Advances in Environmental Biology, 8(11) Special 2014, Pages: 487-496

AENSI Journals

Advances in Environmental Biology

ISSN-1995-0756 EISSN-1998-1066

Journal home page: http://www.aensiweb.com/aeb.html

An Investigation of the Factors Causing Bankruptcy and Their Evaluation: A Case Study of Arash Faraz Shargh Carton Manufacturing Company-Zahedan

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ARTICLE INFO

Article history:
Received 25 April 2014
Received in revised form
8 May 2014
Accepted 20 May 2014
Available online 16 August 2014

Key words:
bankruptcy, distress, bankruptcy causes, financial status, Arash Faraz Shargh carton manufacturing company-Zahedan

ABSTRACT

Bankruptcy is the last stage of a company's' economic life and influence all beneficiaries of that company. Therefore, investigating the factors causing bankruptcy is of high importance. In the present study, the effect of financial data on such investigation has been compared with each other. The purpose of this project is to present the theoretical principles of the research and investigate the bankruptcy causes of companies, as a case study of Arash Faraz Shargh carton manufacturing company-Zahedan. Additionally, this study is tended to propose an appropriate model to provide appropriate strategies to improve companies' status before the incidence of the financial crisis; by doing this, the financial status of companies as well as their ability to continue their activities is evaluated and decision making of shareholders and related beneficiaries are qualitatively improved. To identify bankruptcies of various units and find the factors causing bankruptcy, the required data has been provided out of the information available in Arash Faraz Shargh carton manufacturing company from 2005 (the establishment of the company) to 2008. After collecting observations, the research variables are divided into two categories of response and complementary. In this research, Cox proportional hazards model is evaluated using regression method.

To Cite This Article: Ahmad Naseri and Zahra Rashki Ghale No, An Investigation of the Factors Causing Bankruptcy and Their Evaluation: A Case Study of Arash Faraz Shargh Carton Manufacturing Company-Zahedan. ***Adv. Environ. Biol., 8(11),*** *487-496, 2014*

INTRODUCTION

Rapid advancement of technology and wide environmental changes has led to an increasing acceleration to economy. The increasing competition of enterprises has limited achieving profit and increased the probability of their bankruptcy. Accordingly, compared with the past, financial decision making has become more strategic. Financial decision making has been always accompanied with risk and lack of confidence. Presenting patterns for companies' general perspective is one of the ways of helping investors. Further, analyzing the factors causing bankruptcy is one f the instruments estimating companies' future status. Investors and creditors have a high tendency to discover the probability of companies' bankruptcy since they bear heavy costs in case of companies' bankruptcy. Bankruptcy is treated as an importance category in accounting. Investigating the factors causing bankruptcy and their evaluation in terms of financial principles, analyzing financial ratios as well as investigating the common models of bankruptcy are also important. As its main objective, accounting knowledge has focused on providing useful information for economic decision making as the first index in financial reporting. Accounting knowledge also contributes financial analyzers and other user in future financial and economic status by emphasizing on the characteristics and presenting theoretical principles and providing reliable qualitative and quantitative information. In addition to the internal characteristics of organizations including the specific qualitative and quantitative characteristics of an economic unit, the certain characteristics of companies such as the financial standards and legislation (such as legal and structural development of financial and capital markets) and macroeconomic conditions are effective.

Bankruptcy Definition:

In the financial literature, there are non-distinct terms including distress, failure, commercial unit's unsuccessfulness, bankruptcy, insolvency, and so forth. Of course, there are various definitions about bankruptcy that some of them are referred in the following.

According to Webster dictionary, "bankruptcy is lack of truth or qualification of cashes in short time". Dun and Bradstreet define the terms of bankrupt companies as follows:

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"The commercial units that stop their operations due to transfer or bankruptcy or stopping current operations due to loss by creditors".

According to the Islamic criminal law (Tazirat), bankruptcy is: "the mode of an insolvent merchant or a commercial company who cannot fulfill its trade commitments and contracts". Bankruptcy and its rules encompass only merchants and when ordinary people are so called insolvent when they are not able to pay their depts.

