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Living Standards in Nineteenth-Century Russia

Living standards in the past have attracted renewed attention from economic historians. Debates about the “Great Divergence” have given rise to comparative studies of living standards in Europe and Asia. Differences within Europe, especially the notion of a “little divergence” between northwest Europe and the rest of the continent, and the extent to which this divergence was part of an “industrious revolution,” have inspired new studies of consumption and material culture. Information about wages, prices, literacy rates, crop yields, and anthropometric trends, as well as evidence from inventories of personal possessions, have all been utilized to assess standards of living in various parts of the world from the seventeenth to the early twentieth centuries.¹

Imperial Russia has been conspicuously absent from many of

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1 For living standards and the Great Divergence, see Kenneth Pomeranz, *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (Princeton, 2000); Stephen Broadberry and Bishnupriya Gupta, “The Early Modern Great Divergence: Wages, Prices and Economic Development in Europe and Asia, 1500–1800,” *Economic History Review*, LIX (2006), 2–31; Robert C. Allen et al., “Wages, Prices, and Living Standards in China, 1739–1925: In Comparison With Europe, Japan, and India,” *Economic History Review* (forthcoming). Jan-Luiten van Zanden, *The Long Road to the Industrial Revolution: The European Economy in a Global Perspective, 1000–1800* (Leiden, 2009), 95–101; Jan de Vries, *The Industrious Revolution: Consumer Behavior and the Household Economy 1650 to the Present* (New York, 2008).

Some recent studies of consumption and material culture include Craig Muldrew, *Food, Energy, and the Creation of Industriousness: Work and Material Culture in Agrarian England 1550–1780* (New York, 2011); Sheilagh Ogilvie, “Consumption, Social Capital, and the Industrious

these debates. The conventional view of Russia as a quintessentially “backward” economy, in which serfdom, autocracy, and Malthusian pressures kept living standards low, particularly among the peasantry, has largely prevailed in the broader economic history literature. However, this traditional account has been called into question by a growing body of research indicating a remarkable dynamism in rural Russian living standards during the nineteenth century. Mironov’s magisterial study, draws on a wealth of data from a wide range of sources to make the case that standards of living in Russia were steadily improving before the 1917 Revolution.²

Although this new research has considerably improved our understanding of Russian society during the long nineteenth cen-

Revolution in Early Modern Germany,” *Journal of Economic History*, LXX (2010), 287–325; John Styles, *The Dress of the People* (New Haven, 2008).

For recent research on European and comparative living standards, see Allen et al. (eds.), *Living Standards in the Past: New Perspectives on Well-Being in Asia and Europe* (New York, 2005); Sevket Pamuk and van Zanden, “Standards of Living,” in Broadberry and Kevin H. O’Rourke (eds.), *The Cambridge Economic History of Modern Europe. I. 1700–1870* (New York, 2010), 217–234; Carol S. Leonard and Jonas Ljungberg, “Population and Living Standards, 1870–1914,” *ibid.* II. *1870 to the Present*, 108–129.

² See Alexander Gerschenkron, “Agrarian Policies and Industrialization, Russia 1861–1917,” in H. J. Habakkuk and Michael Postan (eds.), *The Cambridge Economic History of Europe. VI. The Industrial Revolutions and After: Incomes, Population and Technological Changes (2)* (New York, 1965), 706–800; Geroid Robinson, *Rural Russia under the Old Regime* (Berkeley, 1972). Although he grounds his account in a rigorous economic analysis of aggregate data, Allen’s recent study of Soviet industrialization takes the “traditional” view of the rural Tsarist economy as its starting point. See Allen, *From Farm to Factory: A Reinterpretation of the Soviet Industrial Revolution* (Princeton, 2003), esp. 21–46. Similarly, in his comprehensive study of material culture—*The Economy and Material Culture of Russia 1600–1725* (Chicago, 1999)—Richard Hellie assumes that the Russian peasantry remained autarkic.

