

# **Investigation of the Causes of Appearance of Overdue Receivables and Presentation of Appropriate Solutions for Decreasing (Case study of Melli Bank, Qom Branch)**

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## **ABSTRACT**

This research investigates the causes of appearance of overdue receivables and presentation of appropriate solutions for decreasing them in Melli Bank (Qom branch). This research by investigating the relationship between control and monitoring on one hand and appearance of overdue receivables on the other hand, suggests a solution for decreasing overdue receivables and increasing the efficiency of banks and making them able to pay facilities. This research is of the type of applicable, and descriptive method are used by means of different types of research methods in such a way that in the investigated society, the status of control and monitoring on the facilities and overdue receivables will be described. Qom Melli Bank has 133 personnel and is an A-graded branch. The statistical population in this research is all the overdue which have been sent to the executive office of deed registration. In this research, in order to analyse the data obtained from the samples, descriptive statistical methods and illative statistics have been used. The illative statistics show that banks, in order to create the necessary facilities for developing the activities of different productive, service, commercial, industrial, etc. sections, a part of their needed resources and funds can be provided in a partnership way. By identifying the factors of creation of overdue receivables as well as the factors which cause their non-receipt, the future creation of overdue creation can be avoided and by receiving them, the amount of receivables can be decreased.

**KEYWORDS:** Over-due Receivables, Bank system, Melli Bank (Qom Branch)

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## **1. INTRODUCTION**

Credit or loan dispensation or in law words interest-free banking operations, and facilities dispensation are one of the main responsibilities and functions of banks. Most individuals attend the banks for meeting their credit needs and borrowing. This is because individuals are not always able to provide their entire financial needs and capital for performing their financial affairs and therefore it is inevitable for them to provide the entire or some portion of their financial resources for projects and doing business by taking help from other individuals. Banks are the best and the most trustful mean for providing credit needs of individuals (Masoodi, 2008, 137).

### **Iran banking and overdue receivables**

Observations show that Islamic banking rules are not performed in a good way in our country's bank system and in practice we do not use its mechanisms in the country's bank system. Non-compliance of the country's banks to the profits and losses in the contracts ordained with the borrower means their non-compliance to the Islamic banking and this is a beginning for appearance of overdue receivables in the country's banks (Eghtesade Iran, 1389, 29). Not using the cost-profit analyses in the economical projects is one of the main causes of appearance of overdue receivables in the country. In developed countries, the banks and financial institutes investigate the cash flow procedure of an institution in order to truly evaluate the risk of economic activities of the borrower institution. In other words, they get informed of the probability of inability of the institution to perform its commitments, and as a result they maintain a stock reserve in the bank or financial institution for not being entirely damaged in case the paid funds are not returned. Unfortunately, these evaluations do not have an acceptable position in the feasibilities and validations of Iran banking. In addition to this, many plans which get loans do not have justifiable business plan (Eghtesade Iran, 2010, 29).

### **Definition of overdue receivables**

Receivable which is considered as the overdue commitment of the customer and in dictionary means requiring, and overdue which means retarded and in the custom of overdue banking is referred to as the bank's demand from the customers for the dispensed facilities, transactions, and services. It is proposed in two ways:

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- **Uncategorized claims** refer to the commitments in which the underwriters do not obey their commitments at the appropriate time and at the due date, and the bank maintains the aforementioned resides in the related facility and transaction categories and applies only peaceful methods and restraint and assistance and primary proceedings (invitation, talk, admonition, and warning) for receiving them.
- **Categorized claims** refer to the commitments in which the underwriters do not obey their commitments at the appropriate time and at the due date, and the bank after applying primary and peaceful methods, transfer them to the categories such as claims arising from the different Islamic contracts, the customers liabilities for the paid Rial and foreign guarantees, the receivables arising from the unpaid account credits, the accounts of overdue receivables, etc. (Rabizadeh, 2008).

The C, D, E, F, and G clauses of the first matter of the regulation of collection of demands of the banks and financial institutions have categorized the demands into five types. It is clear that each bank has some demands. The demand word is general and consists of all the demands of a bank including current, overdue, bad and uncollectable.

