

**Research Article**

## **EVALUATION OF FACTORS AFFECTING THE NON-REPAYMENT OF KESHAVARZI BANK FACILITIES BY AHWAZ RANCHERS**

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### **ABSTRACT**

One important issue in granting banking facilities is the possibility of non-repayment of loan by the loan takers. Several factors affect the non-repayment of banking loans; identifying these factors, the credit risk can be reduced and controlled and the process of granting credits can be optimized. This study is mainly aimed at evaluating factors affecting the non-repayment of Keshavarzi bank facilities by Ahwaz ranchers, and providing appropriate executive solutions to receive the accrued receivables. Results indicate that the more the literacy of ranchers, the better the performance of loan repayment. In addition, more experience of the rancher in the production can have a positive role in increasing the income followed by an increase in loan repayment. The more the loan-to- total capital ratio, the more the possibility of loan repayment by Ahwaz city`s ranchers.

**Keywords:** *Non-Repayment, Ranchers, Ahwaz, Facilities*

### **INTRODUCTION**

One of the main barriers of economic growth and development of each production sector, especially the agriculture sector, is the lack of capital and correct use of the available capital resources. In many occasions, agriculture sector`s activities are considered to be a low yield activity according to the distribution of farms and limited access of farmers to the information and amenities in short terms, and always has problems with capital it needs (Nader *et al.*, 2013). In long-term, this situation puts the development of rural regions, agriculture, and food stuff production into risk. So, governments in all developed and some of the developing countries make themselves responsible for supporting the agriculture sector (Pouraghajand, 2007).

One way to provide economic enterprises is to grant credits from each county`s banking system to the economical sectors. On this basis, in recent years, in order to support the economical sectors such as agriculture sector, withholding and non-withholding facilities as a tool for the agriculture sector growth and development was granted by specialized banks (Lotfali and Ahmadzade, 2007).

Because agricultural productions are seasonal, there is always a gap between agricultural repayments and receives. Thus, farmers, to pay the current costs and invest in agriculture, require a savings of previously obtained income or credits; but, because of low income, farmers cannot save any money so they need capital to provide current and capital cost (Nader *et al.*, 2013).

Agriculture sector`s needed credits are mainly provided through two major resources- informal credit resources (users, forward buyers, dealers, friends, and relatives who do not consider governmental regulations) and formal credit resources (Keshavarzi bank, rural cooperatives, and commercial banks). Keshavarzi bank is the main formal institute (Bagheri and Najafi, 2004). This bank, as a specialized one, is the main formal agriculture credit institute of the country with 70 years of experience, which provides the financial resources for agriculture sectors. Having a multiple objective of increasing the production, balancing the incomes, granting facilities of accepting new technologies, and compensation of damages resulted from unexpected disasters; Keshavarzi bank pays about 70% of credits allocated on this sector to the applicants from different subsectors (Irannejad, 1996).

Thus, granting bank facilities can increase the investment and reinforce the production as well as improving the level of social welfare. One important issue in granting bank facilities, is the loan taker`s irresponsibility of repayment. Different factors are involved in non-repayment of debts, which if

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identified, credit risk can be minimized and controlled and the process of granting facilities can be optimized (Shraifi, 2011).

Asymmetric information in financial markets, especially in banking systems (regarding the situation of loan takers), adverse selection and granting facilities to risk-taking individuals increases the accrued bank receivables and, in fact, it causes that customers would not be able to pay their debts on time; consequently, disturbance in banking credits distribution and bank bankruptcy followed by disturbance in the country's economy will be resulted. In addition non-repayment of banking facilities cause serious problems such as the increase of credit risk, loss of bank's time and resources, increase of bank costs, blockage of some effective resources of the bank for granting loans, and disturbance of banks planning. So, evaluation of loan takers situation before granting the facilities and appropriate selection of loan takers is of high importance for banks (Sharifi *et al.*, 2011). Thus, given that on time collection of credits is a serious issue in the viability of credit institutes and the high rate of repayment in Keshavarzi bank as well as the intense dependence of bank's financial resources to the collected credits, evaluation of factors affecting the repayment and non-repayment of Keshavarzi bank facilities in Ahwaz ranchers is necessary so that Keshavarzi bank's planners and policy-makers can find ways to enhance the rate of collecting agricultural credits and increase in financial resources of the bank. Some experimental studies conducted inside and outside of the country are evaluated below. After that, results, model estimation, and conclusion plus suggestions will be indicated.

### **Literature Review**

Followings are studies conducted in the related field:

Using Logit model in Bangladesh, Matin (1997) concluded that level of education, duration of membership in the bank, area under plantation, and farmers' various income resources are factors affecting the non-repayment of loan.

