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ANALYSIS

State-of-the-Art in Russian Agriculture: Production, Farm Structure, Trade, Policy and New Challenges

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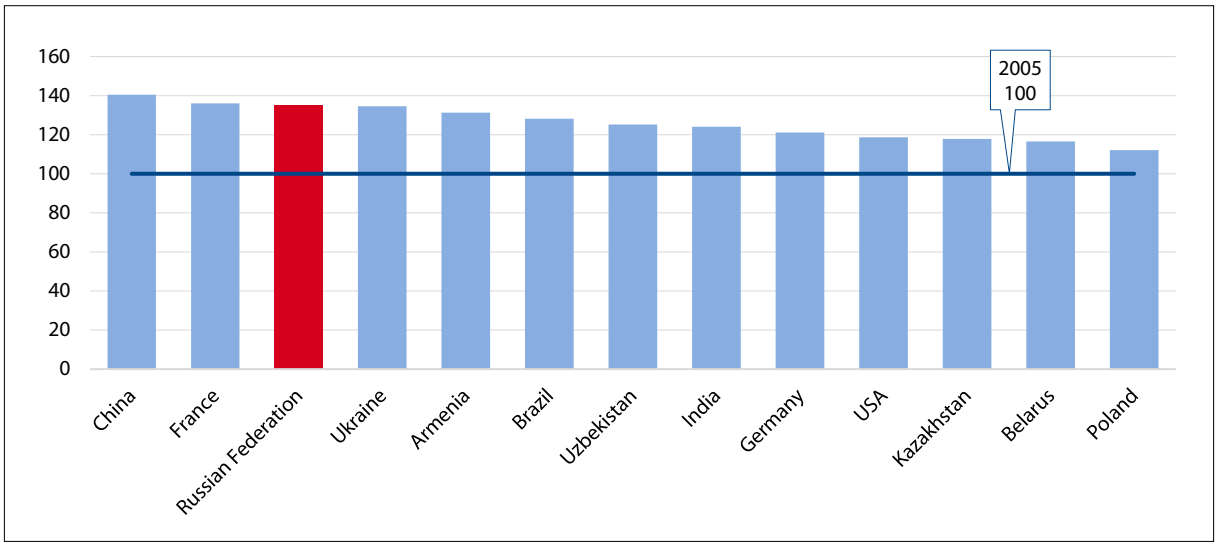
Abstract

This article is devoted to the modern state of Russian agriculture, which has made significant progress in recent years. The authors cover three major areas of agricultural development: changes in the structure of agricultural production, trade development, and agri-food policy. The article concludes by listing the major challenges Russia must address in order to maintain its position in the national economy and in global markets. The article is based on academic studies by the Institute of Agricultural Studies (InAgRes) at the Higher School of Economics—HSE (Russia).

Introduction

Almost unnoticed, Russia has managed to address its longstanding problem of food shortages. The country's modern agri-food sector is one of the most steadily developing sectors of the national economy. Production of selected crops is reaching historical records. The country, which was once a stable importer of staple foods, has become a significant supplier to the world market. Over the past ten years, progress has been made in the field of food quality and safety, all of which has been noted internationally.

Figure 1: Total Factor Productivity in Agriculture by Country, 2015



Source: USDA, Economic Research Service

The increase in agricultural output has been nearly exclusively due to total factor productivity growth, which has been higher in Russia than in most developed countries: in 2015, Russia ranked 24th in TFP growth out of 186 countries (see Figure 1). Both partial sector performance indicators and total factor productivity (TFP) are growing. This growth in production is achieved primarily at the expense of intensive factors.

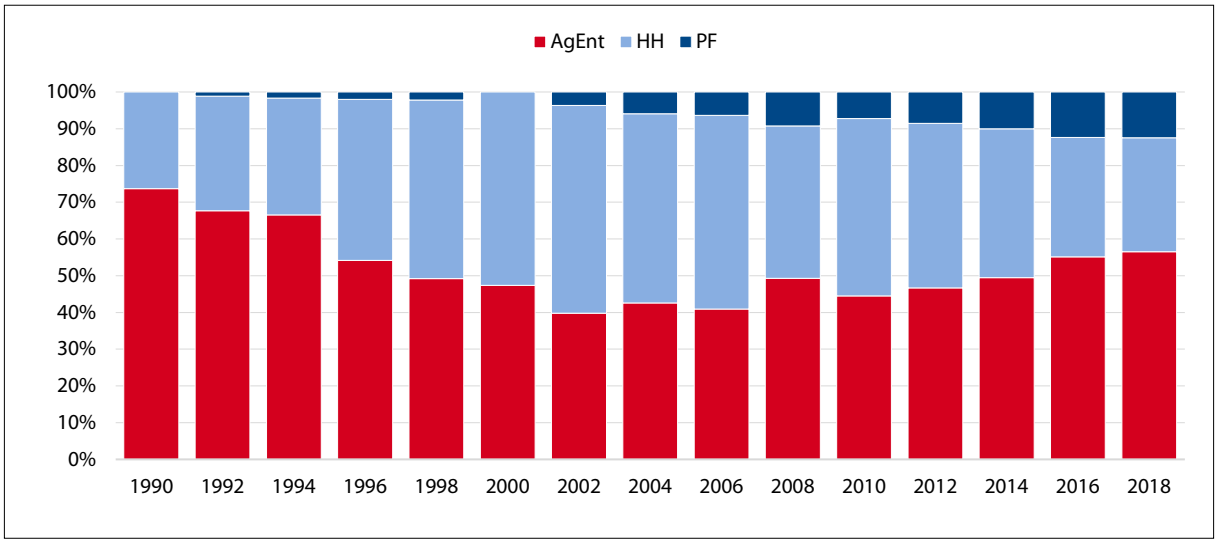
Conventional indicators of national food security show that Russia is consistently in the top third of the world's countries (FAO 2020; Economist Intelligence Unit 2020).

