

Factors Affecting Credit Use in Agricultural Business Concerns in Turkey

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Abstract: The aim of this research is to determine the credit use status of the businesses using agricultural credits and the factors thought to be affecting credit usage. The data of the primary nature in the research are have been collected through polls from 71 business concerns using the Neyman method. The economic structure of the business concerns have been analyzed based on three scale groups of business concerns being 1-50 da, 51-100 da and 101 and over da. While, in the business concerns according to their business concern width averages, 38.03% make up for their want of capital only with their non-institutionalized credit resources, 35.21% have worked only with institutionalized credit resources and 26.76% with both. Khi-Kare analysis have been carried out during the research to see whether there is a relationship between the credit use of the producers and the socio-economic factors claimed to be affecting credit use. According to the results of the test carried out, it has been concluded that the relationship between the level of expertise and rate of market orientedness is statistically meaningful. Furthermore, in order to decide whether there is a difference in terms of some economic characteristics thought to be affecting credit usage, a variance analysis has been made. Only the difference between the business concern width groups and the credit usage groups was found out to be significant.

Keywords: Credit, factors affecting credit use, Turkey.

INTRODUCTION

The continuation of production activities depends on the presence of natural resources and the human power that can take advantage of these resources. However, the benefit human power can reap from natural resources without using any instruments is restricted. Therefore, in order to reap maximum benefit from present resources, we have to take advantage of auxiliary production instruments that will increase the output of the labor force. In order to make it possible for the agricultural business concerns to work intensively, capital, which is the third production factor, must be added to the soil and labor force in sufficient amounts.

There is a need for sufficient amount of capital to enable the application of modern agricultural technologies. If a necessary amount of capital and cash is found in the agricultural business concerns, the necessary investments will be made easily; the inputs required by the production process will be met efficiently and on time and they will become rentable thanks to the labor intensive working conditions.

Capital accumulation within the agricultural sector is very slow. Therefore, we are trying to recover the deficiency in the proprietor's capital through credits. With respect to agriculture, the Turkish state had a

long tradition of sectoral support by way of direct price subsidies, and indirect means of subsidized use of agricultural credit, virtual direct un-taxation of rural incomes, and guaranteed state purchases of strategic commodities such as tobacco, sugar beet, and nuts^[6].

Agricultural credits in the research field can be obtained from persons and various institutions. Credits obtained from persons (tradesman etc.) are called as non-institutionalized credit resources and those obtained from various institutions (TR Ziraat Bank, cooperatives and other commercial banks etc) are called as institutionalized credit resources.

MATERIALS AND METHODS

Agricultural business concerns of Turhal District of the City of Tokat has been chosen as research field in the research. A trust range of 99% and a deviation of 10% was used in the location of the sample volume. The sample volume has been estimated to be 71 in 14 towns and villages chosen as research area through the Neyman Method and the sample business concerns were chosen randomly^[5].

The poll practice and the cross sectional data were taken as a basis and the poll was carried out in February and March of year 2006. The data relating to

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production year 2005 were used. Khi-kare Test was used as the analysis technique during the assesment of the data. Among the Khi-kare figures obtained, the Khi-Kare value and the Khi-Kare calculation values are compared and interpreted. The degree of latitude was used while obtaining the Khi-Kare table value.

- Degree of latitude : $(R - 1) * (K - 1)$
- R: Number of lines in the Khi-Kare frequency table
- K: Number of columns in Khi-Kare frequency table^[8].

We resorted to “Variance Analysis” in the research while detecting whether the differences among the averages of groups numbering more than two were important. The relationship between the business concern width groups, agricultural income, total family income, agricultural products annual sales cost and total gross production value and credit usage and the detection of whether this relationship has an effect has been tested using this analysis method.

The rejection of the zero hypothesis after the variance analysis done does not mean that the differences between the groups’ averages is important. The source of the difference in question should be stated. Therefore, the differences between the averages of of all the binary group combinations were assessed by LSD= Least Significant Difference control. It was concluded that if the difference between the averages in question is smaller than the Most Significant Difference, a significance level of $P < 0,05$ for the difference between the group averages used is not important and that it was important if the significance level was otherwise and this fact was interpreted accordingly.