Bankruptcy Causes:

Determining the exact cause or causes of bankruptcy and financial problems in each specific case is not easy to do. Mostly, various causes altogether lead to bankruptcy. However, according to Dun and Bradstreet, financial and economic problems are the main causes of bankruptcy. In some cases, bankruptcy causes are identified through financial statements and records test. Those accountants who are experienced in analyzing collapsing companies' financial status can easily identify and specify bankruptcy causes. But sometimes, some issues support the appropriate cash flow in a commercial unit during a relatively short term and hide bankruptcy from accountants. Newton (1998) divided bankruptcy causes into two general classes of intra-organizational and inter-organizational causes. As he introduced, inter-organizational causes are as follow:

- Economic system's characteristics
- Competition
- Variations in commerce, improvements and transfers of public demand
- Commercial fluctuations
- Financial supply
- Casualties

Newton (1998) considered intra-organizational causes of bankruptcy of commercial units as the factors which can be avoided by some actions of the commercial unit. Most of these factors are due to incorrect decision making and their responsibility should be directly attributed to the own commercial nits. As he believed, these factors are as follow:

- Ample creation and development of credit
- Inefficient management
- Insufficient capital
- Betrayal and cheat

The Stages of Bankruptcy:

Newton (1998) divided the stages of a company's distress into some stages involving incubation, cash shortage, financial insolvency, and total insolvency finally leading to bankruptcy. Although most of bankruptcies follow these stages, some of companies may reach to complete bankruptcy without passing all the stages.

Budget deficit

Total insolvency

Bankruptcy

Incubation

Financial Insolvency:

The status of the commercial unit does not suddenly and unexpectedly lead to bankruptcy. In incubation stage, there may latently be one or more unfavorable situations for a commercial unit which can be immediately identified. Production demand change, continuous increase in overload costs, obsolete production methods, and so forth are of these factors.

Investigating the theories of Bankruptcy:

Bankruptcy creates heavy costs for investors, creditors, mangers, workers, suppliers, and customers. Finding the cause of companies' overthrow will rescue companies from indispensable collapse through necessary planning. Therefore, predicting bankruptcy of companies is the prerequisite of preventing bankruptcy. In such a case, researchers investigate high amount of information for the potential prediction of bankruptcy. For example, selecting ratios and analyzing them can show deviation points to predict companies' bankruptcy. In spite of disagreement among researchers, lack of a theoretical definition of bankruptcy may be the reason of such a difference. The literature of bankruptcy is practically unable to present a complete theory to explain the cause of companies' bankruptcy. Lack of management qualification, the decrease of productivity, and imposing heavy debts can be a clear theoretical interpretation of bankruptcy probability. However, when it is tried to avoid bankruptcy and overthrow of companies, it is also necessary to identify the basic causes of their overthrow.

Investigating the literature of bankruptcy of companies reveals that:

The first, lack of a basic theory

The second, lack of the principles of selecting the ratios- in this part, there are two subjects:

a. The principles of prediction ratios are difficult;
b. There is disagreement on the financial ratios, preventing to understand bankruptcy causes.

The third, the methodology used to find bankruptcy model in bankruptcy literature finally fails; this methodology is also open to criticize.

However, two kinds of bankruptcy literature are separately propounded by Jang Yung.

1. Bankruptcy literature presented by functionalists in which various prediction models (mostly fully successful) are open to criticize due to lack of a theoretical base. By the way, the collected information about bankruptcy causes is mostly descriptive rather than qualitative. In this kind of literature, also, it is focused on the inference of the inherent cause leading to bankruptcy. Therefore, the descriptive and prediction theory is discussed due to separately analyzing the data such that this separation can cause to appearing dissatisfaction in bankruptcy literature. Although analyzing accounting ratios can be a choice for researcher, such a choice is not identical for all researchers and accordingly, the different ratios, the data results and information gathering as well as their results face problem.
2. The theoretical principles of bankruptcy analysis are superficially discussed in bankruptcy literature. Here, there are some questions asking that what problems can lead to a company’s bankruptcy? Or can selecting a theory contribute mangers to prevent their companies’ bankruptcy and overthrow? Or is bias for a theory useful for bankruptcy? [14].

New Theories of Bankruptcy:

Bankruptcy theory is the failure in a company occurred due to lack of control by one or several shareholders. Bankruptcy appears not in the form of accounting information in a company but due to pure negative value of that company. As a rational feeling, managers usually attempt to gain shareholders’ support against their opponents. The history of companies shows that problems appear when one or several shareholders focus on accounting information analysis. Most of bankrupt companies have not been able to gain shareholders’ support through accounting information since mangers are not able to satisfy different shareholders and they do not implement supportive program. Most of non-bankrupt companies should implement some programs about accounting information to gain shareholders’ support.

Jan Yung believes that bankruptcy and distress have traditionally focused on dept items that can be paid in case of referring. In a number of contracts, in fact, the way of paying debts during distress have been mentioned and conditioned and to maintain liquidity and pay according to the contract, some contents have been embedded in the contract for financial mangers as supervisory duty.

