

THE CREDIT RISK AND ITS EFFECT ON THE PROFIT AND LOSS OF KESHAVARZI BANK BRANCHES (CASE STUDY KESHAVARZI BANK BRANCHES OF HORMOZGAN PROVINCE)

* EBRAHAM POURJAFARI,^a BIZHAN ABEDINI

^a MA of Financial Management, Department of Humanities, Islamic Azad University E-Campus, Tehran, Iran, email: ebrahimpourjafari@yahoo.com

^b Assistant professor of Accounting, Department of Humanities, Hormozgan University Bandar Abbas, Iran, email: bizhan.abe33@yahoo.com

*Corresponding Author Email: ebrahimpourjafari@yahoo.com

Abstract. Credit risk is an important risk in the banking system and banks should pay special attention to it to do their activities regularly. The study examines the credit risk and its effect on the profit and loss of Keshavarzi bank branches. Indicators are including overdue receivables, outstanding receivables, collection of receivables, doubtful receivables and collaterals of doubtful receivables. Regression test was used to analyze and examine the hypotheses. The results showed that overdue receivables at the level of $R^2 = 0/25$, outstanding receivables $R^2 = 0/422$, collection of receivables $R^2 = 0/809$, doubtful receivables $R^2 = 0/512$ and collaterals of doubtful receivables $R^2 = 0/09$ are significantly able to predict and explain profits and losses in the Keshavarzi Bank branches.

Keywords: credit risk, overdue receivables, outstanding receivables, collection of receivables, doubtful receivables, collaterals of doubtful receivables, Profit and Loss

1 Introduction

Risk means the probability of not achieving the expected results. In other words, risk is interpreted as the likelihood of not happening future predictions. The risk cause is called "risk factor". Risk can be mentioned in every area. One of these areas is bank and banking activities. Due to their importance in the economic system, banks are of particular interest in this area. Banks are exposed to varieties of risks according to their types of activities. Based on the Bale Committee, risks in the banks include credit risk, market risk and operational risk (Yazdanpanah and Shakib Hajiagha, 2010).

Banking system is a key element of economic systems. If it functions correctly, it can contribute to the development of the economic system. Otherwise, it has heavy impacts on the economic structure. The banking system can play a strong role in the stability of financial system of the country (Shabani and Jalali, 2013).

Providing financial facilities is considered as one of the important activities of the banking system. The credit rating and ability to repay principal and interest of the recipient of facilities have to be determined in order to provide facilities. So, one of the important aspects of lending by banks is realistic estimate of the probability of not repaying by the customers in order to prevent of or cope with potential losses (Arabmazar, 2006).

The probability of not paying back the principal and interest of loans is called credit risk. Credit risk refers to the possibility of getting part of the credit portfolio of financial institutions outstanding or doubtful due to internal factors (such as lack of credit management, internal control, tracking and monitor) or external factors (such as economic recession, crisis, etc.) (Vakili Fard, 2010).

Since one of the pillars of the banks is to provide services to the society and the natural and legal characters at different levels of production, industry, services, agriculture and housing in the form of credit tools and providing facilities, followed by the issue of resources and consumptions of the banks the topic of receivables and its legal affairs come into the consideration. Receivables arise from the payment of facilities. So, its return and receipt cycle is of significant importance so that the quick and accurate flow of resources and expenditures reflects the health of systems and their procedures. Lack of attention to regulatory structure reform in the field of debt collection can lead the banking system to severe crisis including economic bankruptcy. Because the faster the process of collecting

receivables, the faster the process of putting non-exploitable resources in the cycle of economic activities. The credit risk is one of the most important factors affecting the health of the banking system. The level of credit risk depends on the quality of bank assets. The Bank is a financial institution that facilitates are its most important asset. If the asset is deferred, the bank will be at risk. Although paying facilities is one of the important functions of banks and its postponement causes the decline, the collection of receivables, as another function, can sustain the bank assets. Collection of receivables has several levels. Heads of the branches should create a positive image in the minds of customers through rational relationship and do their best to sustain the assets of the bank. Moreover, identifying factors related to credit risk of customers can aware the authorities. So, learning about the strengths and weaknesses they can do measures to reform the economic system and by raising organizational awareness they can also increase its productivity. Given the importance of the topic, the focus of this study was to investigate the effects of credit risk of customers and its effect on the profit and loss of Keshavarzi bank branches. The results can provide tailored information for managers of banks to use it in making credit policies of banks. (Faqih, 2005).

