

## Evaluation of Financial Performance of Corporate Enterprises

**\*Dr. Meenu Jain**

### **Abstract**

Measurement of financial performance of enterprises and its evaluation belongs to basic identifiers of the overall success of the enterprises in the market. Knowing the indicators representing financial performance related to the dynamic environment, where the enterprises operate, and also related to the ongoing pressure of their surroundings on improvement is a key element by increasing the competitiveness and strengthening the position in the market. Although the usage of nonfinancial indicators is still more often promoted, financial indicators are able to factually and accurately evaluate condition of an enterprise based on its previous development

### **Introduction**

Profitability and growth have been used as measures of financial performance. Return on equity and return on assets have been taken as indicators of profitability. The indicators of growth used, herein, are growth in sales, growth in dividend and growth in net assets. The sample taken is a balanced sample and it represents the Indian corporate sector. The relationship of size, age, leverage, capital intensity, market share and risk with the financial performance has been analyzed. The relationships amongst the performance indicators as well as amongst the various independent variables has also been analyzed. Various statistical tools have been used for this purpose. These statistical tools include Range, Factor Analysis, Correlation, and Regression Analysis. Tables, figures and graphs have been used to present the results of the analysis in a simple way. The statistical results have been thoroughly discussed with appropriate inferences and with reference to various earlier studies on the subject.

### **Measures of Corporate Financial Performance**

The term performance can not be put into a tight framework of definition. It is a complex phenomenon and it can be interpreted and measured in different ways (Goodman and Pennings 1977, Devine et al.1979, Millward 1982). Performance can be assessed from various angles and by different users from their own point of view. A financial analyst judge the performance from profitability and growth point of view. An economic planner will be particular about efficient utilization of resources. A welfare economist will be concerned with the equal distribution of gains and wealth besides efficient utilization of resources. From the national view point the various indicators of performance can be employment generation, research and development, health, education economic development etc. Thus, different parties viewpoint performance differently. The

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shareholders are interested in profitability, whereas, their management is interested in the growth of the company. Therefore, both of these dimensions, viz., profitability and growth should be considered while analyzing performance of a company. In literature various researchers have used profitability and growth as indices of measurement of performance. Profitability has been used as measure of performance by Gort (1962), Rumelt (1974, 1982), McDougall and Round (1984), Paul (1985, 1986), Sambharya (1995), Tallman and Li (1996) and Farjoun (1998). Some researchers have used profitability as well as growth as performance measures (Nathanson and Cassano, 1982; Lamont and Anderson, 1985; Varadarajan, 1986; Varadarajan and Ramanujam, 1987; Capen et al., 1988; Busija et al., 1977). There is no single unanimously accepted measure of performance. Some measures are more widely used than others.

### **Dependent and Independent Variables**

The corporate financial performance is dependent on so many variables. These variables may be size of the firm, age of the firm, leverage, capital intensity, market share, risk, diversification strategy, level of research and development, advertising expenditure etc. Here, an attempt has been made to find out the effect of the following independent variables on the corporate financial performance :

- Size
- Age
- Leverage
- Capital Intensity
- Market Share, and
- Risk

The dependent variables in the present study are profitability and growth. ROE and ROA are the indicators of profitability while GIS, GID and GNA are the indicators of growth. In order to have brief picture of results of our analysis a Composite Index of Performance is constructed by using the technique of Factor Analysis. Hamilton and Shergill (1993a) adopted the similar approach. The technique extracted two performance factors in each case, viz., profitability and growth. Regression Analysis has been applied taking factors affecting performance as independent variables and profitability and growth, separately, as dependent variables. deviations of the average ROE for all the companies. Similarly, Z2, Z3, Z4 and Zs were calculated. By applying this methodology, PRFT and GRTH is calculated as performance variables from all the five variables used for the present sample.

### **Regression Analysis:**

In order to find out effects of independent variables, viz., size, age, leverage, capital intensity, market share and risk, on corporate financial performance, the following models have been employed on the sample companies.

$$P = B_0 + B_1 (\text{Size}) + B_2 (\text{Age}) + B_3 (\text{Leverage}) + B_4 (\text{Capital Intensity}) + B_5 (\text{Market Share}) + B_6 (\text{Risk}) + e.$$

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Where,  $B_0$  is the constant terms and  $B_1, B_2, B_3, B_4, B_5$  and  $B_e$  are the coefficients of independent variables while  $e$  indicates error term in the model.  $B_0$  in the above model includes, inter alia, the effect on performance of variables other than independent variables. In the above model profitability and growth are taken, separately, as dependent variables.