RESULTS AND DISCUSSIONS

Both informal and formal loans matter in agriculture. However, formal lenders provide many more production loans than informal lenders, often at a cost (mostly loan default cost) higher than what they can recover. For example, the Agricultural Development Bank of Pakistan (ADBP), providing about 90% of formal loans in rural areas, incurs high loan default costs. Yet, like other governments, the Government of Pakistan supports the formal scheme on the grounds that lending to agriculture is a high risk activity because of covariate risk^[14].

The credit usage areas in the research area were investigated in three groups, namely mere institutionalized credit resources, mere non-institutionalized credit resource and both institutionalized and non-institutionalized credit resources.

In the business averages, 38.03% of the business concerns using credits depending on the business width groups are trying to recover their capital deficiency through mere non-institutionalized credit resources whereas 35.21% use only institutionalized credit groups and 26.76% use both.

The rural credit market in Vietnam is quite segmented. The formal sector specializes in lending for production purposes whereas the informal sector's lending is quite diverse. We show that rural households are rational in deciding which sources to ask for a particular kind of loan. Reputation, the dependency ratio of households, and the amount of credit applied for by the household are identified as the determinants of credit rationing by the bank. Credit is shown to have a significant impact on household production^[7].

The business concerns examined within the research area were analysed under three headings depending on the credit resources and the credit use figures of the companies studied depending on the business concern width group they are in is given in Table 1.

- a) Business concern meeting their credit needs by obtaining credits from thoroughly institutionalized credit resources (TR Ziraat Bank, cooperatives etc..) : while the credit usage share of such business concerns depending on the business concern width it is in within the credit resource changes between 21.11% and 66.16; it constitutes 58.61% of the credit use in business concerns mean average. An increase can be observed in the use of only institutionalized credit based credits depeding on the business concern width groups and it can be seen that it takes on a value of YTL 3 605,35 in the business concerns mean average.. According to study, the investigation of credit access and its effect suggests that the presence of credit market constraints does impinge significantly on farm profitability, but not on investments^[11].
- b) Business concerns meeting their credit needs from completely non-institutionalized credit resources: This group has the least share among credit use resources groups in the business concerns’ mean average and has 17.64% share in the business concens’ mean average. It takes on values varying between 12.56% and 49.17%.
- c) Business concerns taking credits from both institutionalized and non-institutionalized credit resources: the the rate of credit use value of such business concerns decreases in line with the

Table 1: Credit Use Amounts and Share Within the Total Credit Use (YTL, %) depending on Business Concern Width Groups and Credit Resources

Business Concern Width Groups (da)	Number of Business Concerns(items)	CREDIT RESOURCES							
		Business concerns using only Institutionalized Credit Resources		Institutions using only Non-institutionalized Credit Resources		Business concerns using both		Total	
		Value	%	Value	%	Value	%	Value	%
1 – 50	23	436,65	21,11	1 017,13	49,17	614,72	29,72	2 068,50	100,00
51 – 100	31	4 565,96	61,16	937,50	12,56	1 961,87	26,28	7 465,33	100,00
101 – +	17	6 140,70	66,16	1 447,15	15,59	1 693,65	18,25	9 281,50	100,00
Business Concerns' mean average		3 605,35	58,61	1 085,32	17,64	1 461,25	23,75	6 151,92	100,00

business width groups they are in and has a share of 23.75% in the business concerns' mean average.

It is YTL 1 461,25 in the business concerns' mean average.

While there are differences in the number of business concerns using institutionalized credits based credits depending on their respective business concern width groups, they mark an increase in terms of credits use value. Among the credit resources, the ratio of the business concerns obtaining credits from TC Ziraat Bank to the total number of business concerns is 12.68%. Among the business concerns studied, there were some which obtained credits from commercial banks other than TR Ziraat Bank and the ratio of business concerns using credits from other commercial banks to the total number of business concerns is 2.82. There were not any business concerns obtaining credits from TR Ziraat Bank among business concerns of 1-50 da. 6 of business concerns of 51-100 da used TR Ziraat Bank based credits. And 3 business concerns belonging to the business concerns group of 101 da and over used credits from TR Ziraat Bank. 29.41% of the total credit usage came from TR Ziraat Bank. It has been found out that the total credits from TR Ziraat Bank used by the business concerns as a whole was YTL 128 450,00. The credits used were generally used as equipment, machinery and business concern credits.

The reasons for non-institutionalized credit resources' being the credit resource intensely resorted to are as follows: business concern's being generally made up of smaller business concerns, these business concerns' opportunity to save being too restricted, heavy bureaucracy and guarantees in the institutionalized credit resources, the selective approach credit institutions adopt towards the business executives, falling behind in the level of education thus the level of being informed by the credits, credit interest rates' being too high for the producers, producers' forming stereotypes against institutionalized credit resources and their abstention.

