STUDY OF EFFECT OF THE COMPANY'S STRATEGIC POSITION ON THE RATE OF STOCK RETURNS FIRMS LISTED IN TEHRAN STOCK EXCHANGE

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ABSTRACT
Any company that is competing in an industry has a competitive strategy, whether explicit or implied. It is possible that this strategy is clearly achieved through the planning process or during the execution of various parts of a company's activities gradually and incidental to create. Therefore, structure and strategies that codified and implemented to management and administer an enterprise or industry is a direct impact on the efficiency and competitiveness of it. This study assessed the relationship between corporate strategy (differentiation and leadership) and return on equity of listed companies in Tehran Stock Exchange deals. The study sample comprised 109 companies have been analyzed for the period 2008 - 2012 that a total of 545 years of the company, then companies were divided into two groups according to the prescribed conditions that in total, 110 of the company's strategy of distinguishing and 105 years of the company's strategy of cost leadership and the rest of the samples were excluded due to lack of qualification. In this study of the statistical methods used is composed of linear regression. To achieve the above objective, a main hypothesis and sub-hypothesis was introduced four. The results show that the distinction between corporate strategy and performance factors including return on equity, return on sales, return on assets and return on fixed assets, there is a significant linear relationship, but the strategy only led to a significant return on sales and return on equity is a linear relationship. Further differentiation strategy than the strategy of cost, higher power output is capable of explaining factors.

Keywords: Competitive Strategy, Cost Leadership, Differentiation, Focus

INTRODUCTION
Undoubtedly, access to the global markets, the purpose of organizations and companies that following doomed, compliance and adherence do not like, but want to ask, are the discuss and influence and leading in a word. Business enterprises with regard to the necessity of universal and targeted, and believe it is possible to compete with other companies competing and believed to have an important role in modern civilization and its governance leading to a change of the internal market, to look at the world market move, whilst reinforcing the belief and the ability to perform a planned program and identify and take advantage of external opportunities and competitive strategy selection fits with their, show off more than ever in the global economy. Any company that is competing in an industry has a competitive strategy, whether explicit or implied. It is possible that this strategy clearly formed through the process of planning or activities in several parts of the executive of a company to be formed gradually and implicitly. However, it should be noted that our companies and organizations with the choice what strategies, methods and approaches can turn on their weaknesses internal into strengths and threats from the external environment to opportunity and with the benefit from the capabilities of internal and environmental opportunities, and realized their objective and mission organizational. Therefore, structure and strategies are developed and implemented for the management and operation of an enterprise or industry, a direct impact on the efficiency and competitiveness of it.

History Studies
In an article titled competitiveness of Porter's diamond model approach, while addressing Porter's diamond model the pointed out that factors such as internal factors, domestic demand conditions, related and supporting industries, as well as strategy structure and rivalry on the competitiveness of countries and industries have a direct impact (Moradi and Shafai, 2006).
Research Article

In research on strategic positioning and company's performance evaluation have examined the impact on the company's strategic position in the performance listed in Tehran Stock Exchange. According to the type of activity the company, the status of competitors and customer needs and tastes, the companies need to adopt certain strategies are to be efficient to compete with competitors which leads to improved financial performance in future years. The results indicate that although the use of differentiation and cost leadership strategy will lead to successful financial performance, but only by employing the strategy of differentiation can maintain the successful financial performance in future year (Valipour et al., 2010).

The relationship between the company's strategic orientation and organizational performance reviewed using a balanced scorecard approach. Competitive strategy is one way that company with the help competing in the market and its emphasis on achieving and maintaining a competitive advantage in an industry. Finally, according to the results obtained from the research, competitive strategies decisive role in organizational performance and pro-active, forward-looking, analytical and defensive, significant and positive relationship with organizational performance (Byryaii and Yazdani, 2010).

The relationship between company strategy and performance of the companies listed in Tehran Stock Exchange is studied. This paper presents the concepts of strategy, that including growth and liquidity strategy, it also examines the company's financial performance ratios including earnings per share and their profitability power. According to the results of statistical and hypothesis testing and analysis of the data, have concluded that between the variables of strategy and the performance of companies, there is a significant relationship (Izadi and Saidy, 2012). All the company's resources leads to obtain competitive advantage is not persistent, the only resources that are rare, precious and unique and not easily replaceable, have the potential to achieve competitive advantages (Barney, 1991). One study, the relationship between strategy and management control systems is examined, but he evaluated the strategy from the perspective of customer and advocates strategies using the questionnaire in 76 companies, this research showed that customers express a high-performance company that is emphasized on reporting frequent and use of integrated control system, in cases such as budget control, give a lot importance to monitoring returns and forecasting information and does not less attention to cost control (Simmons, 1987).

Theoretical Competitive Strategies:

Business strategy can be competitive (fight against all competitors to gain advantage) and show how a company must compete in a particular industry. The Competitive Strategy, creating a defensible position in an industry, so that the company can overcome its competitors.

The differentiation strategy is to provide products and services that in the industry, be regarded as a unique product or service. A company that chooses the strategy of efficiency, following the production and supply of standard products which can reduce the cost of each unit to the customer, purpose of the focus strategy is to attention on particular products and services that meet the needs of a small group of consumers (Izadi, 2012).

Cost Leadership

Cost leadership is the way to achieve leading overall in cost through a series of performance tasks that are designed to achieve these objectives (Mahdavikia, 2011).

Differentiation

Purpose of successful supply distinctive products is that company can have more flexibility in terms of product offerings, to adapt to the changing environment of higher power, lower costs to the consumer leads, to keep the device, its lower cost, more relaxed and more features (Mahdavikia, 2011).

Product Differentiation Strategy

The purpose of the product differentiation strategy is to provide products and services that in the industry, be regarded as a unique product or service (Valipour and Basery, 2010).

Focus

Strategy based on a focus on specific groups of customers, is effective when part of the industry have been enough size and breadth and potential growth, and finally this success is not important of major companies and rival (Mahdavikia, 2011).
Rate of Return on Assets
Ratio return on assets (ROA) shows a company's after-tax return of shareholders and creditors, as compared to their investments. In other words, ratio listed return that unit profit is obtained for all investors and creditors (Shabahang, 1995).

Rate of Return on Fixed Assets
Some companies may have fixed assets of the company have a greater role in the company's profitability. So the return on fixed assets of the company can be a greater role in the company's profitability. This ratio is calculated earnings dollars of funds invested in fixed assets of the company's, this means that it is divided profit after interest and tax deduction on the average total fixed assets (Shabahang, 1995).

