

## Research Article

### Linking Swot and Financial Performance: An Empirical Study

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**Abstract:** This empirical study is in the direction of exploring the linkage of SWOT and financial performance. Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses a firm's strengths, weaknesses, opportunities and threats (SWOT) and formulates its strategies based on that analysis. The result of the analysis can also be helpful for the correction of the existing strategies. SWOT analysis can reveal how a firm is placed in the business environment. The opportunities, threats, strengths and weaknesses (SWOT) faced by public limited companies in Coimbatore District, Tamilnadu, India during the period 2009-2014 have been ascertained through a questionnaire and they were related to their sales and profit performance for the terminal year 2005 with the help of multiple regression. Strengths, Weaknesses, Opportunities and Threats (SWOT) are measured in terms of Total Weighted Scores and these combined with Gross Assets deployed by the responding companies are taken as independent variables and Sales and, Profit before Depreciation, Interest and Tax have been considered as dependent variables. Significant relationship has been found based on the data collected and analyzed.

**Keywords:** Financial performance, JEL M100, linkage, SWOT

## INTRODUCTION

Many researches reveal that firms frame strategies for different purposes, like improving market share, new product launch, new market creation, satisfying the experience of the existing customers, achieving a targeted sales or profit, among others. Also there is a general dearth of studies in strategic management linking strategy and performance. This Study is based on the unpublished doctoral thesis submitted by the corresponding author to Alagappa University, Tamilnadu. The study analyses the impact of the opportunities, threats, strengths and weaknesses of the public companies surveyed on their general financial performance based on primary data collected through a questionnaire.

The research was carried out during 2009-2014 in Coimbatore District, a leading industrial town in South India. The town is known for its textile mills and small and medium scale foundries, apart from a few large scale industries, mainly in the engineering industry. The native promoters of these large, medium and small scale industries are known for their conservatism and public shyness. The author wondered what sort of strategies these companies followed in the country which was initiating liberalization and globalization measures commencing from 1991. Attempt has been made by many authors to show a relationship between planning and company performance. While some studies found that companies adopting strategic

planning achieved better levels of performance, other studies did not show such relationship. Any organization shall work out methods to take the maximum advantage of its strengths to overcome the weaknesses. Similarly, the firm shall work to convert it threats into opportunities by utilizing its strengths. SWOT analysis focuses on combining organizational Strengths, Weaknesses, Opportunities and Threats (SWOT) to achieve an advantageous position in the market. Data collected through analysis of SWOT can be used for fine-tuning of strategies followed or the formulation of new strategies.

SWOT analysis can help in the crafting of a strategy that takes advantage of the company's resources. In nutshell, this study is focused to identify the SWOT, link it with sample representative company's financial performance and to provide optimum strategies to capture its best opportunities and protect it against the threats which can endanger its market position.

## LITERATURE REVIEW

Denning and Lehr (1971, 1972) said that size and capital intensity were important causes for the introduction of planning. Kono (1976) identified the high growth of the Japanese economy, technological innovation, severe competition between corporations and national economic plans as the most significant reasons behind the widely found incidence of corporate

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planning in Japan. Glueck (1984) in his study of 358 large corporations noted that economic and governmental factors were critical to be considered in the formulation of strategies. The other important factor was market change. Bibault (1979) also had similar observations. Collins and Preston (1969) also affirmed that the most important environmental factor was market/competitive factor. Aguilar (1967) also made similar observations in their study. Ringbakk (1996) found that 4 out of every 10 of his respondents mentioned that there were problems of getting the support from the top management for planning. The need for personal involvement of the chief executive in planning was emphasized by Taylor and Irving (1971). Hegarty (1976) in his study during 1970 to 1973 observed that companies who were able to link strategies with objectives were successful when compared to others. Schoeffler *et al.* (1974) after studying 57 large corporations concluded that strategic planning helped them in achieving high profitability and high return on investment. Karger and Malik (1975) studied three industries and compared those which did planning with others who did not plan. They showed that planning improved financial performance (Karger and Malik, 1975). Ansoff *et al.* (1970) studied the financial performance of 93 companies. Their study used thirteen variables on twenty-one measures. They concluded that the companies which practiced extensive strategic planning were found to outperform the others (Ansoff *et al.*, 1970). Grinyer and Norburn (1975) made a correlation analysis of the relationship between financial performance, role perception, common perception of objectives and formality of planning in their study of 21 organizations. They found no association with financial performance (Grinyer and Norburn, 1975). Leontiades and Tezel (1980) used five variables—return on assets, return on equity, earnings per share growth, price earnings multiples and sales growth in their study of 61 organizations for measuring the performance. According to them, there was no evidence of an association between the expected importance of strategic planning and performance of the company. Findings of Greenley (1986), in relation to the manufacturing companies, were inconclusive in establishing a relationship between strategic planning and performance. A study on corporate planning in public enterprises was carried out by Bhat (1985). The study included 146 public sector organizations out of which 96 were engaged in corporate planning. He concluded that:

- Market demand
- Policies of the government and
- Finance were the most important concerns of the planners

Dixit (1985) found that the important environmental factors of the Indian organizations were marketing environment, inputs, regulatory framework, government policies and programmes. The existing

innovation systems in the firms belonging to the IT industry studied were insufficient with regard to the technological and commercial transformation of scientific knowledge into IT products, processes or services (Rey and Vijay, 2006). Shergill and Sarkaria (1997) conducted a study among 115 largest manufacturing companies in India in order to know the differences in performance among the industries included. Ahluwalia (1985) conducted a study of growth rates of firms. The present article links opportunities, threats, strengths and weaknesses on the general performance of the companies measured in terms of sales and profit before, depreciation, interest and tax.