The reason for the producers resorting intensively to non-institutionalized credits is that non-institutionalized credit resources are flexible in the dates of payments and that no chages are demanded.

In the study; survey findings related to several nontraditional agricultural credit suppliers are presented; resourcebased strategy concepts are introduced to evaluate the competitive implications of nontraditional lending programs. The potential advantages conferred by firms' resource bases are illustrated with descriptions of the difference among lenders of the functional areas of intermediation (funding, delivery, regulatory compliance, risk-bearing capacity, underwriting) and how these relate to competitive advantages^[16].

In other study reports the characteristics and performance of 87 credit scoring models currently in use by lenders. True product-moment and rank correlations are used to measure consistency among the models. The results of this studs underscore the continuing lack of a uniform model or models for lenders to use in evaluating the creditworthiness of agricultural borrowers. The relatively high disparity among the systems now in place suggest informational deficiencies in this aspect of rural credit markets, and the need for further interchange among lenders, borrowers and analysts about the properties of credit scoring models^[9].

In other study, the Nigerian agricultural credit system is discussed and analysed with particular reference to the cocoa economy of South-Western Nigeria. The problems of credit supply in the area include low producer incomes, high private lenders' interest rates and excessive administrative costs for commercial and government lending institutions. The group loans scheme has been evolved to solve these problems^[1].

Credit rationing and high interest rates may not be due to exploitation by banks and moneylenders, but may instead be rational and efficient responses to information and contracting problems inherent in agricultural credit markets. High interest rates may

Table 2: Credit Use depending on Business Width Groups and the Results of the Variance Analysis

	BUSINESS CONCERN WIDTH GROUPS			
	1 – 50 da	51 – 100 da	101 - + da	General
Total (YTL)	47 575,50	231 425,20	157 785,48	436 786,18
Number of Observations	23	31	17	71
Average (YTL)	2 068,50	7 465,53	9 281,50	6 151,92
VARIANCE ANALYSIS TABLE				
Variation resource	Sum of Squares	Degree of Latitude	Average of Squares	F
Intergroup (000 YTL)	603 488,16	2 (k-1)	301 744,08	3,88
In-group (000 YTL)	5 294 252,05	68 (N-k)	77 856,65	
General (000 YTL)	5 897 740,21	70 (N-1)		
$F_{cal} > F_{table} \quad F_{3,88} > F_{3,15}$				
CONCLUSION: Difference between the groups is important according to $P < 0,05$				
LSD CONTROL TABLE				
Groups compared	Differences between averages	Standard of the Difference in the mean average of the Group Fault $S_{x1} - S_{x2}$	LSD (0,05)	Conclusion *
1	2	3	4=3 x t	5
0 – 2 000 ile 2 001 – 5 000	- 5 396,83	151,17	296,30	important
0 – 2 000 ile 5 001 - +	- 7 213,00	175,70	344,36	important
2 001 – 5 000 ile 5 001 - +	- 1 816,17	165,78	324,93	important

(*) If the LSD Value is bigger than the difference in the mean average in terms of absolute value, the difference is not important. Otherwise, it is considered as important.

Table 3: Credit Use Status in line with the Specialization Level of the Business Concerns

Credit groups (YTL)	Specialization Level of the Business Concerns							
	specialized business		half specialized business		mixed business		Total	
	Number	%	Number	%	Number	%	Number	%
0 – 2 000	10	38,46	8	30,77	8	30,77	26	100,00
2 001 – 5 000	2	9,09	13	59,09	7	31,82	22	100,00
5 001 - +	2	8,70	14	60,87	7	30,43	23	100,00
General	14	19,72	35	49,29	22	30,99	71	100,00
Degree of Latitude = 4	$\chi^2_{cal.} = 10,179 > \chi^2_{tab.} = 9,488$							

reflect high default rates or high costs associated with screening and monitoring loans. At the same time, imperfect information may give rise to imperfect competition, thereby providing lenders an opportunity to exploit borrowers^[18].

The use of accounting in agriculture is low. Consequently, farmers, banks, public administration bodies, policy-makers and other agents usually use nonaccounting- based information as the basis for decision-making. This is also the case when predicting farm non-viability. Farm size, experience and personal characteristics of the farmer, farm location, type of farming involved, approaches to farm productivity and market strategies, etc., all constitute relevant information that is available to agents for evaluation of farm non-viability. They reflect structural and fixed characteristics of each particular farm and can easily be observed^[31].