Return on Equity
Management objective is to obtain the maximum return for investment common shareholders per unit profit. Therefore, return on equity ratio the only criteria to measure success of profit unit in achieving the objective (Shabahang, 1995).

Return on Sales (% of Profit to Revenue)
Net interest margin is the ratio of net income to sales. This ratio shows the profitability of revenues. Thus, it is an important criterion for evaluating the operating performance of the company, it also offers of the implied references in the field of product pricing, combine cost and production efficiency (Shabahang, 1995).

Research Hypothesis
The Main Hypothesis
The relationship between corporate strategy (differentiation and leadership) with stock returns is significant.

The First Sub-Hypothesis
The relationship between company strategy (differentiation and leadership) and return on equity firms is significant.

The Second Sub-Hypothesis
The relationship between company strategy (differentiation and leadership) and return on sales companies is significant.

The Third Sub-Hypothesis
The relationship between company strategy (differentiation and leadership) and return on assets of companies is significant.

The Fourth Sub-Hypothesis
The relationship between company strategy (differentiation and leadership) and return on fixed assets of companies is significant.

MATERIALS AND METHODS
Methodology
The present study is based on the type of applied research for the purpose of classification. The aim of applied research is development of applied science in a particular field. The present study is a correlational research of the methods and nature. The purpose of this study is to determine the relationship between variables. For this purpose, appropriate indicators will be selected based on the scale of measurement variables. Data is a measure of the relative scale. Relative scale provides the highest and most accurate level measurement.

The scale in addition to having all the features of the other scale is absolute zero. The methodology is inductive in which the theoretical and background collected from the library, article and Internet research and reject or confirm the research hypotheses using statistical methods used in the generalization of deductive reasoning.

Since the aim is to recognize the correlation between competitive strategy and performance of company and correlation of all the research that they will try to explore and determine the relationship between different variables using of the correlation coefficient.
Research Article

The correlation coefficient is an indicator that expresses to what extent to variable changes are dependent on other variables.

Statistical Sample

The number of firms listed in Tehran Stock Exchange at the end of 2012 the company's 527.

Pre-Assumptions

1- The number of companies that are out of stock in the time domain. (115)
2- The number of companies that are in stock in the period of study. (113)
3- The number of companies that have changed in the period of study the fiscal year. (56)
4- The number of companies that have been a financial investor and broker. (47)
5- The number of companies that have been a stop trading in the period of study. (41)
6- The number of companies that are in financial year 29/12 does not end. (61)

Thus, with regard to paragraph 1 to 6, 94 companies were selected as examples of systematic research and for each variable the study calculated the number 470 data - year, to test statistical hypotheses.

Models and Methods of Measurement Variables

a) Differentiation Strategy Effect on the Rate of Return

ROA_t = \alpha_0 + \alpha_1 T_1 + \alpha_2 T_2 + \alpha_3 \text{size}_t + \alpha_4 \text{lev}_t + E_t
ROAF_t = \alpha_0 + \alpha_1 T_1 + \alpha_2 T_2 + \alpha_3 \text{size}_t + \alpha_4 \text{lev}_t + E_t
ROE_t = \alpha_0 + \alpha_1 T_1 + \alpha_2 T_2 + \alpha_3 \text{size}_t + \alpha_4 \text{lev}_t + E_t Model 3
ROS_t = \alpha_0 + \alpha_1 T_1 + \alpha_2 T_2 + \alpha_3 \text{size}_t + \alpha_4 \text{lev}_t + E_t Model 4

b) Cost Leadership Strategy Effect on the Rate of Return

ROA_t = \alpha_0 + \alpha_1 R_1 + \alpha_2 R_2 + \alpha_3 \text{size}_t + \alpha_4 \text{lev}_t + E_t Model 1
ROAF_t = \alpha_0 + \alpha_1 R_1 + \alpha_2 R_2 + \alpha_3 \text{size}_t + \alpha_4 \text{lev}_t + E_t Model 2
ROE_t = \alpha_0 + \alpha_1 R_1 + \alpha_2 R_2 + \alpha_3 \text{size}_t + \alpha_4 \text{lev}_t + E_t Model 3
ROS_t = \alpha_0 + \alpha_1 R_1 + \alpha_2 R_2 + \alpha_3 \text{size}_t + \alpha_4 \text{lev}_t + E_t Model 4

Where:

ROA: Return on Assets
ROAF: Return on Assets Fixed
ROE: Return on Equity
ROS: Return on Sales (% of profit to revenue)
T_1: The ratio of total cost of sales, general and administrative to net sales
T_2: Ratio of net sales to cost of goods sold
R_1: Ratio of net sales to net book value of machinery and equipment
R_2: Ratio total number of employees to total assets
Size: The company size, which is calculated through the natural logarithm of the total assets of the company.
Lev: Financial leverage calculated by dividing total liabilities to total assets of the company.
E: Estimation error
\alpha_0: Intercept of the regression
\alpha_1 to \alpha_4: Estimate the slope of the regression line

Dependent Variable

The variable that changes is affected by the independent variable. Dependent variables in this study are as follows:

1- Return on Assets (ROA)
2- Return on Assets Fixed (ROAF)
3- Return on Equity (ROE)
4- Return on Sales (% of profit to revenue)

1) Return on Assets (ROA)
Research Article

ROA = \frac{NI}{A_2}

Whereis:
ROA: Return on assets
NI: Net Income
A_2: Average Total Assets

2) Return on Assets Fixed (ROAF)

ROAF = \frac{NI}{A_3}

Whereis:
ROAF: Return on Assets Fixed
NI: Net Income
A_3: Fixed Assets

3) Return on Equity (ROE)

ROE = \frac{NI (NIAT)}{E_1}

Whereis:
ROE: Return on Equity
NI (NIAT): Net Income (Profit from ordinary shareholders)
E_1: Average common shareholders' rights

4) Return on Sales

ROS = \frac{NI}{S_1}

Whereis:
ROS: Return on Sales (% of profit to revenue)
NI: Net Income
S: Sales

Independent Variables

Company Strategy: The following criteria were used to determine the strategy of the company:
1) T_1: Total cost of sales, general, administrative to net sales
2) T_2: Total net sales to cost of goods sold

Much more of the above indicators suggest that the company has used a differentiation strategy.