- a) **Overdue demands** are the demands which are not refund at the due date
- b) **Bad demands** are the demands which have a weak probability of being paid
- c) **Uncollectable demands** are the demands which are not collectable for some reason (Piroozifar, 2008)

Overdue demands and banks' credit risk

"Risk" is defined as:

"Fluctuation or standard deviation (square root of the variance) of the pure cash flows of an organization (or in case the corporation is very large, a unit in it)"

Credit risk is the risk of unrecovery of a property or loan (only if the contract side is bankrupted), or is the risk of retardation in the payment of installments of the loan. In both of the cases, the current property value decreases and therefore the bank payment ability decreases.

Basel Committee on Banking Supervision (BCBS) has pointed out the subject of credit risk and problematic properties in the eighth and ninth principles of the basic principles for the effective bank monitoring.

### **Prevention of appearance of demands**

The country's bank system is based on the four main and important basics including 1-reliability and trustworthiness, 2- technical capabilities and competency, 3- financial and credit capability, and, 4- credit division and collateral.

If we put this credit system next to the deposit absorption system (resources mobilization) of the banks (the relationship between the debtor and creditor in Qarzolhasaneh and the relationship of the attorney and client in investments) which is based on the validity and legality of the transaction and the axial role of trustee and the attorney for the banks, and commitment to the contracts, then we will be able to find out the approaches for prevention of appearance of overdue demands. Experiences show that when the bank system resources are allocated to real economic activities, then overdue demands do not appear. Even if the demands are overdue, the approach to overcome them is decided, and as a result the bank interests, the prestige of the bank system administrators, and the investments of the investors of the plans and activities have not been put at risk.

### **Overdue demands and time management**

In following up and collecting the demands, timing and time management have very important roles. The debtors who do not want (not the ones who cannot) to pay off their debts to the bank, recognize time management for confronting the banks proceedings very well. They are familiar with the difference of interest rate of financial unorganized market with the official market and the banks interest rate. They understand inflation and time value of money and are good calculators, and they know that if the retardation penalty is accumulated on their debts and profit, the banks are yet welched. Therefore the bankers should not waste time when facing these opportunist individuals and implement tens of ways available for collecting the demands and thus return the people's deposits to their actual position.

### **Overdue demands and talks**

Some of the responsible staffs of the bank, after hearing the debtor's suggestions about solving the demands problem, get angry and since the debtor's suggestion is not in accordance to the banking rules and regulations, they disrupt the basis of negotiation and this usually results in threatening and upsetting the debtor and making him unavailable for the bank (anyway the bank responsible have the right to do these because they see their prestige and effort experience at risk). Anyway we should note that many of the rules and regulations did not exist in the past and in fact they were known as "out of regulations and rules". By the individuals' suggestions, many impossible became possible and have turned into rules and regulations, and on the other hand, many of the rules and regulations have

changed or omitted due for being inefficient, weak and stiff. A clear and up to date example of the subject is the solving the problem of some parts of overdue demands by dispensing new facilities which has been pointed out by the official and top authorities recently (this paper wont investigate the subject). Anyway, before the official announcement, most of the responsables did not have enough courage to enter the subject because they thought they work resume would be at risk (although they still consider some cautions). Anyway, everyone knew and know that one of the approaches is this to help the active units which are involved in demands can be saved by dispensing them facilities (with strong pledges) (Rabieezadeh, 1387).

### **The cause or causes of creation of overdue demands**

The banks' overdue demands arise from two resources: first, arbitrary resources and the desire of the person who has received the facilities; and second, the effect of factors out of the authority of the facility taking person which consist of economic situation, variation of currency rate, interest rate, and war. The source which seems important is the arbitrary affairs of the side that has contracted the bank:

- Impunity from the demands penalties has become an important factor and an economical motivation for the overdue demands in the banking system to increase. In fact, the customer avoids paying the demands because he/she thinks that when his/her demands increase, the probability of his penalty impunity increases.
- Unnecessary strict behaviors at the time of facilities compensation and as a result uncertainty of the customer about credit renewal when needed have become one of the causes of irreversibility of the resources. Investigations show that in some cases the cause of failure in restoring of resources is not due to the ability of the customer, but is due to the uncertainty of the customer about the credit renewal and entering the administrative bureaucracy.
  - Not properly acculturation about the importance of commitment in Islam.
  - Unlimited importation of foreign goods with low price and not selling the products produced inside the country. This causes lack of liquidity for the owners of productive industries and therefore it will lead to the industry bankruptcies and unemployment.
  - The condition of recessional inflation, economic fluctuations, restrictions, management and personalization.
  - Not paying enough attention to investigating the credit of guarantors
  - The out-of-organization factors of creation of overdue demands, obligation of banks to dispense compulsory facilities.
  - Long period of prosecutions throughout judicial resources and courts of law (Nazarian, 1388).