2 Literature review

In this part of the study, according to the investigating the impact of the participatory communication on financial performance and customers, first the concepts of risk and bank risk is discussed and then the facilities and the interest is investigated.

2.1 Risk

Risk is defined as a phenomenon that causes actual and direct loss to the institute by reducing the flow of income and capital losses. Some economists have offered a broad definition of risk. They define as risk any event that potentially shakes the realization of organizational goals by exercising restrictions on capacity and activities of the organization. If we accept this definition, we know the risk as something inseparable from the economic system of the market. So, to define, identify and measure the risky phenomena will be inevitable in financial and economic activities. It is obvious that in the modern world of banking, paying no attention to the concepts of risk and return, diversification of investments, credit risk models, risk quantification and using of mathematical and statistical techniques for making optimal decisions can have irreversible risks for banks (Ghasemi, 2011).

In the common language, risk is a danger that occurs in the future due to the uncertainty about the occurring of an event and the higher the level of the uncertainty, the higher the risk (Esmaeel Nejad Ahangarani, 2014).

Webster dictionary defines the risk as "being in exposure with danger". Investment dictionary defines the risk as potential investment losses which can be calculated (Rasoulzadeh, 2006). Galitz considers the risk as fluctuations in any income. This definition makes it clear that future changes for a particular index, whether positive or negative, puts us at risk. Therefore, changes may cause profit or loss (safdari, 2008).

Risk is the possibility of facing with the loss or damage as a result of a special occasion and includes all the possibilities of injuries, damages and losses that affect achieving the goals of the organization. The meaning of uncertainty and risk are very close but they are distinct from each other. In the uncertainty, the least probability of a decision is not identified but in the risk possible scenarios as well as the probability of each state in the decision is clear (Vakili Fard, 2010).

2.2 Risk classification

Banks and financial institutions face a lot of risks due to the nature of their activities. Because of the breadth and diversity of bank activities, researchers are not unanimous in classifying the risks of banking operations. Some considers the risks of credit, interest rate and liquidity as principal risks of banking system. So, risks that affect the financial institution are divided into three levels as follows:

The first level: the risks on which financial institutions do not have any control and influence and are only affected by them.

The second level: the risk that financial institutions affect them but this effect is little and they are more affected by them.

The third level: risks that affect financial institutions, but financial institutions can bring them under their control and management by applying some methods and tools (Mohammad Rahimi and Mohammadi, 2010). So, it is only the third level risks that financial institutions can overcome and control them by applying methods and tools for risk management.

2.3 Common risks in banking operations

The most common risks in banking operations are the third level risks that are as follows:

2.4 Credit risk

Providing financial facilities is considered to be one of the activities of the banking system. For providing the facilities, the recipient credit rating and ability to repay the principal and interest have to be determined. Probability of not paying back the principal and interest of loans is called the credit risk. This risk can be raised in the following ways:

- The possibility of the reduction of the customer ability to repay the principal and interest of the received facilities.
- The possibility of not paying the principal and interest of the received facilities by the customer.
- The possibility of getting outstanding the repayment of principal and interest of received facilities by the customer. High-volume lending to a company, an industry group, or even an industry regardless of their credit rating is considered as factor enhancing the risk.

2.5 Liquidity risk

Liquidity risk arises from the inability of a bank to provide funds for lending or to pay timely its liabilities (such as deposits). When a bank does not have enough liquidity, it is not able to obtain adequate funds quickly and in reasonable cost through increasing liabilities or converting assets and this failure will affect the profitability of the bank. In acute conditions, lack of sufficient liquidity lead to the bankruptcy of the bank (the consultants group of comprehensive roadmap management, 2013).