Important works about the dynamism in living standards include Jeffrey Burds, *Peasant Dreams and Market Politics* (Pittsburgh, 1998); Dennison, *The Institutional Framework of Russian Serfdom* (New York, 2011); Paul R. Gregory, “Grain Marketings and Peasant Consumption, Russia, 1885–1913,” *Explorations in Economic History*, XVII (1980), 135–164; James Y. Simms Jr. “The Crisis in Russian Agriculture at the End of the Nineteenth Century: A Different View,” *Slavic Review*, XXXVI (1977), 377–398, and the subsequent debate this work inspired: Stephen Wheatcroft, “Crises and the Condition of the Peasantry in Late Imperial Russia,” in Esther Kingston-Mann and Timothy Mixer (eds.), *Peasant Economy, Culture, and Politics of European Russia, 1800–1921* (Princeton, 1991), 128–172. See also the recent work of Leonard, *Agrarian Reform in Russia: The Road from Serfdom* (New York, 2011).

Boris N. Mironov, *Blagosostoianie naseleniia i revoliutsii v imperской Rossii* (Moscow, 2010). Mironov’s study has elicited substantial criticism in the Russian-language historiography for some of the reasons noted in our conclusion. For a summary of the debate, see A. V. Ostrovskii, “K itogam spora ob urovne zhizni v dorevoliutsionnoi Rossii,” *Voprosi istorii*, VI (2011), 129–144.

ture, we still know relatively little about the standards of living of rural inhabitants, who comprised about 85 percent of the population. Most existing research about living standards—including Mironov's—has focused on urban inhabitants, about whom we have much more information. Moreover, even studies of rural areas often convey little sense of geographical or temporal variation (in particular, before and after emancipation of the serfs in 1861). The few studies that consider such variation generally focus on specific types of data—such as human heights or agricultural wages—at regional or provincial levels of aggregation; they tend not to relate heterogeneity in rural living standards to its possible determinants, such as differences in local institutions or factor endowments.³

Such shortcomings are due, at least in part, to difficulties inherent in the evidence about Russian peasants' standards of living. As Wallace, a Briton who spent considerable time in Russia during the late nineteenth century, wrote, "The rural life, and in general the economic organization, of Russia is so peculiar . . . that even the fullest data regarding the quantity of land enjoyed by the peasantry, the amount of dues paid for it, the productivity of the soil, [and] the price of grain . . . would convey to an Englishman's mind no clear conception of the peasants' actual condition."⁴

The "fullest" data available for this period are indeed problematical for studies of this kind. Rural wage and price series are often incomplete—especially for the pre-emancipation period—making it virtually impossible to compile the kinds of measures employed for other parts of Europe. Moreover, imperial Russia covered a vast territory; data for wages, prices, and other measures of quality of life varied significantly from place to place in terms of

3 On living standards in Moscow, see Joseph Bradley, *Muzhik and Muscovite: Urbanization in Late Imperial Russia* (Berkeley, 1985). On St. Petersburg, see Mironov, "Wages and Prices in Imperial Russia, 1703–1913," *Russian Review*, LXIX (2010), 47–72. On Tambov province, see Steven L. Hoch, "On Good Numbers and Bad: Malthus, Population Trends and Peasant Standard of Living in Late Imperial Russia," *Slavic Review*, LIII (1994), 41–75; *idem*, *Serfdom and Social Control in Russia: Petrovskoe, a Village in Tambov* (Chicago, 1986). For an example of a study that relies primarily on anthropometric data, see Mironov and Brian A'Hearn, "Russian Living Standards under the Tsars: Anthropometric Evidence from the Volga," *Journal of Economic History*, LXVIII (2008), 900–929. Other important Russian-language studies of living standards include Iu. I. Kir'ianov, *Zhiznennyi uroven' rabochikh Rossii* (Moscow, 1979); L. V. Milov, *Po sledam ushedshikh epokh* (Moscow, 2006); and works cited in Mironov, *Blagosostoianie*.

