

AN OVERVIEW ON THE FACTORS AFFECTING LACK OF TIMELY PAYMENT OF DELAYED RECEIVABLES

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***Abstract:** Now a days, judgmental method is used to determine credit risk of companies among most of business banks around the world. The present research intends to examine the factors affecting lack of timely payment of delayed receivables. This research has been categorized as a correlation in which Breusch-Pagan-Godfrey test was used to detect inconsistency variance, Breusch-Godfrey test was used to resolve auto correlation problem and Jarque-Bera test was used to test distribution of error terms. Results from hypotheses indicated that Grade point average Account (-5.427), credit record (-5.165) and type of collaterals (-3.877) have a negative significant effect on delayed receivables in Samen institution. In other words, delayed receivables are paid timely by increasing Grade point average Account, credit record and collateral, yet there is a positive significant relationship between Dishonoured cheques (4.245), amount of receivables (6.212) and delayed receivables in Samen institution.*

***Keywords:** Credit record, Grade point average account, amount of facilities, bounced check, type of collaterals, delayed receivables.*

INTRODUCTION

During recent decades, emergence of financial crises in banking system has harmed to most of banks and credit institutions and bankruptcy of some of them in the world economy. As a result, such crises contribute in supervisors' duty to detect sources of crisis in decision making for reducing outcomes of crises. Since amount of receivables in banking system of country at all sectors has kept increasing since 2003, it seems that the conditions undergoing macro economy can have a key role in status of credit portfolio of banks and quality of their receivables. Emergence of crisis in financial

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system can result in exits of depositors' savings from banks, so that if uncertainty to banking system and unstable conditions is felt by depositors finding a better way to keep their savings, they will take action to exit their savings from banks. In addition, since the banks granted a large part of customers' savings in form of receivables, they faced sudden reduction in resources if the facilities are not paid timely, that it might also result in bankruptcy of banks under suspicious conditions. In general, it can say that financial crisis is called to a sudden change or shock in all the financial indices including short-term interest rates, price of assets, change in management performance and behavior, bankruptcy and collapse of financial institutions (Allen, Franklin and Douglas Gale, 2000). Different factors contribute in small financial turmoil ending in financial crisis. Fragility of the banking credit growth, speed of reverse expectations, collapse of public trust and so forth play a key role in emergence of crisis.

In Iran, banks have been mentioned as the biggest financial entity, that credits have been assumed as the pillar in banking system and all the economic enterprises. Further, distribution of credits for both sectors is influenced of economic macro-policies especially at financial and monetary area. Since the banks are relied on public sector in sake of capital, as the result the early attention is drawn into attention to fund resources to these banks. Under the conditions that public banks enjoy support by government to avoid bankruptcy, increase of delayed receivables causes hindering aims under representation of banking facilities for economic growth of country and waste of resources. Indeed, with regard to given explanations, we seek to examine factors affecting lack of timely payment of delayed receivables.

LITERATURE REVIEW

Keeton, William R. (2013) conducted a study entitled "Does Faster Loan Growth Lead to Higher Loan Losses?". Using measurement of loss in loans via the loss on net delayed receivables, they showed that conditions of domestic economy together with poor performance of specific sectors explain the difference in loss on recorded loans among banks. After controlling effect of these factors, it has been observed that loss on loans among different banks is different. This difference is attributed to the difference in risk of operations.

Sinkey and Greenwalt (2013) in a study "Loan-loss Experience and Risk-taking Behavior at Large Commercial Banks" examined loss on loan among business banks within United States via empirical method. In this study, a *log-linear regression model* was estimated for the data of the big business banks within United States. They showed that specific banking factors and macro-economic indices can explain loss rate on loan of banks. The positive relationship between loss rate on loan and extrinsic factors such as interest rates, amounts of paid loan and capital adequacy has been mentioned as the finding of this study.

Berger and Young (2012) conducted a study "Problem Loans and Cost Efficiency in Commercial Banks" and examined the cause and effect relationship between delayed receivables, efficiency of cost and bank capital for a sample of American business banks and indicated that there is a negative mutual casualty between efficiency of cost and delayed receivables.