From the time of Keynes, this economic theory has been known which is separate from ownership. In 1963, as an old economist, Solomon announced that companies’ mangers should be monitored. He explains that from the time of Adam Smith, the classic economic theory has been the primary target of creating national wealth by maximizing profit and when inclusive ownership is replaced with the current management, choosing asset, volume and financial structure of a company seems important.

Of course, before the advent of big companies, manager-owner had to pay more attention to employees, customers and sellers but when management has been separated from ownership, there is a less need of attention. In the universal ideal theory of Smith in which ownership is replaced with workers (unions have no power anymore), customers have not a wide volume of choices to purchase their required products and TV channels do not make choosing a complex activity through the modern advertisements, but in this case, ordinary people act based on principles and the phrase of “let customer investigate” becomes dominant”. Creating new commercial companies causes to determine both management and their objectives through trustful mangers. Elongation of a company’s life is related to the company’s management and the satisfaction of a wide spectrum of the company. Meanwhile, shareholders group is not limited but a wide spectrum of managers and employees are known as new owners of the company. According to the theory propounded by financial experts, maximizing the wealth of this group merely depends on financial managers; even creditors depend on owners and highly consider debt items as an important issue in trade; accordingly, they will act carefully in financial contracts. Further, to increase the life of companies’ mangers, employees and sellers should be satisfied.

The Mechanism of the Control Theory:

Lack of control is one of the reasons leading to bankruptcy. But the fact that what formations exist to control and who should control is open to further discussion. Although legally, a company should be controlled by various shareholders, the economic activities are continuously determined by management of the company.

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Now, if these activities satisfy all shareholders? The important thing is that the management group should accept the control of various claimants.

The management should considers long term control on the company which satisfy all the shareholders; the minimum satisfaction of the shareholders means to follow the opinions of the shareholders, of course, their opinions should not disturb the status of the financial statements. If each group of the shareholders destroys the company's power by extra control and activities, they will principally the considered control. In the following, it is clarified that the shareholders and investors may destroy the control of the company through which activities.

1. Shareholders

Among shareholders of a company, there are some shareholders who are highly interested to receive stock profit and the increase of stock price. The unsatisfied shareholders, meanwhile, directly perform various destruction operations in the frame of the professional societies and institutes' pressures to manage that company. They can sell their stock in the market or use their veto against the management. The control is treated to be lost if these operations lead to the decrease of stock price or the financial power of the company is treated.

2. Creditors

Creditors are another group of investors who demand the payable money' real and issue in a certain time. In terms of their cash's collection, they maintain debtors. This group may use several ways: refusing to extend repayment period, refusing to pay loan in the future, increasing the rate of effective interest, non-directed demands such as claim on company's assets or attempting to predict bankruptcy.

3. Customers

As a group of shareholders, customers search for appropriate commodities production, good services and appropriate price with a rational credit life. Such an interest can be justified by comparing with other companies' products as well as better technology, superior commodities, ensuring the quality of products or non-immediate payment. The limitations which decrease selling pr lack of receiving and collecting receivable accounts lead to the lack of control somehow. Very low financial ratios such as the ratio of inventory flow (the ratio of selling to inventory), receivable accounts' flow, average period of collection and profit margin can be the signs of problem and lack of control.

4. Employees

The demands of employees involve paying appropriate salary, training employees, advancement, appropriate work situation, and permanent employment. Employees expect to have the authority to leave work, creating employee formations, the demand to pay more salary, less work, and claim against the company. Demonstrations, slumber and low cash flow surely lead to the collapse of a company. This probable debt and group movement can lose the control of the company. Traditional analysts do not consider these factors and in the traditional method, productions measurement, non-especial profit and the ratio of wages and salaries cost are ignored while these items can be the beginning of a company's death.

5. Suppliers

Suppliers also can have a significant role in bankruptcy of a company. Their primary interest includes the increase of permanent communication and the increase of demand for commodity through its prompt collection. The failure of such an expectation can lead to the decrease of transportation, the decrease of commodity's exit, the decrease of selling, the increase of competitors' selling, the limitation of credit line, and the increase of price. If the credit commerce is avoided or cost is highly increased and the cost price is increased, the operations of the company are fully destroyed. These are the signs of lack of control. However, inappropriate inventory flow ratios, gross profit percentage, average period of payment in long term, commodity's transportation, and the decrease of selling all reflect the lack of control.