4 Donald Mackenzie Wallace, *Russia* (Leipzig, 1878), II, 345.

quality, coverage, and timing. This variation makes it particularly difficult to generate broad conclusions about Russian living standards. Even characterizing such variation is complicated because of the large amount of information about rural living standards buried in local archives or obscure publications.

This article addresses some of these lacunae through an empirical analysis of micro-level evidence from a rural region in central Russia. Although we cannot claim completely to “convey . . . a clear conception of the peasants’ actual condition,” we can sketch an empirical picture of living conditions outside capital cities across the entire nineteenth century using a variety of new sources. Even though this portrait remains necessarily incomplete, our findings lend cautious support to more recent, revisionist views that see the rural economy in imperial Russia as more dynamic than previously assumed.

This study makes three contributions to the existing literature. First, it broadens the range of measures of living standards by adopting a multidimensional Human Development Index (HDI) approach. In this view, income is translated into goods (including health, education, and possibly other non-market goods) that provide utility or enhance productivity. This process is mediated through markets (prices); the social, political, and physical environment (endowments and institutions); and additional personal and household characteristics. We first present information about wages, salaries, and measures of agricultural production—data that shed light on the income level of Russian peasants. We then turn to evidence about the cost of living, consumption patterns, and material culture, indicating what peasant incomes could purchase and giving some sense of real income levels. Echoing work by Easterlin and others, we then discuss evidence about human capital investments. Finally, we characterize the institutional structures and legal and political rights held by the peasantry, how these evolved over time, and how they contributed to rural inequality.⁵

This study’s second contribution is to extend the temporal dimension by exploring the question of living standards for the pre-emancipation period as well as for the post-reform years. The data presented herein cover a period of roughly 160 years (c. 1750 to

5 Richard A. Easterlin, “The Worldwide Standard of Living since 1800,” *Journal of Economic Perspectives*, XIV (2000), 7–26. For other examples of multidimensional approaches to living standards in economic history, see Allen et al. (eds.), *Living*.

1910). Although constraints imposed by sources for the pre-1861 period (discussed below) prevent the construction of a long-run series of wages, prices, and other indicators, the data reveal new aspects of the quality of life in the countryside in *both* periods, thus enabling general observations about the direction of change in living standards.

Third, this article brings a different geographical focus and new source materials to the study of Russian living standards. Most of the research about rural living conditions has considered the grain belt in the south and southwest (for example, Tambov and Saratov provinces) and the areas around Moscow and St. Petersburg, or it has taken an aggregate approach to provincial or regional differences. In contrast, the focus herein is on two provinces in the so-called Central Industrial Region—Vladimir and Iaroslavl'. Moreover, to get the clearest picture possible, we pursue a micro-level approach that concentrates on two contiguous districts of these provinces—Iur'ev district of Vladimir and Rostov district of Iaroslavl'. These choices were motivated by the richness of the available sources, especially the archival evidence about serf economic activity in Rostov before 1861.

Despite their location in the “industrial” zone of European Russia, the households in these districts engaged in agriculture and a mix of nonagricultural activities. The rural populations of these two districts were overwhelmingly Orthodox, and they were largely members of the peasant estate (*soslovie*). Neither district was a significant destination for migration, although seasonal and permanent out-migration (especially male) was prominent. Economic linkages to Moscow and St. Petersburg were prevalent, but these districts were not the most industrially developed ones in either province. Table 1 compares the two districts. On the whole, both of them appear to have been typical for this region in their mixed economies and population characteristics.

This article employs a wide range of published and unpublished micro- and district-level data. Much of the pre-emancipation evidence comes from estate documents generated by the Sheremetyev family, one of Russia's largest landholding families, supplemented with published data from various sources. The post-emancipation data are drawn primarily from statistical and descriptive materials generated by various government bodies. The extensive sources, covering the entire period, from these two

Table 1 Characteristics of Study Districts: Iur'ev (Vladimir) and Rostov (Iaroslavl')

