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Farms and the Financial Market: Russian Farm Performance, Access to Credit and Government Support

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Financing farms

Large corporate farms no longer totally dominate Russian agriculture but still account for more than 40% of agricultural product, control nearly 80% of agricultural land, and receive virtually all bank loans and government subsidies (see **BASIS Brief 34**). This BASIS brief combines the findings and policy recommendations arising from several studies of the financial market and Russian corporate farms. One study identified the characteristics of the best and worst financial performers among the farms. Another study looked at determinants underlying a farm's ability to access credit. A final study examined the factors underlying the general failure of state support mechanisms for farms.

Financial performance and efficiency

Using 2001 financial and production data for all 195 corporate farms in the Leningrad Oblast, a BASIS study characterized the differences among farms in terms of financial performance. The analysis shows that 34% of farms contribute 75% of total revenues and almost 90% of total profit, while 35% of farms account for 51% of overdue debt.

To quantify the differences in financial performance, the farms were classified into five groups by measures of solvency, ranging from group 1 for best performers to group 5 for worst performers. There exist substantial differences in the productivity of resource use between the best and worst performing farms. The best generate more sales revenue, yet use much less land than the average farm because a relatively high proportion of these best farms are poultry factories and greenhouses, which rely more on labor and capital assets than on land. The best farms use more internally-generated funds (primarily sales revenue) in their financing mix, while the worst farms rely more heavily on external funds. When farms borrow from banks and other institutions, the main difference between best and worst farms is in the use of supplier credit: the worst performing farms are in payment arrears to such an extent that new supplier credit virtually matches bank borrowing. Yet, despite their low profitability and apparent lack of repayment capacity, poor performing farms are able to continue to borrow and buy inputs on credit. In a market economy, it is inconceivable that commercial banks would continue lending to insolvent farms and that suppliers would continue selling to them on credit; yet, in Russia, the practice of soft budget constraints that proved so destructive in Soviet times remains evident.

Government subsidies seem to be allocated mainly from considerations of social equity, not economic performance, and the data show they are of relatively low importance for farm finances. Across the five groups in the study, subsidies average 2% of sales, which is exactly the extent of their impact on net profits. Had all subsidies been eliminated, net profits reported by the farms would have dropped from 8% to 6% of sales. Eliminating subsidies would have increased losses for group 5 farms (the worst performers) from 29% to 34% of sales and would have changed the net profit of group 4 farms to a net loss (from +3% to -2% of sales). Nonetheless, it cannot be said that subsidies keep non-viable farms afloat. Nearly 55% of total subsidies go to groups 1 and 2, which employ a larger workforce, while groups 4 and 5 receive less than 25%. As so often happens in studies of agricultural transition, the empirical findings refute conventional wisdom, which claims that government pours good money after bad by subsidizing inefficient agriculture.

Quality of management is more responsible for differences in financial health across solvency groups. Management quality accounts for almost 50% of the explained variability in the solvency measure. Labor accounts for 28% and land 13%. All other variables combined account for less than 10%. This analysis shows that management quality is more important for success than physical endowments (labor and land). Natural conditions and product choice play a marginal role in financial health, while subsidies—perhaps the most popular policy mechanism in Russia—do not contribute at all. Government policies should emphasize management quality through far-reaching training programs in finance, marketing, production management, and personnel management. Currently, however, it seems that managerial emphasis remains, as was the case in the Soviet era, on production rather than economic and financial performance.

Comparison of the 2001 results with an earlier analysis based on 1999 financial and production data shows that insolvent farms appear firmly stuck in insolvency, with more than 97% remaining poor performers over time. The best farms tended to remain in the top category of performers, although less resolutely, with 73% maintaining their status as best performers. It seems that agricultural reforms helped create a contingent of strong and healthy corporate farms capable of sustained profitable production.

Overall, the data clearly show that 30-40% of farms in the Leningrad Oblast accounted for the majority of sales, profits, and employment. They achieved much higher productivity by all partial measures and managed to maintain a reasonable financial discipline. Government policies should support these farms instead of spreading support among all farms. Supporting the best performers can produce the maximum impact in terms of output and profits.