6. Mangers

Managers play a double role; just like employees, they are interested in job continuous, job satisfaction, appropriate salary, and the need of power and prestige and on the other hand, they protect shareholders' benefits as the company's attorney and agent. Lack of control is different in the first role of management and in the other role of management. In the first role, management defends the benefits of appropriate salary, potential advancement, power and prestige, personal satisfaction, and performing actions by management. Maximizing the personal wealth as the cost of shareholder, deceiving company, creating combinational activities (increasing the size of the management's power and prestige), and purchasing company and releasing stock from the control of owners all or one of them can endanger the company's position and disappear the control by shareholders.

7. Statesmen

Finally, the company should meet the main needs of the government gathered by the authorized organizations such as tax gathering institutes, anti-trust and monopolist institutes, and institutes supporting consumers and environment. Government imposes a series of rules to the company and the management should try to minimize such a pressure. Therefore, the management should obey the tax related law and avoid from collusion and inappropriate projects' implementation. The management should also respect the environment, produce good quality products and provide customer with the complete information regarding the products. The manger should predict the demands of the government and try to change the company's output resources; the manager should also investigate whether these demands and the resources' output disturbs the control in the company or not.

The Literature Review

1. The Foreign Studies

Woodlock (1900) was the first person who studied bankruptcy. He performed the classic analysis in railway industry and presented the results of his research in a paper entitled "the proportion of operational costs to gross accumulated profit". In a paper entitled "the principles of investing on bonds", Jamberline (1911) created the performance ratios using the ratios obtained by Woodlock. During 1930 to 1935, in their study entitled "the analyses methods in financial ratios of bankrupt companies", Venikor and Smith found that the most accurate ratio to determine bankruptcy status is the ratio of working capital to total asset. The researches carried out by William Biour (1966) were the first studies caused the creation of a model to predict bankruptcy.

2. The Studies Conducted in Iran

Amiri Soleimani (2002) conducted a study to investigate the indices of bankruptcy probability in Iranian environmental conditions. Using questionnaire, he polled the opinions of the studied sample about the predictability of a set of 15 financial variables and 10 non-financial variables in bankruptcy probability. He finally investigated 15 financial variables in a linear separating model. His final model included only four ratios including operations cash flow of each share to the profit of each share, cash.

As the researches showed, 80% of the failed companies have been removed from the market in the first four years of their activity and 20% of the remaining companies have to leave the market in the next five years of their activity. According to the mentioned studies, the failure causes of companies are as follow:

- 46.7% due to lack of business knowledge and experience;
- 12.4% due to lack of appropriate economic conditions;
- 12.3% due to lack of financial information and statistics refinement;
- 10.7% due to poor marketing and selling techniques;
- 9.5% due to employees problems;
- 6.2% due to struggles of unions and associations;
- 2.7% due to lack of investigation and using consulting services.

The Pattern of Computing Companies' Bankruptcy in the Future:

Investigating the studies carried on the value of financial statements' information to predict the critical crisis indicates that accounting information can predict the occurrence of financial crisis in companies. However, it should not be ignored that there is little agreement on the type of financial ratios. Investors always seek to find the ways through which they can predict financial bankruptcy of a company. These ways are usually divided into two groups:

1. *Market risk analysis:*
2. *Ratio analysis:*

The patterns of removing crisis:

1. Omitting the advantages to avoid the generation of the units which face problem in the future and clarifying the status of the current problematic units to select and implement the solution of the problems;
2. Supporting, directing, following up, and justifying units to use the facilities predicted in rebuilding law and the acts confirmed by the government during the recent years;
3. Encouraging and creating the necessary obligation and motivation to have an industrial and acceptable accounting system of their financial reports by the related officials;
4. Supporting the creation of specialist and experienced groups to contribute owners and managers of problematic units to find the problems, select and implement the effective and practical strategies;
5. Interference of government to create confidence about pay off and debts repayment through designing a process;
6. Acceptable acts of parties (creditor and debtor) and creating the possibility for productive units to achieve appropriate liquidity flow through continuity and promoting the levels of activities;

7. Moratorium of governmental debts of qualified problematic units and injecting financial resources in case of debt;
8. Accepting the request and paying loan to productive units, especially the problematic units by banks without the conventional investigations and studies if the applicant presents the warrant out of enterprise and gratuitous.

The Statement of the Problem and Research Type:

The purpose of this project is to present the theoretical principles of the research and investigate the bankruptcy causes of companies, as a case study of Arash Faraz Shargh carton manufacturing company-Zahedan. Additionally, this study is tended to propose an appropriate model to provide appropriate strategies to improve companies' status before the incidence of the financial crisis. Accordingly, the present project tends to find an answer to the question asking that "what are the bankruptcy factors of a company?"