Liquidity risk is manifested in various dimensions as follows:

- Financing Risk: unexpected withdrawal or not renewing the term of deposit by the customer make banks maintain unexpectedly the net outflow of such funds.
- Time Risk: the failure to achieve the expected arrival of funds from the repayment of loans granted to customers (resulting from the conversion of inflow facilities to outstanding one) forces banks to compensate for the lack of net inflow of such funds.

Obligation risk: is the risk arising from the clarification of obligations of banks (items below the balance sheet) that causes the bank to be unable to accept a lucrative and desirable trade opportunities (because of the high level of bank obligations) (Yazdanpanah and Shakib Hajiagha, 2009).

2.6 Operational Risk

There is no general and expert definition of operational risk. According to the latest Basel Committee definition of

operational risk in 2004, it is the "loss resulting from inappropriate internal processes, external events, system errors and human errors" .

The most important examples of operational risk are as follows:

- Internal fraud: embezzlement
- External fraud: forged checks
- Employment practices and workplace safety: noncompliance of proficiencies with the duties
- Incorrect ways of providing services: inappropriate lending processes
- Damage to physical assets: earthquake, destruction
- System error and commercial failure: computer system change
- Performance management, delivery management: vague directives.

2.7 Market risk

Market risk is resulting from the fluctuation in market rates or prices such as interest rate, exchange rate, stock price and commodity price and their negative impact on the value of the items inside and outside the balance sheet of financial institutions. This effects mainly resulted in the loss of income and capital.

2.8 Non-current facilities and credit risk

As all economic activity have a certain level of risk, banking activities have various risks. One of the risks refers to the impossibility of repayment of debts by the customers of the banking system and their reluctance to repay. So, overdue and outstanding receivables are common problems of banking activities (Borhani, 2010).

It should be noted in the banking literature overdue, outstanding and doubtful facilities refer to non-current facilities (loans) altogether. The ratio of non-current facilities to total facilities is one of the most important criteria in the banking system for measuring "credit risk". Furthermore, the increase in non-current receivables of the bank (outstanding, overdue and doubtful) and increase the supply of equipment for these receivables apart from the double impact on the increase of uncertainty in the return of resources and making more difficult the predictions to match the maturity of assets and liabilities, affect future profits and losses of the banks as well (Heidari and Ahmadian, 2011).

2.9 Profitability

Profitability is the mission, purpose and philosophy of organizations. Profitability indicates that applied resources are of efficiency and returns. Profitability is the abstract of all measures, strategies, practices and performances of the organizations. Nothing but a continual and growing profitability ensures survival and stability of the organizations. Becoming serious the discussion of privatization and advent of the private banks in the recent years, profitability in the financial institutions especially banks is in the focus. The Bank's profitability is a kind of index to determine the risk-taking behavior of bank managers. Banks with high profitability are under less pressure to generate income and so participate less in risky activities. Also, managers who manage costs poorly enter in risky activities and make their customers suffer losses (Ahmadian and Heidari, 2013).

According to the aforementioned, conceptual model of the research can be reached in this section. Figure 1 illustrates this model. This model encompasses the relationships between variables. Research hypotheses are detectable based on the conceptual model and they will be presented later.

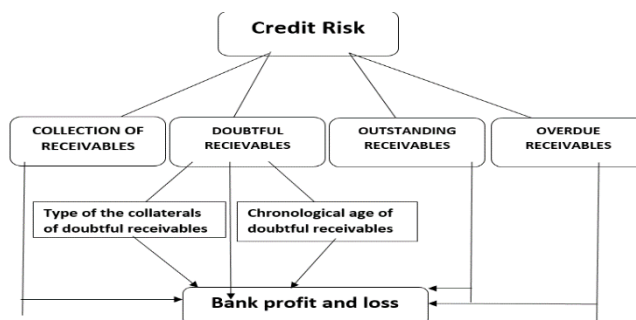


Figure1: conceptual model of the research

- H1: Credit risk has an impact on profit and loss in Keshavarzi bank branches.
- H2: Amount of overdue receivables has an impact on profit and loss in the Keshavarzi Bank.
- H3: Amount of outstanding receivables has an impact on profit and loss in the Keshavarzi Bank.
- H4: The collection of receivables has an impact on profit and loss in the Keshavarzi Bank.
- H5: Amount of doubtful receivables has an impact on profit and loss in the Keshavarzi Bank.
- H6: The collaterals of doubtful receivables have an impact on profit and loss in the Keshavarzi Bank.

