Credit through Rural Credit Partnerships for Agricultural Producers in Kazakhstan

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Abstract

Financing agricultural producers is one of the most acute problems within the entire scope of economic reforms in Kazakhstan. State financial support for agriculture in Kazakhstan is episodic in nature, small in size, and seldom reaches the target recipients, while the commercial banks are reluctant to give credit to agricultural producers. Although Rural Credit Partnerships (RCP) are very promising credit institutions for the agricultural sector, there are a number of challenges to their development. This study is organized in two parts: the first part analyzes the RCP membership status among corporate farms; the second part analyzes access to RCP credit by members of rural credit partnerships (both corporate and individual farms). The results of the first part of the analysis demonstrate that large-scale corporate farms with bank credit history are more likely to be members of RCPs. The second part of the analysis shows that the purpose of a loan requested from the RCP significantly affects the probability of a member to have access to RCP credit.

Keywords: agricultural finance, credit cooperatives, access to credit

Introduction

Credit supply is one of the major factors for normal functioning of farmers and it is one of the keenest problems in the imperfect market conditions of the Commonwealth of Independent States (CIS) (Lerman et al., 2007). It is well known that capital comes in two basic forms: equity capital and debt capital. Credit is the second largest source of capital for farmers (Kent, 2004). However, Kazakhstani farmers face difficulties in accessing both these sources of capital.

There are three main sources of formal credit in the agricultural sector of Kazakhstan: commercial banks, Rural Credit Partnerships (RCPs), and Micro-Credit Organizations (MCOs). However, their contributions to lending in the agricultural sector are unequal. Commercial banks provide the major share of all loans, i.e., more than 90%, RCPs account for about 5% and their share is declining over time, while MCOs provide less than 1% of all loans (Table 1).

Table 1: Shares of loans to agriculture in Kazakhstan

	2005	2006	2007
Total, billion KZT	198.7	254.6	298.2
Share of credit, in %:			
Commercial banks	90.2	95.5	94.5
Rural Credit Partnerships (RCPs)	9.3	3.8	5.1
Micro Credit Organizations (MCO)	0.5	0.7	0.4

Source: Ministry of Agriculture of the Republic of Kazakhstan, http://www.minagri.kz

At present, there is no well-established rural banking system in Kazakhstan. Only two of the thirty commercial banks have a network of branches in rural areas. In addition, commercial banks prefer to give loans to large-scale corporate farms. In 2007, these farms received 96.5% of the total credit lent to the agricultural sector whereas the share of loans to individual farms was minimal and continues to decrease (Table 2).[2]

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2   There are three types of agricultural producers in Kazakhstan: (1) corporate farms (partnerships, join-stock companies, and state-owned farms), the successors of *kolkhozes* (collective farms) and *sovkhozes* (state farms); (2) individual (peasant) farms; and (3) subsidiary household plots (which could be classified as small semi-commercial farms without legal status). Although, corporate farms make less than 1% of the total number of producers, they control more than 50% of arable land in Kazakhstan.

Table 2: Loans provided by commercial banks to agriculture in Kazakhstan

	2005	2006	2007
Loan volume, billion KZT	189.5	243.2	282.0
Share of agricultural lending in total loan portfolio, in %	6.3	4.6	3.5
Share of corporate farms in loans granted to agriculture, in %	96.3	96.0	96.5
Nominal interest rate, in %	14	13.6	15

Source: National Bank of Kazakhstan, http://www.nationalbank.kz

The Rural Credit Partnership system is a recent development in Kazakhstan: only 7 years old, including 2 years of the pilot project period. The Agricultural Credit Corporation (ACC), a totally state-owned organization, was responsible for setting up the RCPs and it retains the right to approve the membership for each RCP. Additionally, the ACC makes the final decision on credit applications in RCPs.

Rural credit partnerships in Kazakhstan

Credit cooperatives are considered to be financial institutions that fill a market niche and consist of entrepreneurs and producers with little or no collateral. In other words, cooperative financial institutions can be particularly suited to bring banking services to the otherwise "unbankable" (Emmons and Mueller, 1997).