Arash Faraz Shargh carton manufacturing company (joint stock) started to work in 2005 with a private capital of 20 billiards Rials and in 2006, its production line was completed with nominal capacity of 20000 tones in three working shifts, embedding 20 professional workers, 5 technicians and 2 industries engineers. The company had four 500-meter burrows located in industrial town of Zahedan. The company was established to produce brown and white cardboards from waste paper, compressed industrial cardboard, and various kinds of cartons and cardboard-made boxes. The investor of the company was a governmental worker who had no knowledge and information about management and the so called industry. This investor gave all the responsibilities to a non native specialist and he did not directly control the company. Non native workers and specialists also were not so willing to work and did not properly fulfill their duties due to the hard life in Zahedan. All the equipments and machineries were purchased from Germany. Since fulfilling the operations needed specialist labor forces and there was a lack of professional labor force in the city, the required workers and specialists were supplied from the neighboring provinces with high salaries. In addition to wages and salary, the investor of the company provided home for the labor force near to the company. On the other hand, the consuming materials required for production eight were imported from Germany or were provided by collecting waste papers across the country. After passing various stages, such kind of paper should be processed to obtain a paste to be changed, then, into cardboard in the company. This cycle was costly and time-consuming, leading to a high depreciation for the machineries and increasing the costs.

The company produced good quality product. The main markets of the products were the markets of Tehran, Isfahan and Mashhad. In addition to the desirable quality with a lower price, the so called company competed with other companies across the country. By increasing the price of dollar, the ingredients were purchased with a high price and since goods' packaging price was increased, instead of carton, nylon was used to package products; and nylon was used with a lower and more reasonable price to package products compared with carton since it was the result of oil materials' recycle. Accordingly, the market of purchasing carton and cardboard-made packaging was disturbed and the volume of company's selling was decreased in the market. Due to the fact that packaging products created an extra pressure for factories, the factories that purchased carton and cardboard changed packaging from small to big forms which it led to the decrease of purchasing carton.

Another problem that carton manufacturing companies faced is the import of prepared carton and paper from the outside of the country. These imports have a negative effect on carton manufacturing companies and significantly decrease their selling and finally influence the so called company.

Additionally, due to using glue and paper, fire is one of the most common events occurred in these companies and smoking and doing other fire-causing by the workers can be causes of fire in the companies. Therefore, personnel should have complete information about safety points and obey them; and even they should be trained if necessary. However, the so called company continued to its activity for four years in spite of all these problems.

Notably, the so called company was burnt in fire due to ignorance and lack of obeying safety points.

Methodology:

The present study is a descriptive- correlation (semi-experimental) research. In this research, using the information extracted from the financial statements of Arash Faraz Shargh carton manufacturing company, the ratios existing in the statements were determined and evaluated in each studied year. The statistical population included Arash Faraz Shargh carton manufacturing company. The required data and information were collected from basic sample financial statements, i.e. balance sheet, profit and loss statement, cash flow statement, and other information published by the company. Moreover, the information related to the theoretical discussions was collected from library resources including books, magazines and specialized accounting websites.

The procedures of implementing the research are as follow:

1. Specifying the statistical population

2. Computing the financial ratios and other required parameters as the independent variables during the considered years
3. Selecting appropriate model with less error criteria and more correlation between the independent variables
4. Evaluating the models fitted for evaluating the validity of the model with the research data

Due to the high importance of identifying failure and crisis causes, the bankruptcy causes have been classified into five groups by specialists. The information obtained in the selected samples only included three factors such as management problems, financial problems and problems due to selling. Figure 1 shows risk function of each of the three factors over time for the selected sample.