A turning point in the development of the sector was the 1998 crisis, which suspended imports and precipitated a flow of domestic investment first into the food sector and then into primary agriculture and the upstream sector. The main growth factors, therefore, were the growth of investment and a corresponding improvement in the quality of management. The 2008 crisis was a second push of the same kind. The introduction of counter-sanctions in 2014 was another attempt to protect domestic producers. That being said, investment and management have almost exhausted themselves as growth factors.

Agricultural Structure

In the Soviet Union, large producers—collective and state farms (*kolkhozes* and *sovkhozes*)—dominated agriculture, while small household plots played a subsidiary role as a source of food and supplementary income for rural families. The structure of agricultural production began to change with the onset of agrarian reforms in the late 1980s and early 1990s. A new category of agricultural producers—peasant or family farms—emerged. These, unlike the subsistence-oriented household plots of earlier years, were market-oriented.

Figure 2: Structure of Gross Agricultural Output (GAO) by Farm Type, 1990–2018 (% in Current Prices)



Legend: AgEnt—agricultural enterprises; HH—household plots; PF—peasant farms.

Source: Federal State Statistic Service (2019)

At the start of the transition, in 1990, Russia had 25,800 agricultural enterprises with an average of 320 employees and 7,800 hectares of agricultural land each. Taken together, these agricultural enterprises accounted for 75% of the country's agricultural production (Rosstat, 1995). Household plots generated the remaining 25% of agricultural production. Peasant farms, which had just begun to appear and managed only 100,000 hectares of agricultural land, made a negligible contribution to Russia's agriculture at that time. By 2018, the agrarian structure had changed completely (see Figure 2): agricultural enterprises' share of agricultural production had dropped to 55%, while family farms' share had increased to 45% (33% for household plots and 12% for peasant farms).

By the late 1990s, a new form of large-scale farming agglomerations—which would become known as "agroholdings"—had begun to emerge. Although there is still no legal definition of agroholdings in Russia, they have established themselves as a separate farm structure alongside the three conventional farm types: agricultural enterprises, peasant farms, and household plots. Today, agricultural enterprises can be distinguished according to their status with respect to agroholdings—that is, as either members of agroholdings or independent enterprises.

Trade

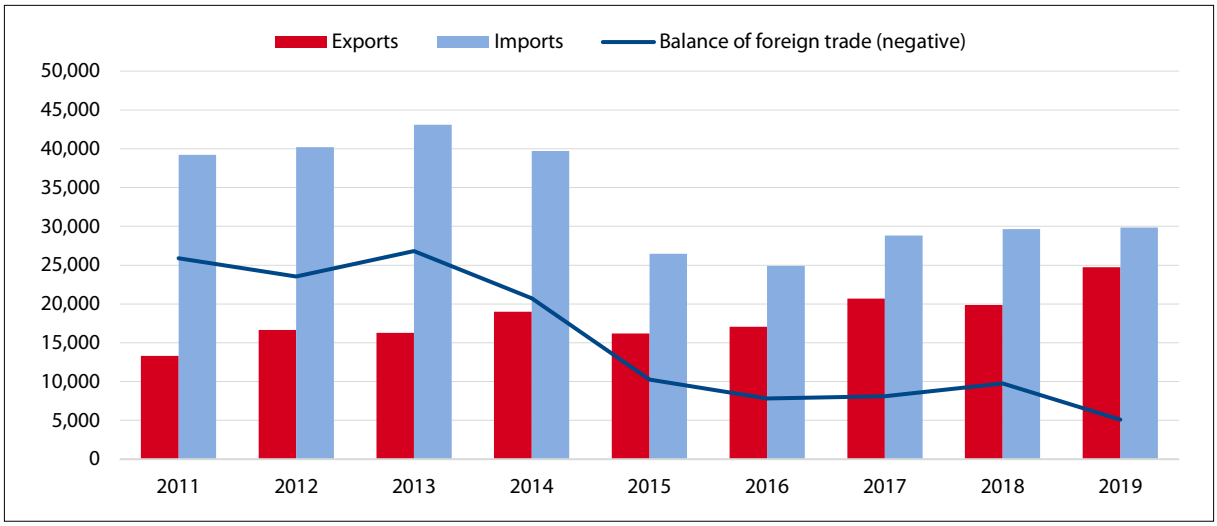
As part of the USSR, the Russian Federation depended on imported agricultural and food products from the other republics and member countries of the Council for Mutual Economic Assistance (COMECON). As reforms began in the 1990s, the sector experienced a lengthy transformational shock caused by a sharp decline in demand for food products (which had previously been heavily subsidized) and by the imports that flooded the market following the liberalization of foreign trade. Recovery began after the 1998 crisis, and by the mid-2000s the country had formulated—and successfully implemented—an import-substitution and food independence strategy. Moreover, the country's domestic output of certain products (e.g., wheat and barley) increased dramatically, making it a prominent global exporter. Naturally, an emphasis on exports became the next national agriculture strategy. In 2018, the Russian President set the goal of achieving USD 45 billion in agricultural and food exports by 2024.[1] In this context, the main

1 Presidential Executive Order No. 204 dated May 7, 2018 "On national goals and strategic objectives of the Russian Federation through to 2024."

long-term task now is to increase exports and to win sustainable competitive positions for Russian products in international agricultural and food markets.

