INVESTIGATE THE EFFECT OF SHORT-TERM BANKING RELATIONSHIPS ON FINANCIAL DISTRESS OF LISTED COMPANIES IN TEHRAN STOCK EXCHANGE

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Abstract. Financial decisions are important to all natural and legal persons, therefore bank is known as a place that always takes the proper decision. Companies that are experiencing turmoil and the crisis is on the verge of collapse and financial resources they need to prevent it, so to reduce the risk of creditors and credit relationships that have died can reduce this risk. Present study investigates the effect of financial turmoil on banking relationships listed companies in Tehran Stock Exchange. For this purpose 132-stock company in the period 1384 to 1393 were examined. According to the statistical methods applied at 95% using regression analysis, findings showed that short-term banking relationships will reduce the amount of financial turmoil this year and next.

Keywords: Banking Relations, Banking Relations Long-Term, Short-Term Banking Relationships and Financial Distress

1 Introduction

One way to avoid bankruptcy, predict or showing signs of financial distress. Referring to the situation in financial distress that the company is unable to meet the obligations and pay debts or faces problems; of course this problem now is not the form of reduced liquidity surplus assets and liabilities of the financial turmoil may be temporary, but if the financial situation does not improve, it may be bankruptcy.

Various factors such risky investments and the company's financial turmoil and some of the capital structure as well as the correct decisions may reduce the financial turmoil. Capital structure, including securities issued by public, private investments, bank debt, commercial debt, leases and so well.

According to signaling theory and theoretical foundations of bank financing compared to public debt, in reducing the agency problems and issues related to information asymmetry is most effective. In addition to providing a good image of the company established banking relationships, ability to obtain external financing increases. Firms with more bank debt, more easily have access to foreign funds and financial turmoil and a lack of funds, they will be reduced.

Given the importance of financial leverage and bank debt that the company eventually has an important role, can identify the implications, strategies for control and guidance of this important element in improving the company's financial situation can be identified. In order to extend and integrate existing literature, this study attempts to expand the understanding of bank debt Companies listed on Tehran Stock Exchange, trying to reduce the impact of financial turmoil on banking relationships to be studied.

2 Theoretical Foundations

Banking relationships, when the lender repeatedly that extends credit to a company. Frequent lending to a company, by raising awareness information to the lender than the borrower's ability to repay the loan, can reduce the information asymmetry between the borrower and the lender. Information with respect to the debtor companies, including information about management's ability to deal with adverse situations and how to act in inappropriate and repay the debt, internal controls and financial statements of the company is spending. (With Company informed of this information asymmetry is reduced.)

Information asymmetry between the lender and the borrower when the company is facing financial distress and uncertainty about its ability to repay can be increased. Companies that have the financial distress to remain financially strong, have need of money and capital, hence, the company will rely on bank until the bank is interested in preserving the procedural income through this way. (Rosen Feld, 2014)

The financial turbulence is the general term used to refer to the Terms of Use that the company is unable to meet the obligations and pay debts or to have problems and in this case the company's liquidity is lower than its current liabilities and obligations, companies financial turmoil may be temporary, but if it does not improve the company's financial situation may lead to bankruptcy. (Miraki, 2012)

Given that the financial turmoil imposes costs on all company stakeholders (creditors, owners, investors and even government, etc.) Identify factors affecting the decrease in financial distress can be prevented incur such costs. Generally, identifying factors that reduce the company's financial distress and prevent their bankruptcy is very important and can be a turning point for the company.

Two views regarding the impact of banking relationships (loan) on financial distress company. The first view is that corporate banking relationships, when the bank decides to companies that are experiencing financial distress loan, the banks of the great advantages of information. The continued granting loans information asymmetry between borrower and lender can reduce, banks by appropriate information regarding the in fact that the company acquires the ability to repay the debt at any facilities, reduce information asymmetry.

It should be noted that short-term banking relationships, is longer, more and more accurate access to this information by banks, because the company when the facility received the short run, are required to provide financial information to the bank to close the deal also new. If you have a full disclosure of this information and their reliability, this can include information management capabilities to overcome perilous situations, internal controls and the accuracy of the financial statements of the company.