Taghi Nataj and Pour kordi (2013) in a research examines and analyzed the reasons for increase of delayed receivables in bank and sought proposing the approaches for prevention and reduction of delayed receivables. In this research, 64 questionnaires were given to the specialized managers, that the results indicated lack of necessary trainings to the staffs as the most important factor affecting increase in delayed receivables, and then indicated lack of organizational structure for the practitioners as well as lack of a comprehensive smart follow-up system and the possibility for creditability of customers as the most important factors affecting increase in delayed receivables. Further, changes in *check*, lack of suitable creditability mechanisms, lack of compliance with customers' rights and lack of comprehensive accounting system and control process have been mentioned as the factors affecting increase in delayed receivables.

Heidari *et. al.*(2013) examined effect of macro-economic indices on delayed receivables of banks. To examine effect of reaction of delayed receivables on economic shocks, quick reaction function and analysis of variances were used as the means to analyze stress test. With regard to fitted models, effect of shock through economic variables due to implementation of monetary and financial policies including inflation, gross domestic production, liquidity volume and loan interest rate have been found with the highest effects on *delayed receivables* in banking system.

Shabani and Jalali (2013) examined the reasons for expansion of delayed receivables in Iran banking system and proposed some approaches to modify it. Results indicated that inter-organizational factors including centralization have more likely contributed in delayed receivables than intra-organizational factors.

RESEARCH METHOD

Quasi-experimental and prospective correlation has been used as the research method at the area of accounting research, categorized as an applied research as it can be used in the process of using information. The statistical population consists of all the companies accepted in Tehran stock exchange during 2009-2013.

Research Hypotheses

1. There is a significant relationship between Grade point average Account and delayed receivables in Samen institution.
2. There is a significant relationship between Dishonoured cheques and delayed receivables in Samen institution.

3. There is a significant relationship between credit record and delayed receivables in Samen institution.
4. There is a significant relationship between type of collaterals and delayed receivables in Samen institution.
5. There is a significant relationship between amount of receivables and delayed receivables in Samen institution.

VARIABLES OF RESEARCH

Independent Variables

Grade point average account

Grade point average Account of the applicant is meant which has been calculated regarding facilities via the scale of million Rial with certain coefficients, considered as the criterion for payment of facilities to the applicant.

Dishonoured cheques

Dishonoured cheque is one of the criteria to measure receivables. To give an operational definition for this variable, it must state that dishonoured cheques of the applicant is calculated based on virtual variables, such that number 1 is given to the case when the person has not bounced check, number 2 is given to the case when the person has just one bounced check, number 3 is given to the case when the applicant has two or more bounced checks, and ultimately number 4 is given to the case when the person has 4 bounced checks.

Credit Record

Credit record refers on how to repay the previous facilities of applicant. Virtual data are used to calculate this variable. If the person has timely repayment in previous facilities, number 1 is given. Yet if the person has delayed *receivables*, number 2 is given.

Type of Collaterals

Type of collaterals means that what collateral is used by the person to receive facilities. To calculate this variable, operating definition below is used. if the person had used property and hybrid collaterals, number 1 will be given; if he had used non-property collaterals, number 2 will be given.

Amount of Receivables

Amount of receivables implies amount of loan received by person. to give an operating definition for this variable, if amount of received loan is under 50 million Rial, number

1 will be given; if amount of received loan is in range of 200-500 million Rial, number 2 will be given; if amount of received loan is in range of 500-1000 million Rial, number 4 will be given; if amount of received loan is more than 1000 million Rial, number 5 will be given;

Field Production

Field production refers to the reason for receiving loan based on code of *Bank Saderat*; number 1 is given to the case the person has received service facilities; number 2 is given to the case the person has received agriculture facilities; number 3 is given to the case the person has received other facilities;

DEPENDANT VARIABLE

Delayed Receivables

Delayed receivables indicate that the applicant has delayed at paying debt of his facilities to the bank. To give an operating definition for this variable, it must state that number 1 is given to the case when the person does not pay his debt on due date and number 2 is given to the case when the person does not pay his debt after 6 months from due date.