Cost leadership strategy indices are as follows:
1) R_1: Ratio of net sales to net book value of machinery and equipment
2) R_2: Ratio total number of employees to total assets

Much more of the above indicators suggest that the company has used a leadership strategy.

Control Variables

1) Company Size: It is equal to the logarithm of total assets.

Size_{it} = LN(asset_{it})

Whereis:
asset_{it}: The total assets of the company
Size_{it}: The size of the company
2) Financial Leverage (Ratio of Debt)

It is obtained by dividing total liabilities to total assets.

Financial Leverage - total debt of the company/ total assets of the company.
RESULTS AND DISCUSSION

Analysis of Findings

Analysis of findings was carried out in three parts: 1) Analysis of pre-assumptions, 2) pre-assumptions used in the model panel, 3) Analysis of relationships between variables. The following is a review of each of them.

Analysis of Pre-Assumptions

In this study, according to previous research, we used linear regression to examine relationships between variables. Linear regression analysis is based on a simple assumption, and if one or more of these assumptions do not establish, incorrect interpretation of the regression analysis and predictions based on it will be weak, so another work done in this study is survey the assumptions of the classical linear regression. The most important of these assumptions including, the assumption of normality of the variables studied, no autocorrelation between components disturbing the model, independence of the independent variables, and heteroskedasticity. Kolmogorov-Smirnov Test was used to assess the normality of the variables. In order to detect the presence of correlation between the components of the disturbing Durbin-Watson Statistics (DW) has been used. The results of Watson-Durbin test are presented separately in the tables of results hypotheses. In this study, to investigate and discover heteroskedasticity using the White test, and if there is a dissimilar, in order to solve this problem, the weight of each data to be considered, and, in order to assess the independence of the independent variables, we used Pearson's correlation coefficient.

1) Normalization of Variables

In this study, the normality of the data was evaluated using Kolmogerov-Smirnol Test. Since the normality of the dependent variable leads to normality of residuals of the model, before the fitting model is necessary, its normal controlled.

Test of normality the null hypothesis and the alternative hypothesis is as follows

\( H_0: \text{The data is normally distributed.} \)

\( H_1: \text{The data is not normally distributed.} \)

<table>
<thead>
<tr>
<th>Table 3: Examine the assumption of normality of the dependent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategies</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Differentiation strategy</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Leadership strategy</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Based on the values given in table (3), since the level of significance level, all variables conversion of more than 5%, thus, the null hypothesis namely the normality of the variables will be accepted. Therefore, all data conversion is a normal distribution.

2- Heteroskedasticity
In this study, to investigate heteroskedasticity of disturbing sentences, the White test is used. In this test the hypotheses are defined as follows:

\[ H_0 = \text{Homogeneity of variance} \]
\[ H_1 = \text{homoskedasticity} \]

White heteroskedasticity test results, and using Eviews software is the table below:

<table>
<thead>
<tr>
<th>The binary relation between the two variables</th>
<th>Statistics value</th>
<th>probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between differentiation strategy and return on equity</td>
<td>F-statistic 5.205263</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Obs*R-squared 47.75081</td>
<td>0.0000</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on sales</td>
<td>F-statistic 347.3602</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Obs*R-squared 107.8923</td>
<td>0.0000</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on assets</td>
<td>F-statistic 40.2336</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Obs*R-squared 94.12498</td>
<td>0.0000</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on assets fixed</td>
<td>F-statistic 1.12698</td>
<td>0.3658</td>
</tr>
<tr>
<td></td>
<td>Obs*R-squared 14.3694</td>
<td>0.3521</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on equity</td>
<td>F-statistic 1.897963</td>
<td>0.0370</td>
</tr>
<tr>
<td></td>
<td>Obs*R-squared 23.91104</td>
<td>0.0470</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on sales</td>
<td>F-statistic 1.172240</td>
<td>0.3104</td>
</tr>
<tr>
<td></td>
<td>Obs*R-squared 16.19163</td>
<td>0.3018</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on assets</td>
<td>F-statistic 640.3112</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Obs*R-squared 102.9776</td>
<td>0.0000</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on assets fixed</td>
<td>F-statistic 828.1000</td>
<td>0.0000</td>
</tr>
<tr>
<td></td>
<td>Obs*R-squared 103.2077</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Using the statistic F (Fisher) can be easily judged from the model, the dissimilar or not. This means that if the probability of the statistic F (Prob (F- Static)) is greater than the error (α), the hypothesis \( H_0 \) and therefore, homoskedasticity accepted. If the violation of this condition is fulfilled, and the model is heterogeneity, Generalized Least Squares method (GLS) is used to remove it. According to the results of Table (4), since the test statistic at the 5% non-significance level for all studied cases except relationship between differentiation strategy and return on assets fixed and the relationship between leadership strategy and return on sales, therefore, the null hypothesis namely homoskedasticity is rejected in all cases studied except relationship between differentiation strategy and return on assets fixed and the relationship between leadership strategy and return on sales.

3- Study of the Hypothesis of the Independence of Errors
To examine the independence of the variance is not expressed in different periods that it is one of the assumptions of regression analysis and is called autocorrelation from test was used Durbin- Watson. This is one of the most famous tests for detecting autocorrelation.
When Watson – Durbin statistic is about 1.5 to 2.5, indicating that there is no autocorrelation, but higher or lower than 1.5 to 2.5, indicating that the error terms do not occur randomly, and therefore, it is unrealistic results. Like the Heteroskedasticity, to solve the problem of autocorrelation and improved results can be used of the generalized least squares method.

### Table 5: Study of the hypothesis of the independence of errors

<table>
<thead>
<tr>
<th>The binary relation variables</th>
<th>Watson-Durbin Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between differentiation strategy and return on equity</td>
<td>1.642859</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on sales</td>
<td>1.844072</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on assets</td>
<td>2.237217</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on assets fixed</td>
<td>1.798726</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on equity</td>
<td>1.620480</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on sales</td>
<td>1.551211</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on assets</td>
<td>2.100504</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on assets fixed</td>
<td>2.153890</td>
</tr>
</tbody>
</table>

Watson-Durbin Statistic value is given in Table 5 for the relationship between differentiation strategy and leadership strategy of returns measures, as shown in Table 5 and the output can be seen by Eviews software, all Watson-Durbin Statistic values are 5.1 to 5.2, therefore, there is no autocorrelation between the variables.