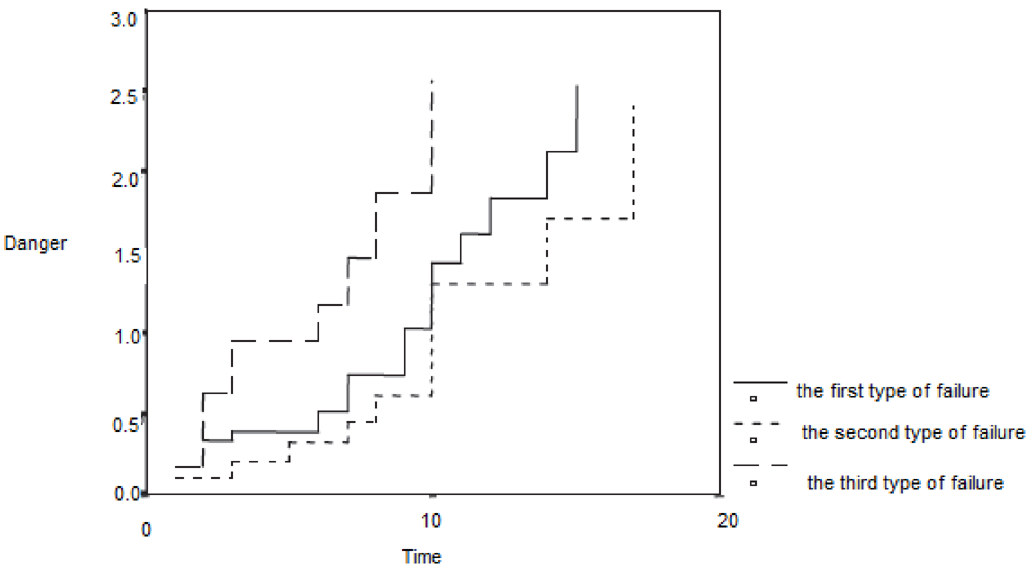

Fig. 1: The risk due to three causes of bankruptcy.

Performing each project involves determining and defining each of its variables. After collecting observations, the variables are divided into two classes of response and complementary. The variable of response is the time duration of activities or production in the company. The complementary variables fall into several classes:

1. The characteristics of mangers such as age, gender, education, job experience, native or non-native.
2. The characteristics of workshop such as ownership of the unit, ownership status of the unit, fixed capital and flow capital, the place of purchasing the required ingredients and machineries, and standard license.
3. The characteristics related to the market and economic status such as alternative commodity, competitors, the activities of other workshops through allowed methods, the barriers related to selling and issuing commodities, status an price of ingredients in the market, the need of load, giving loan, and the problem of liquidity.

Since investigating each of hypotheses using Cox semi parametric method and finding the factors influencing units' bankruptcy, each of the closeness factors should be separately mentioned, it is avoided to mention each of them in the hypotheses. The propounded hypotheses are as follow:

1. It seems that the characteristics of units' mangers such as age, gender, education, job experience, and profession as well as the status of mangers' establishment influence the closeness of the company.
2. It seems that the characteristics of industrial units such as ownership, type of ownership, the amount of fixed and flow capitals influence the closeness of the company.
3. It seems that the characteristics related to the market and economic status such as alternative commodity, competitors, the activities of other workshops through allowed methods, the barriers related to selling and issuing commodities, status an price of ingredients in the market, the need of load, giving loan, and the problem of liquidity influence the closeness of the company.

The above mentioned hypotheses were analyzed using Excel software and Splus software. Due to the fact that the program written for Splaus software could not compare the separation of the categorical variables' rows as the referent row and the rows comparable with the so called row in data analysis, the rows of such variables were inevitably separated; such that a column with a value of 1 in one alternative and a value of zero in the referent alternative was allocated. In this case, only the columns of the alternatives compared with the referent row was entered into the analytical data pattern and the column related to the referent column as the row with zero level was not entered in the pattern. Other variables were entered into the pattern as the continuous variables. To find the factors influencing the probability of bankruptcy, each of the three failure causes was evaluated using Cox pattern. In this regard, the effect of each of complementary variables was firstly evaluated on management problems. After specifying the effective factors and putting aside the neutral factors which had separately influenced management problems in the previous stage were simultaneously evaluated in the final pattern. For two other factors, i.e. financial problems and the decrease of selling were also evaluated using Cox pattern. The results obtained from each factor are as follow:

1. *Management problems (the firs- type of failure):*

As shown in Table 1, the factors related to management problems as the first type of the continuous variables influencing the probability of bankruptcy involve age of mangers, their professional experience, and fixed capital and as the discrete variables include receiving bank facilities. Some of them positively and some others negatively decrease the probability of bankruptcy; for example, the increase of mangers age leads to the increase of their experience; accordingly, the probability of bankruptcy of this kind is decreased (negative coefficient). Mangers' related industrial profession as the second effective factor decreases the risk of bankruptcy of the company. Further, for receiving financial facilities, tow third of management problems are decreased.

Table 1: Evaluating Cox pattern of the firs- type failure (all observations).