The Kazakhstani government recognized that agricultural producers have problems in gaining access to credit and it accordingly initiated the establishment of financial institutions that could coexist both with state financial programs and with the private sector. In other words, the government tried to find an organizational form that could resolve what were seen to be market failures and at the same time operate on a more commercial basis. One of the initiatives was the establishment of a network of Rural Credit Partnerships (RCP) operating in rural areas. The goals of these RCPs were to increase access to short-term and middle-term credit for agricultural producers.

Since 2001, over 150 RCPs have been established in Kazakhstan and about 6,000 individual and corporate farms have become members of these partnerships (2.8% of the total number of all agricultural producers). Most RCPs are located in Kazakhstan's northern grain regions and most of the RCP members are mid-sized

and large farms averaging 1,500 ha of arable land. According to the current law on Rural Credit Partnerships (Law, 2003), RCPs are not allowed to take deposits. RCPs are partly state owned organizations: they have about 30% of state participation in equity (although private RCPs are permitted, none exists); over 50% of all RCP credit is funded through the state budget at a relatively low interest rate. RCP membership is restricted and depends greatly on the type of agricultural commodities produced, on the area of land, and, in most cases, on having good connections with local authorities.

Although the RCPs only satisfy a small proportion of agricultural producers' demand for external finance, they have proved their viability. The main issue at this stage is finding the most effective way to further their development.

Data for empirical analysis

The analysis consists of two parts and consequently requires two different data sets. The first part examined the RCP membership status of corporate farms, and only corporate farms were included in the sample. The second part examined access to credit by RCP members, and both corporate and individual farms were included in the sample.

The analysis is based on a static model that uses cross-sectional data from a specific production period (the year 2006). Data on corporate farms were obtained from the Regional Agency of Statistics (Pavlodar Region, Kazakhstan). Data on agricultural land were obtained from the Regional Land Committee (Pavlodar Region, Kazakhstan), which has records of the area of arable land and pastures (in hectares) rented or owned by farms. Data concerning the RCP members and RCP credit were obtained from the regional headquarters of Agricultural Credit Corporation in Pavlodar Region (Northern Kazakhstan).

For the first part of the analysis, data on corporate farms were used. All corporate farms that reported in 2006 to the Regional Agency of Statistics were considered for inclusion in the analysis. Among 157 corporate farms in Pavlodar Region, 127 farms submitted reports in 2006. Seven farms did not provide all the needed data and were excluded from the sample. The final sample of 120 farms covers 76.4% of the total number of corporate farms in Pavlodar Region in 2006 and 96.7% of all agricultural land controlled by corporate farms in Pavlodar (Figure 1).

Figure 1: Structure of agricultural land by farm categories in Pavlodar Region, 2006 (thousand hectares)

Corporate farms
1174.7

Household plots
78.7

Individual farms
2063.1
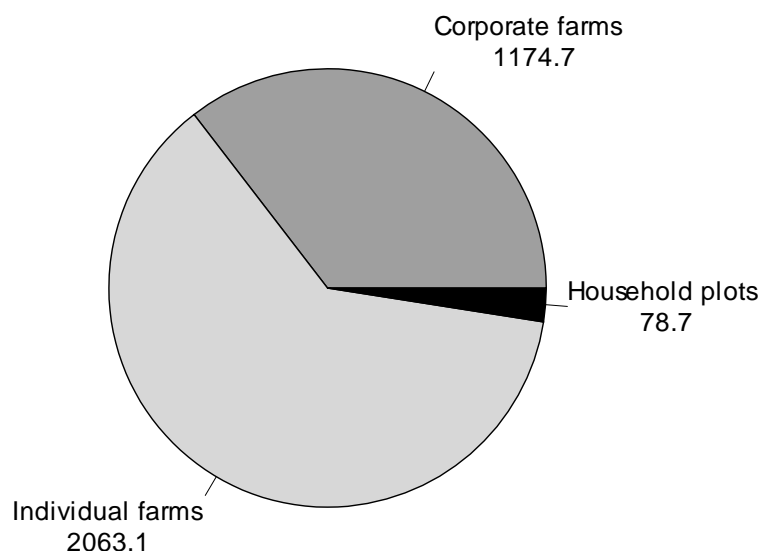
Source: Agricultural Census 2006-2007, www.stat.kz