Between 2011 and 2019, agri-food exports from Russia grew by 86%, while imports declined by 24% (see Figure 3). However, the number of exported goods in which Russia has a comparative advantage in foreign markets is quite limited. In 2018, out of about 170 exported items in the agricultural and food product category, Russia had a comparative advantage in only 35 of them (Karlova & Serova, 2020). These were mainly traditionally exported commodities (fish, seafood, grains). This complicates the task of integrating Russia into global value chains, especially for higher value-added products.

Figure 3: Dynamics of Foreign Trade in Agri-Food Products of the Russian Federation (in million t)



Source: Federal Customs Service Online (2020)

Under these conditions, the overall backwardness of Russian agriculture and the food industry in terms of innovative growth is becoming apparent. Meanwhile, global 21st-century markets are generally focused on processed foods, while traditional agricultural commodities are gradually losing their share (Senauer & Venturini, 2005). Without its own groundbreaking technological approaches, the country will struggle to compete with global players and global value chains. In its export policy, Russia could either integrate into global chains—requiring a dramatic improvement in the quality of its raw materials—or enter fast-growing markets, especially those in China, India, Africa, South-East Asia, and the Persian Gulf.

Policy

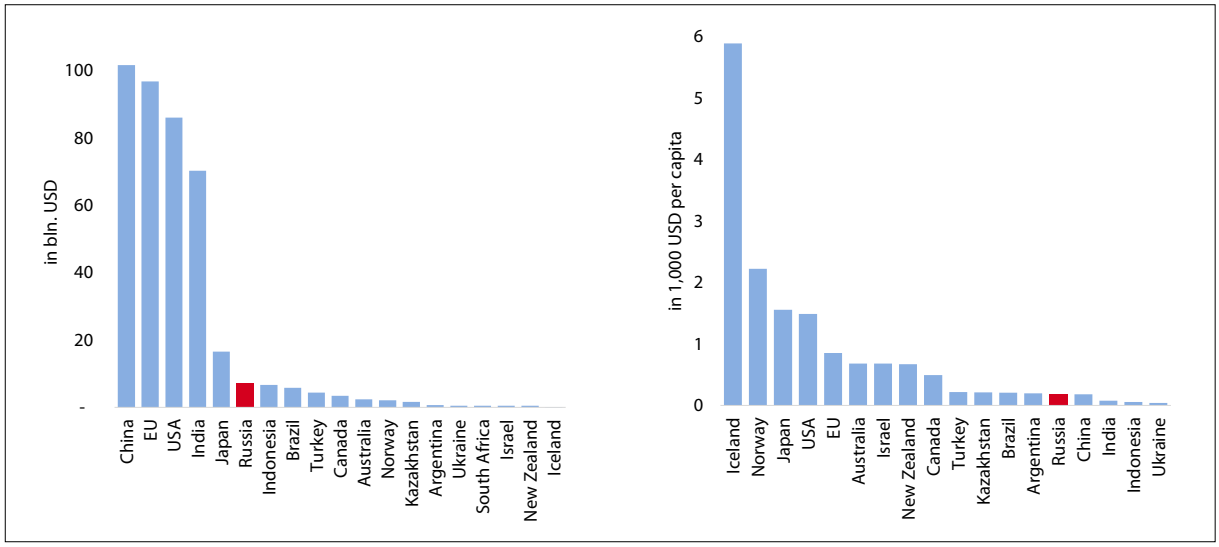
Agricultural policy in Russia is a combination of budgetary support, tax concessions, and trade-related measures. Budget transfers to agriculture are high compared to other countries: at 482 billion rubles, or about USD 7 billion, of transfers to agriculture, Russia ranks 6th among those countries for which the OECD measures the level of state support for agriculture. That being said, this level is only a tenth of that provided by the EU, the US, and China (which range between USD 86 billion and 102 billion), and support per person is much lower in Russia (see Figure 4 overleaf).

Tax concessions for the sector are estimated at 400 billion rubles per year,[2] about the same amount as annual budgetary transfers. Market price support (an estimation of the transfers to agriculture from trade-related measures and other measures affecting producers' prices) also remains a very important instrument, although its share of total support has declined from 49% of the total in 2017 to 42% in 2019 (OECD 2020). The high proportion of price support as a share of total support reflects the important role that trade policy, currency devaluation, and food embargo (counter-sanctions) play in supporting agriculture by providing advantages for exporters and import substitution.