Quantitative variables	Rows	Coefficients	Standard error	P-value
Age	-	-0/05841	0.02363	0.1300
Managers' experience	-	- 0/00148	0.38320	0.99999
Specialized experience	-	- 0/71970	0.26770	0.072000
Need of loan	Yes No	- 0/32240 -	0.81640 -	0.69000 -
Financial facilities	Yes No	- 2/28300 -	1.058800 -	0.03100 -
Liquidity problem	Yes No	- 0/66220 -	0.84160 -	0.43000 -
Fixed capital	-	0/00022	0.00007	0.00087

Moreover, it is observed that high fixed capacity, in the beginning of exploitation, when the workshop is involved in managerial problem, cannot avoid bankruptcy of company. Fixed capital is the primary investment of a company to take the license of exploiting organizations. The bankruptcy problem of companies facing managerial problem cannot be easily decreased.

2. *The financial problems (the second-type of failure):*

Discrete variables of liquidity problem of company involve the place of purchasing ingredients, machineries problem and the barriers of selling such as the factors influencing company's financial bankruptcy. The above mentioned factors are of the production barriers of small industries. According to Table 2, non-governmental industries facing liquidity problem to supply their working capital have a higher probability of the financial bankruptcy compared with the companies that do not have such a problem.

Table 2: Evaluating Cox pattern of the second- type failure.

Complementary variables	Rows	Coefficients	Standard error	P-value
Age	-	0/00269	0.02819	0.92000
Education	Academic	0.33980	1.19600	0.78000
Managers' experience	-	- 0/05528	0.36420	0.88000
Specialized experience	-	- 0/42350	0.3550	0.023000
Ownership status	Under rental company's ownership	0/44670 -	1.15300 -	0.70000 -
Liquidity problem	Yes No	1/86700 -	0.88250 -	0.03400 -
Ingredients	Rare Appropriate	0/45210 -	0.86240 -	0.60000 -
Machineries purchasing	Province Out of province	- 1.41200	- 0.74470	- 0.05800
Machineries problems	Technical problem After-selling services	0.28880 0.26460	0.84660 0.82250	0.73000 0.75000
Commodity selling problem	Production decrease Bad quality High price	2.02100 3.24000 1.24900	0.84950 1.00600 1.24100	0.01700 0.01700 0.31000
Advertisement	Marketer Other	-0.75300 -	1.29400 -	0.056000 -

Furthermore, the companies that their raw materials required for production are purchased from out of the province are more exposed to the risk of bankruptcy. Commodity and productive goods selling problem are of the factors influencing the financial bankruptcy. With respect to the obtained results, the factors of production decrease, bad quality and lack of enough information about the market are more rapidly exposed to the financial bankruptcy threshold but among these factors, bad quality and lack of enough information about the market are more dangerous factors in terms of bankruptcy-causing. The factors such as technical problems and after selling services of productive machineries have no effect of company's financial bankruptcy while the factors such as oldness and depreciation of machineries lead to the financial bankruptcy. In such a failure, although the variables of experience and profession of mangers have not become significant, it indicates that experience leads to the decrease of bankruptcy probability under any condition.

3. *The problems of selling decrease (the third-type failure):*

Table 3 indicates that the variables of mangers' age, their experience, need of loan, and ingredients' price influence the bankruptcy due to selling decrease. Specialized mangers face fewer problems related to selling decrease.

The answer of No in the variable of receiving loan with two rows of yes and no has been adopted as the referent row. According to Table 3, there is a reverse relation between receiving financial facilities and the closeness due to selling decrease. The changes of ingredients' price in the market have been mentioned as one of the effective environmental factors in marketing planning of companies. It can be said that these changes and fluctuations threatens the activities of companies, leading to their closeness. Hence, for production planning and marketing, prices stability at each level is better than its variability.

Table 3: Estimating the parameters of the third- type failure.

Quantitative variables	Rows	Coefficients	Standard error	P-value
Age	-	-0/04218	0.02546	0.09800
Specialized experience	-	- 0/47800	0.24340	0.05000
Financial facilities	Yes	- 1/38000	0.67250	0.04000
	No	-	-	-
Ingredients' price	Expensive	-	-	-
	Variable	1.8830	0.74970	0.01200

Generally, companies may face one of the three failures of financial, economic and legal. In financial failure, weakness in fulfilling timely commitments reflects financial dilemma. Lack of flow capital is usually the sign of financial dilemma. Lack of flow capital is a sign which derives from other factors such as weak capital structure with excessive current borrowing, high operational costs and like that. Usually, economic failure, financial failure and credit failure are distinguished. In general, commercial failure equals economic failure since the institute, for investment, has not been able to gain a profit similar to what is accessible in another place. Legal failure is not the lack of ability to timely fulfill commitments but refers in a case in which total assets are not sufficient to pat total debts. Typically, various causes lead to bankruptcy and the most important cause is the lack of proper management of companies. Management errors, high costs, poor financial activity, neutral activities of selling and high production cost by themselves or in combination can be a warning for bankruptcy of the company. Economic recession, interest rate changes, the increase of inflation, ingredients' price fluctuations, and international economic conditions are of the factors causing organizations' bankruptcy. Government's decisions, unwanted natural events and life stage of organizations are also of the factors leading to bankruptcy. Due to limited capital, specialized and efficient labor force and lack of direct support of government compared with big productive units (governmental), non-governmental industries are more rapidly exposed to the threshold of bankruptcy. As a result, due to the role of industry growth in the improvement of economic status, it is necessary to investigate the barriers and problems speed down or even stop production process.