Research Model

$BC = \alpha_0 + \beta_1 \text{ GPAA} + \beta_2 \text{ Dishonoured cheques} + \beta_3 \text{ Credit Record} + \beta_4 \text{ Type collateral} + \beta_5 \text{ The amount of the facility} + \beta_6 \text{ Field production} + \varepsilon$

EMPIRICAL RESULTS

Hypotheses Testing

In this section, *t*-statistics and *sig* are used to test hypotheses. If the absolute value of *t* is greater than the *t* in the table, null hypothesis will be rejected and the considered coefficient will be significant, otherwise it cannot reject the null hypothesis. Further, *sig* indicates minimum probability for confirmation of null hypothesis based on zero value of the considered coefficient, which if this probability is greater than 5%, null hypothesis cannot be rejected; otherwise the considered coefficient will be significant.

The first hypothesis

There is a significant relationship between grade point average account and delayed receivables in Samen institution.

Studying *sig* of *t*-statistics for the variable of grade point average account (-5.427) indicates that this variable has a negative significant effect on delayed receivables in Samen institution at error level (5%). Therefore, it can say that the first hypothesis

(H_0) is rejected at confidence level higher than 95%, *i.e.* there is an inverse significant relationship between grade point average account and delayed receivables in Samen institution.

The second hypothesis

There is a significant relationship between credit record and delayed receivables in Samen institution.

Studying sig of *t*-statistics for the variable of credit record (-5.165) indicates that this variable has a negative significant effect on delayed receivables in Samen institution at error level (5%). Therefore, it can say that the second hypothesis (H_0) is rejected at confidence level higher than 95%, *i.e.* there is an inverse significant relationship between credit record and delayed receivables in Samen institution.

The third hypothesis

there is a significant relationship between Dishonoured cheques and delayed receivables in Samen institution.

Studying sig of *t*-statistics for the variable of Dishonoured cheques (4.245) indicates that this variable has a negative significant effect on delayed receivables in Samen institution at error level (5%). Therefore, it can say that the third hypothesis (H_0) is rejected at confidence level higher than 95%, *i.e.* there is an inverse significant relationship between Dishonoured cheques and delayed receivables in Samen institution.

The fourth hypothesis

There is a significant relationship between type of collaterals and delayed receivables in Samen institution.

Studying sig of *t*-statistics for the variable of type of collaterals (-3.877) indicates that this variable has a negative significant effect on delayed receivables in Samen institution at error level (5%). Therefore, it can say that the fourth hypothesis (H_0) is rejected at confidence level higher than 95%, *i.e.* there is an inverse significant relationship between type of collaterals and delayed receivables in Samen institution.

The fourth hypothesis

There is a significant relationship between amount of receivables and delayed receivables in Samen institution.

Studying sig of *t*-statistics for the variable of amount of receivables (6.212) indicates that this variable has a positive significant effect on delayed receivables in Samen institution at error level (5%). Therefore, it can say that the fifth hypothesis

(H₀) is rejected at confidence level higher than 95%, i.e. there is an inverse significant relationship between amount of receivables and delayed receivables in Samen institution.

Table 1
Results from testing the second hypothesis (dependant variable of *delayed receivables*)

<i>Results from testing the second hypothesis(dependant variable of delayed receivables)</i>				
<i>Variable</i>	<i>Regression coefficient</i>	<i>Standard error</i>	<i>t-statistics</i>	<i>Sig</i>
Width of origin	22.995	0.064	359.421	0.000
Grade point average account	0.355-	0.065	5.427-	0.000
Type of collaterals	0.324-	0.083	3.887-	0.000
Credit record	0.432-	0.084	5.165-	0.000
Dishonoured cheques	0.333	0.078	4.245	0.000
Amount of receivables	0.955	0.154	6.212	0.000
Determination coefficient 0.6855		<i>f</i> -statistics 49.587 (0.000)		
Adjusted determination coefficient 0.6717		Durbin-Watson 2.209		

CONCLUSION

Banking system in Iran likewise other countries plays a key role in economy, because in addition to mediating role of banks for cash in money market, they have a key role in funding mid-term and long-term programs due to lack of sufficient development in capital market. To sum up, it can say that collection of financial resources and their allocation to different economic sectors are the most important activities of banks. Yet, it must pay a particular attention to this point that financial resources have met needs of bank to grant facilities on one hand and the banks should have allocated their limited financial resources in an optimal way for production of services and goods on the other hand, because efficiency will come out of optimization of production and allocation of resources concerning theories of economy.

