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Communal Institutions, Resource Allocation, and Russian Economic Development: 1861–1905

At the end of the nineteenth century, Russia was one of the poorer countries in Europe. Although economic growth was evident by the end of the century, per capita incomes remained quite low, less than 50 percent of adult males were literate, and infant mortality was over 200 per thousand.[1] This economic situation fuelled social unrest, which culminated in the revolutions of 1905 and 1917 and the founding of the Soviet Union. Thus, understanding what inhibited Russian economic development in the nineteenth century is an important task for economic historians.

Existing explanations of the "backwardness" of late-Tsarist Russia tend to emphasize the economic inefficiencies of the peasant institutions created in the wake of serf emancipation in 1861. Originally undertaken to modernize the Russian economy, the reforms that ended serfdom strengthened the communal organization of rural society. These measures endowed peasant communities with collective property rights and made them jointly responsible for tax and land payments. Many historians have argued that the institutional environment based on the communal village was characterized by significant microeconomic inefficiencies. Communal property rights constrained land market development and reduced incentives for making improvements in agricultural productivity. The practice of joint liability created ties to the commune that limited labor mobility, which, in effect, "re-enserfed" the peasant population. These factors slowed structural change and constrained aggregate economic growth well into the twentieth century. Thus, the underdevelopment of the Russian economy in 1900 derived, primarily, from the institutional consequences of the "modernizing" reforms of the 1860s.[2]

Is this the correct way to view Russian economic history over this period? Did the reforms and the peasant land commune really have such adverse effects on productivity and factor markets? To date, historians have generally accepted this story without

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[1] Aggregate growth rates were respectable in the late nineteenth century, but they occurred from a very low level of national income, and population growth undercut any per capita improvements. Per capita GDP was roughly 20 percent of Britain's and 40 percent of France and Germany's levels in the early twentieth century. For national income and demographic figures, see Gregory, *Before Command*, pp. 19–22. On literacy, see Mironov, "Development."

[2] This interpretation of Russian economic history has been most prominently articulated by Alexander Gerschenkron in "Agrarian." Gerschenkron also provides a good summary of the statutes governing emancipation and other, related reforms of the 1860s and after.

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empirically evaluating any of the underlying economic arguments. The land commune as an economic institution remains a black box, only vaguely outlined by the legal statutes that defined it.[3] My dissertation draws on a variety of new data taken from archival documents and contemporary published sources to better understand the emancipation reforms and the communal institutions they generated. My findings suggest that the institutional structure of post-1861 countryside did have long-run effects on Russian economic development. However, micro-level evidence regarding the peasant commune indicates that the institution was relatively flexible and did little to impede economic development in the ways often envisioned in the literature.

Economic historians have recently taken advantage of the opening of the Russian archives to improve our understanding of how the Soviet command economy worked.[4] At the same time, many aspects of the Tsarist economy have remained almost unstudied, even though a wealth of information is available. A major contribution of this dissertation is to introduce several new data sets derived from materials produced by local government authorities known as *zemstva* (singular: *zemstvo*). These bodies were responsible for carrying out numerous administrative functions, which required that they maintain detailed records of local economic conditions.[5] The dissertation draws primarily on sources from Moscow province, where the commune was a prominent feature, and where the archives retain many documents produced by the province's especially active *zemstvo*.

The first chapter of the dissertation investigates whether, following emancipation in 1861, villages of former serfs had different development paths than did villages of peasants previously obligated directly to the state. Scholars have argued that former state peasants received better land settlements in the reforms of the 1860s, and as a result, they were less likely to leave agriculture for industry in the following decades.[6] Exploring the differences between these two types of communities is one way of addressing how serfdom and the institutional conditions created by emancipation might have mattered locally for long-run development. Utilizing data on a matched sample of Moscow province villages documented in two *zemstva* surveys from the 1870s and the late 1890s, I find evidence that the reforms did not eliminate socio-economic differences across villages. Along practically all economic dimensions, former serf villages remained worse off in 1900. However, I find little difference between the two types of villages in the level of involvement in nonagricultural occupations. The implication of this result is that former serfs faced lingering limitations on their labor market decisions. Exactly what these restricting factors were requires additional research. The panel-data methodology employed in this chapter to investigate the long-run effects of emancipation can easily be extended to other provinces where *zemstva* undertook repeated surveys of different types of peasant villages.

[3] This is beginning to change with recent studies by a small number of historians interested, primarily, in noneconomic aspects of the commune. For example, see Gaudin, *Ruling Peasants*.

[4] This literature is summarized in Gregory and Harrison, "Allocation."