According to the studies and investigations carried out in the field of overdue demands in different banks, it can be concluded that the type of facility is effective on increasing overdue demands. In addition to that, economical fluctuations are also effective on the amount of overdue demands. Lack of monitoring is another effective factor.

Since monitoring is important at the three stages of resource allocations, its consumption and return of expected resources and profits, investigation of overdue documents show that at cases in which the resources are paid and carefully monitored, the amount of overdue demands is so low that is not considered. Therefor it seems that allocation of the credit resources by the customer to affairs out of the subject of the contract has caused the influence of the type of usage of facilities on the overdue demands. For the economic fluctuations and inflation rate, it has been concluded that if the amount of difference between the inflation rate and bank interest rate is significant, as it has always been in recent years, the debtors (the bank facility takers) become benefited by subsidies which is of great value. Therefor for the facilities which have been dispensed by lower (minimum) interest rate, the amount of their subsidies are higher and therefore their refund has been delayed. Undoubtedly, the problem of determining the bank interest rate and its effect on the country's economy will be an important challenge for the economic organizers and the bank system responsible (Najaf, 2008).

### **Methods to decrease or collect overdue demands**

Collecting the banking system overdue demands needs novel formulations and the current situation of the country, the pressure caused by overdue demands should not be imposed on the producers and economic entrepreneurs in the country.

Each credit case and overdue demand has its own condition and therefor it is not possible to determine a specific time for carrying out them for reaching the result (Nazarian, 2009).

- Negotiation, assistance, moratorium or legal action

- Resolving the overdue debts of the customer with their contract side is executable in one of the following ways:
  - The customer pays back his debts including the loan, interest in cash or according to an agreed timing table to the bank. In these cases, the penalties are spared partly or completely.
  - In the cases in which the relevant economic unit possesses an acceptable technical and economic justification, or becomes a unit with technical and economic justification after modifying the structure, and evaluation of the institution shows acceptable and reliable goods production, services and revenue, and provides enough reliability for the bank manager that if assisted the institution is able to pay back the new facility as well as the overdue demands, and paying new credit does not make the debt load of the corresponding corporate heavier, the board of directors of the bank can proceed to do necessary agreements with the corresponding customer.
  - In cases in which neither of the above ways is possible, legal and judicial actions can be done in order to acquit the pledges and collect the demands.
- Training the staff, specially the forces related to facilities dispensation
- Holding courses and workshops in order to increase the proficiency of the specialists and managers of the credit committees
- Considering educational and work backgrounds in appointing the credit staffs of banks
- Creation of an up to date and comprehensive software consisting of the credit background of the customers of the country's bank network
- Creation of electronic monitoring procedures out of the authority of the staffs of the credit committees of the banks, and influencing of the governing laws related to the overdue demands on the limitations of the credit decision makings.
- Effective management of the dispensed facilities by means of strengthening the credit evaluation of the banks' customers and creation of necessary guarantees for collecting the credits (Nazarian, 1388)