3. Research methodology

The study is descriptive and in causal-comparative manner. In this study, comparing the credit risk of different branches of the Keshavarzi Bank, the impact of credit risk on profit and loss of this bank branches in the province of Hormozgan was investigated. So, the research is applied. Different levels of credit risk (low, medium and high) of the bank branches were compared based on their profit and loss.

The population of this study includes all branches of the Keshavarzi Bank branches in the province of Hormozgan (37

branches) that their information related to 5 consecutive years from 2010 to 2014 were studied. The sample consisted of 37 branches of the Bank that were studied by census method. Library method was used to collect information about the literature. Observation, documentation, check listings and interviews were used to investigate and achieve the objectives. To analyze the data SPSS software was used. In the descriptive part for analyzing the data mean, standard deviation, variance, etc. were used. 4. Kolmogorov-Smirnov test and Levine's test were used for testing the normality of the data. Regression test was used to test the hypotheses.

4. Findings

First, the normality of the variables is investigated by Kolmogorov-Smirnov test. Next, according to the results of the tests we investigate the testing of hypotheses.

4.1 Kolmogorov-Smirnov test

Kolmogorov - Smirnov test was used to investigate the normality of the distribution of data. Its results have been shown in Table 1.

Table 1. Kolmogorov-Smirnov test results

Profit and loss	Credit risk	Collaterals of doubtful receivables	Doubtful receivables	Collection of receivables	Outstanding receivables	Overdue receivables	Indices
0/69	1/18	1/15	0/87	1/242	0/838	1/012	Z score
0/72	0/11	0/14	0/42	0/09	0/4	0/2	Significance level

According to Kolmogorov-Smirnov test, the dependent variable is normally distributed because its significance level is more than 0/5. Since the variable has a normal distribution, parametric tests are used to analyze the data and test hypotheses.

4.2 Variance Constancy test

Before examining the regression test, we must ensure that no sections have variance larger than 10 times the size of the smallest variance. If so, data must be converted to logarithms or standard scores (z). In this study, Levine test was used before investigating the data for the homogeneity of the variance of variables. Table 2 shows the results of the homogeneity of variance.

Table 2: Levine test to investigate the homogeneity of variance

Significance level	Second degree of freedom	First degree of freedom	F	Variable
0/13	3	1	4/14	Overdue receivables
/062	3	1	8/428	Outstanding receivables
0/23	3	1	2/258	Collection of receivables
0/07	3	1	7/329	Doubtful receivables
0/22	3	1	2/317	Collaterals of doubtful receivables
0/13	3	1	5/718	Credit risk
0/28	3	1	2/713	Profit and loss

As seen in Table 3, none of the variables are significant so the assumption of homogeneity of variances is confirmed.

4.3 Lack of correlation of predictor variables

Table 3: The results of Pearson test for correlation coefficient

Overdue receivables	Outstanding receivables	Collection of receivables	Doubtful receivables	Collaterals of doubtful receivables	Variable
1	-0/27*	-0/24*	-0/42*	0/29*	Overdue receivables
	1	-0/25*	-0/256*	-0/016*	Outstanding receivables
		1	-0/37*	0/22*	Collection of receivables
			1	0/176*	Doubtful receivables
				1	Collaterals of doubtful receivables

* Confidence level is less than 95 percent. (P is greater than 0/05).

As can be seen in the above table, lack of the correlation of predictor variables is confirmed because the confidence value is less than 95 percent.

H0: The amount of overdue receivables has an effect on profit or loss in the Bank.

H1: The amount of overdue receivables does not have an effect on profit and loss in the Keshavarzi Bank.

4.4 Inferential findings

First hypothesis: the amount of overdue receivables has an impact on profit and loss in the Keshavarzi Bank.