**F-Leamer Test (Check of Homology of the Intercepts of Sections)**

To select the panel data and integration data methods used F-Leamer Test. In the F-Leamer Test is placed hypothesis H₀ namely homology of the intercepts (Integration data) against hypothesis H₁ namely heterology of the intercepts (panel data). The test results show that levels studied are heterogeneous and have individual differences and panel methods are more appropriate. F-Leamer test results are summarized as follows in Table (6) is provided. The null hypothesis and alternative hypothesis for F-Leamer test is as follows:

- H₀ = Integration Data Method
- H₁ = Panel Data Method
### Table 6: F-Leamer test result (homology of the intercepts of sections)

<table>
<thead>
<tr>
<th>The relationship</th>
<th>F-statistic</th>
<th>Degrees of freedom</th>
<th>Probability</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>between differentiation strategy and return on equity</td>
<td>10.300488</td>
<td>(21,84)</td>
<td>0.0000</td>
<td>Panel data method</td>
</tr>
<tr>
<td>between differentiation strategy and return on sales</td>
<td>2.114790</td>
<td>(21,84)</td>
<td>0.0086</td>
<td>Panel data method</td>
</tr>
<tr>
<td>between differentiation strategy and return on assets</td>
<td>3.156686</td>
<td>(21,84)</td>
<td>0.0001</td>
<td>Panel data method</td>
</tr>
<tr>
<td>between differentiation strategy and return on assets fixed</td>
<td>1.815946</td>
<td>(21,84)</td>
<td>0.0296</td>
<td>Panel data method</td>
</tr>
<tr>
<td>between leadership strategy and return on equity</td>
<td>2.796124</td>
<td>(20,79)</td>
<td>0.0006</td>
<td>Panel data method</td>
</tr>
<tr>
<td>between leadership strategy and return on sales</td>
<td>6.668116</td>
<td>(20,79)</td>
<td>0.0000</td>
<td>Panel data method</td>
</tr>
<tr>
<td>between leadership strategy and return on assets</td>
<td>0.029672</td>
<td>(20,79)</td>
<td>0.0991</td>
<td>Integration data method</td>
</tr>
<tr>
<td>between leadership strategy and return on assets fixed</td>
<td>0.045626</td>
<td>(20,79)</td>
<td>0.0840</td>
<td>Integration data method</td>
</tr>
</tbody>
</table>

According to the results of Table (6) as shows the relationship between variables is rejected for all studied cases except the relationship between leadership strategy and return on sales and relationship between leadership strategy and return on sales fixed namely hypothesis $H_0$ (integration data method) and the hypothesis $H_1$ (panel data method) is accepted, to estimate of the research model is used of the panel data method. Therefore, the estimating equations using of the panel data method is carried out for all top companies during the years 2008 to 2012. Since the integration method is accepted in the relationship between leadership strategy and return on assets and relationship between leadership strategy and return on assets fixed, therefore, the Hausman Test is not required.

#### The Hausman Test (Choice between Fixed and Random Effects)

Hausman test statistic for the detection of differences of fixed or random cross Chi-Square distribution with degrees of freedom is calculated to be equal to the number of independent variables. For Hausman test the null hypothesis and alternative hypothesis are as follows:
H_0: Random effects method
H_1: Fixed effects method

Summarized results of the Hausman test using software Eviews is presented in Table 7 below:

<table>
<thead>
<tr>
<th>Research models</th>
<th>Chi-Square Statistic</th>
<th>Degrees of freedom</th>
<th>Probability of</th>
<th>Test results</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between differentiation strategy and return on equity</td>
<td>.57865311</td>
<td>4</td>
<td>0.0208</td>
<td>Fixed effects</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on sales</td>
<td>35.563331</td>
<td>4</td>
<td>0.0000</td>
<td>Fixed effects</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on assets</td>
<td>55.081629</td>
<td>4</td>
<td>0.0000</td>
<td>Fixed effects</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on assets fixed</td>
<td>32.700071</td>
<td>4</td>
<td>0.0000</td>
<td>Fixed effects</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on equity</td>
<td>2.383791</td>
<td>4</td>
<td>0.6656</td>
<td>Random effects</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on sales</td>
<td>20.394682</td>
<td>4</td>
<td>0.0004</td>
<td>Fixed effects</td>
</tr>
</tbody>
</table>

Based on the values given by (7) with respect to the significant level of reporting for all models except the relationship between leadership strategy and return on sales shows that the hypothesis H_0 was rejected and the hypothesis H_1 was accepted at 95% confidence level, and it has implicate the use of fixed effects and These results imply that the random effects for the relationship between leadership strategy and return on sales.

**The Main Hypothesis Testing and Analysis**

**The Main Hypothesis**
There is a significant relationship between company strategy (cost and leadership) and the efficiency of the company. The main hypothesis is divided into four sub-hypothesis:

**The First Sub-Hypothesis Testing**
There is a significant relationship between company strategy (cost and leadership) and return on equity of the company.
There is no significant correlation between company strategy (cost and leadership) and return on equity. There is significant correlation between company strategy (cost and leadership) and return on equity.

\[
\begin{align*}
H_0 : & \beta = 0 \\
H_1 : & \beta \neq 0
\end{align*}
\]
As shown by the following statistical table:

\[
\begin{align*}
H_0 & : \rho = 0 \\
H_1 & : \rho \neq 0
\end{align*}
\]

All pre-assumptions of linear regression studied according to previous sections and the results showed that the use of linear regression is possible. Subsequently, we will do the analysis relationships between variables using linear regression models.

**Table 8: Estimated of regression the relationship between the strategies type and return on equity.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Symbol</th>
<th>Coefficient</th>
<th>T-statistic</th>
<th>Probability</th>
<th>Adjusted R²</th>
<th>Durbin-Watson</th>
<th>F-statistic</th>
<th>F-probability</th>
<th>View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant coefficient</td>
<td>β₀</td>
<td>0.030007</td>
<td>0.172361</td>
<td>0.8635</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cost of sales, general, administrative to net sales</td>
<td>T₁</td>
<td>-0.005339</td>
<td>-0.930326</td>
<td>0.3543</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.131669</td>
</tr>
<tr>
<td>Ratio of net sales to cost of goods sold</td>
<td>T₂</td>
<td>0.135046</td>
<td>3.860645</td>
<td>0.0002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company size</td>
<td></td>
<td>0.006999</td>
<td>0.533668</td>
<td>0.5947</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Leverage</td>
<td>Lev</td>
<td>0.020121</td>
<td>2.058496</td>
<td>0.0420</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership Strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant coefficient</td>
<td>β₀</td>
<td>-0.014791</td>
<td>-0.094389</td>
<td>0.9250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of net sales to net book value of machinery and equipment</td>
<td>R₁</td>
<td>-0.021848</td>
<td>-4.229495</td>
<td>0.0001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio total number of employees to total assets</td>
<td>R₂</td>
<td>29.84326</td>
<td>1.267646</td>
<td>0.2079</td>
<td>0.18551</td>
<td>1.62048</td>
<td>6.865236</td>
<td>0.000064</td>
<td>105</td>
</tr>
<tr>
<td>Company size</td>
<td></td>
<td>0.027670</td>
<td>2.341427</td>
<td>0.0212</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Leverage</td>
<td>Lev</td>
<td>-0.000107</td>
<td>-0.424248</td>
<td>0.6723</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significance of the coefficients of the independent variable and constant tested using T-Student test. The null hypothesis the alternative hypothesis to estimate model parameters (slope and intercept) as follows:
Research Article