#### **LITERATURE REVIEW**

- Farahbakhsh, Mohammadi (2001): Mohammadi carried out his thesis having the title of "Investigation of credit information and overdue demands of the case study of Iran Melli bank"
- Baradari, Jafar, (2007) has carried out his thesis having the title of "Investigation of the situations and factors affecting on appearance of overdue demands and presentation of appropriate approaches for preventing it in Saderat Bank based on the Moral Hazard model"
- DavoodiKasbi, Aliasghar (2004) has carried out his thesis having the title of "Investigation of the effective factors in creation of overdue demands of Refah Bank"
- CharkhiSahlabad, Ali (1996) has carried out his thesis having the title of "Investigation of usability of the financial statements of the corporates in dispensing the credit facilities"
- Kasravi, Bahareh (2008) has carried out her thesis having the title of "Investigation of effective factors on creation of overdue demands of the mining and industry sector and presentation of the preventing methods in the Tehran East Saderat bank "
- Soori, Gholam (1997) has carried out his thesis having the title of "Investigation of factors influencing the improvement of financial structure of the country's financial banks".
- Derakhshandeh, Ahmad (1997) has carried out his thesis having the title of "Investigation of the role of the pledges in facilities dispensation in the Rebaless banking system"
- RoohiZahraee, Abbas (2008) carried out his thesis having the title of "Investigation of the causes of increase in the due demands of Iran Saderat Bank in the five-year period of 72-76 and ways for decreasing it"
- Izadpanahee, Negahdar (1993) has carried out his thesis having the title of "Level of reliance of financial banks on the information of financial statements in dispensation of bank facilities"
- Modarres, Ahmad, and Zekavat, SeyedMorteza (2003) have presented a paper entitled "Models of credit risk of the bank customers (Iran ToseeSaderat bank as a case study)"
- Khansari, Rasool, and Fallah shams, Mirfeiz (2010) have presented a paper entitled "Evaluation of the structure model of KMV in prediction of default of the corporates accepted in Tehran Stock Exchange"
- Janice Boucher Breuer (2006) has presented a paper entitled "The problems of bank loans: Conflict between interest and organizations"

- L.C Thomas (2000) has presented a paper entitled “A study on the credit and behavior ranking: Prediction of financial risk of borrowers”
- Yenpao Chen, Ruey-JiGuo, Rao-Li Huang (2008) have presented a paper entitled “Two stages of credit evaluation of bank loans”
- Joao A. Bastos (2010) presented a paper entitled “Prediction of default of bank loans”

### **Research hypotheses**

The subject investigated here is the causes of creation of overdue demands. It is clear that for clarifying the causes, scientific questions can be exposed, but the alternative way is to follow a shortcut which is common in scientific researches. In this alternative way we directly expose the answers other than the questions which can be considered as a scientific hypothesis.

- 1- There is a relationship between decreasing monitoring and control on one hand and overdue demands on the other hand in such a way that decreasing control and monitoring causes creation and increase in overdue demands.
  - a. There is a relationship between reduction of control and monitoring before facility dispensation on one hand and overdue demands on the other hand in such a way that increasing the control and monitoring before facility dispensation for being assured of reliability of the borrower and the guarantor leads to a decrease in the amount of overdue demands.
  - b. There is a relationship between control and monitoring during facility dispensation on one hand and overdue demands on the other hand in such a way that increasing the control and monitoring during facility dispensation and observance of the regulations and criteria in visiting the place where the plan is going to be carried out and then verifying the loan application leads to a decrease in the amount of overdue demands.
  - c. There is a relationship between control and monitoring after facility dispensation on one hand and overdue demands on the other hand in such a way that increasing the control and monitoring after facility dispensation and creation of a tracking and demands collecting bureau for introduction of the properties (confiscation of management properties) and decreasing the execution notification time period leads to a decrease in the amount of overdue demands.

**The main hypothesis:** There is a relationship between reduction in control and monitoring of credits on one hand and overdue demands on the other hand.

**First secondary hypothesis:** There is a relationship between reduction in control and monitoring of credits before facility dispensation on one hand and overdue demands on the other hand.

**Second secondary hypothesis:** There is a relationship between reduction in control and monitoring of credits during facility dispensation on one hand and overdue demands on the other hand.

**Third secondary hypothesis:** There is a relationship between reduction in control and monitoring of credits after facility dispensation on one hand and overdue demands on the other hand.

## **RESEARCH METHOD**

The aim in this research is the actual, objective and regular description of the characteristics of a situation for which a descriptive-analytic method has been used. After the topic was chosen, a library research was carried out for identifying the effective factors and then a field research has been done in order to gather information from the cases in which their repay was delayed (and had been categorized as overdue demands and past due) and in order to be collected, were transferred from the transaction office of Melli Bank Qom Branch (Division of Demands Collection and Tracking) to the executive office of the Organization of Registration of Deeds.

### **Statistical universe**

Qom Melli Bank is one of the top banks in the country. This unit by having 125 personnel and being placed at the center of Qom possesses a privileged position and due to the number and variety of facilities and as a result the variety in the overdue facilities, it is an appropriate universe for investigation of overdue demands.

#### **Sampling size and calculation method**

For the universe size, the control and monitoring before facilities dispensation (installment payment history of the borrower), the control and monitoring during facilities dispensation (verification of loan application, visiting the place the loan is going to be used, the installment payment history of the guarantors), and control and monitoring after facilities dispensation (the time period of execution notification, properties confiscations must be provided. The

sampling size is about 25 % of the noted universe including 78 cases which have been randomly selected and then analyzed.