Lekshmi *et al.*, (1998), in a study conducted in Kerala state of India, using linear discriminate analysis, tried to identify the reasons of difference between farmers who repay and ones who doesn't repay the loan. They found out producers surplus, time of plantation, and credit gap are factors differentiating these two groups of farmers. They also believed that by technology advancement, resources owned by farmers are insufficient to meet financial needs and accomplish agricultural operations. In the other hand, they do not have enough access to credit resources to realize their requirements. Unrealistic estimation of farmers' financial needs along with the *accrued* repayment of loan is the reasons of these factors.

Jabar *et al.*, (2002) studied the supply and demand of USA's credits of ranching sector. The analyzed the credit distribution in Ethiopia, Kenya, Uganda, Nigeria and concluded that formal credit institutes do not have enough funds to support the credit request of ranching sector. Results indicated that gender and educational level of the householder, diary production training, granting loans, and the number of farm's livestock have a significant effect on taking loans and household liquidity situation, although the amount and direction of the impact were not identical in all countries.

Kopahi and Bakhshi (2002) evaluated factors affecting the repayment performance of agriculture credits in Berjand city. Results showed that using machinery in the farm, duration of loan repayment, control and supervision of the bank on the consumption of loan, and use of loan in current activities have a positive and significant effect on the credit repayment performance. In the other hand, natural disasters in the farm (such as drought and pests), farmer's level of education and waiting time for loan have a negative and significant effect on the performance of credit repayment.

Bagheri and Najafi (2004), evaluated factors affecting the agriculture loans repayment in Fars province. They concluded that natural disasters, farm income-to-total income ratio, farm income, product insurance, rate of savings, waiting time for loan, control by bank experts, repayment time, type of activity covered by loan, diversity index, plurality buyers, off-farm income, area under plantation, education, and figurative variable of city are respectively the main factors affecting the difference of both groups repaying and not repaying the loan.

Mir *et al.*, (2004) evaluated factors affecting the accessibility to agriculture credits and its role on the production of Sistan and Baluchistan province. Results indicated that factors such as area under

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plantation, number of work forces in a household, and having savings in the bank affect the accessibility to agriculture credits and credits have a positive role on production.

Sharifi *et al.*, (2011) evaluated factors affecting the non-repayment of agriculture facilities in Keshavarzi bank of Isfahan province. They concluded that the younger the loan takers the better the performance of the repayment of loan and loans granted for the agriculture sector and side industries. In addition, lower rate of interest provides a better condition to repay the loan.

Loans taken by real estate collateral have a better repayment situation than those taken by partnership collateral. As well, it is indicated that most of the withholding loans are not repaid and the more the loan taker share in the project, the more the financial ability he or she has and, compared with a loan taker with smaller capital, the possibility of non-repayment of loan will be minimized.

Poryazdian *et al.*, (2012) examined factors affecting the actual and potential demand of agriculture credits in Khorazsan Razavi province.

Results indicated that actual demand of credits is elastic to the variables of rate of interest, way of granting loans by banks, repayment, and the interval between receiving the loan and the start of repayment and the potential demand of credits is elastic to the variables of farmer's educational level, farmer's experience, farmer's income, time of loan, repayment, interval between receiving the loan and start of repayment, and the percentage of bank's respond to the loan request.

Karami (2012) evaluated factors affecting the request of agriculture credits in Boyer Ahmad city. Results indicated that area under plantation, farmer household's workforce, and machinery have a positive effect on the request.

## **MATERIALS AND METHODS**

In terms of nature, objective, and way of data collection, this is a quantitative, applied, and field study, respectively. The statistical society of the study includes all Ahwaz city's ranchers who received Keshavarzi bank loans from 2009 to 2010. Based on the information of Ahwaz Keshavarzi bank, 1351 ranchers received facilities, of which 950 ones neglected repaying the loan and 400 ones were successful to repay it. To determine the sample, using Morgan table, 270 and 190 ones were determined to be the statistical sample of individuals neglecting and repaying the loans, respectively, and samples were randomly selected.

Information needed in the field stage was collected through interview with the samples. Questionnaire, as the main tool of study, included three information sections about the individual characteristics of ranchers, economic activities and technical activities. Evaluation of the content and appearance validity of questionnaire was conducted using the ideas of professors, livestock affairs experts of agriculture Jihad and Keshavarzi bank.

## **RESULTS AND DISCUSSION**

### ***Discussion and Conclusions***

#### ***Individual Characteristics of the Livestock Farmer***

Evaluating the individual characteristics of ranchers, results of table (1) indicate that 50% of ranchers, who repay the loan, have less than 24 years experience and 50% has more, while 80% of the ranchers, who neglect repaying the loan, has less than 24 years, 19.6% has more than 24 years, and 0.4% has 62 years experience.