## METHODOLOGY

A survey was conducted by the author as part of his doctoral research study among the public limited companies located in Coimbatore District, Tamilnadu. The study covered only the companies either manufacturing or trading in goods in the industrial sector. The survey questionnaire was responded by thirty seven companies out of 481 public limited companies meeting the criteria of the study. However, the questionnaires of 7 companies were incomplete and not included in the study. The importance of Opportunities, Threats, Strengths and Weaknesses of the Industry were ascertained through assigned scores ranging from 1 to 5. Similarly, the performance of the companies for these Opportunities, Threats, Strengths and Weaknesses were ascertained through the assigned scores ranging from 1 to 4. Two Total Weighted Scores (TWS) were calculated, one for the Opportunities and Threats and the other for the Strengths and Weaknesses for each responding company from these scores. Total Weighted Score, for example, was calculated for Opportunities and Threats for each company by using the following three steps:

- Find out the weight for each Opportunity and Threat posed by the industry to the company by dividing the score for that Opportunity or Threat by the total of the scores for all the Opportunities and Threats posed to that company. The outcome of this step is a fraction expressed as a decimal number.
- Multiply the decimal number obtained for an Opportunity or the Threat in step 1 by the performance score given by the company for that Opportunity or Threat to obtain a weighted score.
- Add all the weighted scores obtained in step 2 for the Opportunities and Threats of each company. This total of the weighted scores is called by the author as Total Weighted Score (TWS)

Total Weighted Score for the Strengths and Weaknesses of each company was also calculated by following the same procedure as mentioned above.

Multiple Regression technique has been used in the research study to identify the relationship between the independent variables, Opportunities and Threats, Strengths and Weaknesses, measured in terms of Total Weighted Scores and the Gross Assets deployed by the responding companies on the one hand and their Sales and Profit Before Depreciation, Interest and Tax respectively, on the other hand. The resulting regression showed the impact of the independent variables on the overall results of the dependent variable.

## RESULTS AND DISCUSSION

**Analysis of opportunities available:** The data collected has been analysed with the following results:

During 2009-2014, the companies have expressed the view that Exports were an important opportunity and that domestic Market Size was equally important (Table 1). They also stated that Market Growth rate continued to be a major opportunity available to them. Domestic market size and Export Opportunities occupied the first place with 13.41% of the respondents stating that these factors were the major opportunities during the period. Market growth stood at the second place with 12.85% of the responses in favour of this factor as the second major opportunity to them.

**Threats:** During the period 2009-2014, Low Entry barriers, Low Profit margins, Substitutes and Imports were the major threats posed by the industry (Table 2). All these three threats ranked first as per the opinion of the respondents and constituted 10% each of the responses.

**Strengths of the companies:** The data analysed has been tabulated with the following results.

During the period 2009-2014, the top three industry strengths identified in the order of importance were, Efficient R&D Department, Better capacity utilization and Good Brand Image (Table 3). Employee productivity and High Market share of the units were the other characteristics of the industry. Efficient R&D Department, Better Capacity Utilisation and Good Brand Image respectively scored 8.2, 7.49 and 7.12% of the responses.

**Weakness of the companies:** During 2009-2014, the critical weaknesses of the industry in that order were High Direct Production costs, Obsolete Technology, Competition from Small Firms and Surplus Production Capacity (Table 4). These weaknesses represented 16.28, 13.95, 12.40 and 10.08% of the total responses. The data analysed has been tabulated as below:

**Linking SWOT and sales performance:** Multiple regression analysis was done considering the Sales Performance for the year 2014 as dependent variable

Table 1: Opportunities

Industry opportunities	No. of responses	% of responses
Market size	24	13.41
Market growth rate	23	12.85
Export opportunities	24	13.41
Industry profit margin	14	7.820
Less competitors	12	6.700
Economies of Scale	14	7.820
Improved technology	17	9.500
Government policy	16	8.940
Proven channels of distribution	13	7.260
Availability of expert manpower	11	6.150
Scope for outsourcing	11	6.150
Total	179	100.0