**Sampling procedure**

At this stage, the cases are categorized into three categories:

No.	Number of executive cases	Amount
1	128	Lower than 10000000 Rial
2	100	From 10000001 to 50000000 Rial
3	82	Higher than 50000001 Rial
<b>Sum</b>	310	

No.	Number of executive cases	Amount
1	32	Lower than 10000000 Rial
2	25	From 10000001 to 50000000 Rial
3	21	Higher than 50000001 Rial
<b>Sum</b>	78	

**Sizing tools and how to create and execute**

In order to gather the information, all of the Qom Melli bank cases which have been sent to the executive office of Organization of Registration of Deeds are note-taken, and the documentaries available in the executive and transaction (division of collection of installments) offices have been used in the tables and plots and then analyzed.

**Regression Coefficient**

In order to better predict the dependent variable, each coefficient is multiplied in its relevant variable and this coefficient determines the contribution of the related independent variable in the prediction. The  $\alpha$  coefficient shows the intercept or the constant coefficient. When all the other independent coefficients are zero, the predicted value equals this coefficient. The multiple regression is a generalization of the simple regression. Generalization here means taking into account more than the independent variable X. In other words, we can study the effect of many variables on Y.

**R<sup>2</sup> Coefficient**

This quantity which is called R-Squared by the computer measures the regression ability to predict the dependent values in the sample region. If the regression process is complete, then R<sup>2</sup> will equal one, and if the process is not better than the simple average of dependent variable, then R<sup>2</sup> equals zero.

**Research findings and their analysis**

First, we express the research findings in a descriptive way and then we analyze the hypotheses by means of available statistics.

**Effect of extent of customers with bad records**

In order to investigate the effect of extent of customers with bad records on the overdue demands, a linear regression has been used in which R<sup>2</sup>=42 %.

**Table 1: Effect of extent of customers with bad records**

The scattering source	Sum of squares	Degree of freedom	Average of squares	Calculated F	P	Level of reliability
<b>Regression</b>	3/145	1	3/145	3/321	0/72	<b>0/05</b>
<b>Error</b>	49/295	76	0/649			
<b>Sum</b>	<b>51/449</b>	<b>77</b>				

H0: The extent of customers with bad records is effective on the remained overdue demands

H1: The extent of customers with bad records is not effective on the remained overdue demands

Since the calculated F is higher than 0.05, it can be concluded that there is no direct relationship between the extent of customers with bad records and the remained overdue demands.

X<sub>1</sub> is the extent of the customers with bad records X<sub>1</sub>=/348 +0/432Y<sub>1</sub>

**Effect of confirmation of loan request**

In order to investigate the effect of confirmation of loan request on the overdue demands, a linear regression has been used in which R<sup>2</sup>=0.631 which shows the direct relationship of effect of loan request and overdue demands.

**Table 2: Effect of confirmation of loan request**

The scattering source	Sum of squares	Degree of freedom	Average of squares	Calculated F	P	Level of reliability
Regression	32.439	1	32.439	129.685	0.000	0.05
Error	19.010	76	0.250			
Sum	51.449	77				

H0: The confirmation of loan request is effective on the remained overdue demands

H1: The confirmation of loan request is not effective on the remained overdue demands

Since the calculated F is lower than 0.05, it can be concluded that there is a direct relationship between the confirmation of loan request and the remained overdue demands.

X<sub>2</sub> is the type of the effect of loan request.

$$Y=0.350+1.135X_2$$

**Effect of amount of visit on the overdue demands**

In order to investigate the effect of amount of visit on the overdue demands, a linear regression has been used in which R<sup>2</sup>=0.631 which shows the direct relationship of amount of visit and overdue demands.

**Table 3: Effect of amount of visits on the overdue demands**

The scattering source	Sum of squares	Degree of freedom	Average of squares	Calculated F	P	Level of reliability
Regression	32.439	1	32.439	129.685	0.000	0.05
Error	19.010	76	0.250			
Sum	51.449	77				

H0: The type of visit is effective on the remained overdue demands

H1: The type of visit is not effective on the remained overdue demands

Since the calculated F is lower than 0.05, it can be concluded that there is a direct relationship between the type of visiting the place and the remained overdue demands.