The sample farms were classified into crop producers and livestock producers. Crop production is the dominant agricultural specialization of farms in Pavlodar Region due to historical factors that go back to the Soviet time. Livestock production is concentrated in districts where the climatic conditions are unfavorable for crop production, and livestock producing farms typically specialize in livestock with little or no crop production. Of the 120 corporate farms included in the sample, 34 corporate farms specialized in livestock production and seven were mixed farms with more than 50% of crop production; for simplicity, these mixed farms were included in the group of crop producing farms.

The sample includes 37 corporate farms that are members of RCPs; these farms represent 37.5% of all land controlled by corporate farms in Pavlodar Region. Among large-scale corporate farms in the sample (44% of the sample are large farms with more than 5,000 hectares per farm) about 40% are RCP members, whereas among the remaining small- and medium-scale corporate farms (with less than 5,000 hectares per farm) only 23% are RCP members.

The data for the second part of the analysis consist only of RCP members in Pavlodar Region, including both corporate farms and individual farms. The sample covers 289 farms (94% of all RCP members) including 33 corporate farms (data on 30 of these corporate farms were used in the first part of the analysis) and 256 individual farms for which information on credit purposes and plot size could be obtained; total number of RCP members was 307 members in 2006. The sample covers 26.8% of total agricultural land in Pavlodar Region, including 344,000 hectares in corporate farms (38.7%) and 545,000 hectares in individual farms (61.3%). Of the 33 corporate farms, 27 are crop-producing farms.

The variables expressed in terms of money are given in Kazakhstani currency – Tenge, KZT. The exchange rate in 2006 was 132 KZT to $1.

Membership status: corporate farms

In order to participate in a credit scheme offered by Rural Credit Partnerships an agricultural producer should be a member of the RCP. The first part of the analysis focuses on the factors that affect membership of corporate farms in RCP.

Binary logistic regression (Logit) model was applied to determine factors that influence corporate farm's membership status in RCP. The Logit model for the dependence of P_i (probability of being a member) on the values $x_{1i}, x_{2i} \ldots x_{ki}$ of k explanatory variables, $x_1, x_2, \ldots x_k$, is expressed as follows:

$$\ln (P_i/(1 - P_i)) = \alpha + \beta_1 x_{1i} + \ldots + \beta_k x_{ki}, \tag{1}$$

where $(1 - P_i)$ is the probability of the ith corporate farm being a non-member, and $\ln(P_i/(1 - P_i))$ is the logit or log odds in favor of the ith corporate farm being a member of the RCP ("the event"). The x_k are the hypothesized determinants of the membership status, α and β_k are the parameters to be estimated, and i is the number of observations (120 farms) (Chatterjee and Hadi, 2006).

The odds ratio for an independent variable, Exp (β), is the natural log base e raised to the power of β (the coefficient by the corresponding explanatory variable). The odds ratio is the factor by which the independent variable increases or (if negative) decreases the log odds of the dependent variable. For example, for continuous variables the odds ratio represents the factor by which odds (event) changes for a one-unit change in the variable. In other words, if Exp (β) > 1, the independent variable increases odds (event), and conversely, if Exp (β) is less than 1, the independent variable decreases odds (event). When Exp (β) = 1, the independent variable has no effect on odds (event) (Garson, 2010).

We formulate the following hypotheses concerning the membership status of corporate farms in RCP.

Hypothesis 1a:
Small- and medium-scale corporate farms are less likely to be RCP members.
Hypothesis 1b:
Farms specializing in livestock production are less likely to be RCP members.