In other words, in a manufacturing unit, managers and manpower make attempt to determine rate of their production in a way to use production factors in an optimally way in addition to use of maximum facilities and resources and allocation of cost in a favorable way. This has also gone true in banks, attempted to grant facilities to the companies to have a return consistent with earning of their facilities in addition to having low risk. This comes to realize when the banks enable to detect their credit customers and enable to classify them based on their ability and tendency to repay commitments (Bahareh Oryani, 2006). Nowadays, in most of business banks throughout the world, the judgment method is used to determine customers’ credit risk. With regard to the given explanations, summary of results are as follows:

The First Hypothesis

There is a significant relationship between grade point average account and delayed receivables in Samen institution.

This results indicate that there is a negative significant relationship between grade point average account and delayed receivables in Samen institution, such that if the borrower's grade point average account is low during getting loan and after receiving facilities, the probability for lack of repayment of loan at due date will increase, under which delayed receivables will appear. According to the reasonable analysis for the result of this hypothesis, it must say that lack of circulation of accounts and low grade point average account can be due to several factors. This does not mean that the person has not the ability for repayment of loan, whereby the most important reasons can be in this way that the borrower creates grade point average account with his money in different banks and receives loan from different banks, and this can raise the problems such as lack of repayment of receivable facilities. Result of this research is consistent with the results of research by Ekrami and his colleague (2009), confirming the result of this hypothesis.

The second hypothesis

There is a significant relationship between credit record and delayed receivables in Samen institution.

Result of this hypothesis indicated that there is a negative significant relationship between credit record and delayed receivables in Samen institution, *i.e.* if the credit record of the borrower is higher, amount of delayed receivables will reduce. In other words, credit record indicates to which extent the person has had a good credit record. The more credit record of customers is higher at banks, amount of delayed receivables will reduce. It should pay a particular attention to this point that numerous factors including cultural factors, economic factors and necessary training and planning can be of great importance, because if the credit record exists in culture of a country, it will affect reduction of delayed receivables. On the other hand, economic problems can cause lack of timely payment for receivable facilities. Result of this research is consistent with the results of research by Salas, Vincente and Jesus Saurina (2012) saying that expansion of credit record causes reduction of delayed receivables.

The third hypothesis

There is a significant relationship between Dishonoured cheques and delayed receivables in Samen institution.

In analysis of this hypothesis, it must say that the more Dishonoured cheques increase, delayed receivables will increase. Result of this hypothesis indicates that if the person who receives facilities has not had the ability to pass his cheques at due date, the person will be found borrower, whereby he will become disreputable legally; in this regards, if number of person's Dishonoured cheques increase, this can result in increasing lack of repayment of receivable facilities at due date. This result can be of

great important to the banks to examine the person's legal conditions before giving him the facilities. Result of this hypothesis is consistent with the result of research by Ekrami and his colleague (2009) and Naderi Karaj (2009).

The fourth hypothesis

There is a significant relationship between amount of receivables and delayed receivables in Samen institution.

Result of this hypothesis indicated that receiving any type of collateral can reduce amount of lack of repayment of facilities. This indicates this reality that individuals including natural and legal individuals know themselves committed to repaying timely by giving a collateral; in this way, the person seeks to resolve his problem by getting bank facilities, yet he knows having a collateral as a guarantee at bank, and this will put the person under pressure d to try hard to repay his load timely, otherwise banks can oblige the person to repay the loan by having an authentic document or collateral. Result of this hypothesis is consistent with the result of research by Ekrami and his colleague (2009).

The first hypothesis

There is a significant relationship between amount of receivables and delayed receivables in Samen institution.

Result of this hypothesis specified that the more amount of receivable facilities increases for the individuals, this can increase the probability for lack of repayment of debts. In analysis of this hypothesis, if the person adopts heavy amount of facilities, this can raise problem in due date of the person's loan, for which it can mentioned different reasons such as lack of use of funds in efficient production, economic problems and so forth. This specified that the borrowers of higher loan do not repay their loan at due date. Result of this hypothesis is consistent with the result of research by Rajan, Rajiv and Sarat C. Dhal (2011), saying higher amounts can result in lack of repayment of receivable facilities.

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