X<sub>3</sub> is the type of visiting of the dispensed facilities.

$$Y=0.350+1.135X_2$$

**Effect of necessity of execution notification**

In order to investigate the effect of necessity of execution notification on the overdue demands, a linear regression has been used in which R<sup>2</sup>=0.009

**Table 4: Effect of necessity of execution notification**

The scattering source	Sum of squares	Degree of freedom	Average of squares	Calculated F	P	Level of reliability
Regression	0.44	1	0.440	0.656	0.421	0.05
Error	51.009	76	0.671			
Sum	51.449	77				

H0: The time period of execution notification is effective on the remained overdue demands

H1: The time period of execution notification is not effective on the remained overdue demands

Since the calculated F is higher than 0.05, it can be concluded that there is no relationship between the time period of execution notification and the remained overdue demands.

**Effect of extent of guarantors with bad records**

In order to investigate the effect of extent of guarantors with bad records on the overdue demands, a linear regression has been used in which R<sup>2</sup>=0.064.

**Table 5: Effect of extent of guarantors with bad records**

The scattering source	Sum of squares	Degree of freedom	Average of squares	Calculated F	P	Level of reliability
Regression	3.282	1	3.292	5.179	0.026	0.05
Error	48.167	76	0.634			
Sum	51.449	77				

H0: The type of guarantors is effective on the remained overdue demands

H1: The type of guarantors is not effective on the remained overdue demands

Since the calculated F is lower than 0.05, it can be concluded that there is direct relationship between the extent of guarantors with bad records and the remained overdue demands.

$X_5$  is the extent of the customers with bad records  $Y=1.278+0.444 X_5$

### Effect of extent of introduction of properties

In order to investigate the effect of extent of introduction of properties on the overdue demands, a linear regression has been used in which  $R^2=0.290$  which shows the direct relationship to the overdue demands.

**Table 6: Effect of extent of introduction of properties**

The scattering source	Sum of squares	Degree of freedom	Average of squares	Calculated F	P	Level of reliability
Regression	14.911	1	14.911	31.016	0.000	0.05
Error	36.537	76	0.481			
Sum	51.449	77				

H0: The extent of introduction of properties is effective on the remained overdue demands

H1: The extent of introduction of properties is not effective on the remained overdue demands

Since the calculated F is lower than 0.05, it can be concluded that there is direct relationship between the extent of introduction of properties and the remained overdue demands.

$X_6$  is the extent of the introduction of properties  $Y=0.601+1.078 X_6$

### The resulted pattern

In this approach, the first variable which has entered the equation is visiting by  $R^2 = 0/641$  and  $P = 0/000$  for which the regression equation is  $y = 0/278 + 1/197x_3$ .

The second variable is introduction of the properties by  $R^2 = 0/650$  and  $P = 0/000$  for which the regression equation is  $y = 0/134 + 1/095x_3 + 0/239x_6$ .

The third variable is the confirmation of loan request by  $R^2 = 0/650$  and  $P = 0/000$  for which the regression equation is  $y = 0/148 + 0/883x_3 + 0/225x_6 + 212x_2$ .

The fourth variable is the guarantor's record by  $R^2 = 0/655$  and  $P = 0/000$  for which the regression equation is  $y = 0/041 + 0/797x_3 + 0/190x_6 + 0/287x_2 + 0/123x_5$ .

The fifth variable is the customer's record by  $R^2 = 0/655$  and  $P = 0/000$  for which the regression equation is  $y = -0/038 + 0/765x_3 + 0/198x_6 + 0/304x_2 + 0/117x_5 + 0/082x_1$ .

The sixth variable is the time period of notification by  $R^2 = 0/657$  and  $P = 0/000$  for which the regression equation is  $y = -0/106 + 0/792x_3 + 0/198x_6 + 0/284x_2 + 0/121x_5 + 0/076x_1 + 0/029x_4$ .

### Conclusions

In past investigations, mostly the out-of-organization aspects have been pointed out (such as inflation) and those that the branch cannot have control on. Factors such as age and educational level are not also reliable criteria for decreasing the overdue demands. It is because most of the producers specially the small and medium factories do not have high educational levels and are in a wide range of age. The important thing which has been pointed out in these investigations is the control and monitoring on the facility paying cycle at the stages before facility payment, during facility payment and after facility payment. By valid monitoring, the creation of demands is avoided before and during the facility payment. Monitoring after the facility payment leads to demands collection and decrease.