In the Russian budget, support to agriculture is provided mostly in the form of subsidies, a number of which are not always effective in achieving their goals. About 40–50% of the funds are allocated to the most distorting programs that promote the expansion of production. The share of support to general services—programs that increase

2 According to the registry of tax concessions by the Russian Ministry of Finance (https://www.minfin.ru/ru/document/index.php?id_4=124742)

Figure 4: Budget Support to Agriculture in Russia Compared to Other Countries



Source: authors' calculations based on OECD statistics

the potential of the whole sector (research and development, education, inspection services, infrastructure development programs, etc.)—declined from 48% in 2006 to 26% in 2019 (OECD, 2020).

While support for innovations and the provision of digital technologies for agriculture are declared as being among the government's policy priorities, those activities are not prioritized in budgeting. Only 3.1% of the agricultural budget is allocated to research and development, and this share has been declining. Moreover, in 2019, only 45% of the funds budgeted for the digital transformation of agriculture were actually disbursed.[3]

The recent shift in the stated policy objectives from production growth to export expansion requires redirecting funds to research, development, and innovation in order to improve the international competitiveness of Russian agriculture. However, the structure of support has not changed with the shift in policy goals and most export-promotion measures are also production-related: subsidized credit, land improvement, capitalization of the state-owned agricultural bank and leasing company (81% of the federal transfers under the "Exports" project in 2019), etc. General services to exporters, such as simplification of border procedures, veterinary and phytosanitary services, information support, and support for promotion and market access amount to less than 10% of budget transfers under the "Exports" project.[4]

New Challenges

In order to maintain and strengthen its position in both domestic and foreign markets, Russia urgently needs to respond to a number of challenges.

1. Global food systems are undergoing a structural transformation toward more sustainable models that will benefit, among other things, from innovations and digital technologies. Food production is one of the world's most knowledge-intensive industries today. Russia must switch to an innovative method of developing its agri-food sector.

What are the main constraints on the innovative development of Russian agriculture today?

First, there is a huge generation gap in agricultural sciences, dating back to the 1930s and 1940s, when restrictions were imposed on many agricultural areas (for example, agricultural economics, agricultural statistics, and genetics) and scientific schools in these areas were destroyed. Furthermore, in the 1990s, the entry of young people into science declined sharply.

Second, the main investor in applied agricultural science today is the private sector. Worldwide, the investment cycle in applied agricultural research is 12–20 years on average. Such investments, therefore, are only possible in a stable business environment. In today's Russia, even the largest agribusiness companies have an average planning horizon of 4–5 years. In these conditions, investments in science and personnel become high-risk.

3 Author's calculations from The Federal Treasury's data: https://minfin.gov.ru/ru/statistics/

4 Ibid.

Third, innovative development and new technologies call for a completely different approach to agricultural education. Not only is the modern system of agricultural education in Russia detached from basic research, but it also trains generalists, leaving graduates unable to meet the practical needs of business.

2. The main challenge to global development today is the need for the sustainable development of all spheres of human activity, including agriculture. The main obstacle to the sustainable development of agriculture in Russia is, of course, the "resource curse": the availability of vast land and water resources and Russia's relative biodiversity mean that there is as yet no urgent need for the country to preserve them. Russia is still the planet's environmental donor. Nevertheless, there are already challenges to sustainable development that need to be addressed in the medium term.

First, there is the problem of maintaining soil fertility. Second, although the reduction in the area used for agricultural production due to the increase in productivity per hectare has led to some improvement in the conservation of biodiversity in the country, the limits of the ecological burden on agricultural production have already been reached in some parts of Russia. Third, the lack of a national strategy or even a vision for food loss and waste (FLW) reduction is a serious threat to sustainable agricultural development. Since there is practically no official monitoring system for FLW in Russia, we have to rely on the expert opinions of market participants. For the main branches of the agri-food sector, losses reach up to 40% of output (Galaktinova et al. 2020), which means that all types of resources are used in a correspondingly unproductive manner. Fourth, modern food systems should be more focused on the needs of different groups of consumers. The modern middle class worldwide, including in Russia, is concerned about sustainable food production practices. Thus, pointing out sustainable practices is becoming an increasingly important factor in an enterprise's ability to compete in the food market.

3. Switching the national priority from import substitution in the agri-food sector to an export orientation is associated with some long-standing risks.

First, there is an economic risk to the domestic market. The literature well explains the risks to the domestic market of developing export-oriented value chains. Second, there are social risks. The targets set out for increasing the export of agri-food products may be met at any cost, including by reducing the amount of food supplied to the domestic market. Third, a focus on exports also bears the ecological risk of over-exploiting natural resources.

4. With increasing productivity in the agricultural sector, a large proportion of rural areas of Russia have been marginalized. This has led to the degradation of rural areas in these territories, the migration of the rural population to the cities, and the disappearance of a large number of settlements. Moreover, large-scale agribusiness in search of skilled labor has switched in some cases to shift methods of organizing work.

The underdevelopment of rural areas is becoming an obstacle to the development of agriculture. The marginalized social environment creates risks for production and businesses cannot attract qualified employees on a permanent basis.