In fact, this information will allow the banks to companies that are experiencing financial distress trust and this ability to repay obligations on the part of these companies is stabilizing. The second view is that, unlike the first comment by Weinstein and Yafeh (1998) is provided, show that although lenders to make credit company, but they agree that, given that companies are experiencing financial distress will receive loans more difficult circumstances and conservative investment policies adopted by banks shall be unable to achieve profitability in the future.

This issue weakened the company's future status and value to banking relationships, for example, including bank policy is that if the financial crisis is now in the range, creditors with collateral heavier shorten the payback period on its bank insurance contracts and this for creditors biggest advantage is that there is information asymmetry is eliminated and the outstanding bank debt to avoid.

It is derived from the theory of insurance, (Mehrani, 2009) and is now quoted on the banking system's main problem the Bank of bank debt outstanding is that banks are not able to reclaim them. In general, financial analysts and financial turmoil of the financial crisis as the main risk to firms and investors refer arrives, because in the event that all groups will be affected in
some way associated with the company. Creditors, providers of finance, banks may be an important part of your quest to lose. Investors will be worthless assets and employees will lose their jobs. An overview of the phenomenon of crisis and financial distress, losses to society will exhibit overt and covert bankruptcy. Will be a waste of resources and lack of trust is a barrier to the development of economic and social future. Based on the importance crisis and financial distress is obvious. If this unpleasant phenomenon is predictable, perhaps it can be prevented from occurring or to minimize its impact.

Developing companies banking relationships makes further investments do and can also inhibit financial crisis and financial distress. According to Central Bank statistics on Iranian companies, also major source of financing through debt from banks and financial institutions active in this field is, which examines how corporate behavior in loans from the bank and the bank’s response to this request and finally the effects of facilities granted by banks to companies that are experiencing financial distress in the short and long term, results can be an important and useful to the users.

Given the importance of financing and the significant role that the company eventually, can identify variables affecting it and guidance and control solutions, is also important to identify the positive and negative consequences. Much research taking loans from financial companies as a risk indicator variable or financial condition of the company have been identified. In addition, many arguments to get financing associated with the company's growth opportunities there.

According to the theory (theory) signaling of bank financing compared to public debt, in reducing the agency problems and issues related to information asymmetry is more effective and banks in monitoring companies to collect and process certain information appear that compared with other lenders, enabling them to be more effectively monitor the borrower and this may reduce the amount of financial distress. (Ozkan and Ozkan 2004)

In order to extend and integrate existing literature, this study attempts to develop an understanding of the financial and banking relationships facilities Companies listed on Tehran Stock Exchange, linear trying to influence banking relationships examined the financial indignation. According to the stated purpose of this study is to answer the question, whether banking relationships and significant adverse impact on the Company's financial distress or not?

3 History Research

Internal investigations: Abbasi (2014) study entitled "The relationship between content components accounting profit with financial distress and information asymmetry" to do. In this research effect of financial distress, bankruptcy intangible assets and level of information content and operating cash flows have been examined in determining prices and stock returns. For this purpose, the data distressed 64 companies and 64 healthy companies listed on the Tehran Stock Exchange during the period 87 to 92 are used.

To test the hypothesis in relation to the stock prices of panel data with random effects in relation to not see the stock return of the used panel data. Research results show that financial distress significantly reduces the information content of prices of all components of earnings and stock returns have been in. This reduction in content is not related to the tangible assets and also for companies with high information asymmetry and for companies with low information asymmetry these rates are the same.

Also level of bankruptcy and informational content discretionary accruals there is a significant relationship, while the level of earnings in bankruptcy and information content not see all the components of stock returns no relationship. Pour Ali, et al (2013) study, "Relationship between the degree of financial leverage, financial distress of listed companies in Tehran Stock Exchange" did. In this study, the company's financial leverage as the main lever detected that explains the company's financial distress.

The study society consisted of listed companies in the stock during the period 2007-2011. After sampling 32 companies were selected by systematic elimination method. Findings show a significant negative relationship between leverage and the degree of helplessness. Yazdani (2012) study entitled "Relationship bankruptcy, financial distress, manage growth and free cash flow of listed companies in Tehran Stock Exchange" to accomplish. This study is correlational research method and survey method of data collection from websites of Tehran Stock Exchange.