Determinants of credit access

In Russia, the majority of politicians, agricultural officials, and corporate farm managers firmly believe that inadequate access to credit is a major factor constraining growth. Researchers used a sample of corporate farms from the 2003 BASIS survey to study the determinants of access to credit. In the sample, 30 corporate farms reported receiving bank loans; 75 farms received no loans. We analyzed five groups of factors that could affect the ability of these farms to succeed or fail in accessing credit. Three groups focus on farm activity: current repayment capacity (i.e., ability to generate profits), ability to smooth out negative fluctuations of wealth (i.e., asset endowments), and creditworthiness (as expressed by credit history). Two groups of factors recognize that access can be helped or hindered based on transactions costs (for the farm or the bank) and regional policies.

Economic efficiency is the main determinant of credit access. Farms with higher profitability have a higher probability of borrowing. This suggests that the Russian rural credit system, however limited and thin, behaves to a certain extent according to market principles. Yet, there were significant deviations from what is normally observed in market economies. Asset endowments, such as land and capital stock, have a very weak effect on the ability to borrow. This is understandable, because land is not really used for collateral in the present legal system and cannot be easily sold to repay outstanding debt; therefore, in Russia, land does not play the role of a store of realizable value that can be liquidated in times of adversity.

Another deviation from market principles is that a bad credit history does not impair the ability to borrow. This may be because overdue debt is not an appropriate measure of credit history in an environment with pervasive soft budget constraints. It may also reflect uncertainty surrounding the very notion of credit history in a transition economy, where owners and managers change often and rapidly. Under such circumstances, it may be better to use total indebtedness as a measure of solvency affecting access to credit.

Entitlement to subsidized interest rates, one of the main tools of Russian agricultural policy today, does not impact a corporate farm's credit access. Commercial banks decide whether or not to lend to an agricultural producer who is entitled to a subsidized interest rate, and their decision is affected by usual market economy considerations of general risk and creditworthiness.

The findings caution against generalizing the conventional financial patterns of market economies to transition countries. Russia seems to be characterized by specific fundamental features that require further attention before the familiar principles of developed countries can be extended to its financial markets.

The government role

Sustainable growth in the farm sector is impossible without an inflow of investments and the ability of producers to access financial resources. The financial market's underdevelopment is caused largely by the insolvency of many corporate farms, which limits the demand. This is the most urgent problem in Russian agriculture and the main barrier to financial capital inflow. Yet there are major problems too on supply side of the financial market due to inefficient and imperfect state mechanisms of support. Government policies include debt rescheduling, subsidized credit, and investment support. Debt rescheduling and write-off policies are "reactive" measures to the problem of mounting overdue debt and looming bankruptcies in agriculture. Subsidized credit and investment support programs are "proactive" programs intended to improve the access of farms to the formal financial institutions and mitigate the observed shortage of agricultural investments.

The insolvency of many farms makes agriculture the least attractive arena for financial capital. The government has made many attempts to solve the problem of overdue agricultural debts. A Presidential Decree of 2003 proposed writing off 57 billion rubles of fines and penalties for 18,000 farms. The most serious hindrance to this debt restructuring program is the requirement to regularly make current payments (taxes and social deductions). Many farms cannot meet this requirement, and by 2004 only 30% of eligible farms applied to the program.

Due to the permanent indebtedness of most farms and generally high risks in agriculture, most commercial banks are not interested in lending to farms. This led the government, in 2001, to begin a program of agricultural credit support. The plan was to subsidize interest on commercial short-term credit. Mid-term credit schemes of three and five years followed. The advantage of this model is the involvement of bank capital and the development of competition among banks. In 2003, 291 banks participated in the program of credit subsidizing. However, two banks accounted for 70% of credit agreements.

The basic financial requirement is the applying farm's solvency. In addition to signs of solvency, commercial banks demand collateral, preferring the relatively liquid livestock and machinery. Less frequently they will accept crops in the field and real estate. What is readily available to farms as collateral—land—is not attractive to lenders. Where in many countries land is the basic collateral in lending to the agricultural sector, in Russia land could not be mortgaged until very recently and in most regions does not have sufficient market value (see **BASIS Brief 36** on land prices and mortgaging land). Only approximately 3,000 corporate farms, less than 10% of the total number, have the kind of financial performance and lack of overdue creditor indebtedness that would enable them to gain medium-term investment credit. Approximately 6,500 corporate farms would be considered creditworthy for short-term credit, for which solvency requirement are not as stringent. The government's subsidized credit program reduces the cost of borrowing, but access is effectively limited to about 25% of farms that meet both government and bank conditionalities.