About the Authors

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References

- Economist Global Intelligence Unit (2020). Global Food Security Index https://foodsecurityindex.eiu.com/
- Federal State Statistic Service Russia (2019), Agricultural Statistics, www.gks.ru
- Karlova, N. and E. Serova (2020). Prospects of the Chinese market for Russian agri-food exports.—In: Russian Journal of Economics 6(1): 71–90/ https://doi.org/10.32609/j.ruhje.6.50824
- Senauer, B., & L. Venturini (2005). The globalization of food systems: A conceptual framework and empirical patterns, Working Paper 05-01, The Food Industry Center, University of Minnesota. https://ageconsearch.umn.edu/record/14304
- FAO, IFAD, UNICEF, WFP and WHO (2020). The State of Food Security and Nutrition in the World (SOFI): Transforming food systems for affordable healthy diets. http://www.fao.org/publications/sofi/en/
- OECD (2020). Agricultural Policy Monitoring and Evaluation 2020, OECD Publishing, Paris, https://www.oecd-ilibrary.org/agriculture-and-food/agricultural-policy-monitoring-and-evaluation-2020_928181a8-en
- Галактионова Е. А., Ким В. В., Антоневич К. В. (2020) Продовольственные потери и пищевые отходы на потребительском рынке РФ. – Международный сельскохозяйственный журнал. 2020. № 4. С. 1–20. (Galaktionova E.A., Kim V.V., Antanevich K. Food loss and waste at consumption market of Russian Federation—International Agricultural Journal. 2020, #4, pp. 1–20) https://publications.hse.ru/articles/377994246

ANALYSIS

Agricultural Support in Russia from the Political Economy Perspective

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Abstract

The contribution summarizes two research papers that examine the mechanisms of Russian agriculture subsidization considering the incentives of the key stakeholders involved. We first put Russian agricultural support in an international context, briefly comparing it with the EU's Common Agricultural Policy and other countries' support systems. Then, using a unique dataset from the Russian Ministry of Agriculture and drawing on the political economy literature, we map the incentives of regional and federal governments in the distribution of targeted subsidies among the Russian regions. Results suggest that similar to the US and the EU, the regional and federal levels of the Russian government not only seek to boost agricultural development but also see subsidies as a tool for pursuing political goals. We conclude by discussing the implications of these results and the corresponding policy options.

Russian Agricultural Support in the Global Context

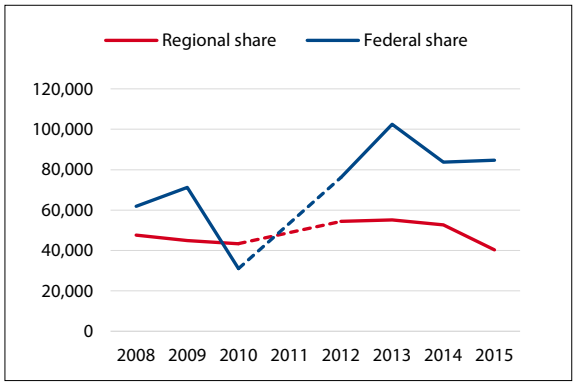
Aggresively pursuing the goal of food self-sufficiency, Russia allocates substantial budgetary resources to the agricultural sector. During the years 2017–2019, the state allocated an impressive 0.7% of GDP annually on average. To put this figure in a global perspective, Australia and Argentina each spent 0.1% per year during the same period. Even the EU, whose massive Common Agricultural Policy accounts for 34.5% of its budget, spent only 0.4% of EU GDP (EU, 2020). Thus, Russian agricultural policy generates comparatively large transfers of public funds to the agricultural sector. Moreover, unlike in other countries, a relatively small share (13%) of this support goes to rural infrastructure and extension services. This implies that agricultural producers should receive higher shares of direct support in Russia. Although the official goals of this support are to stimulate agricultural production and improve rural quality of life, it would be naïve to assume that state officials do not pursue other goals with these large transfers.

We observe substantial variation in levels of support across Russian regions, much of which cannot be explained by economic factors and distribution rules. Differences in subsidies per hectare can be as large as 20-fold. In addition, the composition of types of support (e.g., crops or livestock) varies substantially. Attempts to explain the differences using purely economic factors or fiscal distribution rules fail, indicating that there may be other drivers for these differences. Since agricultural subsidies essentially represent large transfers from the state to producers, we use the political economy literature to explain how Russian politicians may be using agricultural subsidies for rent-seeking and to maximize political support. Such an explanation requires understanding the Russian context, which features weak institutions and has a tendency toward centralization in intergovernmental relations.

Governance Centralization and Rural Politics

Centralization of Russian intergovernmental relations over the past two decades has facilitated the discretionary use of transfers like agricultural subsidies. Putin's regime has consolidated power at the federal level and stripped the regions of the bargaining power they enjoyed during the Yeltsin era. This has brought more clarity to the distribution rules of agricultural subsidies, which consist of federal and regional co-funding. The regions are relatively free to decide how they will distribute regional agricultural funding, but if they want to obtain federal co-funding, they must fulfill a number of federal requirements. In line with the general trend toward centralization, federal co-funding has gained in importance over time (see Figure 1). Although federal

Figure 1: Federal and Regional Shares of Agricultural Subsidies in 2010, Million RUB