Evaluating ranchers' level of education, results of table (2) indicate that 0.8% of ranchers, who repay the loan, is illiterate, 3.1% has primary school degree, 23.8% has guidance school degree, 55.4% has high school and below degree, and 16.9% has academic degrees, while 14.6% of ranchers, who neglect repaying the loan, are illiterate, 17.7% has primary school degree, 23.5% has guidance school degree, 34.6% has high school and below degree, and 9.6% has academic degrees.

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**Table 1: Frequency distribution of experience**

Description of experience	Ranchers who repay		Ranchers neglecting the repayment	
	percentage	percentage	Frequency	percentage
24>	50	80	213	50
24-40	40	19.6	56	40
41-61	10	0	0	10
62	0	0.4	1	0
<b>Total</b>	100	100	270	100
<b>Min</b>	5		5	
<b>Max</b>	50		62	
<b>Mean</b>	20		15	
<b>Standard Deviation</b>	8		8.8	

Source: findings of the study

**Table 2: Frequency distribution of educational level**

Description of education	Ranchers who repay		Ranchers neglecting the repayment	
	frequency	percent	frequency	Percent
Illiterate	13	0.8	40	14.6
primary	16	3.1	48	17.7
Guidance school	43	23.8	63	23.5
High school and below	84	4.55	92	34.6
Academic	34	9.16	27	9.6
<b>Total</b>	190	100	270	100

Source: findings of the study

**Economic Activities of Ranchers**

Evaluating the economic activities of ranchers, results of table (3) indicate that 60% of ranchers, who repay the loan, has less than 50 livestock, 31% has between 51 and 100, and 9% has more than 100 ones, while 80% of ranchers neglecting repay the loan has less than 50 livestock, 18.1% has between 51-100, and 1.9% has more than 100 ones. Thus, maximum rate of non-repayment is observed in farms having less than 50 livestock.

**Table 3: Frequency distribution of livestock number**

Description of livestock number	Ranchers who repay		Ranchers neglecting the repayment	
	frequency	percentage	frequency	percentage
50>	95	60	212	80
51-100	59	31	50	18.1
100	36	9	8	1.9
<b>Total</b>	190	100	270	100
<b>Min</b>	6		6	
<b>Max</b>	160		160	
<b>Mean</b>	35		20	
<b>Standard Deviation</b>	31.2		3.31	

Source: findings of the study

Evaluating the received loan-to-total project ratio, it is indicated in table (4) that 55.3% of ranchers, who repay the loan, stated the received loan-to-total project ratio to be less than 30%, 28% stated that it is between 30-60%, and 16.2% stated that the ratio is more than 60%, while 20.1% of ranchers neglecting

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the repayment of loans stated it to be less than 30%, 47.6% stated that it is between 30-60%, and 32.3% of ranchers stated this ratio to be more than 60%. The lower the received loan-to-total project ratio, the lower the credit risk will be obtained, which is followed by an increase in loan repayment.

**Table 4: Frequency distribution of received loan share from the total project**

Description of loan share	Ranchers who repay		Ranchers neglecting the repayment	
	frequency	percentage	frequency	percentage
>30%	93	55.3	52	20.1
30-60	57	28.5	124	47.6
60>	41	16.2	94	32.3
Total	190	100	270	1000
Min	5		4	
Max	80		100	
Mean	50		50	
Standard Deviation	7.24		24	

Source: findings of the study

### Ranchers` Technical Activities

Evaluating the ranchers` technical activities, results of table (5) indicate that 92% of ranchers, who repay the loan, have product insurance and 8 percent has not, while 60 percent of ranchers neglecting the repayment of loan have insurance and 40% has not.

**Table 5: Frequency distribution of product insurance**

Description of share	Ranchers who repay		Ranchers neglecting the repayment	
	frequency	percentage	frequency	percentage
Yes	150	92	160	60
No	40	8	110	40
Total	190	100	270	100

Source: findings of the study

### Conclusion and Suggestions

Several factors affect the non-repayment of bank loans, which can be omitted by study and cognition. Especially in non-payment of bank loans, these factors depend on the individual characteristics, economic activities, and technical activities of the livestock farmer. This study was mainly aimed at studying these characteristics as factors affecting the non-payment of bank loans among Ahwaz city`s ranchers. Results indicated that product insurance, education, livestock farmer`s experience, and number of livestock are factors affecting the non-repayment. In addition, the lower the received loan-to-total project ratio, the higher the repayment of loan would be resulted.

Based on the results of the present study, followings are suggested.

- 1- Given the negative effect of loan-to-total asset ratio, it is suggested that authorities gain information about the amount of asset and ability of producers to repay the loan before granting it.
- 2- According to the positive effect of the number of livestock, providing necessary conditions for livestock farming units with larger scale can be a factor affecting the reduction of non-repayment in the region.

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3- Given the positive effect of experience and education, it is suggested that authorities consider these factors when assigning the credits.

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