**Empirical Investigation:**

Originally, sample of 109 companies was taken for the present study. But complete data was available only for 94 companies. Therefore, financial performance for 94 companies has been evaluated. The complete data for the following 15 companies were not available.

1. Amforge Industries
2. DCM
3. Escorts
4. Godavary fertilizers
5. Gujarat Heavy Chemicals
6. Kanoria Chemicals
7. Llyod Steel
8. Mafatlal Industries
9. Maharashtra Scooters
10. Modern Textile
11. Modi Rubber
12. Orient Paper
13. Sudarshan Chemicals
14. Triveni Engineering
15. Vikrant Tyres.

**Objectives of The Study**

The major objective of the present study is to examine empirically and financial performance in listed large private sector manufacturing companies in India. However, following are more specific objectives :

1. To find out corporate financial performance.
2. To make a suggestive framework on the basis of the study conducted.

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### Hypothesis

A hypothesis is an assumption about relations between variables. It is a tentative explanation of the research problem or a guess about the research outcome. According to Theodorson "a hypothesis is a tentative statement asserting a relationship between certain facts." According to Goode and Hatt

"Hypothesis is a preposition which can be put to test to determine its validity."

The following hypothesis has been developed and tested in this study:

1. Diversification strategy has significant impact on financial performance.
2. Higher degree of diversification of the firm is expected to have better effect on the performance of the firms.

### Analysis of Results and Discussion

Summarize the statistical results of financial performance of Indian companies. These results have been discussed in the following paras.

- **Relationship Amongst the Performance Indicators**

Its shows that in the Indian corporate sector, ROE and ROA are significantly correlated. The correlation between ROE and ROA is positive. With the increase in ROE, ROA also increases and vice versa. Figure 6.6 shows that ROE and ROA move in the same direction with the change in diversification strategy. There is a significant positive correlation between GIS and GID, GNA and GIS and GNA and GID. This means that with increase/decrease in sales, the payment of dividend too increases/ decreases, accordingly. This is according to the basics of accounting and finance. As generally, with the increase in sales, the profitability also increases which may lead to the payment of more dividends and vice versa. The relationship between GIS and ROA, GID and ROE, GID and ROA, GNA and ROE and GNA and ROA, however, is not significant.

- **Interrelationship Amongst the Variables**

Its shows the interrelationship amongst the independent variables. This table also shows the correlation of profitability and growth with all the independent variables. It is customary to discuss interrelationships amongst the variables before doing Regression Analysis. Profitability has significant negative correlation with market share and risk. The correlation between profitability and capital intensity is negative and highly significant. The negative correlation between capital intensity and profitability implies that the firms having better use of fixed assets have better profitability and vice versa. ( $\text{Capital Intensity} = \frac{\text{Fixed Assets}}{\text{Net Sales}} \times 100$ ). Also profitability reduces with the increase in risk and market share, which may be because of disadvantages of high expansion and diversification. Leverage, age and capital intensity have shown consistently negative relationship with profitability and are significant virtually in all cases. These results are in tune with those of Maninder (1997). Growth is significantly and negatively correlated with size and age. This may be because of the reason that larger firms have

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lower chances of further growth. The sample of the present study consists of large Indian private sector companies. Also, old firms have lesser chances of growth as they have already grown up considerably. Leverage, capital intensity and market share have significant positive correlation with growth. The reason may be that market expansion leads to growth and for growing extra finances are required which may be obtained through debt capital. High capital intensity implies large fixed assets as percentage of sales than low capital intensity companies. Thus, increased capital intensity leads to growth. These results also corroborate the observation of Maninder (1997). Regression Analysis has been applied on the relationship between profitability and growth as dependent variables and size, age, leverage, capital intensity, market share and risk as independent variables. It shows that correlation between size and age, size and leverage and size and risk is not significant. This means that these variables are not related to each other. In other words, these relationships imply that it is not necessary that a large firm will also be an old one or a larger firm will