[5] Through household surveys, reports from networks of correspondents, and rigorous record keeping of local market transactions, the *zemstva* monitored taxable resources and food supplies and carried out many other functions of local government. These data—covering 34 provinces over the period 1867 to 1917—remain little studied, especially by western economic historians. For my dissertation, I collected *zemstvo* materials from a number of libraries and archives in the United States and Russia. On the functions of the *zemstva* and for citations to statistical output that the institution generated, see the essays in Emmons and Vucinich, eds., *Zemstvo*.

[6] For example, see Gerschenkron, "Agrarian."

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By the end of the nineteenth century, Russian grain was traded extensively on world markets and domestic food consumption was growing.[7] However, agricultural productivity in the form of grain yields remained quite low relative to Western Europe. Data compiled by a Ministry of Finance commission for the 1890s shows rye seed-yield ratios in the range of just four to seven on peasant land across European Russia.[8] In the second chapter of the dissertation, I consider perhaps the most famous feature of the Russian peasant commune—the practice of occasionally pooling and reallocating rights to farm specific plots of land within the communal open fields. This practice has been cited as a major reason for why peasant agricultural productivity remained so low by 1900. Alexander Gerschenkron noted that under the repartitional form of communal property rights, "the temporary character of land use and the strong disincentive to improve a piece of land that sooner of later was to be transferred to another household" limited investment in peasant agriculture. But was this actually the case empirically?[9] Were repartitions really such costly expropriations of household property rights?

To answer these questions, I matched *zemstvo* data on socio-economic conditions in Moscow province to unique information on the number of repartitions by communes between 1858 and 1878. This variable is available as an average over the communes in each township of the province, with a mean value of slightly more than two repartitions per commune over this period. Using these data, I study the empirical relationship between grain productivity and the frequency of repartitions. This exercise employs a simple production-function framework that controls for labor and capital inputs, as well as variation in agricultural conditions that were constant across the 8–20 townships of the 13 districts of Moscow province.

At first glance, the findings seem to support Gerschenkron's interpretation of communal repartitions. The results from the production function estimates show a negative correlation between the frequency of repartitions and grain seed-yield ratios for both winter and spring crops in 1876/77.[10] But based on archival and published contemporary accounts of repartitions, I argue that this correlation is not causal. Rather, repartitions were endogenously driven by factors that were also correlated with grain yields.

To better understand this joint causality, I turn the analysis around and explore the variation in the frequency of repartitions. This takes advantage of additional township-level information culled from a variety of sources and leads to two important findings. One is that repartitions were more frequent where *collective* tax and land obligations were higher. In the Moscow region, the size of these obligations was largely determined by the level of nonagricultural income, rather than the productive value of the land itself. Thus, this correlation implies that communal repartitions were unlikely to have been purely exogenous expropriations of land. In the Moscow region, where agriculture was especially unproductive, the practice was more important as a mechanism for adjusting shares of communal obligations among households.

A second conclusion from studying the correlates of repartition frequency is that the practice was more frequent in townships where factor markets were less developed. These areas were farther from Moscow, had relatively more former serfs, and showed

[7] On Russian grain and world markets, see Goodwin and Grennes, "Tsarist." For evidence on rising rural consumption levels, see Gregory, "Grain."

[8] *Materialy*, pp. 155–71. Van Bath (*Agrarian History*) reports higher rye seed-yield ratios for Western Europe before 1800.

[9] Gerschenkron, "Agrarian," p. 747.

[10] One additional repartition was associated with 10–15 percent lower seed ratios, depending on the specification and crop.

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less active land-rental markets. In terms of agricultural productivity, these findings indicate that repartitions were symptomatic, rather than causal determinants of low yields. Other factors—some observed and some unobserved—drove both the decision to repartition communal land and grain productivity. Moreover, the practice appears to have substituted for land market transactions (often costly or prohibited under the emancipation legislation) in reallocating resources. Additional work is necessary to confirm these findings in other, more agricultural, parts of Russia, but it is clear that the standard negative view of communal repartitions should be reconsidered.

The final chapter of the dissertation turns to a second common criticism of the post-1861 peasant commune. This view asserts that under the reform statutes, collective liabilities and property rights of the commune made it difficult for households and individuals to transfer land, exit the commune, and allocate their labor elsewhere. In aggregate, this "enserfment" to the commune hindered the flow of labor out of agriculture and into industry, which impeded Russia's structural transformation and slowed economic growth.