The results of tests showed a significant negative correlation between excessive growth and excessive growth and financial distress and bankruptcy. Also characterized by rising financial distress, bankruptcy increases. While at the same time due to excessive growth and free cash flow on the strength of this relationship adds. Other companies that result in excessive growth and free cash flow less strong relationship exists between bankruptcy and financial distress.

Khajavi, et al., (2011), a study entitled "A comparative study of the quality of financial reporting and non-distressed distressed companies listed in Tehran Stock Exchange" did. This study compared the quality of financial reporting distressed and non-distressed companies in Tehran Stock Exchange 1381 to 1388 as well. To compare the quality of financial reporting and independent t-test for equality of variances in the second test of Levene's test was used at a given society.

The results show that the quality of financial reporting in non-distressed firms listed in the Tehran Stock Exchange, in compared with failed firms are less and less stable. It can be concluded that the findings obtained or non-distressed companies active in the Tehran Stock Exchange, they attempt to manipulate earnings or economic conditions in the country have problems with the country's projected cash flows and reduce the quality of financial reporting in non-distressed companies has been active in the stock.

Hosseini (2011) study entitled "investigate the effect financial leverage and capital intensity related to the financial distress of listed companies in Tehran Stock Exchange". This study, after controlling for variables such as size, profitability and cash assets, the impact of capital intensity (capital of the Company) on the relationship between financial leverage and financial distress all companies listed on the Tehran Stock Exchange during the period 2002-2009.

In this study measured the financial distress Altman model. Findings indicate a significant and negative relationship between leverage and resonator and financial distress. On the other hand significant correlation between the intensity of capital and financial distress is not and finally the results showed that capital intensity is a decisive moderating effect on the relationship between financial leverage and the financial distress of listed companies in Tehran Stock Exchange.

Farzinvash and Wealthy (2010) in a study titled "Global Financial Crisis experiences and lessons for the Iranian economy." Showed that different countries according to economic conditions and the vulnerability of the financial crisis, various economic policies such as reducing interest rates, supporting small businesses, extension of credit, plans to guarantee deposits and debt financing by reducing the interest payments will have to work in order to deal with the crisis.

External research: Höwer (2016) in a study entitled "The role of banking relationships when companies are in financial distress," German firms began to study. A total 319,423 company during the years 2013 to 2000 studied treaty. Tobit regression was used.
to test the hypothesis. The results showed that the banking relationship reduces the financial distress. They believe the dissolution of banks to finance more efficient decision making and the ability to depend on the characteristics and motivations of banks.

They also believe that banking relationships and enhance the company's ability to reduce the financial distress. Teruel García et al (2014) study entitled "The Impact of quality in achieving commitments on bank loans" to study Spanish companies involved. To this end, in 1281 the number of companies examined in the years 2005-1988. Two-stage least squares regression model to test their assumptions used.

The results showed a positive association between the quality of the bank's obligations and liabilities. This communication even controlling for other factors that affect access to bank loans and to check whether the correlation between two variables inherent in bank loans and established the company's commitment to quality. The results show that the benefits of high precision, information asymmetry between banks and corporations reduce the loan applicant.

Rosen Feld (2014) in a study entitled "The impact on the future of banking relations firms with financial distress" Showed that support borrowing in the six months before the financial distress significantly increases the probability of transition from distress; thereby reducing the effect of this (lack of education loans) now increases the turbulence intensity for the Altman Z model were calculated on the basis of their financial distress.

Young et al (2012) study entitled "Effect of predictability of earnings on bank debt contracts" did. They used a sample of 8022 bank loan agreement of US companies, concluded that companies with more predictable earnings, more favorable loan terms such as lower interest rates, longer maturities, collateral clauses restrictive and less.

The results also indicated that the link between the predictability of earnings and the cost of bank loans, to access private information about borrowers, competition between banks and bonds and depends on company size. Lee et al (2011) study entitled "Effect of concentration of capital in the industry on the relationship between leverage and financial distress restaurants in America" aims at testing the subject of financial distress in America's restaurant industry. Data collection firms over the period 2008-1990 in America.

Check the degree of financial distress with z scores measure the results indicate a positive effect modifier of the relationship between financial leverage and financial turbulence is the focus of capital. They believe that the company's leverage (leverage) as a main factor that explains the company's financial distress is known, and the fact that leverage increases the degree of financial distress.