The dependent variable, membership status, is a dichotomous (binary) variable with values 1 and 0, where 1 stands for being a RCP member and 0 otherwise. The hypothesized determinants of the membership status are TOTLAND, LAB, EQUIP, PROFIT, SPECIAL, BANKCRED, DISTDISTR (as explained below). The regression estimating the probability that a corporate farm is a RCP member, takes the following form:

$$\ln (P_i/(1 - P_i)) = \alpha + \beta_1 TOTLAND_i + \beta_2 EQUIP_i + \beta_3 DISTDISTR_i + \beta_4 BANKCRED_i + \beta_5 SPECIAL_i + \beta_6 LAB_i + \beta_7 PROFIT_i \qquad (2)$$

Table 3: Descriptive statistics, corporate farms, 2006

	N	Mean	Std. deviation	Minimum	Maximum
TOTLAND, '000 ha	120	9.14	14.33	0.10	86.16
EQUIP, mln KZT	120	3.82	14.61	0.00	114.49
DISTDISTR, km	120	43.73	33.56	5.00	167.00
BANKCRED, mln KZT	120	2.67	12.88	0.00	106.57
SPECIAL, dummy, 0 – crop production, 1 – livestock production	120	0.28	0.45	Frequency	
				0 = 86	1 = 34
LAB, people	120	41.42	80.85	0.00	452.00
PROFIT, mln KZT	120	5.98	23.12	-110.71	113.43

The membership status of corporate farms was estimated as a function of the following explanatory variables (the descriptive statistics are given in Table 3):

1.   TOTLAND: total agricultural land managed by the farm, including arable land and pasture (in hectares). According to the Land Code of Kazakhstan not only privately owned agricultural land, but also land use rights can be used as collateral, and TOTLAND accordingly includes both owned and rented land.

2.   EQUIP: value of equipment (in KZT). Although in theory agricultural land can be used as collateral, in reality farm equipment is more acceptable collateral to formal credit institutions due to underdeveloped land markets. The greater the equipment value, the more acceptable it is as collateral. However, the average accumulated depreciation among corporate farms is about 70%, and in some farms the equipment is completely written off.

3.   DISTDISTR: distance to district center (in km). This represents the distance to the RCP district headquarters. This variable stands for transaction costs. Due to the highly bureaucratic nature of the process of applying for RCP credit, transaction costs related to making and then revising the application can be quite large, constituting a significant impediment to access to credit.

4.   BANKCRED: amount of commercial bank credit (KZT). If a corporate farm is borrowing from a commercial bank, this means that the farm is sufficiently sustainable and creditworthy. As a result, it is easier to be ranked by the RCP as a reliable member and borrower.

5.   SPECIAL: specialization. This is a dummy variable with 0 for crop-producing farms and 1 for livestock farms. For Kazakhstani farms specialization plays an important role in the borrowing process. Grain-producing farms receive a major part of state subsidies and subsidized credit, and RCPs being partly state-owned organizations inevitably follow this policy. Crop-producing corporate farms accordingly make 75% of RCP membership.

6.   LAB: labor, the total number of employed on the farm. The more people work on the farm, the larger the farm is. Some corporate farms, which are successors of former state and collective farms, continue to employ redundant labor and suffer from inefficiencies. For some corporate farms, this variable may represent production costs, not the scale of production.

7.   PROFIT: profit before tax (KZT). Despite a policy aimed at improving agricultural production through farm enlargement (Program, 2010) and state-support programs for large-scale farms, smaller agricultural producers seem to be more profitable. Moreover, farms that are more profitable can choose to apply for commercial bank credit, which is much larger than RCP credit.

The means of the explanatory variables were calculated separately for the group of RCP members (n=37 corporate farms) and for the control group of non-members (n=83). The differences in the means between the two membership-status groups were found to be statistically significant for all variables, except EQUIP and PROFIT (Table 4).

Table 4: Factors affecting the membership status of corporate farms in RCP: comparison of means for members (n = 37) and non-members (n=83), 2006

Variables	Mean		t-value	Sig. (2-tailed)
	Members (n=37)	Non-members (n=83)		
TOTLAND, '000 ha	11.94	7.89	1.41	0.16
EQUIP, mln KZT	2.75	4.29	-0.70	0.48
DISTDISTR, km	52.57	39.79	1.89	0.06
BANKCRED, mln KZT	7.59	0.48	2.88	0.005
SPECIAL, dummy, 0 – crop production, 1 – livestock production	0.14	0.35	-2.45	0.01
LAB, people	64.03	31.34	1.89	0.06
PROFIT, mln KZT	4.72	6.54	-0.36	0.72