In order to investigate whether this *de jure* argument holds any *de facto* truth, I turned to the archival records of a unique *zemstvo* survey from Moscow province in the late 1890s. This survey collected information from all 200,000-plus peasant households in the province, although the original returns from only 38 villages in two townships have survived.[11] Randomly sampling from these survey records, I constructed a dataset of observations on approximately 650 households and 4,000 individuals. These data provide a wealth of information on demographics, occupations, wealth, land holdings, and agricultural production. With these data in hand, and I study the commune's role in household labor and land decisions.

The development economics literature offers a number of insights regarding agricultural household behavior when factor markets are imperfect.[12] At the extreme, large institutional impediments to transactions in multiple markets may lead to household autarchy. This has long been the implicit view of the Russian peasantry under the post-emancipation commune, where collective liability for obligations supposedly forced households to remain in the village and farm their communal allotments of land. Such an interpretation has persisted even though evidence exists for both labor mobility and active land markets.[13] Moreover, this literature has seldom acknowledged the important role of the commune in substituting for imperfect factor markets.

The findings presented in the final chapter of the dissertation are inconsistent with autarchic interpretations of peasant society and the commune. Perhaps unsurprisingly for semi-industrial Moscow province, I find that the majority of households were engaged in nonagricultural occupations aside from, or in addition to, farming. They used these sources of income to pay off their communal obligations and maintain a presence in the village. More importantly, the data provide considerable evidence that households were able to adjust their landholdings in very flexible ways, either through

[11] These records, along with other documents produced by the Moscow *zemstvo*, are housed in the Central Historical Archive of Moscow. I found no reason why the records for only these two townships (Morozovskaia in Dmitrovskii district and Pavlovskaia in Zvenigorodskii district) have survived.

[12] For example, see Saudolet et al., "Household."

[13] On the autarchic view of peasant in Tsarist Russia, see the pioneering work of Chaianov, *Theory*. Anfimov (*Zemel'naia*), Burds (*Peasant Dreams*), and numerous other studies do describe very active peasant participation in rural factor markets. However, these researchers rarely make use of any micro-level information or explore how factor transactions occurred under the postemancipation institutions.

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the commune in the form of partial repartitions among a few households, or through various types of rental market transactions. Indeed, land and labor markets allowed households to adjust their land-labor ratios when the commune was slow in optimizing their land allotments, or when the households experienced mortality-driven losses of labor.

To test how households responded to a plausibly exogenous change in land-labor ratios, I took advantage of how the *zemstvo* survey was conducted to construct a measure of labor lost to mortality between 1897 and 1899. Controlling for village effects, household characteristics, and whether the commune already adjusted the household's land allotment, I test whether responses could take place through the nonagricultural labor market, hired labor market, or land rental markets. The estimated coefficient on my mortality shock measure of lost labor implies that, *given a fixed land endowment*, households responded to a recent death by (weakly) renting out excess land and (strongly) allocating less labor to nonagricultural activities. Indeed, this sectoral adjustment of labor often offset the agricultural labor lost through mortality. I conclude from these and other results in this final chapter that at least by the 1890s, peasant households were relatively uninhibited by the commune in how they allocated their labor and land endowments. Communal obligations, along with legal restrictions on the alienability of communal land, did little to prevent households in the Moscow region from participating in a wide variety of factor market transactions.

Overall, my findings on the commune are consistent with the institution providing much more *de facto* flexibility than scholars have long assumed. These results pertain to the period *before* the famous Stolypin land reforms ended joint liability and communal restrictions on household factor decisions.[14] At the same time, the institutional structure of postemancipation Russia was unlikely to have been completely benign. Serfdom itself appears to have produced lingering impediments to economic development. My findings on the peasant land commune relate exclusively to one of the most advanced regions of European Russia. Other, more agricultural regions may indeed have been negatively affected by communal property rights and collective liability. More research is necessary to fully understand the institutional features of late-nineteenth-century Russian economic history.

[14] This is consistent with the hypothesis of Gregory (*Before Command*, chap. 3), who argues that the economic growth apparent in the national income statistics (albeit, growth that did not raise Russia out of poverty) could not have happened if the commune actually functioned as it was legislated to.

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The Lender's Curse: A New Look at the Origin and Persistence of Interest Bans in Islam and Christianity

Over the past few decades, a significant amount of research has been conducted in search of the causes underlying the "rise of the West".[1] In relation to the Middle East, this research takes on a special significance. By almost any account, the Middle East was far more advanced economically and scientifically than Western Europe as late as the thirteenth century. Yet, Middle Eastern economies did not develop nearly as rap-

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[1] North and Thomas, *Rise of the Western World*; Jones, *European Miracle*; Diamond, *Guns*; Landes, *Wealth*; Pomeranz, *Great Divergence*; and Acemoglu, Johnson, and Robinson, "Rise of Europe."

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