The Effect of Business Cycles on Financing Policies of Companies Listed on Tehran Stock Exchange

Nafiseh Aghaei Firouzabadi, Forough Heyrani and Shahnaz Nayeb zadeh

INTRODUCTION

One of the things that is important about corporate status and finance is the status of economic and business cycles. Investment and financing policies of companies are in different internal and external methods like using external credit, short-term debt and long-term debt, which are the same as external finance, and internal financing, i.e., the issuance of shares, use of retained earnings, company liquidity and its raising [10]. Ormrod (2013) study conducted on private companies in the UK concluded that fiscal policy and investments in private companies are sensitive to changes, diversity of financing while credit contraction caused by the financial crisis has a negative effect on the performance and investments of private companies. Among characteristic of most modern economies is that their economic activity moves from boom period in which economic growth exists to a stagnation period in which negative growth of economic activity can be observed. Identification of these periods that are called business cycles all together has been the center of gravity of many researches in recent decades. Economic conditions can have a different effect on the company; so sometimes knowledge of the change of financing according to the business cycle would help investors and other decision makers in the financial markets for a more accurate prediction method in financing during periods of boom and bust.

Economic condition in Iran as a developing country is quite different from the advanced economies, while the economic rate of 3% can be indicative of high economic growth in a country like America. This rate in Iran, given the economic growth, implies an economic downturn [17]. Given no research has been conducted in this area in Iran, this study makes it possible for companies listed on Tehran Stock Exchange to predict accurate methods of financing in various economic conditions and come to understand how to control their budget during periods of boom and bust or how to minimize credit contraction by resorting to alternative sources of financing. This study is aimed at representing the sensitivity of the method of financing compared with the business cycle and economic periods boom and bust (the economy status). The main objective of this study is to investigate the effect of business cycles on different financing methods of companies listed on Tehran Stock Exchange.

Theoretical Foundations And Hypotheses Developing:

Business Cycle:

The term "business cycle" is referred to models repeated with business boom and bust in an economic system. Each business cycle has four modes: economic boom, economic bust, crisis and economic recovery. An "economic boom" is a situation in which commercial activities are at their peak and unemployment is in the...
lowest rate. After period of the economic boom, business activity will decrease and unemployment rises. This period is called "Economic Downturn". If the economic downturn lasts for a long time, then a situation arises that is called "economic crisis". A period in which the economy improves and unemployment decreases is called "economic recovery".

One of the economists conducted numerous studies on economic cycles is Vezly Michel, an American famous scientist. According to Bernz and Michell, business cycle is a kind of fluctuations occur in all economic activities in countries that their economies are often based on market economy or activities of businesses enterprises.

A cycle with almost simultaneous development and expansion begins at most economic activities followed by periods with same range of general stagnation, decline and the beginning of a boom and after a while ends in a boom phase of the next cycle. This sequence of changes is repeatable but without specific frequency. In terms of period, continuity of the business cycles varies from a year to ten or twelve years that cannot be divided into shorter cycles with similar oscillations characteristics [15]. The business cycle in the present study is periods of economic Periods of boom and bust that is generally considered as economic status. A dummy variable is used to measure the economic status; the number 1 is used for economic boom status while zero is used for bust economic status [11]. In order to determine economic periods of boom and bust, 5 periods of boom and bust in two years has been used [17].

Detteilor [5] study on a model of relationship between business cycle and status of company with the aim of creating a model of FM and variations in the dimensions of space and period of bust found that there are significant differences between these four areas with different characteristics. First, in terms of location it can be as multiple banking. Second, in terms of high- and low GDP growth can be as boom and bust [5]. Sonson (2012) in his study about implementing a tolerable business cycle with the aim of application of a tolerable business cycle in the form of a case study of a local manufacturer found that cycles of companies with tolerable cycle are divided in to 9 steps [13]. Alajoutsujarvi [2] to determine the dynamics of the business cycle on business relationships interviewed 12 company executives including 2 focused groups and a workshop group to identify the effects of the business cycle on highly volatile industry, methods to smooth the effects of highly volatile business cycles in the industry from the point of view of business provider of technology-based projects [2]. Wan et al. [16] study, with the aim of investigating the effects of major economies on return and volatility of the paper and lumber industries stock, was conducted. This study entitled “assessment of the economic impact of the huge new economics on portfolio of US wood products industry”. This study was in line with the business cycles from 1963 to 2010. They obtained practical results of volatility clustering and leverage effect in the industry stock portfolio [16]. In an investigation of how to get a job mobility in the business cycle and how the choice of the business cycle helps to occupational mobility, Liis et al. (2014) concluded that occupational mobility is higher during boom periods and lower during bust periods. Moreover, they found that demographic characteristics influence possibility of occupational change in business cycle during boom period while staff positions in the occupational hierarchy is remarkable during boom period [8].