Member corporate farms are larger than non-members by both land and labor: the average size for member farms is 11.94 thousand hectares, compared with 7.89 thousand hectares for non-member farms; member farms employ on average 64 workers, compared with 31 for non-member farms. These two variables imply that larger corporate farms are more acceptable as members to RCPs. They also imply that state supported financial organizations prefer to credit large-scale farms. At the same time, RCP members have borrowed more from commercial banks (7.6 million KZT compared with 0.48 million KZT for non-member farms). This essentially implies that both main sources of credit – commercial banks and RCPs – are more accessible to large corporate farms than to smaller producers. The crop/livestock specialization variable proves the statement that crop producing corporate farms are more readily served by formal credit institutions than livestock farms: the mean value of the specialization ratio for member farms is significantly lower than for non-member farms, which points to a higher frequency of crop-producing farms (SPECIAL=0) among the members. The result for distance from the district center where the RCP headquarters is located is statistically significant,

but counterintuitive: non-member farms are closer to the RCP headquarters than member farms and thus enjoy lower transaction costs. This result may be explained by the specifics of the Pavlodar Region, where most large-scale crop producing farms – the favorites of credit institutions – are located far from the district centers. The differences in PROFIT and EQUIP are not statistically significant and the t-value is unexpectedly negative. This could mean that RCPs simply cannot meet the needs of the more profitable farms with a large collateral base. Indeed, 33 corporate farms received credit from RCPs, but their number decreased to 19 in 2008 and just 14 in 2009. The amount of credit that RCPs can provide is not large enough to satisfy the credit needs of corporate farms.

The results of the Logit regression (Table 5) generally support Hypothesis 1a. The estimated coefficient of LAB is positive and significant, indicating that larger farms employing more labor have a higher probability of being a RCP member. From the model we conclude that an increase of the labor force by one worker (keeping other factors constant) increases the odds of membership by a factor of 1.02 (i.e., by 2%). The coefficient of TOTLAND – another size variable – is also positive, but it is not significant in the estimated model.

Farms with access to commercial bank credit have a higher probability of being also a RCP member. A unit change in the amount of bank credit (holding all other factors constant) increases the odds of being a member by a factor of 1.44, i.e., by 44%. Indeed, a farm having bank credit is considered by the RCP as creditworthy and, additionally, such a farm is more confident in its ability to meet RCP membership requirements.

The regression results in Table 5 also support Hypothesis 1b. The specialization dummy SPECIAL distinguishes between crop-producing farms (SPECIAL=0) and livestock farms (SPECIAL=1). It is statistically significant and the odds of being a member are lower by a factor of 0.32 (i.e., by 68%) for livestock farms compared with crop-producing farms.

The variables characterizing the value of equipment and profit have a statistically significant negative sign. This may be interpreted as an indication of negative self-selection: profitable farms and farms that have a large collateral potential in the form of equipment simply do not need to be a RCP member and do not apply for membership. that can be interpreted as indication that if a farm is sustainable enough and can offer costly enough equipment as collateral, then it would be in less need to be a member of RCP. Therefore, a unit increase in the value of equipment reduces the odds of being a member by 30%, while a unit increase in profits reduces the odds of being a member by 5% (Table 5).

Table 5: Results of the Logit model estimating the probability to be a RCP member for corporate farms in Pavlodar Region, 2006 (n=120)

Variables	Coefficient estimates	Exp(β)
TOTLAND, '000 ha	0.015 (0.2335)	1.01
EQUIP, mln KZT	-0.361 (4.274**)	0.70
DISTDISTR, km	0.013 (3.356*)	1.01
BANKCRED, mln KZT	0.363 (6.609***)	1.44
SPECIAL, dummy, 0 – crop production, 1 – livestock production	-1.157 (3.187*)	0.32
LAB, people	0.025 (9.304***)	1.02
PROFIT, mln KZT	-0.051 (2.827*)	0.95
Constant	-1.744 (12.095)	0.18

Note: ***, ** and * indicate statistical significance at the 1%, 5% and 10% levels, respectively; t-statistics in parentheses

Access to credit among RCP members

The second part of the analysis considers factors affecting access to credit for RCP members, which may be corporate or individual farms. The analysis relies on the assumption that all members are willing to borrow from the RCP. We formulate the following hypothesis concerning the borrower status of corporate farms in RCP.