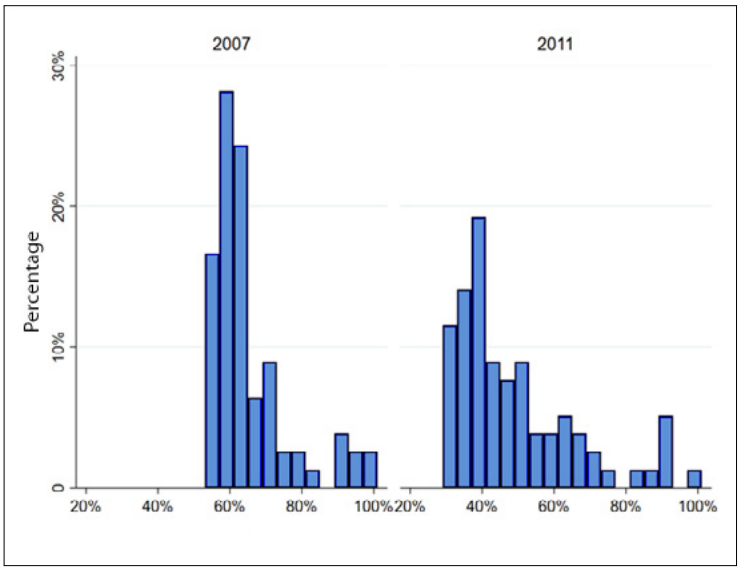
---Dashed Line Indicates Missing Observations for 2011
Source: Kvartiuk and Herzfeld (2021)

funds should be allocated based on distribution formulas, informal negotiations between the regions and the federal government are common. These negotiations occur in a covert and non-transparent way because there are no institutions to facilitate this process.

Party politics is one of the central tools that has been used by the Russian government to cement its incumbency. United Russia (UR), an incumbent party controlled by the president, dominated the 2007 and 2011 elections in every single region, albeit to varying degrees (see Figure 2). One of the key reasons this success was possible is because regional politicians were incentivized to mobilize voters for UR in exchange for remaining in power themselves. Under these pressures, regional politicians appealed to local elites to help them maximize political support. Large enterprises with many employees were especially interesting for regional politicians because voter mobilization and/or coercion predominantly happens in the workplace. Whether local politicians used "carrots" or "sticks" for voter mobilization largely seemed to depend on the level of regional democratization and the strength of local institutions. Western regions demonstrated more competitive political outcomes, whereas the North Caucasus and the oil-producing regions (e.g., Tiumen and Tatarstan) rely more on autocratic governance approaches and may have tended to use coercion rather than appeasement.

The rural population represents an attractive group of voters for redistributive politics for a number of reasons. First, rural inhabitants are substantially poorer on average. For instance, rural salaries were ca. 60% of the national average between 2015 and 2017. The political economy literature suggests that poorer populations are more susceptible to transfers. Second, agriculture is of central importance to local economic growth. Despite the fact that only 7% of the labor force was employed in agriculture in 2016, the rural economy depends heavily on agricultural production and related economic activities such as service and input delivery, processing, and trading. Thus, agricultural subsidies can disproportionately affect the voting behavior of rural residents. Finally, rural inhabitants may have less access to diverse media outlets and credible information, making them easy prey for state-backed propaganda, which—when combined with transfers—can make a difference in electoral outcomes.

Figure 2: Distribution of Votes for United Russia in 2007 and 2011 Elections within the Sample



Source: Kvartiuk and Herzfeld (2021)

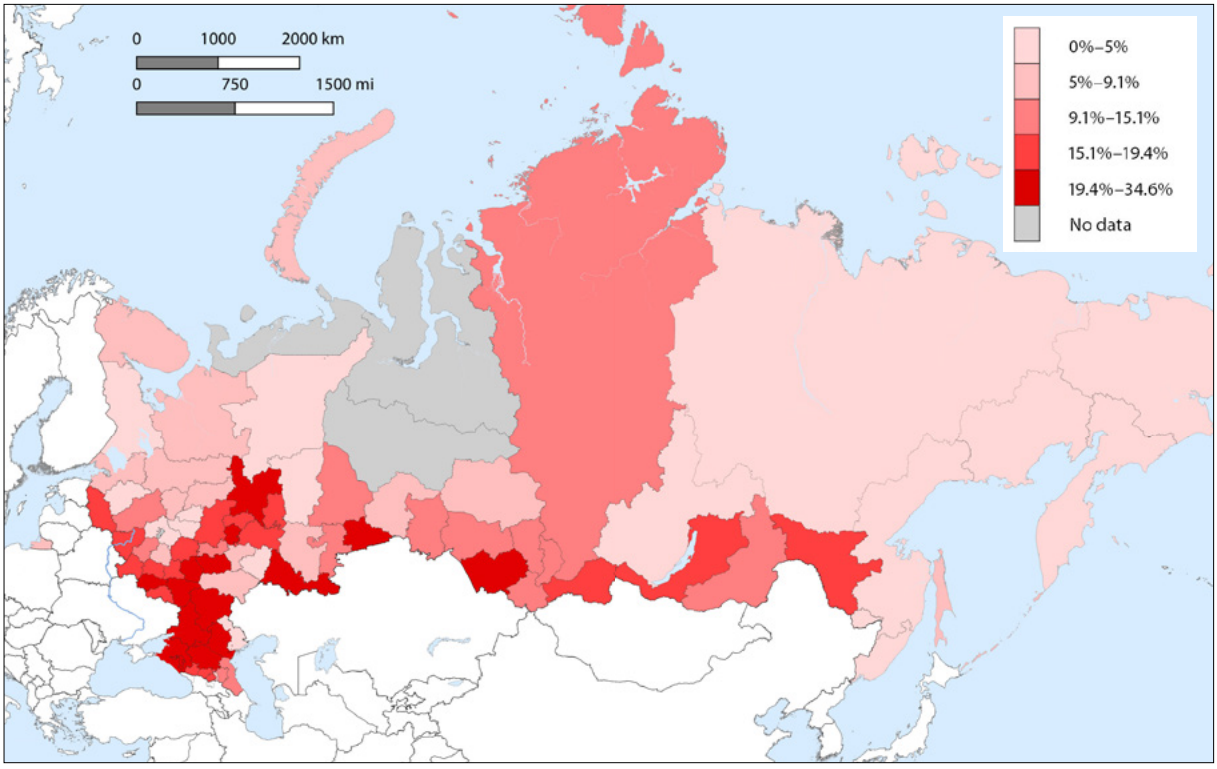
Regulatory Capture in Agricultural Subsidization