Financing:

Companies need financial resources for investment, but financial resources and their use needs to be determined appropriately and it is the task of the financial manager to determine financial resources and how to use them.

Financing is divided into two following sections based on their financing:

- Internal resources
- External resources

In internal resources, financing of the company is through profits; that is company used the obtained profit in mostly operating activities to gain more efficiency instead of dividing the profit to the shareholders. However, in external resources the company uses liabilities (debt) and equity for financing. The main differences between debts and equity can be summarized as obligation to pay the tax benefits of debt [1]. Each of the above methods of financing has consequences that should be considered when decide about financing and using these resources. In the selection of short-term or long-term financing, the rule of the thumb used by company is that it is financed by “Short-term investments for short-term funds, and long-term investments for long-term funds.” This means that short-term borrowing cost is used when there is less risk, but the long-term financing is used for long-term investments [9]. With the introduction of the theoretical foundations of the business cycle and periods of boom and bust and taking into account the different ways of financing by the financial managers of the companies, the main hypothesis can be proposed:

H1: Business cycles have a significant impact on financing policy of companies listed in Tehran Stock Exchange.

Durendez [6] study compared brokerage firms and retail firms with banks in terms of audit reports on the financial decisions and their financing in Spain. The results show that use of the audit reports are important in investment decisions and financing [6]. One of studies on financing was conducted by Ormrod on statistical
population of private companies with a registered office in England in a sample size of 4973 companies. He investigated the effect of financial crisis of 2007-2009 on the financing and investment decisions of private companies and concluded that credit contractions had a negative impact on performance and investment of private companies while they were sensitive to changes and diversity of funding [10]. Castelnuovo [3] examined the effects of policy shocks on the financing opportunities in America using Vector Autoregressive (VAR) and showed that cholesterol-vals may underestimate the welfare cost due to large fluctuations in the economy [3]. Raymond investigated the limits of financing for investment in Brazil with Brazilian companies to study how to deal with the limitations of financing for investment and concluded that the company's investment in Brazil is dependent on liquidity [12].

Gudov [7], with the aim of analyzing qualitative and quantitative requirements of small and large Russian companies with opportunities and constraints in resource mobilization to finance investment in various sectors of company life cycle, investigated a combination of formal and informal sources of financing. Obtained results showed that the study results can help authorities in formulation of a SME plan to support the different stages of the financing supply chain of Russia [7]. Chowdhury et al. with the aim of investigating whether the lack of entrepreneurial in GCC company may influence their ability to obtain financing, studied entrepreneurial companies and financing through debt in the Persian Gulf Cooperation Council and concluded that entrepreneurial activity increases the Company's ability to borrow from banks [4]. In order to investigate the distribution of several factors that show the negative relationship between financial limitations and sensitivity of cash flow investment, Kim studied the impact of cash resources and external financing on sensitivity of cash flow investment and found that the replacement between cash resources and cash flow to some extent explain why financial companies limited to cash flow are not heavily dependent while level of net external financing also can explain a part of cash flow investment of this sensitive system [14]. In this study, financing variables are defined as follows [10].

Total debt is obtained by dividing the sum of short and long-term debt and business credit by the total assets of the company:

$$TD = \frac{short - term \ debts + long - term \ debts + business \ credit}{total \ assets}$$

Long-term debt is obtained by dividing noncurrent debts by the total assets of the company:

$$LD = \frac{long - term \ debts}{total \ assets}$$

Short-term debt is obtained by dividing current receivable loans by the total assets of the company:

$$LD = \frac{short - term \ debts}{total \ assets}$$

Business credit is obtained by dividing accounts and business payable documents by the total assets of the company:

$$TC = \frac{accounts \ and \ business \ payable \ documents}{total \ assets}$$

Net debt is obtained by dividing changes of total business non-current debt and current business receivables and financial liabilities towards the end of the period compared with liabilities of the beginning of the period by total liabilities and non-current financial liabilities and current business receivables of beginning period. To achieve the sub-objectives of the sub-study, the main hypothesis is provided and tested in 6 sub-hypothesis as follows:

H11. Economic boom and boost period has an impact on total debt of companies listed on Tehran Stock Exchange.
H12. Economic boom and boost period has an impact on long-term debt of the companies listed on Tehran Stock Exchange.
H13. Economic boom and boost period has an impact on short -term debt of the companies listed on Tehran Stock Exchange
H14. Economic boom and boost period has an impact on business credit of the companies listed on Tehran Stock Exchange
H15. Economic boom and boost period has an impact on net debt of the companies listed on Tehran Stock Exchange
H16. Economic boom and boost period has an impact on net business credit of the companies listed on Tehran Stock Exchange

Methodology:

Research method of the present study is applied, non-experimental correlational and ex post facto in terms of purpose, research method and data, respectively. Data required to testing the research hypotheses collected from stock reports (annual financial statements and explanatory notes), daily trading stocks through online exchange for 10-year period (2003-2012). These data stored in a database to be used to calculate variables.
Moreover, Information Exchange Organization software including Rahavard and Tadbirpardaz were used to complete and control data.

The statistical population of the study consisted of all companies listed on Tehran Stock Exchange. Proportional sampling method was used for the selection of the total available data. First, all companies that could participate in the sample were selected; Then all of the companies that did not meet any of the following conditions deleted and finally 60 companies were selected for testing. Requirements for selection of the companies are as follows:
1. Companies with no active investments in the industry of financial intermediating.
2. Companies with no business stop during the study.
3. Companies with available data.
4. Fiscal year in these companies should be ended in March and the company’s financial year shall not be changed during the study period.

Finally, after performing the above restrictions, 60 samples of the companies listed on Tehran Stock Exchange were selected by proportional method. In this study, descriptive statistics was used to describe the sample and population. Inferential statistics were used to analyze the data to test the relationships between variables, the main model of study based on research Ormrod study [10] designed as follows:

\[ Y_t - \beta_1 + \beta_2 \times BC + \beta_3 \times GT + \beta_4 \times BC \times GT + \beta_5 \times ROA + \beta_6 \times GT \times BC + \beta_7 \times ROA \times BC + \mu_t \]

**Findings:**

In this study, to evaluate the effect of economic situation on the company, eight hypotheses were raised that tested separately. To test the hypotheses, correlation between variables and regression equations through panel data were used.

**First sub-hypothesis analysis:**

This hypothesis about investigation of the impact of the economic situation (BC) on total debt (TD) proposed and tested using the following model:

\[ \text{Total Debt} = \beta_3 \times \text{ROA} + \beta_2 \times \text{GT} + \beta_4 \times \text{BC} + \beta_5 \times \text{GT} \times \text{BC} + \beta_6 \times \text{ROA} \times \text{BC} + \mu_t \]

First, given the type of model, fixed cross-sectional and time effects are tested. In the combined data, cross-sectional and time effects of data as well as their simultaneous effects are tested. In testing of all the study hypotheses, given Chow test statistic on fixed cross-sectional effects with a probability lower than 0.05 and for time constant effects with a probability above 0.05, Cross Sectional Fixed Effects model is preferred. After using the Chow test and time fixed effects model, Hausman test is used for the selection of data testing method between two Fixed Effects and Random Effects methods. In all hypotheses testing of this study, probability lower than 0.05 at 95% confidence level for random effects is rejected and for fixed effects is accepted. The result of the first sub-hypothesis testing is presented in table 1.

**Table 1:** Results of the first sub-hypothesis analysis.

<table>
<thead>
<tr>
<th>Adjusted coefficient of determination = 0.853475</th>
<th>F Statistics = 55.4571</th>
<th>Probability (Prob) = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durbin-Watson Statistics = 1.177319</td>
<td>T Statistics</td>
<td>Probability</td>
</tr>
<tr>
<td>Descriptive variable</td>
<td>Factor</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>ROA (Performance)</td>
<td>-0.0092</td>
<td>0.000597</td>
</tr>
<tr>
<td>GT (Sales growth)</td>
<td>0.043387</td>
<td>0.019184</td>
</tr>
<tr>
<td>BC (economic status)</td>
<td>0.03034</td>
<td>0.011184</td>
</tr>
<tr>
<td>GT * BC</td>
<td>-0.04289</td>
<td>0.019233</td>
</tr>
<tr>
<td>ROA * BC</td>
<td>-0.00033</td>
<td>0.000501</td>
</tr>
<tr>
<td>C</td>
<td>0.495131</td>
<td>0.011404</td>
</tr>
</tbody>
</table>