- The development of the executive system of Maskan Bank has not been appropriate for its network.
- Economic facts such as inflation and the difference between the facilities interest rate and market rate have a direct effect on the overdue demands.



- The type of facilities have been effective on the increase of demands of Sepah Bank.
- The personal information of the facility takers has been effective on the increasing of overdue demands.
- The inflation rate has been effective on the increasing of overdue demands.
- There is relationship between the amount of dispensed facilities and overdue demands
- The personal information of the facility takers (age, educational level) are effective on the overdue demands
- The type of pledges are effective on overdue demands.

## REFERENCES

1. Economy in Iran;" the bank unpaid, causes, effects and consequences"; pp: 23-30; Journal of the Iranian economy; Issue 139; September 2010; Tehran.
2. IzadPanahi.N; " The reliance on commercial banks to grant credit in the financial information"; MS Thesis; University of Allameh Tabatabai; 1993.
3. Baradari.J; "The study of the factors influencing the emergence of outstanding receivables and provide appropriate prevention strategies based on the Bank Moral Hazard"; MS Thesis, Institute of Banking; 2008.
4. Pirouzfahar.A; "arrear, arrears and deferred "; monthly bank and Economic; N 10; page 25; August 2010.
5. Tehrani.R, Falah Shams. M; "explaining the design and modeling credit risk in the banking system"; Journal of Social Sciences and Humanities of Shiraz University; second edition; 2005.
6. Charkhi Sahl-Abad, A;" review of financial statements of companies in the credit line"; MS Thesis; Tehran University; School of Management; 1995.
7. Khonsari, R., Falah Shams.M; "evaluated in KMV structural model predicting defaulted companies listed in Tehran Stock Exchange"; No. 28; page 49; 2010.
8. Kasbi Davoodi, A.; "Evaluation of factors involved in bank claims pending"; MS Thesis; Islamic Azad University of Mashhad; 2003.
9. Derakhshande. A; "The Role of Interest-Free Banking System records the Grant Facility"; Master Thesis; Institute of Banking; 1997.
10. Zahraei.A ;" pending review of the Export Development Bank of Iran's increasing demands and ways to reduce it from 76 to 72 in 5 years"; Master's thesis; Islamic Azad University; Tehran; 2000.
11. Soori.Gh; "Evaluation of factors affecting improvement of the financial structure of the country's commercial banks"; Master's thesis; Central Bank of the Islamic Republic of Iran Banking Institute; 1998.
12. Farahbakhsh Mohammadi. M.A.; "credit information and receivables outstanding of Bank Melli Iran Bank Case Study"; Master Thesis; Institute of Banking; 2002.
13. Kasravi. B; "pending review of factors affecting demand for industry and mine Bank supervision and prevention methods in East Tehran"; theses Masters Islamic Azad University; 2009.
14. Modarres.A, Zekavat. S.M; "bank customer credit risk models (Export Development Bank of Iran)"; Journal of Auditors ;No. 19; page 54; 2003.
15. Masoudi, A;"Banking law"; Tehran; advance; Issue 1; 2009.
16. Najaf. M; " outstanding receivables to banks, factors, criteria and guidelines"; the newspaper world economy ; Number 1499; Page 13 (bank and insurance); 2009.
17. Nazarian, H;" resources and strategies to reduce outstanding receivables at banks"; the National Bank website; 2009.
18. Bryan Beresford-Smith, Colin J. Thompson, (2009) "An info-gap approach to managing portfolios of assets with uncertain returns", Journal of Risk Finance, The, Vol. 10 Iss: 3, pp.277 - 287
19. Janice Boucher Breuer (2006), Problem bank loans, conflicts of interest, and institutions, Journal of Financial Stability 2 (2006) 266–285
20. Joao A. Bastos,(2010), Forecasting bank loans loss-given-default, Journal of Banking & Finance (2010)
21. Lyn C. Thomas(2000), A survey of credit and behavioural scoring: forecasting financial risk of lending to consumers, International Journal of Forecasting 16 (2000) 149–172
22. Yenpao Chen ,Ruey-Ji Guo , Rao-Li Huang,(2009), Two stages credit evaluation in bank loan appraisal, Economic Modelling 26 , 63–70