Before we explore the political incentives behind the distribution of agricultural subsidies, we analyze whether local elites can capture these funds. Since agricultural support is mainly a regional policy in Russia, it is natural to examine the incentives of local politicians. Importantly, members of regional parliaments (unlike their federal counterparts) are legally allowed to run businesses while in office (such individuals are commonly known as "moonlighting politicians"). This reality may allow members of parliament (MPs) to pursue their vested interests or cause them to be biased in their allocation and distribution of agricultural subsidies. Thus, we hypothesize that regional parliaments where more MPs operate agricultural enterprises will likely allocate more subsidies to the agricultural sector.

To test this hypothesis, we use a unique panel dataset from the Russian Ministry of Agriculture on agricultural subsidies from 2008 to 2015. We complement it with the registries of MPs in 78 Russian regions and map all the companies owned by local MPs using the "SPARK" database. Using official enterprise classification, we were able to calculate the share of MPs with agricultural enterprises and the number of agricultural enterprises per MP in any given parliament at a given point in time. Figure 3 demonstrates the prevalence of agricultural interest in regional parliaments across Russia. Apart from a cluster of regions in the North Caucasus where more than 30% of MPs have agricultural businesses, we observe substantial variation irrespective of how agriculturally oriented a given region is.

In addition, we mapped the share of companies owned by governors and ministers of agriculture during the period between 2008 and 2015. As a result, it was possible to use dynamic panel data models to econometrically model the relationship between the agricultural interest embedded in regional parliaments and the subsidies allocated.

Figure 3: Share of MPs in Regional Parliaments Who Had Agricultural Companies



Source: Kvartiuk and Herzfeld (2019)

The results of these estimates point in the direction of regulatory capture in the distribution of Russian agricultural subsidies. In particular, beyond the economic factors, we find that regional co-funding is higher in those regions where a higher proportion of MPs own agricultural companies or where more companies are registered per MP. Thus, regional politicians that moonlight at agricultural companies appear to be more incentivized to push for agricultural support in their regions. Interestingly, having a minister of agriculture who owns at least one company appears to be associated with more regional co-funding, but having a governor with an agricultural enterprise does not.

Redistributive Politics and Agricultural Subsidies

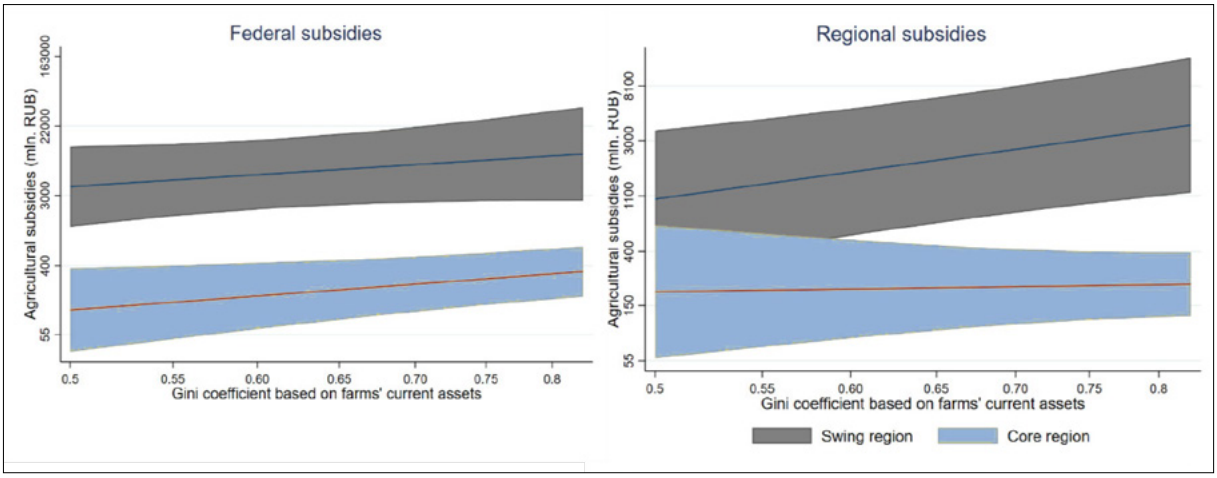
Besides being an object of direct rent-seeking, agricultural subsidies could be instrumentalized to maximize political support for the incumbent government. In particular, both levels of the government may strategically allocate and distribute subsidies to cement the power of UR. A number of scholars found that the federal government used inter-governmental transfers for the same purpose. Similar to agricultural subsidies, these are formula-based transfers that represent ca. 1% of GDP. Following this strand of literature, we address the debate about the strategy the incumbent government will assume to maximize political support. First, it could target loyal or core voters, rewarding them for their votes in the previous electoral cycle. Conversely, the government could direct the funding toward swing voters—those groups that could potentially vote for UR in the next elections. Moreover, the government may partner with large agricultural enterprises to mobilize voters. Because workplace coercion has been found to be the major strategy for voter mobilization in Russia, the government may direct the subsidies toward large farms with many employees in hopes of receiving higher support for UR in exchange.