Hypothesis 2a:
Corporate farms are more likely to get credit than individual farms.

Hypothesis 2b:
Farms that use credit to purchase inputs (fuel and seeds) are more likely to get credit than farms that use credit to purchase livestock.

Members' access to credit is estimated by using a Logit model where the dependent variable – the borrower status – is a dichotomous (0, 1) variable indicating whether farm *i* borrows from the RCP (when it takes the value 1) or does not borrow (when it takes the value 0). The hypothesized determinants of borrower status (access to RCP credit) are TOTLAND, LEGSTAT, and PURP. The borrower status is estimated as a function of the following variables:

Figure 2: Distribution of farms by credit purpose (corporate and individual farms), %
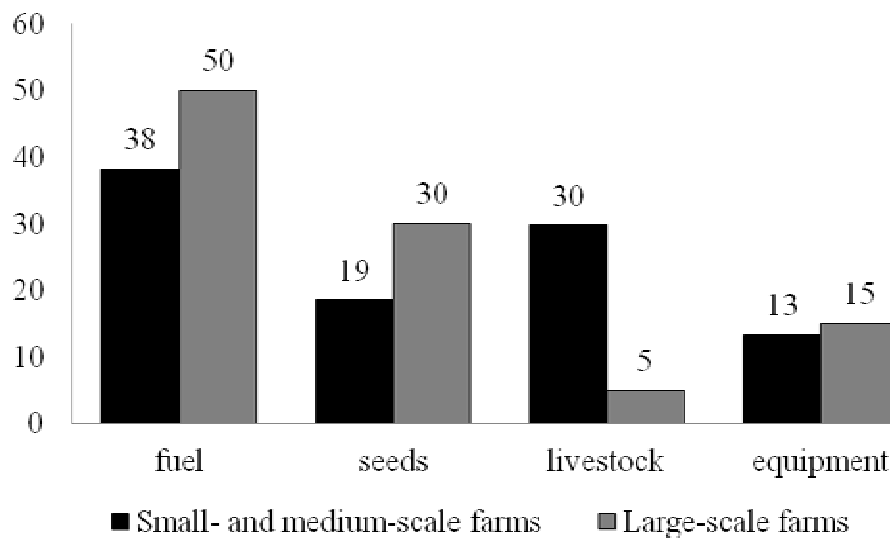
Source: Regional headquarter of Agricultural Credit Corporation
(Pavlodar Region) and own calculations

1. TOTLAND: total agricultural land (including arable land and pasture), both owned and rented. The average land area of RCP members was 7,006 hectares for corporate farms and 1,931 hectares for individual farms in 2006.

2. LEGSTAT: the legal status of the member – a corporate farm or an individual farm. This is a dummy variable that takes the value 1 if the member is an individual farm and 0 if the member is a corporate farm. The average amount of credit is significantly different for the two groups: 4.6 million KZT for corporate farms and 1.6 million KZT for individual farms in 2006.

3. PURP: the purpose for which the loan was obtained from the RCP. This is a discrete variable with four levels: the value 4 is the base value representing equipment purchase; the values 1, 2, and 3 identify the purpose of the loan as

purchasing fuel, seeds, and livestock, respectively. Among larger farms (both corporate and individual) priority is given to borrowing for fuel and seeds (50% and 30% of borrowers, respectively), whereas smaller farms tend to borrow for livestock and fuel (30% and 38%, respectively). Purchase of livestock is the only purpose for which the percentage of borrowers is higher among small farms (30% compared with just 5% for large farms). Figure 2 shows the distribution of the purpose of borrowing for small and large farms.