\[
\begin{cases}
H_0 : \beta_i = 0 & i = 1, 2, 3, 4 \\
H_1 : \beta_i \neq 0
\end{cases}
\]

Value of the test statistic is computed as follows:

\[
t_{\hat{\beta}_i} = \frac{\hat{\beta}_i - 0}{S_{\beta_i}}
\]

The rejection and acceptance area of the null hypothesis is defined as follows:

![Diagram showing rejection and acceptance area of the null hypothesis]

The rejection and acceptance area of the null hypothesis is at the 95% confidence level.

The judgment in this case, the null hypothesis is rejected if the value of t in the area rejected. According to the results of Table (8) and t values calculated for constant coefficient, independent and control variables in the differentiation strategy, as well as the possibility thereof, since of the t-values significant level for the variables of the net sales to cost of goods sold and financial leverage is less than 0.05%, therefore test of equality of regression coefficients equal to zero the two variables is rejected, this indicates that variables listed are significant at the 95% confidence level. Therefore, variables of the net sales to cost of goods sold and financial leverage in the differentiation strategy will remain in the linear regression model. The model is derived from the differentiation strategy as follows:

\[
\text{ROE}=0.135046T^2+0.020121 \text{LEV}
\]

According to the results of Table (8) and t values calculated for constant coefficient, independent and control variables in the leadership strategy, as well as the possibility thereof, since of the t-values significant level for the variables ratio of net sales to net book value of machinery and equipment and company size is less than 0.05%, therefore test of equality of regression coefficients equal to zero the two variables is rejected, this indicates that variables listed are significant at the 95% confidence level. Therefore, variables of the ratio net sales to net book value of machinery and equipment and company size in the leadership strategy will remain in the linear regression model. The model is derived from the leadership strategy as follows:

\[
\ln \text{ROE}=-0.021848R+0.027670 \text{Size}
\]

Also, according to the results of Table 8, the coefficient of determination adjusted model in the differentiation and leadership strategy (0.18368) and (0.18551) respectively, indicating relatively good explanatory power of the model is to describe the dependent variable. This means that about 18.3% and 18.5%, respectively, of changes in return on equity can be explained by the differentiation and leadership.
strategy. Regression F-statistic value of the differentiation and leadership strategy is 7.131669 and 6.865236 respectively. According to the possibility of statistics F (0.000040) and (0.000064) results show that the explanatory power of the models listed, because F values calculated are significant at 0.05% error level. The regression models are overall significant at the 95% confidence level. Moreover Durbin-Watson statistic values in both strategies suggest that there is no autocorrelation between the components of disturbing model, because these values are between 1.5 to 2.5. Therefore, there is a significant linear relationship between leadership and differentiation strategy, and return on equity. Due to the amount of the adjusted coefficient of determination in the differentiation and leadership strategy is (0.18368) and (0.18551) respectively. The power of the two models is almost identical in explaining the dependent variable namely of the return on equity. Therefore, there is a significant relationship between leadership and differentiation strategy, and return on equity.

The Second Sub-Hypothesis Testing

There is a significant relationship between company strategy (cost and leadership) and return on sales. There is no significant correlation between company strategy (cost and leadership) and return on sales. There is significant correlation between company strategy (cost and leadership) and return on sales.

\[
\begin{align*}
H_0 : \beta &= 0 \\
H_1 : \beta &\neq 0
\end{align*}
\]

As shown by the following statistical table:

\[
\begin{align*}
H_0 : \rho &= 0 \\
H_1 : \rho &\neq 0
\end{align*}
\]

All pre-assumptions of linear regression studied according to previous sections and the results showed that the use of linear regression is possible. Subsequently, we will do the analysis relationships between variables using linear regression models.

**Table 9: Estimated of regression the relationship between the strategies type and return on sales**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Symbol</th>
<th>Coefficient</th>
<th>T-statistic</th>
<th>Probability</th>
<th>Adjusted R²</th>
<th>Durbin-Watson</th>
<th>F-statistic</th>
<th>View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation Strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant coefficient</td>
<td>(\beta_0)</td>
<td>3.223553</td>
<td>1.18614</td>
<td>0.2389</td>
<td>0.913143</td>
<td>1.844072</td>
<td>632.4931</td>
<td>110</td>
</tr>
<tr>
<td>Total cost of sales, general</td>
<td>(T_1)</td>
<td>29.50800</td>
<td>112.261</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>administrative to net sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of net sales to cost of</td>
<td>(T_2)</td>
<td>1.013967</td>
<td>3.52565</td>
<td>0.0007</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>goods sold</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company size</td>
<td></td>
<td>-0.518038</td>
<td>-</td>
<td>2.89111</td>
<td>0.0049</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td></td>
<td>-0.373898</td>
<td>-</td>
<td>-</td>
<td>0.0014</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[\beta_0: \beta: \beta\]
### Leadership Strategy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>T-Value</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage</td>
<td>3.30547</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant coefficient β₀</td>
<td>0.549488</td>
<td>-3.498117</td>
<td>0.0007</td>
</tr>
<tr>
<td>Ratio of net sales to net book value of</td>
<td>-0.048290</td>
<td>-2.490228</td>
<td>0.0387</td>
</tr>
<tr>
<td>machinery and equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio total number of employees to total</td>
<td>-268.9772</td>
<td>-7.874694</td>
<td>0.0000</td>
</tr>
<tr>
<td>assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company size</td>
<td>0.099382</td>
<td>2.770904</td>
<td>0.0340</td>
</tr>
<tr>
<td>Financial Leverage</td>
<td>-0.000591</td>
<td>-4.521704</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Significance of the coefficients of the independent variable and constant tested using T-Student test. The null hypothesis the alternative hypothesis to estimate model parameters (slope and intercept) as follows:

\[
\begin{align*}
H₀ &: βᵢ = 0 \quad i = 0, 1, 2, 3, 4 \\
H₁ &: βᵢ ≠ 0
\end{align*}
\]