Table 4: Regression model of the effect of overdue receivables on the profit and loss in the Keshavarzi Bank

Durbin-Watson	Adjusted determination (adj R2) coefficient	Determination (R2) coefficient	Correlation (R) coefficient	Variable
1/994	0/23	0/25	-0/5	Overdo receivables

As seen in the table 4, the amount of overdue receivables according to $R^2 = 0/25$ are able to predict 25% of Keshavarzi bank profits and losses.

Table 5: variance analysis of the role of the overdue receivables in the bank profits and losses

p	F	Mean Square	Degree of freedom	Sum of squares	
0/001	186/448	7/019	1	7/019	Regression
		3/764	35	6/324	Residual
			36	1/334	Total

Analysis of variance showed that according to the value of $F=186/448$ and $P=0/001$, amount of overdue receivables can significantly predict the Bank's profit and loss.(table5).

Table 6: the results of the prediction of the profit and loss in Keshavarzi bank through overdue receivables

p	t	Beta	Variable
0/245	1/167	-	Constant
0/001	13/655	-0/5	Overdue receivables

According to Table 6, the amount of overdue receivables has positive and meaningful relationship with the Bank's profit and loss due to the amount of $Beta = 0/5$, $t = 13/655$ and $p = 0/001$.

H0: The amount of outstanding receivables has an impact on the profit and loss in the bank.

H1: The amount of outstanding receivables does not have an impact on the profit and loss in the bank.

The second hypothesis: the amount of outstanding receivables has an impact on profit and loss in the Bank.

Table 7: Regression model of the effect of outstanding receivables on the bank's profits and losses

Durbin-Watson	Adjusted determination (adj R2) coefficient	Determination (R2) coefficient	Correlation (R) coefficient	Variable
2/4	0/374	0/422	-0/649	Outstanding receivables

As seen in the table 7, due to $R^2 = 0/422$ the amount of outstanding receivables is able to predict 42/2% of profits and losses of the bank.

Table 8: Analysis of variance of the role of outstanding receivables in the bank's profit and loss

p	F	Mean squares	Degree of freedom	Sum of squares	
0/01	8/755	71/542	1	572/336	Regression
		33/122	35	1357/984	Residual
			36	1930/32	Total

According to the amounts of $F=8/755$ and $p=0/01$, outstanding receivables are significantly able to predict the profit and the loss

in the bank (table8).

Table 9: Results of predicting of the profit and loss in the bank through outstanding receivables

p	t	Beta	Variable
0/245	1/167	-	Constant
0/01	2/959	-0/649	Outstanding receivables

Given the amounts of $Beta =0/649$, $t =2/959$ and $p =0/01$, outstanding receivables have a significant relationship with the profit and loss in the Bank (table9).

H0: The amount of collection of receivables has an impact on the profit and loss in the bank.

H1: The amount of the collection of receivables does not have an impact on the profit and loss in the bank.

The third hypothesis: the amount of the collection of receivables has an impact on profit and loss in the Bank.

Table 10: Regression model of the effect of the collection of receivables on the bank's profits and losses

Durbin-Watson	Adjusted determination (adj R2) coefficient	Determination (R2) coefficient	Correlation (R) coefficient	Variable
1/622	0/803	0/809	0/899	Collection of receivables

As seen in the table 10, due to $R^2 =0/809$ the amount of the collection of receivables is able to predict 80/9% of profits and losses of the bank.

Table 11: Analysis of variance of the role of the collection of receivables in the bank's profit and loss

p	F	Mean squares	Degree of freedom	Sum of squares	
0/001	52/126	23/713	1	23/713	Regression
		0/156	35	5/612	Residual
		-	36	29/325	Total

According to the amounts of $F=52/126$ and $p=0/001$, the collection of receivables are significantly able to predict the profit and the loss in the bank (table11).

Table 12: Results of predicting of the profit and loss in the bank through the collection of the receivables

p	t	Beta	Variable
0/891	-3/236	-	Constant
0/001	12/334	0/899	Collection of receivables

Given the amounts of $Beta =0/889$, $t =12/334$ and $p =0/001$, the collection of receivables have a significant relationship with the profit and loss in the Bank.