- **Relationship of Independent Variables with Financial Performance**

In this section, an attempt has been made to find out the effect of independent variables, viz., size, age, leverage, capital intensity, market share and risk on the financial performance of the Indian companies. Five indicators of financial performance have been taken, viz., ROE, ROA, GIS, GID and GNA. The first two (ROE and ROA) are profitability indicators, whereas, the other three (GIS, GID and GNA) are growth indicators. The Profitability Composite Index comprising ROE and ROA and Growth Composite Index comprising of GIS, GID and GNA have been constructed. The Profitability Composite Index is taken as dependent variable in Table 5.10 while the Growth Composite Index is a dependent variable in Table 5.11. Therefore, the effect of independent variables on both the profitability (Profit Composite Index) and the growth (Growth Composite Index) shall be analyzed, separately. Following the correlation matrix, Table 5.10 and Table 5.11 show the results of least square estimation of regression equations which seek to explain the variation in performance in terms of size, age, leverage, capital intensity and risk. These two tables summarize the results of regression models using PRFT and GRTH factors of performance as dependent variables, respectively. The independent variables have been transformed in order to improve their linearity with dependent variables. It shows the regression results with PRFT as dependent variable. Age, leverage and capital intensity are related negatively and highly significantly with profitability. The risk is also significantly and negatively related with profitability. However, size and market share have positive relationship with profitability at 5% level of significance.

- **Relationship of Size with Profitability and Growth**

Size of the company is significantly and positively related with profitability, whereas, it has highly significant negative relationship with growth. This finding of positive relationship between size and profitability is in tune with Montgomery (1979), Hamilton and Shergill (1993b) and Maninder (1997). This positive relationship between size and profitability may be because of scale economies. This may also be because of marketing power, technology and financial factors. The

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larger firms tend to have larger market shares and thus greater profitability as given in Table 5.9. Also, the larger firms can adopt efficient modern technologies and may have easy and more access to working capital and long term finances. However, Bettis (1981) and Bothwell et al. (1984) found negative relationship between size and profitability. They argued that size not only provides economies and market power but costs also. It is commonly said that large firms enjoy economies of large scale and thus higher returns. Our regression models accept this with reference.

- **Relationship of Age With Profitability And Growth**

Its show that age has highly significant negative relationship with profitability and significant negative relationship with growth. This implies that older firms have poor profitability and lesser growth than the younger firms. This might be because of continuous use of outdated management and marketing practices and /or obsolete technology and their inbuilt inhibitions / tendencies to try new approaches. The inverse relationship of age with profitability and growth may be due to all weaknesses, which may arise with ageing.

- **Relationship of Leverage With Profitability and Growth**

Leverage has shown highly significant negative relationship with profitability and highly significant positive relationship with growth (Tables 5.10 and 5.11). High leverage implies high proportion of debt capital employed in business in comparison to equity capital. This negative relationship between leverage and profitability may be because of excessive interest expenses associated with heavy debt load. If the highly leveraged firm's ROA is less than the cost of debt, the firm will have lower profitability. The results are in tune with Grant and Jammine (1988) who reported that high leverage is associated with low profitability. Similar relationship has been observed by Chaganti and Damanpur (1991) and Maninder (1997). However, Baker (1973) found positive relationship between leverage and profitability, implying that the high leverage tend to raise profitability. Hamilton and Shergill (1993b) revealed that the impact of leverage (ratio of total debt to total assets) to be positive on ROE, ROA and GIS. They observed that this relationship might vary over the business cycle. Thus different studies have given different results regarding the relationship between leverage and profitability. The finding of positive relationship between leverage and growth is as expected. This may be because for growth larger funds are required and debt is a major source of long term finance. These results are similar to those of Hamilton and Shergill (1993b) and Maninder (1997).

### **Conclusions**

The Profitability as dependent variable (Table 5.10) shows the value of R as 0.694 which implies that 69.40% variation in profitability of Indian companies comes due to the combined effect of the independent variables, viz., size, age, leverage, capital intensity, market share and risk. In Table 5.11 the R<sup>2</sup> value for growth as dependent variable is 0.5795, which implies that 57.95% variation in growth in Indian companies is because of the combined effect of the independent variables

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considered, herein. It further implies that approximately 30.60% variation in profitability and 41.05% variation in growth is because of the variables other than the independent ones considered in the regression model. In both the regression models F ratio is highly significant. The values of R and F ratio indicate that the regression models constructed are strong ones.

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