Value of the test statistic is computed as follows:

\[
tₜᵢ = \frac{\hat{β}_i - 0}{S_{βᵢ}}
\]

The rejection and acceptance area of the null hypothesis is defined as follows:

The rejection and acceptance area of the null hypothesis is at the 95% confidence level.
Research Article

The judgment in this case, the null hypothesis is rejected if the value of t in the area rejected. According to the results of Table (9) and t values calculated for constant coefficient, independent and control variables in the differentiation strategy, as well as the possibility thereof, since of the significant values for all variables except the constant coefficient is less than 0.05%, therefore test of equality of regression coefficients equal to zero for the all variables is rejected, this indicates that variables listed are significant at the 95% confidence level. Thus none of the independent and control variables in the differentiation strategy will be removed from the linear regression model. The model is derived from the differentiation strategy as follows:

\[ \text{LNROS} = 29.50800 T1 + 1.013967 T2 - 0.518038 \text{Size} - 0.373898 \text{LEV} \]

According to the results of Table (9) and t values calculated for constant coefficient, independent and control variables in the leadership strategy, as well as the possibility thereof, since of the significant values for all variables as well as the constant coefficient is less than 0.05%, therefore test of equality of regression coefficients equal to zero for the all variables is rejected, this indicates that variables listed are significant at the 95% confidence level. Thus of the independent and control variables in the leadership strategy will remain in the linear regression model. The model is derived from the leadership strategy as follows:

\[ \text{LNROS} = -0.549488 - 0.048290 R1 - 268.9772 R2 + 0.099382 \text{Size} - 0.000591 \text{LEV} \]

Also, according to the results of Table 9, the coefficient of determination adjusted model in the differentiation and leadership strategy (0.913) and (0.573) respectively, indicating high explanatory power of the model is to describe the dependent variable. This means that about 91.3% and 57.3%, respectively, of changes in return on sales can be explained by the differentiation and leadership strategy. Regression F-statistic value of the differentiation and leadership strategy is of 632.4931 and 35.60329 respectively. According to the possibility of statistics F (0.000000) and (0.000000) results show that the explanatory power of the models listed, because F values calculated is significant at 0.05% error level. The regression models are overall significant at the 95% confidence level. Moreover Durbin-Watson statistic values in both strategies suggest that there is no autocorrelation between the components of disturbing model, because these values are between 1.5 to 2.5. Therefore, there is a significant linear relationship between leadership and differentiation strategy, and return on sales. Due to the amount of the adjusted coefficient of determination in the differentiation and leadership strategy is (0.913) and (0.573) respectively. The power of model in the differentiation strategy is higher than the power of model in the leadership strategy in explaining the dependent variable of the research namely return on sales. Therefore, there is a significant relationship between leadership and differentiation strategy, and return on sales.

The Third Sub-Hypothesis Testing

There is a significant relationship between company strategy (cost and leadership) and return on assets.

There is no significant correlation between company strategy (cost and leadership) and return on assets.

There is significant correlation between company strategy (cost and leadership) and return on assets.

\[
\begin{align*}
H_0 : \beta &= \circ \\
H_1 : \beta &\neq \circ
\end{align*}
\]

As shown by the following statistical table:

\[
\begin{align*}
H_0 : \rho &= 0 \\
H_1 : \rho &\neq 0
\end{align*}
\]

All pre-assumptions of linear regression studied according to previous sections and the results showed that the use of linear regression is possible. Subsequently, we will do the analysis relationships between variables using linear regression models.
Table 10: Estimated of regression the relationship between the strategies type and return on assets

<table>
<thead>
<tr>
<th>Variable</th>
<th>Symbol</th>
<th>Coefficient</th>
<th>T-statistic</th>
<th>Probability</th>
<th>Adjusted R²</th>
<th>Durbin-Watson</th>
<th>F-statistic</th>
<th>Probability</th>
<th>Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant coefficient</td>
<td>β₀</td>
<td>-3.987641</td>
<td>-2.06860</td>
<td>0.0410</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cost of sales, general, administrative to net sales</td>
<td>T₁</td>
<td>0.101810</td>
<td>1.60225</td>
<td>0.1121</td>
<td>0.64751</td>
<td>2.23721</td>
<td>51.05840</td>
<td>0.000000</td>
<td>110</td>
</tr>
<tr>
<td>Ratio of net sales to cost of goods sold</td>
<td>T₂</td>
<td>2.090623</td>
<td>5.39747</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company size</td>
<td>size</td>
<td>0.010092</td>
<td>0.06949</td>
<td>0.9447</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Leverage</td>
<td>Lev</td>
<td>1.095606</td>
<td>10.1224</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Leadership Strategy**

| Constant coefficient         | β₀     | 1.053270    | 2.53894     | 0.0302      |             |               |             |             |       |
| Ratio of net sales to net book value of machinery and equipment | R₁     | 0.020247    | 0.33665     | 0.7365      |             |               |             |             |       |
| Ratio total number of employees to total assets | R₂     | 18.18500    | 0.05605     | 0.9553      |             |               |             |             |       |
| Company size                 | size   | -0.079556   | -0.54014    | 0.5893      |             |               |             |             |       |
| Financial Leverage           | Lev    | 0.022324    | 13.6441     | 0.0000      |             |               |             |             |       |
Significance of the coefficients of the independent variable and constant tested using T-Student test. The null hypothesis the alternative hypothesis to estimate model parameters (slope and intercept) as follows:

\[
\begin{align*}
H_0 : \beta_i &= 0 & & i = 0, 1, 2, 3, 4 \\
H_1 : \beta_i &\neq 0
\end{align*}
\]

Value of the test statistic is computed as follows:

\[ t_{\beta_i} = \frac{\hat{\beta}_i - 0}{S_{\beta_i}} \]

The rejection and acceptance area of the null hypothesis is defined as follows:

The rejection and acceptance area of the null hypothesis is at the 95% confidence level.

