0.087			
R-squared	0	.383 F-statisti	c	3.975			
Adjusted R-s		.287 Prob. (F-	/	0.006			
S.E. of regre	ession 0	.076 Durbin-V	Vatson stat	1.787			
Dependent V	'ariable: ROE						
C	-0.9922	0.7337	-1.35	0.185			
D1	0.1500	0.0819	1.83	0.076			
D2	-0.0568	0.0822	-0.69	0.494			
SIZE	0.0791	0.0566	1.40	0.172			
RISK	-0.2107	0.2022	-1.04	0.305			
FS	0.3321	0.1699	1.95	0.059 3.807			
R-squared	R-squared 0.372972 F-statistic						
Adjusted R-s	0.008						
S.E. of regre		7207 Durbin-V	Vatson stat	1.674			
<u>Dependent V</u>	<u> 'ariable: MB</u>						
C	-12.1567	11.9677	-1.02	0.317			
D1	1.9222	1.4952	1.29	0.208			
D2	-1.8320	1.3448	-1.36	0.183			
SIZE	1.1760	0.9516	1.24	0.226			
RISK	-4.8480	3.1635	-1.53	0.135			
FS	3.7667	2.4972	1.51	0.141			
R-squared		.317 F-statisti		2.965 0.026			
Adjusted R-squared 0.210 Prob. (F-statistic)							
S.E. of regre	ession 2	.997 Durbin-V	Vatson stat	1.040			