The results of Durbin-Watson statistics (no autocorrelation error terms) for all model assumptions indicate the relative independence of the data. According to the T statistics and probability, it can be concluded that regression equation is significant at 99% confidence level. The adjusted coefficient of determination of the model indicates the relevance of independent variables with the dependent variable (total debt). According to Table 1, the model adjusted coefficient of determination is 0.85. Therefore, on average 85% of the variability is explained by the model. According to the test results of probability model related to BC variable (ecomonomical status) that is lower than 0.01, the variable in the model is significant at 99% confidence level. Moreover, probability of ROA variable is lower than 0.01, so this variable is significant at a confidence level of 99% in the model, but probability of GT variable (Sales growth) and the probability of the product of BC variable multiplied by GT variable (Sales growth) is lower than 0.05, so this variable is significant at the 95% confidence level in the model, but the probability of the product of BC variable multiplied by ROA variable is lower than 0.05, so the variable ROABC in the model is significant at the 95% confidence level. On the other
hand, GTBC is not significant in the model. Therefore, given the significant BC variable in the model, as the main variable to accept or reject the hypothesis, it can be said that there is a relationship between BC (economic status) and total liabilities (TD). Thus, according to the results of this study the first hypothesis is accepted.

**Second sub-hypothesis analysis:**

This hypothesis about investigation of the impact of the economic situation on long-term debts (LD) proposed and tested using the following model:

\[
\text{Longterm debt} = \beta_0 + \beta_1 \cdot \text{ROA} + \beta_2 \cdot \text{GT} + \beta_3 \cdot \text{BC} + \beta_4 \cdot \text{GT} \cdot \text{BC} + \beta_5 \cdot \text{ROA} \cdot \text{BC} + \epsilon
\]

The results of the second sub-hypothesis testing is presented in Table 2.

**Table 2:** Results of the second sub-hypothesis analysis.

<table>
<thead>
<tr>
<th>Descriptive variable</th>
<th>F Statistics = 13.11012</th>
<th>Probability (Prob) = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA (Performance)</td>
<td>-0.00069</td>
<td>0.000205</td>
</tr>
<tr>
<td>GT (Sales growth)</td>
<td>-0.0092</td>
<td>0.00476</td>
</tr>
<tr>
<td>BC (Economic status)</td>
<td>0.00797</td>
<td>0.003554</td>
</tr>
<tr>
<td>GT * BC</td>
<td>0.008679</td>
<td>0.004786</td>
</tr>
<tr>
<td>ROA * BC</td>
<td>-0.00013</td>
<td>0.000157</td>
</tr>
<tr>
<td>C</td>
<td>0.093144</td>
<td>0.000376</td>
</tr>
</tbody>
</table>

F-statistics and its probability indicate that regression equation is significant at 99% confidence level. According to the test results of probability model related to BC variable (economical status) that is lower than 0.05, the variable in the model is significant at 99% confidence level. Moreover, probability of ROA variable is lower than 0.01, so this variable is significant at a confidence level of 99% in the model, but probability of GT variable (Sales growth) and the probability of the product of BC variable multiplied by GT variable (Sales growth) is lower than 0.05, so this variable is significant at the 95% confidence level in the model, but the probability of the product of BC variable multiplied by ROA variable is lower than 0.05, so the variable ROABC in the model is significant at the 95% confidence level. On the other hand, GTBC is not significant in the model.

**Third sub-hypothesis analysis:**

This hypothesis about investigation of the impact of the economic status on short-term debts in the companies listed on Tehran Stock Exchange proposed and tested using the following model:

\[
\text{Shortterm debt} = \beta_0 + \beta_1 \cdot \text{ROA} + \beta_2 \cdot \text{GT} + \beta_3 \cdot \text{BC} + \beta_4 \cdot \text{GT} \cdot \text{BC} + \beta_5 \cdot \text{ROA} \cdot \text{BC} + \epsilon
\]

The results of the second sub-hypothesis testing is presented in Table 3.