The probability that the farm borrows from the RCP is thus estimated by the following Logit regression model:

$$\ln (P_i/(1 - P_i)) = \alpha + \beta_1 TOTLAND_i + \beta_2 LEGSTAT_i + \beta_3 PURP_i \qquad (3)$$

Table 6 summarizes the estimation results. Among the factors affecting members' access to RCP credit, the area of total land is the only metric variable. It is statistically significant and has a positive sign, as expected, because farms with more land have a greater volume of activity and thus a greater demand for credit; furthermore, such farms are crop producers and as described above have a preferred status for borrowing. However, since RCPs are not allowed to accept agricultural land as collateral, this factor cannot be regarded as contributing to loan security.

Unexpectedly, individual farms are more likely to borrow than corporate farms. The regression shows unexpected results, the change of legal status reduces the probability of obtaining credit for corporate farms in comparison with individual farms. The change of legal status from corporate farm (LEGSTAT = 0) to individual farm (LEGSTAT = 1) increases the odds of borrowing by a factor of 2.521. Despite the fact that corporate farms are significantly larger than individual farms and the majority of corporate farms are crop producers, the regression results do not support Hypothesis 2a. Although corporate farms borrow larger amounts, individual farms as an organizational category are more likely to borrow from the RCP than corporate farms.

Table 6: Results of the Logit model estimating the probability to borrow by RCP members, 2006 (n=283)

Variables	Coefficient estimates	Exp(β)
TOTLAND, '000 ha	0.053 (3.85**)	1.054
LEGSTAT, dummy, 0 - corporate, 1 - individual	0.93 (4.21**)	2.521
PURP, dummy, 1 - fuel	1.36 (11.51***)	3.890
PURP, dummy, 2 - seeds	1.46 (10.45***)	4.323
PURP, dummy, 3 - livestock	-0.17 (0.16)	0.846
Constant	-0.60 (2.85)	0.552

Note: ***, ** indicate statistical significance at the 1% and 5% levels, respectively; t-statistics in parentheses; the analysis uses 283 of the 289 sample farms, because six farms did not provide information on the purpose of borrowing.
PURP (4 = equipment purchase) – reference variable

Two of the three credit-purpose dummies are highly significant. Farms whose purpose was to use credit for purchasing fuel (PURP = 1) and seeds (PURP = 2) were more likely to obtain RCP credit than farms whose purpose was to use credit for equipment purchase (the reference value PURP = 4) (Table 6). Purchases of livestock (PURP = 3) does not have a significant effect on borrowing probability compared with equipment purchase.

When the purpose of credit changes from equipment purchase (the reference level) to purchase of fuel, the probability of borrowing increases by a factor of 3.890 (Table 6). Similarly, borrowing to purchase seeds increases the probability of borrowing by a factor of 4.323 compared to the reference probability of borrowing for equipment. These results support Hypothesis 2b: borrowing for the purchase of inputs (fuel and seeds) increases the probability of getting credit compared to borrowing for equipment or livestock purchase.

Summary and conclusions

Analysis of factors affecting the membership status of corporate farms in RCP identified the number of farm workers as the most significant determinant of the probability that a corporate farm becomes a RCP member. Since the number of farm workers is a measures of farm size, this finding points to a state policy aimed at encouraging farm enlargement and supporting mainly large grain producing farms through the government-sponsored RCP mechanism. The second significant factor emerging from the analysis is credit history, i.e., existing borrowing from commercial banks outside the RCP system. If a potential RCP member had bank credit before applying to join the RCP, such an applicant would be regarded as more reliable with a lower default risk in RCP. However, commercial banks obviously prefer to credit large-scale farms rather than small- and medium-scale producers. Another measure of farm size, total land area, turned out to be not significant. This probably implies that agricultural land does not play a significant role as collateral as long as land markets remain underdeveloped and land use rights are ambiguous. The results suggest that smaller corporate farms are less likely to be RCP members and thereby have limited access to credit services provided by the RCPs. This situation may seriously constrain rural development in Kazakhstan.

The access of RCP members – both corporate and individual farms – to loans from their RCP was found to depend on total agricultural land, the legal status of the farm (whether corporate or individual), and the purpose of borrowing (purchasing fuel, seeds, livestock, or equipment). Corporate farms were not found to have better chances of borrowing from RCP than individual farms. Use of credit to purchase fuel and seeds (rather than livestock or equipment) was found to improve the members' chances of borrowing from RCP. Contrary to the previous analysis of membership status of corporate farms, total land area was found to be a significant factor in this analysis, probably because it was the only measure of farm size used and not because of possible collateral value.