The judgment in this case, the null hypothesis is rejected if the value of t in the area rejected. According to the results of Table (10) and t values calculated for constant coefficient, independent and control variables in the differentiation strategy, as well as the possibility thereof, since of the significant values for all variables except the ratio total cost of sales, general, administrative to net sales and company size is less than 0.05%, therefore test of equality of regression coefficients equal to zero for the ratio total cost of sales, general, administrative to net sales and company size is rejected, this indicates that variables listed are no significant at the 95% confidence level. But other of the independent and control variables in the differentiation strategy will remain in the linear regression model. The model is derived from the differentiation strategy as follows:

\[ \text{LNROA} = -3.987641 + 2.090623T2 + 1.095606\text{LEV} \]

According to the results of Table (10) and t values calculated for constant coefficient, independent and control variables in the leadership strategy, as well as the possibility thereof, since of the significant values for all variables except financial leverage is more than 0.05%, therefore test of equality of regression coefficients equal to zero for the all variables except financial leverage is accepted, this indicates that all variables listed are no significant at the 95% confidence level. Thus of the independent and control variables except financial leverage in the leadership strategy will be removed from the linear regression model. The model is derived from the leadership strategy as follows:

\[ \text{LNROA} = -0.549488 + 1.053270\text{LEV} \]

Also, according to the results of Table 10, the coefficient of determination adjusted model in the differentiation and leadership strategy (0.647) and (0.283) respectively, indicating good explanatory power of the model is to describe the dependent variable. This means that about 64.7% and 28.3%.
respectively, of changes in return on assets can be explained by the model. Regression F-statistic value of the differentiation and leadership strategy is of 51.05840 and 52.23427 respectively. According to the possibility of statistics F (0.000000) and (0.000000) results show that the explanatory power of the models listed, because F values calculated is significant at 0.05% error level. The regression models are overall significant at the 95% confidence level. Moreover Durbin- Watson statistic values in both strategies suggest that there is no autocorrelation between the components of disturbing model, because these values are between 1.5 to 2.5. Thus, according to the results of Table (4-15), there is a significant linear relationship between differentiation strategy and return on assets, while was not observed a significant linear relationship between leadership strategy and return on assets. 

The Fourth Sub-Hypothesis Testing

There is a significant relationship between company strategy (cost and leadership) and return on assets fixed. There is no significant correlation between company strategy (cost and leadership) and return on assets fixed. There is significant correlation between company strategy (cost and leadership) and return on assets fixed.

\[
\begin{align*}
H_0 : \beta &= 0 \\
H_1 : \beta &\neq 0
\end{align*}
\]

As shown by the following statistical table:

\[
\begin{align*}
H_0 : \rho &= 0 \\
H_1 : \rho &\neq 0
\end{align*}
\]

All pre-assumptions of linear regression studied according to previous sections and the results showed that the use of linear regression is possible. Subsequently, we will do the analysis relationships between variables using linear regression models.

Table 11: Estimated of regression the relationship between the strategies type and return on assets fixed

<table>
<thead>
<tr>
<th>Variable</th>
<th>Symbol</th>
<th>Coefficient</th>
<th>T-statistic</th>
<th>Probability</th>
<th>Adjusted R²</th>
<th>Durbin-Watson</th>
<th>F-statistic</th>
<th>Probability</th>
<th>Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differentiation Strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant coefficient</td>
<td>$\beta_0$</td>
<td>-3.326703</td>
<td>-</td>
<td>0.40532</td>
<td>0.6861</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cost of sales, general, administrative to net sales</td>
<td>$T_1$</td>
<td>2.584381</td>
<td>9.55269</td>
<td>0.0000</td>
<td>0.69051</td>
<td>1.79872</td>
<td>61.79950</td>
<td>0.000000</td>
<td>110</td>
</tr>
<tr>
<td>Ratio of net sales to cost of goods</td>
<td>$T_2$</td>
<td>4.971016</td>
<td>3.01429</td>
<td>0.0032</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Formula</td>
<td>Coefficient</td>
<td>T-value</td>
<td>P-value</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>----------</td>
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<td>---------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company size</td>
<td>sold</td>
<td>-0.413542</td>
<td>0.66886</td>
<td>0.5050</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Leverage</td>
<td>Lev</td>
<td>4.140690</td>
<td>8.98523</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership Strategy</td>
<td>( \beta_0 )</td>
<td>0.605712</td>
<td>3.03660</td>
<td>0.0308</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio of net sales to net book value of machinery and equipment</td>
<td>( R_1 )</td>
<td>0.020510</td>
<td>0.04027</td>
<td>0.9679</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ratio total number of employees to total assets</td>
<td>( R_2 )</td>
<td>-571.6583</td>
<td>0.02089</td>
<td>0.8352</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company size</td>
<td>size</td>
<td>0.006417</td>
<td>0.00514</td>
<td>0.9959</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Leverage</td>
<td>Lev</td>
<td>0.213425</td>
<td>15.4055</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significance of the coefficients of the independent variable and constant tested using T-Student test. The null hypothesis the alternative hypothesis to estimate model parameters (slope and intercept) as follows:

\[
\begin{align*}
H_0 & : \beta_i = 0 \quad i = 0,1,2,3,4 \\
H_1 & : \beta_i \neq 0
\end{align*}
\]

Value of the test statistic is computed as follows:

\[
t_{\beta_i} = \frac{\hat{\beta}_i - \beta_i}{S_{\beta_i}}
\]

The rejection and acceptance area of the null hypothesis is defined as follows:

The rejection and acceptance area of the null hypothesis is at the 95% confidence level.
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The judgment in this case, the null hypothesis is rejected if the value of t in the area rejected. According to the results of Table (11) and t values calculated for constant coefficient, independent and control variables in the differentiation strategy, as well as the possibility thereof, since of the significant values for all variables except the constant coefficient and company size is less than 0.05%, therefore test of equality of regression coefficients equal to zero except constant coefficient and company size is accepted, this indicates that variables listed are no significant at the 95% confidence level. But other of the independent and control variables in the differentiation strategy will remain in the linear regression model. The model is derived from the differentiation strategy as follows:

\[ \text{LNROAF} = 2.584381T1 + 4.971016T2 + 4.140690\text{LEV} \]

According to the results of Table (11) and t values calculated for constant coefficient, independent and control variables in the leadership strategy, as well as the possibility thereof, since of the significant values for all variables except the financial leverage and constant coefficient is more than 0.05%, therefore test of equality of regression coefficients equal to zero for the all variables except financial leverage and constant coefficient is accepted, this indicates that all variables listed are no significant at the 95% confidence level. Thus of the independent and control variables except financial leverage and constant coefficient in the leadership strategy will be removed from the linear regression model.