Cho et al (2010) study entitled "Effects of Financial Distress and capital structure on work outside directors" to review the conflict of interest between shareholders and debt holders by check work outside directors when a company is experiencing financial distress or facing discussion a high financial leverage and came to the conclusion that external managers with higher financial distress less effort to control their financial levers.

Charalambakis et al (2008) study entitled "financial distress costs and capital structure" of 143,562 years-the company during the period 2002-1990 were examined. They use modified Altman z-score as a benchmark to estimate the probability of financial distress concluded, there is a positive relationship between leverage and the possibility of failure, so that no matter how helpless higher financial leverage is higher.

In fact, they are using the estimated probability of financial distress as a proxy for the costs of the financial crisis, found that the dynamic leverage the relationship between financial crisis and the leverage is very important. They were removed when the dynamic leverage the direct and positive relationship between financial distress and leverage achieved. Also included in the model when the dynamic leverage, and leverage the relationship between the probabilities of financial distress were negative. Our results show that the dynamics of leverage (capital structure) companies in financial distress very important asset.

4 Research Methodology

Due to the expected results of this research in the decision-making considerable financial managers, investors and other stakeholders should be, the purpose of this study from the perspective of applied research component, as well as the investigation discuss the relationship between several variables, considering the nature and procedure of the kind of research is descriptive. All companies listed in the Tehran Stock Exchange, constitute the study society.

A sample of the systematic elimination method is used, in this study, companies with the following characteristics were chosen as examples:

1. From 2004 to 2014 are present the stock.
2. Firms to the banks and financial intermediation, leasing and other companies not to invest.
3. In order to be comparable information, the fiscal year ending 29 March.
4. Trading interval not more than 4 months.
5. Data and information is complete.

5 Hypotheses and regression models

1. The amount of short-term banking has opposite relationships and significant effect on financial turmoil this year.

\[ F = \text{FD}\text{it} = \text{financial distress i and t}; \]

2. The short-term banking has relationships and significant adverse impact on the upcoming year's financial distress.

\[ F = \text{FD}\text{it+1} = \text{financial distress i d t + 1}; \]

\[ \text{STBR}\text{it} = \text{short-term bank relations firm i in period t}; \]

\[ \text{OPM}\text{it} = \text{operating profit margin i in period t}. \]

\[ \text{ATAt} = \text{Tangible assets of company i at time t}. \]

\[ \text{ATTu} = \text{The total asset turnover ratio of company i at time t}. \]

\[ \text{ICR}\text{it} = \text{Company interest coverage ratio at period t}. \]

\[ \text{CMVit} = \text{Changes in the market value of company i at time t}. \]

Here:
5.1 Studied variables

The variables used in this study are of three types: the dependent variable, independent variable and control variable. The dependent variable is the variable that to happen explain or predict their variability. The independent variable is a characteristic that its effect on the dependent variable is examined by the researcher. Variable control variable is the independent variable on the dependent variable to distinguish the effects of other variables, are examined. Accordingly variables used to explain the impact of the financial indignation banking relationships, as Table 1 have been used.

Table 1 List of studied variables

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Measurement criteria</th>
<th>Name of variable</th>
<th>Kind of variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>$Z_{it}$</td>
<td>$3.3 \times \frac{EBIT_i}{TA_{it}} + 1.4 \times \frac{RE_i}{TA_{it}} + 1.2 \times \frac{WC_i}{TA_{it}} + 0.6 \times M_i / TL_i$</td>
<td>Financial distress</td>
<td>Dependent</td>
</tr>
<tr>
<td></td>
<td>The ratio of short-term debt (credit) bank completely debt</td>
<td>Short-term banking relationships</td>
<td>Independent</td>
</tr>
<tr>
<td></td>
<td>Operating profit sharing virtually Sale</td>
<td>Operating profit margin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fixed assets virtually divided assets</td>
<td>Visibility of assets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please virtually divided assets</td>
<td>Asset turnover ratio</td>
<td>Controlling</td>
</tr>
<tr>
<td></td>
<td>Earnings before interest and taxes to interest expense (financial)</td>
<td>Interest coverage ratio</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Market Value Market Value difference this year compared to the previous period</td>
<td>Changes in market value</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The natural logarithm of market value</td>
<td>size of the company</td>
<td></td>
</tr>
</tbody>
</table>

5.2 Analysis tools

To analyze the data from this study will be used descriptive and inferential statistics. To describe and summarize the collected data, descriptive statistics (mean, variance, correlation, covariance,) and inferential statistics were used to analyze and test hypotheses will be. In this study, F-Leamer tests and Hausman, to determine the type of panel data and test t, to test hypotheses will be. Also for analyzing data mining results, Excell software and Eviews and Stata will be used.