H0: The amount of doubtful receivables has an impact on the profit and loss in the bank.

H1: The amount of doubtful receivables does not have an impact on the profit and loss in the bank.

The forth hypothesis: the amount of doubtful receivables has an impact on profit and loss in the Bank (table12).

Table 13: Regression model of the effect of doubtful receivables on the bank's profits and losses

Durbin-Watson	Adjusted determination (adj R2) coefficient	Determination (R2) coefficient	Correlation (R) coefficient	Variable
2/336	0/51	0/512	-0/72	Doubtful receivables

As seen in the table 13, due to $R^2 =0/512$ the amount of the doubtful receivables is able to predict 51/2% of profits and losses of the bank.

Table 14: Analysis of variance of the role of the doubtful receivables in the bank's profit and loss

p	F	Mean squares	Degree of freedom	Sum of squares	
0/001	45/276	546/402	1	546/402	Regression
		0/847	35	32/177	Residual
		-	36	578/579	Total

According to the amounts of $F=45/276$ and $p=0/001$, the doubtful receivables are significantly able to predict the profit and the loss in the bank (table14).

Table 15: Results of predicting of the profit and loss in the bank through the doubtful receivables

p	t	Beta	Variable
0/891	-0/138	-	Constant
0/001	25/402	-0/72	Doubtful receivables

Given the amounts of Beta =0/72, t =25/402 and p =0/001, the doubtful receivables have a significant relationship with the profit and loss in the Bank (table15).

H0: The collaterals of doubtful receivables have an impact on the profit and loss in the bank.

H1: The collaterals of doubtful receivables do not have an impact on the profit and loss in the bank.

The fifth hypothesis: the collaterals of doubtful receivables have an impact on profit and loss in the Bank.

Table 16: Regression model of the effect of the collaterals of doubtful receivables on the bank's profits and losses

Durbin-Watson	Adjusted determination (adj R2) coefficient	Determination (R2) coefficient	Correlation (R) coefficient	Variable
2/005	0/08	0/09	0/31	Doubtful receivables

As seen in the table 16, due to R2 =0/09 the collaterals of the doubtful receivables is able to predict 9% of profits and losses of the bank.

Table 17: Analysis of variance of the role of the collaterals of doubtful receivables in the bank's profit and loss

p	F	Mean squares	Degree of freedom	Sum of squares	
0/001	18/16	543/601	1	543/601	Regression
		2/968	35	83/101	Residual
			36	626/702	total

According to the amounts of F=18/16 and p=0/001, the collaterals of doubtful receivables are significantly able to predict the profit and the loss in the bank. (Table 17)

Table 18: Results of predicting of the profit and loss in the bank through the collaterals of doubtful receivables

p	t	Beta	Variable
0/261	0/362	-	Constant
0/001	13/534	0/31	Doubtful receivables

Given the amounts of Beta =0/31, t =13/534 and p =0/001, the collaterals of doubtful receivables have a significant relationship with the profit and loss in the Bank (Table 18).

H0: The credit risk has an impact on the profit and loss in the bank.

H1: The credit risk does not have an impact on the profit and loss in the bank.

The main hypothesis: the credit risk has an impact on the profit and loss in the Keshavarzi Bank branches.

Table 19: Regression model of the effect of the credit risk on the bank's profits and losses

Durbin-Watson	adj) Adjusted determination coefficient (R2)	Determination coefficient (R2)	Correlation (R) coefficient	Variable
1/56	0/143	0/357	0/597	Credit risk

As seen in the table 19, due to R2 =0/357 the credit risk is able to predict 35/7% of profits and losses of the bank.

Table 20: Analysis of variance of the role of the credit risk in the bank's profit and loss

p	F	Mean squares	Degree of freedom	Sum of squares	
0/001	3/665	175974248/4	1	175974248/4	Regression
		105686614/9	35	317059844/8	Residual
			36	493034093/2	Total

According to the amounts of F=3/665 and p=0/001, the credit risk is significantly able to predict the profit and the loss in the bank.(Table 20).