Table 12: Summarized findings from the study of the relationship between variables

<table>
<thead>
<tr>
<th>Statistical parameters / Test relationships between variables</th>
<th>Strategy</th>
<th>coefficient of determination adjusted</th>
<th>number</th>
<th>Error level</th>
<th>Linear relationship between the variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between company strategy (cost and leadership) and return on equity is significant.</td>
<td>Differentiation</td>
<td>0.183</td>
<td>110</td>
<td>0.05</td>
<td>Accept</td>
</tr>
<tr>
<td></td>
<td>Leadership</td>
<td>0.183</td>
<td>105</td>
<td>0.05</td>
<td>Accept</td>
</tr>
<tr>
<td>The relationship between company strategy (cost and leadership) and return on sales is significant.</td>
<td>Differentiation</td>
<td>0.913</td>
<td>110</td>
<td>0.05</td>
<td>Accept</td>
</tr>
<tr>
<td></td>
<td>Leadership</td>
<td>0.573</td>
<td>105</td>
<td>0.05</td>
<td>Accept</td>
</tr>
<tr>
<td>The relationship between company strategy (cost and leadership) and return on assets is significant.</td>
<td>Differentiation</td>
<td>0.647</td>
<td>110</td>
<td>0.05</td>
<td>Accept</td>
</tr>
<tr>
<td></td>
<td>Leadership</td>
<td>0.283</td>
<td>105</td>
<td>0.05</td>
<td>No accept</td>
</tr>
<tr>
<td>The relationship between company strategy (cost and leadership) and return on assets fixed is significant.</td>
<td>Differentiation</td>
<td>0.690</td>
<td>110</td>
<td>0.05</td>
<td>Accept</td>
</tr>
<tr>
<td></td>
<td>Leadership</td>
<td>0.333</td>
<td>105</td>
<td>0.05</td>
<td>No accept</td>
</tr>
</tbody>
</table>

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The model is derived from the leadership strategy as follows:

$$LNROAF = 0.605712 + 0.213425 LEV$$

Also, according to the results of Table 11, the coefficient of determination adjusted model in the differentiation and leadership strategy (0.690) and (0.333) respectively, indicating good explanatory power of the model is to describe the dependent variable. This means that about 69% and 33.3%, respectively, of changes in return on assets fixed can be explained by the model. Regression $F$-statistic value of the differentiation and leadership strategy is of 61.79950 and 35.91024 respectively. According to the possibility of statistics $F$ (0.000000) and (0.000000) results show that the explanatory power of the models listed, because $F$ values calculated is significant at 0.05% error level. The regression models are overall significant at the 95% confidence level. Moreover Durbin-Watson statistic values in both strategies suggest that there is no autocorrelation between the components of disturbing model, because these values are between 1.5 to 2.5. Thus, according to the results of Table (4-16), there is a significant linear relationship between differentiation strategy and return on assets fixed, while was not observed a significant linear relationship between leadership strategy and return on assets fixed.

### Table 13: The Conclusions

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Regression model</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between differentiation strategy and return on equity</td>
<td>$ROE = 0.135046T2 + 0.020121 LEV$</td>
<td>The relationship significant</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on equity</td>
<td>$LNROE = -0.021848R1 + 0.027670Size$</td>
<td>The relationship significant</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on sales</td>
<td>$LNROS = 29.50800T1 + 1.013967T2 - 0.518038Size - 0.373898 LEV$</td>
<td>The relationship significant</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on sales</td>
<td>$LNROS = -0.549488 - 0.048290R1 - 268.9772R2 + 0.099382Size - 0.000591 LEV$</td>
<td>The relationship significant</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on assets</td>
<td>$LNROA = -3.987641 + 2.090623T2 + 1.095606LEV$</td>
<td>The relationship significant</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on assets</td>
<td>$LNROA = -0.549488 + 1.053270LEV$</td>
<td>The relationship no significant</td>
</tr>
<tr>
<td>The relationship between differentiation strategy and return on assets fixed</td>
<td>$LNROAF = 2.584381T1 + 4.971016T2 + 4.140690LEV$</td>
<td>The relationship significant</td>
</tr>
<tr>
<td>The relationship between leadership strategy and return on assets fixed</td>
<td>$LNROAF = 0.605712 + 0.213425LEV$</td>
<td>The relationship no significant</td>
</tr>
</tbody>
</table>
The Results of Hypothesis

The purpose of testing the hypothesis is evaluated the relationship between company strategy (leadership and differentiation) and performance in the field of research, which was conducted through the regression and correlation. The overall results show a linear relationship between company strategy and performance of firms listed in Tehran stock market. In general, the higher the power of model in the differentiation strategy than the leadership strategy in explaining the dependent variable of research namely returns. Tripathy, (2006) examined the strategic position and its impact on company performance in their study. He then introduced Michael Porter's generic strategies, this strategy, as the element knows that the direct impact on company performance, and subsequently his states that companies use the strategy of differentiation compared with efficiency strategies are more durable performance. His study included a ten-year period from 1996 to 2006.

Practical Suggestions Based on the Results

1- Based on the results, we can state that the strategy would be criterion for investment decisions in addition to other variables.
2- Company managers should implement differentiation strategy to increase market share, improve performance and remain competitive, and to achieve these goals, companies must make coordination between research and development and marketing departments.
3- Companies need to understand the factors affecting the company's strategy, choose their strategy (the distinction between strategies, leadership, or a combination of both strategies) and following the appropriate operational tactics as their appropriate strategy.
4- The government is implemented the appropriate incentive policies for the companies following their strategies, it will help productivity and financial performance.

Practical Suggestions on Future Research

1- Studied of the relationship between management control systems of the company's strategy.
2- Studied the interrelationships between company strategies and planning organization.
3- Studied the relationship between company strategies and economical and cash value added the company.
4- Studied impact company strategy on the viability returns.
5- It is suggested that future research should be considered a longer period study.

Limitations of the Study

The lack of efficient capital markets, as a confounding factor could affect research results that cannot be controlled by the researcher. The subject including of the present study is one of the bottlenecks in the implementation of research based on the capital market. Companies should be cautious in certain situations such as disasters and political conditions.

REFERENCES

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