In the study analyzes the personal and farm characteristics that influence the use of farm credit, the degree of indebtedness, and debt consolidation for U.S. farms. Whereas previous studies have examined the supply side of agricultural credit using lender-based data, this study considers the demand side of agricultural credit using representative farm-level data from the USDA's 2001 Agricultural Resource Management Study (ARMS). The results show that gross farm income, risk management strategies, and operator's age and risk aversion had significant influences on the likelihood of farm credit use by rural residence, intermediate, and commercial farms^[13].

Business Concern Width: Business concern width is generally considered to be a factor affecting the tendency to adopt agricultural innovations. Business concern width is one of the most significant criteria

setting the economic power of the business concern and revealing its level of wealth^[10].

You might expect business concerns extending over a large area or having a large operation area to adopt and use modern agricultural technology more easily and that these business concerns must be managed better. Therefore, it can be claimed that the credit use of business concerns with a larger area of land is higher. For example, an increase in farm size will raise the absolute amount of credit, as it affects the total demand for credit. It will also affect the interest rate, as it increases the collateral value of borrowing, thereby increasing the supply of credit. The implication is that the supply and demand curves of credit cannot be separately identified, unless the determinants of credit supply and demand, other than borrower-specific variables, are used for the estimation. Reduced-form equations will be used for the statistical analysis of the determinants of level of borrowing by source of credit^[17].

A variance analysis has been conducted to find out whether there is an intergroup relationship between credit use and business concern width and the results of the calculations and the LSD control table are given in Table 2.

According to the results of the analysis, the difference between the groups is statistically significant. It can be said that the business concern width groups might have an effect on credit use according to $P < 0,05$. Therefore, we can conclude that in terms of credit use business width is an important factor. The LSD control states which group is the source of the difference detected between the credit use and business concern width groups according to the $P < 0,05$ significance level. LSD control is provided in Table 2.

As can be seen in LSD control table, it has been revealed that the difference in the comparison of the mean averages of all the credit groups is significant.

Level of Expertise: It is known that the agricultural sector is greatly affected by the nature. Therefore, risks and uncertainties have a direct effect on agriculture. The producers can prefer product diversification against such risks and uncertainties. Damage incurred in one product can be made up for by way of product diversification against possible natural events.

The business concerns studied are classified as specialized, half specialized and mixed business concerns. Specialized business concerns are companies earning 70% of its annual agricultural product sales cost from a single product. Half specialized business concerns are those earning 70% of their total annual agricultural products sales cost is earned from two production branches (on condition that each have a share of at least 10%). Mixed business concerns, on

the other hand, are the business concerns other than specialized and half specialized business concerns.

Table 3 gives information on the specialization levels of business concerns. When inspected as a whole, it can be seen that the rate of specialized business concerns is 19.72%, that of half specialized business concerns is 49.29 % and this ratio is 30.99% for mixed business concerns.

Half specialized business concerns vary between 30,77% and 60,87% depending on the group they belong to and increase in line with their own group

Khi-Kare analysis was carried out to decide whether there is a relationship between the credit use of the business concerns and the level of specialization. The results of the analysis made reveals that the relationship between the level of specialization and credit use is statistically meaningful. In other words, the level of specialization has an effect on credit use. It was concluded that at a significance level of $P < 0,05$, the difference between credit use groups and level of specialization is important.

Rate of Market Orientedness: Agricultural products' being offered to the market results in the individuals in the rural area getting into contact with the outside culture. The rise in the number of agricultural products offered to the market might cause a rise in awareness in terms of both cooperation and guarding financial interests. It can already be said that with the offering of products into the market, an awareness for protecting and spreading the interests of producers have been created. And it is predictable that a producer aware of his economic interests which are to be protected will pay much more attention to the use of credits^[15].

Information relating to credit use in line with market orientedness and the results of the Khi-Kare analysis are given in Table 4.

When inspected as a whole, the rate of business concerns with a market orientedness rate of 81-95% is 57.74%. This group varies between 45.45% and 69.56% compared to their own groups and shows variation. 2.82% of the business concerns have a market orientedness rate of 50-65%; 21.13% has a rate of 66-80% and 57.75% has a market orientedness rate of 81-95% and finally, 18.31% of the business concern has a rate of 96-+% of market orientedness.

