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Russia's New Agricultural Operators: Emergence, Evolution, and Impact

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New players in Russian agriculture

One of the most dramatic recent changes in Russian agriculture is the emergence of externally owned and managed commercial farming operations that are exceptionally large, typically ranging between 10,000-250,000 hectares. The investment community had long considered Russian agriculture as the sector with the most risk, carrying a high potential for loss and a low return on investment. In recent years, however, investors from outside the agricultural sector have acquired control over farm assets and millions of hectares of farmland and have begun introducing organizational changes such as vertical integration, custom and contract farming, land leasing, and central machinery stations. Responding to real profit opportunities, these entrepreneurs bring with them the means to overcome market and institutional imperfections, as well as human and physical capital limitations. Following the lead of these new agricultural operators (NAOs), "traditional" agricultural producers also have begun to modify and extend their farming activities.

This new phenomenon of non-agricultural entities participating in farm production and decision-making and engaging in "value through risk" investment runs contrary to the common expectation of how Russian agriculture would evolve in the post-Soviet era. Rather than a vibrant family-farming sector, what may in fact be emerging is a kind of Russian *latifundia*, owned not by the nobility but by corporations that in many cases are not directly related to food and fiber production. Since most of the NAOs rely on hired labor, they represent an even further retreat from the concept of the individual family farm.

Theory tell us that at the heart of any innovation lie transaction and coordination costs along with informational asymmetries. A firm develops new ways of doing business to reduce these costs and align incentives among economic agents. Organizational innovation has the potential to reduce or mitigate factor and product market distortions in the short run. In the long run, it can lead to inefficiencies or inequities through, for example, concentration of power and absentee ownership. Such inefficiencies can overwhelm short-term societal gains. Because NAOs will have a tremendous impact on Russian agriculture, it is essential to understand how and why the organization of agricultural firms in Russia is changing and what these changes imply for future productivity, competitiveness, rural development, and income distribution. This brief is intended as an initial assessment that we hope will lead to a more comprehensive analysis when better data become available.

Emergence

Most NAOs entered agriculture as a subsidiary or spin-off from an existing firm, or "mother company." We identified three time periods for entry: prior to the 1998 currency devaluation, immediately after the currency devaluation (1999-2000), and more recently (2001-2004). The main wave of new entries occurred immediately following the 1998 devaluation. Companies with agribusiness and other linkages to agriculture entered relatively early in response to growing consumer demand and commodity export opportunities, all of which increased agricultural profitability. Companies with banking and financial linkages typically entered agricultural production either well before or well after the financial crisis. State and quasi-state organizations demonstrated the most diverse pattern, with entries occurring in all three periods. Mother companies in this group are usually quasi-privatized entities created from former Soviet monopolies, companies owned by regional governments, or organizations established by regional governments to manage and upgrade bankrupt farms.

NAOs vary considerably in their origin, structure, and economic objectives, yet our case studies identified some general patterns. NAOs respond to perceived profit opportunities in production agriculture, primarily in the former collective sector. They are founded by outsiders with access to credit, processing services, or end-user markets. They focus, to a large extent, on overcoming input market imperfections, supplying machinery services, credit, pesticides and fertilizers, managerial services, and skilled labor. They make significant investments and technological improvements in production agriculture. Many of the entrepreneurs behind the NAOs work closely with administrative officials in developing and managing their businesses. The social consequences in rural areas appear to be mixed; layoffs are common, for instance, yet all firms try to guarantee competitive land lease payments to rural people and some firms have attempted to provide extended packages of social services previously offered by the collectives.

Our survey focused only on agroholdings; that is, NAOs that lease land and acquire non-land assets for purposes of entering agricultural production. Based on our sample and a few case studies, we distinguish five principal entry patterns by outsiders into agriculture.

Become a financial sponsor of an existing farm. The sponsors usually do not directly control and own farm assets and do not manage the farm on a daily basis, but they do typically bear the farm's risk of financial failure. Their main function is to provide a guarantee to an input supplier or financial creditor or to invest in farming activities themselves. Another function is to help transform a traditional farm to a more modern operation.