Table 2: Threats

Industry threats	No. of responses	% of responses
No entry barriers	17	10.0
Standardized products	15	8.82
Declining market growth	8	4.71
Low profit margins	17	10.0
Big/powerful competitors	14	8.24
High stakes by competitors	9	5.29
Strong Exit barriers	10	5.88
Substitutes and imports	17	10.0
Buyers dictate prices	15	8.82
Suppliers dictate production cost	13	7.65
Non-conducive government policies	13	7.65
Higher lending rates	10	5.88
Spurious products	10	5.88
Higher cost of production	1	0.59
Total	170	100.0

Table 3: Industry strengths

Strengths	No. of responses	% of responses
Low capital	11	4.12
High market share	17	6.37
Better capacity utilisation	20	7.49
Superior quality products	17	6.37
Employee productivity	18	6.74
Low direct prodn cost	10	3.75
Reliable distn. channels	12	4.49
Good brand image	19	7.12
Good after sales service	13	4.87
Ability to raise funds	12	4.49
Low cost of capital	7	2.62
Tax advantages	9	3.37
Locational advantages	13	4.87
Reliable sub-contractors	11	4.12
Patents, trade marks	12	4.49
Efficient manpower	13	4.87
Experience curve advantages	8	3.00
Efficient R&D	22	8.24
Reliable suppliers of inputs	14	5.24
Differentiated products	8	3.00
Loans for expansion	1	0.37
Total	267	100

and the Opportunities, Threats, Strengths and Weaknesses combined with Gross Assets for the year 2014 as independent variables. The result of the regression is given below.

ANOVA Table 5 returned an F value of 33.253 for the above regression. Hence a significant relationship between Opportunities, Threats, Strengths, Weaknesses and Total Assets on Sales for the year 2014 was identified. These independent variables, namely, Opportunities, Threats, Strengths, Weaknesses

Table 4: Industry weakness

Weaknesses	No. of responses	% of responses
High direct production costs	21	16.28
Obsolete technology	18	13.95
Bad design of the product	6	4.650
Hostile trade union	13	10.08
Surplus production capacity	13	10.08
No product differentiation	10	7.750
Low value addition	12	9.300
Small firms can compete	16	12.40
Dominant supplier of inputs	11	8.530
Low capacity utilisation	9	6.980
Totals	129	100.0

Table 5: ANOVA

Model	Sum of squares	df	F	Sig.
1				
Regression	9.09E+09	3	33.253	0.000
Residual	2.37E+09	26		
Total	1.15E+10	29		

a: Predictors: (Constant), Assets\_1, OPPTHR, STRWEAK; b: Dependent Variable SALES\_1

Table 6: Model summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>
1	0.891	0.793	0.769

Predictors: (Constant), Assets\_1, OPPTHR, STRWEAK

Table 7: ANOVA

Model	Sum of squares	df	F	Sig.
1				
Regression	2.00E+08	3	19.697	0.000
Residual	87960555	26		
Total	2.88E+08	29		

a: Predictors: (Constant), Assets\_1, OPPTHR, STRWEAK; b: Dependent Variable SALES\_1

Table 8: Model summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>
1	0.833	0.694	0.659

Predictors: (Constant), Assets\_1, OPPTHR, STRWEAK

combined with Total Assets explained 79.30% of the variation in the Sales during the year 2014 (Table 6).

Linking SWOT and Profit before Depreciation, Interest and Taxes.

Multiple regression analysis was done considering the Profit before Depreciation, Interest and Taxed for the year 2014 as dependent variable and the Opportunities, Threats, Strengths and Weaknesses combined with Gross Assets for the year 2014 as independent variables. The result of the regression is given in Table 7.

The ANOVA Table 7 returned an F value of 19.697 which was significant for this regression. Thus a significant relationship has been found between Opportunities, Threats, Strengths, Weaknesses and Total Assets on Profit before Depreciation, Interest and Taxes for the year 2014. These independent variables, namely, Opportunities, Threats, Strengths, Weaknesses combined with Total Assets explained 69.40 %of the variation in Profit Before Depreciation, Interest and Taxes during the year 2014 (Table 8).

## CONCLUSION

The following conclusions are drawn: The important opportunities available to the companies studied during the period 2009-2014 were Export, market size and market growth rate. The striking threats perceived by the companies surveyed were Low Entry barriers, Low Profit margins, Substitutes and Imports during the same period. These companies stated that Efficient R&D Department, Better capacity utilization and Good Brand Image, High Market share and Employee productivity were the strengths of the industry and the weakness were High Direct Production costs, Obsolete Technology, Competition from Small Firms and Surplus Production Capacity. The Study found significant relationship between the opportunities, threats, strengths and weaknesses combined with the fixed assets as independent variables and sales as a dependent variable for the financial year 2014. These independent variables, namely, Opportunities, Threats, Strengths, Weaknesses combined with Total Assets explained 79.30 % of the variation in the Sales. Similar relationship has also been established for the same period between the opportunities, threats, strengths and weaknesses combined with the fixed assets as independent variables and the profit before depreciation, interest and tax as a dependent variable. These independent variables, namely, Opportunities, Threats, Strengths, Weaknesses combined with Total Assets explained 69.40% of the variation in Profit before Depreciation, Interest and Taxes.

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