We test these hypotheses using the same dataset on agricultural subsidies and complement it with data on the outcomes of federal and regional elections during the period between 2008 and 2015. To test whether swing or core voters were targeted, we constructed UR's winning margin with respect to the closest runner-up party. Low winning margins imply higher political competition and thus represent regions with predominantly swing voters. We assume that

core voters are represented in those regions with high margins of victory. In addition to political competition proxies, we also use a measure of large-scale farming within a region. In particular, we construct a Gini coefficient based on the current assets of all the farms within a given region in a given time within our panel. The source for our data was the "Spark" database. We used dynamic panel models with instrumental variables and error correction terms.

Results point in the direction of strategic redistribution using large farms as vote brokers. Econometric estimates suggest that both federal and regional governments direct larger agricultural subsidies to those regions where UR faced more competition in the last elections. This provides support for the swing voter hypothesis. Another important finding is that agricultural subsidies consistently go to the regions with large agricultural farms. Moreover, regional governments appear to allocate disproportionately more subsidies to large farms when political competition in their regions is high, i.e. when UR did not do well during the last elections (as illustrated by Figure 4). We see that at the federal level, the "swing region effect" is additive, whereas at the regional level it is multiplicative, as the slope of the relationship between large farming proxy and subsidies becomes steeper. This suggests that vote brokerage may be more relevant in the context of the allocation of regional subsidies.

Figure 4: Predicted Agricultural Subsidies for "Swing" and "Core" Regions Depending on the Concentration of Farming Assets



Source: Kvartiuk and Herzfeld (2021)

Conclusion

This contribution provides a short summary of two research papers on the political economy of agricultural subsidy distribution in Russia. As the differences between levels of regional subsidization can hardly be explained by economic factors, we investigate the incentives of the key stakeholders, treating agricultural subsidies as transfers. First, we find evidence for regulatory capture on the regional level because regional parliaments with higher shares of MPs who have agricultural companies tend to allocate more regional subsidies. Due to a lack of data, we cannot say whether MPs benefit directly from the subsidies or whether these "moonlighting politicians" have a bias toward supporting agriculture. Comparatively permissive laws related to combining political positions with running businesses at the regional level may facilitate rent-seeking.

Second, the incentives of the Russian government in distributing state subsidies appear to be aligned with the incumbent regime's redistributive strategies for maximizing political support. We find that federal and regional governments allocate more agricultural subsidies to "swing regions"—that is, those regions where UR faced stronger competition in the last elections. This discretion when it comes to allocation may provide both levels of the government with the tools to mobilize rural voters. Moreover, these transfers may be made more effective if large agricultural enterprises are targeted as vote brokers.

Our findings are in line with the literature focusing on other non-agricultural sectors. Moreover, the Russian case is hardly unique, as similar effects have been found in other contexts, including the US and the EU. However, weak institutions in combination with authoritarian, centralized intergovernmental relations generate an especially fertile context for using agricultural subsidies in redistributive politics.

Please see overleaf for information about the authors, recommended reading, and references.

About the Authors

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Recommended Reading

Kvartiuk, Vasyl, and Thomas Herzfeld. 2021. "Redistributive Politics in Russia: The Political Economy of Agricultural Subsidies." *Comparative Economic Studies*, 1–30. https://doi.org/10.1057/s41294-020-00131-2

References

- Kvartiuk, Vasyl, and Thomas Herzfeld, 2019. "Regulatory Capture in Russian Agricultural Subsidization.", *Paper presented at the 56th Annual Meeting of the Public Choice Society*, Louisville, KY, USA.
- Frye, Timothy, Ora John Reuter, and David Szakonyi. 2018. "Hitting Them With Carrots: Voter Intimidation and Vote Buying in Russia." *British Journal of Political Science:* 1–25.
- Marques, Israel, Eugenia Nazrullaeva, and Andrei Yakovlev. 2016. "Substituting Distribution for Growth: The Political Logic of Intergovernmental Transfers in the Russian Federation." *Economics and Politics* 28(1): 23–54.
- Uzun, Vasiliy. 2015. "Printsipy Formirovaniya i Raskhodovaniya Agrarnogo Biudzheta v Rossii, USA i ES." *Agrarnaya Ekonomicheskaya Politika*: 32–41.

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