Enter into joint production agreements. Under a joint production agreement, the outside entity does not become the owner, but still actively participates in farm production decisions. In many cases, the joint production agreement is a natural extension of the common practice when farms get pre-harvest credit from marketers.

Provide custom farming services. Under custom farming as it is practiced in Russia, the outside firm provides production services and partly bears the risks of crop failure, adverse commodity price movements, and other market developments.

Lease agricultural land. The outside firm assumes the responsibility for all production and marketing activities along with the associated risks and returns, dependent on and limited by the size of the leased land plot.

Acquire farm non-land assets. In most cases, the assets are acquired by establishing a new legal entity free from the original farm's debt. The new entity acquires the most valuable physical assets from the old farm and gradually works to reduce, in one way or another, the outstanding debt of the original farm. A side effect of such a strategy is the emergence of numerous asset-empty legal agricultural entities that exist only on paper. Acquisition of the farm's non-land assets is typically accompanied by leasing land from individual land share owners or the state, making the NAO fully involved in agricultural production.

In many cases we observed a transition from sponsorship, joint production agreements, and custom farming to a more comprehensive involvement in agricultural production.

Evolution

There seem to be strong motivations for outsiders to enter agriculture, for the number of new registered NAOs exceeds the number of NAOs that have exited the agricultural sector. Usually, even when a company decides to exit, its farm project is taken over by another outsider. During the past three years, however, the average NAO has not grown significantly in terms of land size. In 2001, in our sample, the average NAO controlled 54,800 hectares through lease or ownership and operated 8.9 farms. By 2003, the figures were 53,200 hectares and 8.3 farms. The largest companies did not grow, while the smaller companies grew aggressively. In 2001, the 11 largest agroholdings in our sample controlled a total of 2.3 million hectares. By 2003, the same firms still controlled 2.3 million hectares. In contrast, in 2001, 36 "small" agroholdings (under 30,000 hectares of farmland) controlled a total of 523,000 hectares. By 2003, they had doubled their control of land to 1,059,000 hectares. These developments may be interpreted as a search for optimal size with a type of centripetal effect. It is also important to note that the largest agroholdings tend to be in the state and quasi-state category rather than private agribusinesses.

Our case studies demonstrate that vertical integration is dependent on the nature of the mother company and the sector in which it operates. State and quasi-state companies, as well as industrial and banking firms tend to focus on production agriculture as a separate entity, not as a part of a vertical supply chain. On the other hand, smaller regional agribusinesses tend to establish close links with input supply, food marketing, or processing facilities that are incorporated into the agroholding structure. Large, diversified interregional agribusinesses generally claim that they pursue vertical integration strategies, but in many cases the actual level of integration is modest. The output of agricultural production operation, however large, may be quite small compared to the mother company's processing capacity.

The highest level of vertical integration exists in the domestic poultry industry, where the five leading companies control 24 former collectives and newly established farms, providing 35% of the national broiler output. Other poultry holding companies control another 13% of the output. The remainder of broiler production comes from independent corporate farms. In other subsectors of Russian agriculture the level of integration is much lower even though the overall presence of leading agribusiness companies in agriculture is high. For example, in the grain industry, six of the ten leading exporters have grain production operations. In the sugar industry, all ten leading companies, accounting for about 85% of national output, produce sugar beets. Yet the reliance on captive supplies of raw materials remains quite modest in both the grain and the sugar industries (5-25%, depending on the specific case).

Our case studies and interviews with top managers identified a number of managerial dilemmas faced by NAOs. The decision-making structure of the mother company is typically rooted in an industrial, trading, or financial culture that emphasizes economies of scale, standardization, and top-down approaches. This managerial orientation is not particularly well-suited for agriculture. The biological and spatial characteristics of agricultural production require timely and site-specific decisions. Consequently the potentially huge benefits of centralization and economies of scale are offset by the inability to make timely, local decisions. When the holding company tries to increase local decision-making authority, it often increases the risk of resource misuse and theft.