An alternative way of ensuring farms' access to investment resources is the state-supported program of financial leasing. The program is implemented through a state-owned federal company whose equity capital is used to finance the purchase of farm machinery and equipment, which are then leased out to farms through regional leasing companies. According to Ministry of Agriculture estimates for 2002 and the first half of 2003, farms acquired about 33% of their machinery and equipment through the leasing program.

The advantage of leasing is that is uses a farm's income forecast (i.e., a business plan) instead of credit history to determine who is in the program. In this way, it provides access to investments for farms that do not meet the requirements of commercial banks. However, leasing is more costly than a bank loan. Leasing agreements are carried out through intermediaries, each of whom gets a margin. In addition, the need to make an advance payment is a serious barrier

B A S I S
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for many farms hoping to lease expensive equipment. Moreover, in leasing schemes used in other countries, the leased machinery serves a collateral; in the Russian scheme, the company leasing the equipment requires other guarantees. Mainly, this is because the lack of a used-machinery market greatly reduces the value of leased equipment. Two other drawbacks are that a single company monopolizes agricultural leasing and only domestic machinery is offered.

While these programs have helped solvent farms gain access to credit and machinery, the system is fully based on state subsidies and thus distorts market mechanisms and discourages development of alternative forms of involvement in the farm sector by commercial financial institutions or commercial equipment lessors. However, the majority of Russian farms are insolvent. Burdened with overdue creditor debt, about the only way these farms can access investments is by being incorporated into vertically-integrated businesses (see **BASIS Brief 35** on agroholdings and vertical integration in agriculture).

In a survey conducted by BASIS researchers in 2003 in three oblasts, only 18% of farm managers find it possible to use subsidized credit; 72% consider it absolutely unavailable. Respondents say the main obstacles to credit are their farms' high rates of indebtedness, the risks that would result from not being able to repay the loans, the excessively short term of the loans, and the lack of collateral. Statistical analysis confirms that overdue indebtedness is a major obstacle to accessing credit. Conversely, the more efficient farms that receive credit also have a greater chance to lease equipment, and participation in leasing schemes increases the chance of receiving credit. This is quite explicable given that both leasing and credit require collateral that can be provided by the same farms.

The general improvement in the financial situation of Russian farms since 1999 is attributable to overall agricultural recovery, not to government support. Continuing government interventions in farm finances, often replicating the old centralized models, do not appear to have had a significant impact on agriculture. Although subsidized interest-rate programs reduce the cost of borrowing and thus increase the demand for credit, administrative barriers severely restrict the actual volumes of credit used under these programs. Commercial banks show an increased interest in agricultural lending since the post-1999 recovery, yet they adopt similarly restrictive criteria for loan approval. Government-sponsored machinery leasing programs appear to be unfolding on a substantial scale across the country. Yet they too are hampered by administrative regulations that limit the choice of suppliers and models to a centrally-approved list. Furthermore, the cost advantages of government leasing programs are not clear because of non-transparent charges and calculations.

The government has attempted to create mechanisms for farm credit support, but providing agricultural enterprises access to financial capital is one of the most difficult tasks in the overall reform effort. The marginal impact of government support programs requires careful rethinking of the role of government in agricultural finance. To be successful, Russian corporate farms probably need fewer barriers to the proper functioning of market channels, not necessarily more support.

Related reading

For details on the data and methodology behind the analysis of the financial sector, see the full papers:

Epshtein, D. 2005. "Financial Performance and Efficiency of Corporate Farms in Northwest Russia." *Comparative Economic Studies* 47(1): 188-99.

Subbotin, A. 2005. Determinants of Access to Credit for Corporate Farms in Russia. *Comparative Economic Studies* 47(1): 181-87.

Yastrebova, O. 2005. "Nonpayments, Bankruptcy and Government Support in Russian Agriculture." *Comparative Economic Studies* 47(1): 167-80.