6 Research findings

6.1 Descriptive Statistics

Table 2. Descriptive statistics of variables in this model for 132 sample companies, 10 years shows that the descriptive parameters for each variable separately is indicated. These parameters generally include data on central indexes such as mean, median, maximum, minimum, and distribution of information on indicators such as standard deviation, skewness and kurtosis is. Most important central index that represents the average balance and center of gravity point distribution and index the data center is perfect for showing off.

For example, the average variable interest coverage ratio is 152.6649 shows that more data on these variables are concentrated around this point. Another indicator of central median that shows the status of the community. As shown in Table 2 can be seen mid-term relationships between the bank and size of the company, respectively 0.0000 and 5.6300 is shows that half of the data is less than this amount and half are greater than this amount.

In general, scattering parameters, the criteria for determining the distribution of each other or the distribution of data compared to the mean. Among the most important scattering parameters, the standard deviation. Rate of asymmetry of the frequency curve is called skewness. If the coefficient of skewness is zero, and if the coefficient is positive, society is completely symmetric, skewed to the right and left if there will be negative skewness.

Skewness is positive for all variables in this model. Most variable interest coverage ratio and variable short-bank relations are skewed and variable operating profit margins skewed to the left and right skewness variable interest coverage ratio and the size of their deviation from the center of symmetry. Elongation rate of frequency curve to curve the normal variable is called skewness. If the coefficient of skewness is zero, and if the coefficient is positive, society is completely symmetric, skewed to the right and left if there will be negative skewness.

The variables used in this study are three types: the dependent variable, independent variable and control variable. The dependent variable is the variable that to happen explain or predict their variability. The independent variable is a characteristic that its effect on the dependent variable is examined by the researcher. Variable control variable is the independent variable on the dependent variable to distinguish the effects of other variables, are examined. Accordingly variables used to explain the impact of the financial indignation banking relationships, as Table 1 have been used.

Table 2. Descriptive statistics research variables

<table>
<thead>
<tr>
<th>Kurtosis</th>
<th>Skewness</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Name of variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.951</td>
<td>2.4330</td>
<td>2.218591</td>
<td>-6.4300</td>
<td>23.7500</td>
<td>2.669659</td>
<td>Financial distress</td>
</tr>
<tr>
<td>2.3621</td>
<td>0.2837</td>
<td>0.19736</td>
<td>0.0000</td>
<td>0.9000</td>
<td>0.351159</td>
<td>Short-term banking relationships</td>
</tr>
<tr>
<td>7.9485</td>
<td>2.3000</td>
<td>0.142748</td>
<td>0.0000</td>
<td>0.8100</td>
<td>0.078591</td>
<td>Operating profit margin</td>
</tr>
<tr>
<td>78.0408</td>
<td>3.39485</td>
<td>0.198811</td>
<td>-1.2200</td>
<td>3.7100</td>
<td>0.205152</td>
<td>Visibility of assets</td>
</tr>
</tbody>
</table>
6.2 The first hypothesis test result

To test the first hypothesis, the dependent variable, the financial distress this year with the independent variable (short-term banking relationships) and control variable (operating profit margin, asset visibility, asset turnover ratio, the company's market value changes and interest coverage ratio, size of the company) were examined. Select the type of model to test results in Table (3) is provided. According to the table to test the first model of panel data and fixed effects model was used.