A khi-kare analysis was carried out to decide whether there is was a relationship between credit use and market orientedness. The results of the analysis reveal that the relationship between credit use and market orientedness is statistically meaningful. According to this result, it is possible to claim that there is a relationship between using credit and market orientedness or that market orientedness has an effect

Table 4: Credit use depending on the rates of market orientedness

Credit groups (YTL)	Groups of market orientedness									
	%50 - %65		%66 - %80		%81 - %95		%96 - +		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
0 – 2000	0	0,00	4	15,39	15	57,69	7	26,92	26	100,00
2001 – 5000	0	0,00	9	40,91	10	45,45	3	13,64	22	100,00
5001 - +	2	8,70	2	8,70	16	69,56	3	13,04	23	100,00
General	2	2,82	15	21,13	41	57,74	13	18,31	71	100,00
Degree of Latitude = 6		$\chi^2_{cal.} = 13,131 > \chi^2_{tab.} = 12,592$								

Table 5: Credit use in line with agricultural income groups

Credit groups (YTL)	Agricultural income groups								
	0 – 5 000		5 001 – 10 000		10 001 - +		Total		
	Number	%	Number	%	Number	%	Number	%	
0 – 2000	13	50,00	9	34,62	4	15,38	26	100,00	
2001 – 5000	11	50,00	5	22,73	6	27,27	22	100,00	
5001 - +	7	30,43	10	43,48	6	26,09	23	100,00	
General	31	43,66	24	33,80	16	22,54	71	100,00	
Degree of Latitude = 4		$\chi^2_{cal.} = 3,741 < \chi^2_{tab.} = 9,488$							

on credit use. At a significance level of $P < 0,05$, the difference between credit use and market orientedness is proven to be important.

Agricultural Income: Almost all of the individuals living in the rural society deal with agricultural production. Some of the products they produce are offered to the market and the rest is consumed by the family members. In this respect, as a result of agricultural production, they both offer products to the market and demand products from the market. Moreover, individuals who are not satisfied with their incomes work as agricultural workers in the status of foreign labor force.

Increase in agricultural income which takes a significant interest from the incomes of individuals dealing with agriculture depends on an increase in productivity in agricultural production. The minimization of production costs, easy supply of inputs and convenience in offering products to the market will be able to result in income increases in business concerns. High income of borrowers may have positive effect on repayment of loans. The relationship between income and loan repayment of rural borrowers is expected to be positive. However, in the study, the results obtained are opposite to the prior expectations. One possible explanation can be that the probability of loan repayment by rural borrowers may be affected more by their attitude towards debt obligations than by their repayment ability^[4].

Credit usage statuses of producers in line with agricultural income value groups are given in Table 5.

When inspected, the chart reveals that 43.66% of the business concerns derive a revenue of YTL 0-5000 from agricultural activities; 33.80% derive YTL 5000-10000 and 22.54% derive 10001-+.

On the other hand, it is observed that agricultural revenue group with an income of YTL 0-5000 is dominant in the credit groups. Among the credit groups, 43.48% of those using a credit of 5000 and over have an agricultural revenue of 5001-10000..

Khi-Kare analysis has been carried out to decide whether there is a relationship between credit use and income groups. The results of the analysis have revealed that the relationship between the agricultural income groups and credit use is statistically not meaningful. In other words, we can say that agricultural income does not affect credit use. It has been found out that at a significance level of $P < 0,05$ a difference between credit use groups and agricultural income groups is not important.

Agricultural Products Annual Sales Cost: It is known that in rural societies agricultural production is done for earning a living and also for the market. Market oriented production gained in importance especially with the improvements in agriculture. The annual sales costs of the agricultural products offered to the market is an economic indicator on the basis of both business concerns and rural societies. It can be

Table 6: Credit use according to Agricultural products annual sales cost groups and the results of variance analysis

	Annual agricultural products sales costs groups			
	0 - 10 000	10 001 - 20 000	20 001 - +	General
Total (YTL)	58 426,50	194 897,18	183 462,50	436 786,18
Number of Observations	20	29	22	71
Average (YTL)	2 921,33	6 720,59	8 339,20	6 151,92
VARIANCE ANALYSIS TABLE				
Variation resource	Sum of Squares	Degree of Latitude	Average of Squares	F
Intergroup (000 YTL)	323 365,84	2 (k-1)	161 682,92	1,97
In-group (000 YTL)	5 574 374,37	68 (N-k)	81 976,09	
General (000 YTL)	5 897 740,21	70 (N-1)		
F cal. < F table F 1.97 < F3,15				
CONCLUSION: Difference between the groups is not important according to P < 0,05				