**Table 3:** Results of the third sub-hypothesis analysis.

<table>
<thead>
<tr>
<th>Statistics camera - Watson = 1.847333</th>
<th>Statistics F = 34.32106</th>
<th>Probability (Prob) = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA (Performance)</td>
<td>-0.00426</td>
<td>-9.51452</td>
</tr>
<tr>
<td>GT (Sales growth)</td>
<td>0.01774</td>
<td>0.014886</td>
</tr>
<tr>
<td>BC (Socioeconomic status)</td>
<td>0.01020</td>
<td>0.008957</td>
</tr>
<tr>
<td>GT * BC</td>
<td>-0.01588</td>
<td>0.015118</td>
</tr>
<tr>
<td>ROA * BC</td>
<td>5.95E-05</td>
<td>0.000407</td>
</tr>
<tr>
<td>C</td>
<td>0.264452</td>
<td>0.008801</td>
</tr>
</tbody>
</table>

According to results of testing probability of BC variable (economic status) which is above 0.05, so this variable is not significant at a confidence level of 99% in the model, moreover the probability of ROA variable is lower than 0.01, so the variable in the model is significant at the 95% confidence level. But probability of GT (Sales growth), the product of BC variable multiplied by ROA and ROABC in the model is above 0.05. So the variables in the model are not significant at the 95% confidence level. Thus, according to non significant BC in the model, as sub-hypothesis to accept to reject of the hypothesis, it can be said that there is a relationship between BC (economic status) and short term debts (SD). Thus, according to the results of this study the second hypothesis is not accepted.
Fourth sub-hypothesis analysis:
This hypothesis about investigation of the impact of the economic situation on business net credit proposed and tested using the following model in the companies listed on Tehran Stock Exchange:

\[ \text{Netdeposits} = \beta_1 + \beta_2 \times \text{ROA} + \beta_3 \times \text{GT} + \beta_4 \times \text{BC} + \beta_5 \times \text{GT} \times \text{BC} + \beta_6 \times \text{ROA} \times \text{BC} + \mu \]

The results of the fourth sub hypothesis testing is presented in Table 4. F statistics and its probability show that the regression equation is significant at 99% confidence level.

Table 4: Results of the fourth sub-hypothesis analysis.

<table>
<thead>
<tr>
<th>Descriptive variable</th>
<th>Statistics</th>
<th>Probability (Prob) = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted coefficient of determination</td>
<td>F = 13.11012</td>
<td>Non significant</td>
</tr>
<tr>
<td>Durbin-Watson Statistics</td>
<td>1.731014</td>
<td>Non significant</td>
</tr>
<tr>
<td>CF (Cash flow)</td>
<td>-1.46E-09</td>
<td>-0.40946</td>
</tr>
<tr>
<td>GT (Sales growth)</td>
<td>0.020838</td>
<td>0.012188</td>
</tr>
<tr>
<td>BC (economic status)</td>
<td>-0.00014</td>
<td>0.002197</td>
</tr>
<tr>
<td>GT * BC</td>
<td>-0.02104</td>
<td>0.011913</td>
</tr>
<tr>
<td>CF * BC</td>
<td>7.00E-09</td>
<td>2.23E-09</td>
</tr>
<tr>
<td>C</td>
<td>0.19103</td>
<td>0.001025</td>
</tr>
</tbody>
</table>

According to the test results of the probability related to BC variable (economic status) that is above 0.05, this variable is not significant at the 95% confidence level in the model. Moreover the probability of the product of BC variable multiplied by GF and CFBC in the model is lower than 0.01% and 0.05%, respectively. So the variables in the model are significant at the 95% confidence level. Thus, according to non significant BC in the model, as sub-hypothesis to accept to reject of the hypothesis, it can be said that there is no relationship between BC (economic status) and net business credit (TC). Thus, according to the results of this study the third hypothesis is not accepted.

Fifth sub-hypothesis analysis:
This hypothesis about investigation of relationship between economic situation (BC) and net debt (ND) proposed and tested using the following model in the companies listed on Tehran Stock Exchange:

\[ \text{Netdeposits} = \beta_1 + \beta_2 \times \text{ROA} + \beta_3 \times \text{GT} + \beta_4 \times \text{BC} + \beta_5 \times \text{ROA} \times \text{BC} + \mu \]

The results of the fifth sub hypothesis testing is presented in Table 5. F statistics and its probability show that the regression equation is significant at 99% confidence level.

Table 5: Results of the fifth sub-hypothesis analysis.