Table 21: Results of predicting of the profit and loss in the bank through the credit risk

p	t	Beta	Variable
0/24	-0/21	-	constant
0/001	8/29	0/597	Credit risk

Given the amounts of Beta =0/597, t =8/29 and p =0/001, the credit risk has a significant and positive relationship with the profit and loss in the Keshavarzi Bank.(Table 21).

5 The conclusions and recommendations

The First hypothesis: the amount of overdue receivables is effective on the profit and loss in the Keshavarzi Bank.

In the first hypothesis, the effect of overdue receivables on the profit and loss of the bank was investigated. Linear regression was used to test this hypothesis. The results of this test showed that the amount of overdue receivables are able to account for 25

percent of the bank's profits and losses. Paying overdue receivables organizes the banks for banking activities but not paying overdue receivables destroys the focus of activities and goals and thus banks will linger in their affairs. Kosmidou (2008) concluded that the increase in the risk of banks in paying facilities leads to the decrease in bank's profitability. In other words, bank risk in cases where there is possibility of not collecting receivables timely leads to lower profitability of banks. Kovasmido believes that banks can increase their profitability through control and effective monitoring of the credit risk.

The second hypothesis: the amount of outstanding receivables is effective on the profit and loss in the bank.

Regression test was used to investigate this effect. The results of this test showed that the amount of outstanding receivables account for 42% of the profit and loss. So, it is effective on the profit and loss. Outstanding receivables are among the indexes which reduces profit and leads credit institutions to the loss. Ghasemi (2010) also found that the phenomenon of outstanding receivables in bank assets requires creating reserves and this leads to the reduction of operating income and the volume of bank assets.

The third hypothesis: the collection of receivables is effective on the profit and loss in the Bank.

In the third hypothesis, the effect of the collection of receivables on the profit and loss of the bank was investigated. The results of the regression analysis showed that the debt collection is 80/9% effective on the profit and the loss. In accordance with what was said in the past, debt collection has dramatic effects on the Bank's profit and loss. If banks are able to have appropriate and timely financial commute, they will be able to do their activities well and more efficiently but late return of the resources to the banks causes problems for them and make them stay away from their intended targets and pay attention to the problems of not collecting the receivables; hence the collection of receivables has a positive effect on bank profits and losses. Pasiras (2008) found that studied and targeted credit risks will ensure the bank profits. Given this, banks need to act sensitively about credit risk and the possibility of debt collection.

The fourth hypothesis: the amount of doubtful receivables is effective on the profit and loss in the Keshavarzi bank.

Results of regression analysis showed the amount of doubtful receivables counts for 51/2 percent of the profit and loss of the Bank. In Iran, due to the difficult situation with which the industries (including agriculture) are grappling, it has its impact on the banking system and since the industries are not able to pay back their loans, the topic of receivables has become an issue in the banking system. (FallahShamsi, 1998)

The fifth hypothesis: collaterals of doubtful receivables are effective on the profit and the loss in the bank.

In the fifth hypothesis the effects of collaterals of doubtful receivables on the bank profits and losses were studied. The results showed that collaterals of doubtful receivables count for 9 percent of the profit and loss of the Bank. So, it is effective on the profit and the loss. According to the nature of the collaterals of doubtful receivables, they seem more collectable and are effective on the profit and loss of the Keshavarzi Bank but this interference is not too much and does not have a big role in determining profit and loss of the bank.

6 Conclusion

The aim of this study was to evaluate the effect of credit risk on the profit and loss in Keshavarzi bank. The risk is an irrefutable factor in economic activities. Lack of attention to the circumstances related to the amount of risk in economic and banking activities leads economic and banking institutions to the failure. Credit risk in Keshavarzi Bank is mostly under the influence of government policies to remove poverty and create food independence. Payments are done through the obligatory plans. However, this is done in the light of the banking system and banks should be able to observe the principles of banking and do payments carefully.