<table>
<thead>
<tr>
<th>Significance</th>
<th>T Statistic</th>
<th>Standard error</th>
<th>Coefficients</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0000</td>
<td>-16.29163</td>
<td>0.426197</td>
<td>-6.943441</td>
<td>Intercept</td>
</tr>
<tr>
<td>0.0406</td>
<td>-2.050291</td>
<td>0.129258</td>
<td>-0.265017</td>
<td>Short relations bank</td>
</tr>
<tr>
<td>0.0000</td>
<td>11.13456</td>
<td>0.152575</td>
<td>1.701909</td>
<td>Operating profit margin</td>
</tr>
<tr>
<td>0.0000</td>
<td>-4.896968</td>
<td>0.18163</td>
<td>-0.882666</td>
<td>Tangible assets</td>
</tr>
<tr>
<td>0.0000</td>
<td>28.37748</td>
<td>0.71797</td>
<td>2.037414</td>
<td>Asset turnover ratio</td>
</tr>
<tr>
<td>0.0000</td>
<td>8.371867</td>
<td>0.012805</td>
<td>0.010705</td>
<td>Changes in market value</td>
</tr>
<tr>
<td>0.0213</td>
<td>-1.197802</td>
<td>0.000352</td>
<td>-0.000042</td>
<td>Interest coverage ratio</td>
</tr>
<tr>
<td>0.0000</td>
<td>19.17465</td>
<td>0.071863</td>
<td>1.377941</td>
<td>size of the company</td>
</tr>
<tr>
<td>0.0000</td>
<td>17.51984</td>
<td>0.028059</td>
<td>0.491597</td>
<td>The elimination of autocorrelation</td>
</tr>
</tbody>
</table>

0.8965 : Adjusted coefficient of determination | 0.9086 : Coefficient of determination
1.9624 : Durbin Watson | 0.0000 : Significance | F = 74.9762 : F Statistic

Source: research findings

According to the p-value obtained for the regression equal to zero and less than 5%, therefore the null hypothesis that all the regression coefficients are zero is rejected at the same time and this shows that all the regression coefficients are not zero simultaneously. Also, the Durbin-Watson (AR after entering the first level) in the range of 1.50 to 2.50, which indicates the absence of autocorrelation in the data.

Coefficient of determination model 0.9086 shows that 90.86% Changes dependent variable (the financial distress this year) is followed by the independent variable and control. Given that a significant bank of the Short variable coefficient is less than 0.05, so it can be concluded at the level of 5% short of indignation banking financial year there is a significant impact. The first model is the result of research.

It should be noted that the control variables, the operating profit margin (OPM), the visibility of assets (Ata), asset turnover ratio (ATu), changes in market value (CMV), firm size (SIZE) has a significant impact indignation year because the t-statistic p-value variables operating profit margin, asset visibility, asset turnover ratio, changes in market value, size is less than the level of 0.05. (P-value <0.05)

Given that achieved a significant level of short-banking relationship is significant for the independent variable, i.e. short-term banking relationships has a significant impact on the financial distress. According to the obtained coefficient is negative for the independent variable (short-bank relations) The impact of financial distress on the company's short-term banking relationships is negative; in other words, by increasing the intake of short-term facilities, the company reduced financial distress and an inverse relationship between short-term banking relationships and financial distress.

6.3 The second hypothesis test result

To test the second hypothesis, the dependent variable, the financial distress next year with the independent variable (short-term banking relationships) and control variable (operating profit margin, asset visibility, asset turnover ratio, the company's market value changes, interest coverage ratio, firm size) about investigated. According to the table to test the second hypothesis of panel data and fixed effects model was used. The second hypothesis test results in Table (4) is provided.