<table>
<thead>
<tr>
<th>Descriptive variable</th>
<th>Coefficient</th>
<th>Standard deviation</th>
<th>T Statistics</th>
<th>Probability (Prob) = 0</th>
<th>Level of confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted coefficient of determination</td>
<td>F = 3.62549</td>
<td>Non significant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson Statistics</td>
<td>1.939946</td>
<td>Non significant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA (Performance)</td>
<td>-0.00051</td>
<td>0.005518</td>
<td>-0.09229</td>
<td>0.9265</td>
<td>Non significant</td>
</tr>
<tr>
<td>GT (Sales growth)</td>
<td>-0.08008</td>
<td>0.130433</td>
<td>-0.06196</td>
<td>0.9506</td>
<td>Non significant</td>
</tr>
<tr>
<td>BC (Economic status)</td>
<td>0.015567</td>
<td>0.076405</td>
<td>0.203746</td>
<td>0.8386</td>
<td>Non significant</td>
</tr>
<tr>
<td>GT * BC</td>
<td>0.163445</td>
<td>0.168218</td>
<td>0.971624</td>
<td>0.3317</td>
<td>Non significant</td>
</tr>
<tr>
<td>ROA * BC</td>
<td>0.016192</td>
<td>0.005686</td>
<td>2.847678</td>
<td>0.0046</td>
<td>99%</td>
</tr>
<tr>
<td>C</td>
<td>0.885454</td>
<td>0.084106</td>
<td>10.52781</td>
<td>0</td>
<td>99%</td>
</tr>
</tbody>
</table>

According to the test results of the probability related to BC variable (economic status) that is above 0.05, this variable is not significant at the 95% confidence level in the model. Moreover the probability of ROA and GT (Sales growth) variables and the product of BC variable multiplied by GT are above 0.05, so the variables in the model are not significant at the 95% confidence level. But probability of the product of BC variable multiplied by ROA in the model is lower than 0.01%. So this variable in the model is significant at the 95% confidence level. Thus, according to non significant BC in the model, as sub-hypothesis to accept to reject of the hypothesis, it can be said that there is no relationship between BC (economic status) and net debt (ND). Thus, according to the results of this study the fifth hypothesis is not accepted.

Sixth sub-hypothesis analysis:
This hypothesis about investigation of relationship between economic situation and net equity issue (NEI) proposed and tested using the following model in the companies listed on Tehran Stock Exchange:

\[ \text{Netdeposits} = \beta_1 + \beta_2 \times \text{ROA} + \beta_3 \times \text{GT} + \beta_4 \times \text{BC} + \beta_5 \times \text{GT} \times \text{BC} + \beta_6 \times \text{ROA} \times \text{BC} + \mu \]
The results of the sixth sub hypothesis testing is presented in Table 6. F statistics and its probability show that the regression equation is significant at 99% confidence level.

<table>
<thead>
<tr>
<th>Table 6: Results of the sixth sub-hypothesis analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptive variable</strong></td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>ROA (Performance)</td>
</tr>
<tr>
<td>GT (Sales growth)</td>
</tr>
<tr>
<td>BC (Economic status)</td>
</tr>
<tr>
<td>GT * BC</td>
</tr>
<tr>
<td>ROA * BC</td>
</tr>
<tr>
<td>C</td>
</tr>
</tbody>
</table>

According to the test results of the probability related to BC variable (economic status) that is lower than 0.05, this variable is significant at the 95% confidence level in the model. Moreover the probability of ROA is lower than 0.01, so the variables in the model is significant at the 95% confidence level. But probability of GT variable, the product of BC multiplied by GT in the model is above 0.05%. So this variable in the model is not significant at the 95% confidence level. Thus, according to non significant BC in the model, as sub-hypothesis to accept to reject of the hypothesis, it can be said that there is a relationship between BC (economic status) and NEI. Thus, according to the results of this study the fifth hypothesis is accepted.

Discussion And Conclusion:
Consistent with previous results, the economic situation of the company has an impact on total debt in Iran. This is a direct and suggests increasing flow of credit in different economic situation. Moreover, total coefficients during boom and bust periods had not significant difference. Because the total debt consists of different variables, it can be claimed that economic status has a direct impact on long-term debt status. So firms in Iran in different economic status can rely on long-term debt. Moreover, total coefficients during boom and bust periods have a little difference about 01/0 that is not remarkable. The economic status has no effect on short-term debt, commercial credit and net debt. So companies in Iran in different economic status, cannot rely on short-term debt, commercial credit and net debt. Generally, it can be concluded that long-term financing of the economy channel in Iran had been base on the commercial boom and bust periods. However, short-term financing channels, commercial credit and net debt of companies in different economic situation did not change considerably. Moreover, negative coefficient of ROA in regression of long-term debt is consistent with the hierarchical theory. That is profitable companies in both commercial boom and bust cycles use less long-term debts and prefer internal financing to external debt.

REFERENCES