Table 7: Credit use according to total gross production value groups and the results of variance analysis

	Total gross production value groups			
	0 - 12 000	12 001 - 24 000	24 001 - +	General
Total (YTL)	68 313,50	204 142,18	164 330,50	436 786,18
Number of Observations	22	32	17	71
Average (YTL)	3 105,16	6 379,44	9 666,50	6 151,92
VARIANCE ANALYSIS TABLE				
Variation resource	Sum of Squares	Degree of Latitude	Average of Squares	F
Intergroup (000 YTL)	415 865,72	2 (k-1)	207 932,86	2,58
In-group (000 YTL)	5 481 874,49	68 (N-k)	80 615,80	
General (000 YTL)	5 897 740,21	70 (N-1)		
F cal. < F table F 2,58 < F 3,15				
CONCLUSION: Difference between the groups is not important according to P < 0,05				

considered as an economic factor used in the comparisons done between rural societies and business concerns^[15].

Furthermore, agricultural products annual sales costs are among the criteria indicating the economic condition of the producers. Therefore, it can be said that it helps producers with a high agricultural products annual sales be financially well off and take credits very easily.

Business concerns whose annual agricultural products sales cost is between YTL 10001-20000 have a large share among agricultural products annual sales groups. While 28.17% of all the business concerns have an annual agricultural products sales cost of YTL 0-10000, 40.84% have an annual agricultural products sales cost of YTL 10.001-20.000. And 36.42% of the business concerns using a credit of YTL 0-2000 have had an annual agricultural products cost of YTL 10001-20000.

A variance analysis was made to decide whether there is an intergroup relationship between credit use and annual agricultural products sales costs groups. The

results of the calculation are given in Table 6.

A variance analysis has been carried out to decide whether there is a statistical difference between credit use and agricultural products annual sales cost groups and the results have shown that the difference is statistically not important. Therefore, we can say that according to P < 0,05, agricultural products agricultural products annual sales costs do not effect credit usage.

Total Gross Production Value: Gross production value can be defined as gross income belonging to the business concern as a whole or one of the activities of the business concern (wheat, barley, cattle, sheep raising). The gross production of the business concern is affected by product prices, husbandry and agricultural product outputs, and the workload of activities depending on the production technology^[12]. In other words, gross production value is the total production value created by a production branch in an accounting period^[2].

Gross production value is an economic indicator on the basis of business concern, rural society and on the

macro level. Since gross production rate takes into consideration the products produced in the agricultural business concerns, it makes up, in a way, without taking into consideration the expenses, the yearly income of a business concern. Therefore, it is included within the research as an economic factor thought to affect credit use.

Business concerns with a total gross production value of between YTL 12 001 – 24 000 occupy a great share among total gross production value cost. While 30,99 % of all the business concerns have a gross production value of YTL 0 – 12 000 ; 45,07% get a total gross production value of between YTL 12 001 – 24 000. In the credit groups, on the other hand, the rate of business concerns using a credit of YTL 0-2000 in comparison to total gross production value groups vary between 11,54% and 46,15% and constantly falls.

In order to decide whether there is an intergroup relationship between credit use and total gross production value groups, a variance analysis was carried out and the estimation results are given in Table 7.

According to the variance analysis done in order to state whether there is a statistical difference between credit use and total gross production value groups, the difference between the groups is statistically not important. Therefore, we can say that according to $P < 0,05$, the total gross production value groups do not have an effect on credit use.

Conclusion: Though non-institutionalized credit resources are not high in value among agricultural credit resources, they are preferred credit resources in terms of business concern numbers. Among the institutional credit resources, the credit use in TR Ziraat Bank is not sufficient. This is possibly because of the traditional behaviors displayed by business executives during credit use and the structures of business concerns that do not require an intensive business capital.

To sum up, the revision of agricultural credit policy in Turkey and development of technical information and supervision as well as credits should receive closer attention. Taking into consideration the conditions of the producers and reducing the number of formal procedures to be carried out during the credit granting process will lead to the improvement of agricultural credit resources thus leading to a rise in producer's means, insure improvements in quality and quantity in production and help agricultural activities which are important in terms of the country's economy develop.

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