<table>
<thead>
<tr>
<th>Significance</th>
<th>T Statistic</th>
<th>Standard error</th>
<th>Coefficients</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0012</td>
<td>3.260765</td>
<td>0.737005</td>
<td>2.403201</td>
<td>Intercept</td>
</tr>
<tr>
<td>0.0000</td>
<td>-5.06244</td>
<td>0.199109</td>
<td>-1.00798</td>
<td>Short relations bank</td>
</tr>
<tr>
<td>0.00198</td>
<td>2.334047</td>
<td>0.276141</td>
<td>0.644526</td>
<td>Operating profit margin</td>
</tr>
<tr>
<td>0.0005</td>
<td>-5.3209</td>
<td>0.289553</td>
<td>-1.01949</td>
<td>Tangible assets</td>
</tr>
<tr>
<td>0.0000</td>
<td>7.293806</td>
<td>0.123855</td>
<td>0.903372</td>
<td>Asset turnover ratio</td>
</tr>
<tr>
<td>0.0151</td>
<td>1.953386</td>
<td>0.027066</td>
<td>0.05287</td>
<td>Changes in market value</td>
</tr>
<tr>
<td>0.6216</td>
<td>0.493758</td>
<td>0.000212</td>
<td>0.000105</td>
<td>Interest coverage ratio</td>
</tr>
<tr>
<td>0.9696</td>
<td>-0.03814</td>
<td>0.125642</td>
<td>-0.00479</td>
<td>size of the company</td>
</tr>
<tr>
<td>0.0000</td>
<td>0.493576</td>
<td>0.039741</td>
<td>0.258064</td>
<td>The elimination of autocorrelation</td>
</tr>
</tbody>
</table>

0.753273 : Adjusted coefficient of determination | 0.78578 : Coefficient of determination
2.092239 : Durbin-Watson | 0.0000 : Significance | F = 24.17252 : F Statistic

Source: research findings
Regarding the amount of p-value obtained for the regression equal to zero and less than 5%, therefore the null hypothesis that all the regression coefficients are zero is rejected at the same time and this shows that all the regression coefficients are not zero simultaneously. Also, amount of Durbin-Watson (AR After entering the first level) in the range of 1.50 to 2.50, which indicates the absence of autocorrelation in the data.

Coefficient of determination to show that model 0.78578 78.578% Changes dependent variable (the next year's financial distress) is followed by the independent variable and control. Given that a significant bank of the Short Variable coefficient is less than 0.05, so it can be concluded at the level of 5% of the Short-bank financial indignation next year there is a significant impact.

As a result, the second hypothesis is confirmed. It should be noted that the control variables, the operating profit margin (OPM), the visibility of assets (Atu), asset turnover ratio (Atu), changes in market value (CMV) next year has a significant impact indication; because the t-statistic p-value variables operating profit margin, asset visibility, asset turnover ratio, changes in market value is less than the level of 0.05. (P-value <0.05)

In general, given the significant level of short-banking relationships obtained for the independent variable is significant, i.e. short-term banking relationships has a significant impact on the financial turmoil next year, according to the coefficient obtained for the independent variable is negative (short-bank relations) The impact of short-term banking relationships over the next year is also negative financial distress; in other words, the findings show that the company's short-term debt problems reduces their financial distress.

Perhaps because of an increase lenders monitoring the performance of managers, or concerns about the exposure of their inability managers which there is a loss position. On the other hand findings showed that coefficient obtained for the independent variable (short relationship banking) in the second version of the first model, which suggests which short-bank relations next year than this year will be more effective and reduces the financial distress.

The overall results obtained from these two hypotheses compared to the results of research Pour Ali and colleagues (1392), Hussein (1390), Hówer (2016) and Rosen Feld (2014) is aligned and compared to the results of research Lee et al. (2011), Charalambakis et al (2008) is inconsistent.

7 Recommendations based on research findings

1) The results showed that increasing the intake facility (short-term) financial distress this year and reduce future; therefore, corporate executives (especially to managers who have their company's financial distress) and recommended to other users, which to decide to move out of the financial distress credit and financial facilities, consider, as this increases which were associated performance monitoring Director of the Bank, company's ability to increase investment and prevent the bankruptcy of the company.

2) Due to banks and financial institutions have a risk management committee shall adopt decisions on granting loans, leading to calls for strict conditions on granting their facilities, faced with such a situation with more regulatory and corporate managers face, therefore, it is recommended that owners, managers are required to provide the required financial resources to use their facilities, because this method can be regarded as a regulatory mechanism.

3. Applicants choose facilities based on their proposed rate of return on the project is the subject of contracts. In this case, the applicant's assessment of the profitability of the facility should be submitted to the bank and declare their desired activity. In this situation, banks are faced with financial constraints in providing, with interest rates suggested by the applicants facilities, able to choose plans with higher profitability and lower risk are that this may reduce problems of financial distress companies applying for loans, so the managers of companies experiencing financial distress, it is recommended that special attention be facilities based on contracts.

References


Primary Paper Section: A
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