Conclusion:

According to aforementioned, there are various reasons for commercial bankruptcy. In developed countries, such a category is considered and monitored through legal systems while in developing countries, the probability of bankruptcy is higher, especially if law provides a little support for the beneficiaries of bankruptcy. Therefore, it is necessary to select a method evaluating the financial status of companies but since no evaluative method of performance presents a complete model and beside a model, there is always a need of professional judgment of decision maker, relying on a bankruptcy model does not always lead to correct decision on the behalf of beneficiaries groups.

By the way, there are various beneficiaries who require optimal decision making and it is necessary to limit these groups in order to focus on one of those beneficiaries to present the model. However, the act of commerce law modification has attempted to maintain the benefits of bankrupt and creditors while it seems that it is necessary such laws are comprehensively reviewed and investigated once every few years.

It seems, however, that there have been a few practical and legal actions regarding bankruptcy in Iran and with respect to more economic and commercial flourishing, a long way will wait for the occurrence of commercial bankruptcies while there is not a clear and complete definition about bankruptcy in Iran.

Recommendations:

1. To have skillful labor force, it is recommended to build some academies around factories to train efficient native workers to work at factories; for example, technical colleges of Zob Ahan in Isfahan and Gold academy in Mashahd;
2. Lack of excessive import of foreign cardboard and its effect on domestic industries;
3. Government's support from producers to perform warrantee services of machineries by their manufacturers;
4. Subsidiary for factories due to the increase of water, electricity, gas, etc. rate.

REFERENCES

[1] Alikhani, M., 2006. Evaluating the models of bankruptcy in stock exchange, MA thesis, Islamic Azad University, Science and Technology branch.
[2] Altman, E., 1968. 'Financial ratios, Discriminant analysis and the prediction of corporate bankruptcy ,' Journal of Finance ,4) September), pp: 54-89.
[3] Amini, O., 2005. Evaluating bankruptcy in companies listed in Tehran stock exchange. MA thesis, Islamic Azad university, Central branch.
[4] Bahang, R., 1996. The financial management (the 1st volume), the third edition, the specialized accounting and auditing center of accounting organization.
[5] Beaver, W., 1966. 'Financial ratios as predictors of failure ,'Empirical Research in Accounting.Selected Studies, Supplement to Vol.
[6] Farhang, M., 1995. The culture of economic sciences (the 7th edition), Tehran: Alborz publication .
[7] Gitman, LJ., 1996. Principle of managerial finance (7 RD ED). New-york: Harper Collins college.
[8] Grant Newton, W., 1981. "Bankruptcy and Insolveny Accounting "Practice and procedure ; New York: The Ronald Press Company.
[9] Hajiha, Z., 2005. The collapse of company, its causes and stages, audit, no. 29: 8-18 and 24-43.
[10] Kamvernon, T., 1990. "Accontingtheory"second Edition, pp: 55-58.
[11] Ofri Langroudi, M.J., 1987. the terminology of law, Tehran: Ibn-e-Sina library.
[12] Ohlson, J., 1980. 'Financial ratios and the probabilistic prediction of bankruptcy'(Journal of Accounting Research, pp: 18.
[13] Raei, R. and S. Fakahi Pour, 2004. Predicting financial distress of companies using artificial neural networks, the financial researches, pp: 17-39.
[14] Rahnamy Rouposhti, F., H. Nikoo Maram and Sh. Shahvar Diani, 2006. The financial and strategic management (value making), Tehran: Kasakavoush publication
[15] Saeidi, A. and A. Aghaii, 2009. Predicting financial distress of companies listed in stock exchange using Bayes networks, accounting and auditing researches, 16(56): 59-78.
[16] Safari, A.R., 2002. The relation of financial ratios and the continuity of companies' activities, MA thesis, Allame Tabatabaei University, Tehran.
[17] Soleymani Amiri, Gh. R., 2002. Investigating the indices predicting bankruptcy in Iranian environmental conditions, doctrine dissertation of accounting, Tehran University, management faculty.