To date, there are no convincing examples of a satisfactory managerial solution to this problem. One potentially promising approach experimented with by several NAOs is the creation of farms run by a small group of individuals or even a single family within the agroholding structure. These approaches attempt to combine the benefits of centralization and economies of scale with the well-known advantages of classical family farming. The organizational shift toward "internal" individual farming that we are beginning to detect among Russian agroholdings is reminiscent of the ultimate demise of the huge "bonanza farms" in the American Midwest, which broke up and transformed into family farms despite their resounding initial success. If the fate of the bonanza farms in the United States is any indication, then NAOs may not be sustainable in their present form.

Impact

In a short time, NAOs have become a powerful key component of Russian agriculture. Domestic farm policy, from official agricultural statistics to agricultural support programs, must be reexamined in light of this phenomenon. Specifically, the official definition of an agricultural producer must be adjusted to reflect the new reality. In the present framework, a highly capitalized custom farming operator is not considered an agricultural producer and is not eligible for farm support programs, while a technically bankrupt former collective farm may still enjoy various producer privileges. Recognizing the NAOs as agricultural producers would give them a voice in key domestic agribusiness regulation programs.

Given the acute decapitalization of existing farms, NAOs are forced to collateralize their non-agricultural assets to support investment in primary agriculture. This process diverts resources from the firm's core activities and exposes the entire organization to significant risks in the event of poor performance in the agricultural divisions. To mitigate the risks, the government should first amend the hopelessly outdated mortgage and collateral legislation, introducing an efficient and enforceable system of grain warehouse

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receipts, legalizing lien rights, launching agricultural collateral registration offices in rural areas, and enabling simplified out-of-court collection enforcement procedures.

Production and market risk mitigation mechanisms are of high priority. Minimum price support or crop failure insurance (ideally both) must be deployed. Currently the price support mechanism works in the form of interventions only to a limited extent for a narrow range of grains. Producers consider the intervention mechanism unsatisfactory. Consideration should be given to modifying the current inflexible crop insurance program to make it more applicable for a wide range of agricultural investors. This would include developing alternative subsidized insurance packages, shifting from all-inclusive to specific-risk coverage packages, transitioning to investment-based valuation, and giving attention to reinsurance issues.

In many cases the positive intentions of domestic legislators become a further burden to domestic agricultural investors. Recent simplification of agricultural taxation has had a negative impact on many integrated NAOs. Instead of easing operational performance, it places them in unequal competitive positions with independent farms: due to unequal VAT treatment the (integrated) customers of the farms do not receive adequate VAT refund from tax authorities and require farm price tradeoffs.

Finally, changes may be required in land ownership rights and land leasing mechanisms. Functioning land markets and streamlined leasing procedures are essential to enable the flow of land from the less efficient traditional farms to the potentially more efficient new producers. Current problems in these areas make long-term investments in agriculture risky and costly. For example, before signing land lease agreements, new entrants have to properly register the land ownership rights of the numerous individual owners of the land shares. The full cost of land plot registration may exceed the cost of the agricultural land itself. It would be reasonable if these costs were borne by government and not private businesses. The big tenant-small "virtual plot" owner relationships remain fragile, which does not help foster long term investments in the land.

Will NAOs grow bigger and stronger or will they disappear like the bonanza farms in the United States? Already there are signs that some NAOs are turning to organizational solutions that allow greater operational freedoms through the creation of smaller subunits run by a small group of individuals. Therefore, despite its apparent failure in modern Russia, the "individual farm" may have an optimistic future. Transformations of this type move Russia away from a plantation agriculture toward family-owned structure linked through markets and contracts to the entire supply chain, as is common in market economies.

From a global perspective, NAOs have the potential to bring Russia's vast agricultural resources into world agricultural markets. Efficient production methods, improved quality and value chains are transforming Russia into a significant agricultural competitor. We are witnessing the first steps of an organizational change in Russian agriculture. It remains to be seen if these changes will bring about significant new growth in Russian agriculture.

Further reading

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