Outstanding facilities are the result of the wrong validation of borrowers, guarantors and actually taking the risk without considering the limitations of the bank capital and based on wrong performance indexes. Some banks settle outstanding and overdue debts of their customers with providing new facilities. This leads to false increase in the paid facilities which are considered as points for them and hides the performance and

accuracy of banks in paying facilities and leads to the negligence in paying loans timely and eventually covers up the real receivables of the bank. Adverse effects of the receivables on the banking system, economic system, credit system of banks, can disrupt the activities of banks especially in crisis (more than 5% of the remaining facilities) (GIO Report, 2007).

7 Recommendations

1. Since Keshavarzi Bank helps production and agriculture through facilities, it is proposed the bank to take into account Islamic contracts to improve the system of payments. So it can take into account the interests of the parties in payments and in participation in agricultural production and so it prevents paying inappropriate facilities. This must be done expertly and economically so payments with economic efficiency can take priority.
2. The results in this study suggest that credit risk indicators are effective on the profit and loss in Keshavarzi bank. Given the importance of credit risk, it is recommended that the Bank should take into account guaranteed procedures in repaying receivables. On this basis, taking office at the bank branches it can keep track of the collection of receivables.
3. Credit risk is one of the most important indicators of monetary and banking system that leads to the economic development. Accordingly, it is recommended to examine the factors affecting the credit risk of banks in future studies.
4. It is recommended to researchers and students who are interested in the study of the credit risk to take into consideration the variety of credit risk such as the level of the risk, type of warranties and so on in their research.

Literature:

1. Arabmazar, A. k., Royintan, P.: *Factors affecting the credit risk of bank customers*, Journal of Economic Essays, 1385, 3, 45-77.
2. Borhani, H. Foreign currency deputy of the central bank of Iran. Article accessible in: www.ireconomy.ir, 2007
3. Consultants' Group of comprehensive roadmap management. *The definition and calculation of bank risks*; field of study: theories of organization and management, 2013.
4. Esmaelnejad, M.: *Principles and concepts of risk management*, Sina bank, publications of public relations, 1391.
5. Faqih, M.: *Credit risk management and its policies*, the monthly of Bank va Eqtesad, 2005, 58-60
6. FallahShamsi, M. F.: *Measurement models of credit risk in banks and credit institutions*, Tazehaye Eqtesad, 1387, 33, 2 - 22.
7. Ghasemi, H.: *Outstanding receivables and its role in bank profitability*, bank va Eqtesad, 2010, 12-21.
8. GIO report. *Outstanding receivables of state-owned banks*, 2007
9. Heydari, H., Ahmadian, A.: *The impact of macroeconomic conditions on bank profits and losses (the case study of one of the country's private banks)*, monetary Research, 2012, 71-99.
10. Kosmidou, K. *The determinant of banks' profit in Greece during the period of EU financial integration*. Journal of Managerial Finance, 2008, 34, 417-428.
11. MuhammadRahimi, A., Mohammadi, M. *Check the status of risk management in financial institutions and provide optimum model for it*, Marja Danesh, 2009, 23-46.
12. Pasiouras, F.: *Estimating the technical and scale efficiency of Greek commercial banks: The impact of credit risk, off-balance sheet activities, and international operations*. Research in International Business and Finance, 2008, 22, 301- 318.
13. Rasulizadeh, Ali.: *Predict and manage risk in Tehran Stock Exchange*, Foundation of Toseey Farda, 2006.
14. Safdari, N.: *Improving the banking system with the cover of the risk of outstanding receivables*, Tazehaye Eqtesad, 2007, 61-67.
15. Shabani, A., Jalali, A.: *The reasons for the spread of "outstanding receivables" in the banking system of Iran and*

some solutions to correct it, Quarterly Journal of Management and Budget, Year 16, 2010, 155-181.

16. VakiliFard, H.R.: *Financial management 2*, Jangal publications, Tehran, 2010.

17. Yazdanpanah, A., ShakibHajiAgha, S.: *Factors affecting banks' liquidity risk (Case Study of Mellat bank)*, Journal of Financial Studies, 2010, 3, 27-54.

Primary Paper Section: A

Secondary Paper Section: AE