Thus, despite the generally positive outcomes of the RCP program reflected in the growing amount of RCP credit and increasing RCP membership (Figure 3), two main problems hamper the development of RCPs. The first problem is related to mistrust that surrounds RCP membership of corporate farms. There is a perception that the heads of corporate farms who maintain close connections with the local authorities or the staff of the Agricultural Credit Corporation will be better able to participate in RCPs. Since the final decision on membership is made by the ACC, one can suggest that this agency would follow the state agricultural policy, namely, increasing support for large-scale producers, such as corporate farms. Government-controlled credit unions are generally characterized by non-

transparent decision making regarding both membership and credit allocation, which gives central and regional authorities too much flexibility in favor of "well-connected" RCP members (Buyske and Lamberte, 2006).

**Figure 3: Grown of the number of RCP members, 2005-2009
and amount of credit provided by RCP, Pavlodar Region**

credit, mln KZT   number of RCP members
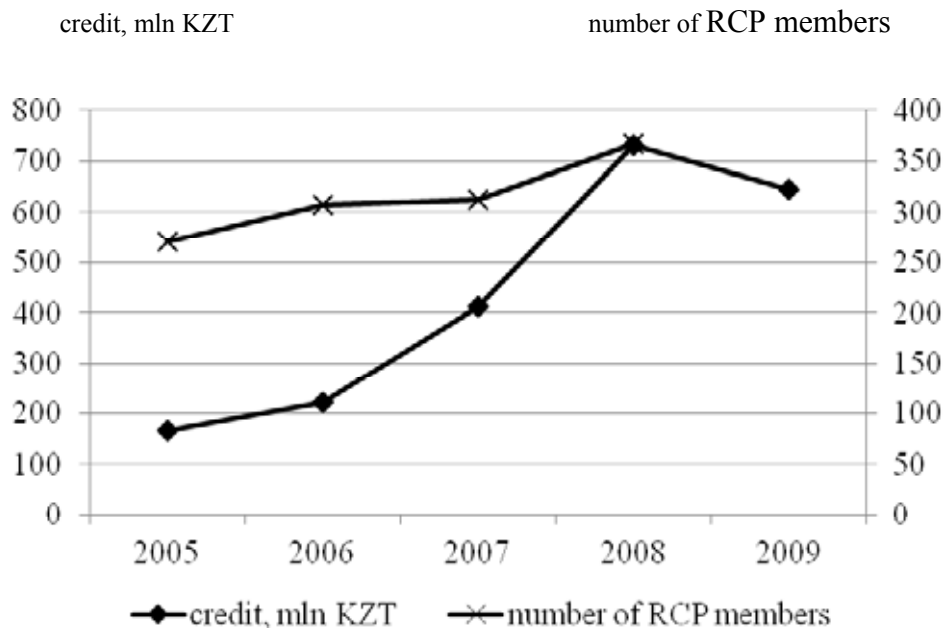
Source: Regional headquarter of Agricultural Credit Corporation (Pavlodar Region)

The second problem is related to restrictions concerning access to credit among RCP members, whether corporate or individual farms. The restrictions may be attributable to the heavy dependence of RCPs on state credit lines and their obligation to adhere to the policy and predetermined requirements of the Agricultural Credit Corporation. RCPs are not powerful enough to develop their own credit policy taking into account local peculiarities and needs.

Clearly, state financial support is mainly aimed at large-scale grain producing farms, which is in keeping with Kazakhstan state agricultural policy of enlarging corporate farms. RCPs, being almost completely dependent on state credit lines, will not be able to meet the credit needs of all agricultural producers – both large and small. Therefore, it is necessary to acknowledge that the successful development of RCPs will largely depend on structural and legislative improvements in the future. Encouraging membership and increasing participants'

commitment to saving would enable RCPs to be more independent of state credit resources and extend their sphere of activity.

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