	IUR'EV	ROSTOV
Area in Square Versti (1 Verst' = 1.07 Kms)	2,745.6	3,440
Approximate % Serfs (of Total Population, c. 1858)	66.4	45.3
Total population in 1858	82,921	138,717
% population male in 1858	48.5	46.8
Total population in 1897	92,629	148,970
% population male in 1897	44.5	43.8
% population born in district, 1897	92.6	92.6
% of all land held in peasant communal ownership, 1877	55	66
% of communal land in "repartitional" tenure, 1905	98.5	100
% of all land owned by the nobility, 1877	11.5	19.7
% of all land owned by the nobility, 1905	17.4	7.4
% working-age males in agriculture (main occupation), 1897	69.3	76.9
% working-age females in agriculture (main occupation), 1897	47.2	73.9

NOTE The land area, 1858 populations, and the approximate percentage of former serfs were derived from information in A. Bushen (ed.), *Statisticheskaia tablitsy Rossiiskoi Imperii. II. Nalichnoe naselenie imperii za 1858 god* (St. Petersburg, 1863); N. A. Troinitskii (trans. Elaine Herman), *The Serf Population in Russia According to the 10th National Census* (Newtonville, Mass., 1982). The land shares come from Russia, Ministerstvo vnutrennykh del, Tsentral'nyi statisticheskii komitet, *Statistika zemliavladieniia 1905 g.* (St. Petersburg, 1906). The other data are from Troinitskii (ed.), *Pervaia vseobshchaia perepis' naseleniia Rossiiskoi Imperii, 1897 g.* (St. Petersburg, 1905), IV and L.

small districts, complement the recent (and more aggregate) study of Russian living standards by Mironov. Our evidence, like Mironov's, shows little sign of a broad or persistent crisis in rural Russian living standards during the nineteenth century. However, we identify a number of deviations from the aggregate story that make clear the importance of pursuing additional micro-level analyses before drawing strong general conclusions about the trajectory of living standards.⁶

The next two sections of this article work backward chronologically—from the post-reform period to the period before the emancipation of the serfs, a century later. This order helps to show the ways in which the sources create special difficulties for long-

6 Mironov, *Blagosostoianie*, utilizes a variety of urban and provincial-level measures of living standards but focuses primarily on anthropometric data, which he views as most reliable for long-run analysis.

run comparisons, as further explicated in the conclusion, which places our micro-level findings within a macro-level context.

RUSSIAN RURAL SOCIETY, 1861 TO 1910 A long tradition in Soviet and Western scholarship views the 1861 emancipation of the serfs and its accompanying reforms as re-imposing constraints on the peasantry that amounted to a new form of serfdom. The assignment of peasants into formal land communes, the collective control of property rights, and the joint liability for land and tax obligations restricted factor mobility and the development of the rural economy. According to this literature, the burdens (taxes and land payments) placed on peasant communities remained exceptionally high, even exceeding those imposed under serfdom. As a result, rural living standards continued to stagnate into the twentieth century, despite improvements in agriculture and growth in nonagricultural sectors.⁷

This “crisis” view of rural living standards in post-emancipation Russia has been questioned from a number of different perspectives, ranging from calculations based on GDP per capita to anthropometric studies. Although participants in this debate have had access to a much richer vein of sources than are available for the pre-1861 period, most of their studies have either neglected regional variation or have taken a restrictive view of what comprises standards of living. Moreover, surprisingly few studies have made systematic use of records produced by the *zemstva*, the institutions of local self-government founded in the 1860s across much of European Russia. As part of their mandate to monitor taxable resources and encourage local economic development, the *zemstva* often engaged in substantial statistical investigations of rural society. The *zemstva* of Vladimir and Iaroslavl’ provinces produced streams of data in the post-emancipation period about topics ranging from literacy rates and public-health conditions to agri-

7 This interpretation viewed high taxes and land obligations as extracting resources from the countryside to fund state-led industrial development. See Vysochaishe uchrezhdennoe Osoboe Soveshchanie o nuzhdakh sel’skokhoziaistvennoi promyshlennosti, *Svod trudov mestnykh komitetov v 49 guberniiam Evropeiskoi Rossii* (St. Petersburg, 1904); Russia, Ministerstvo finansov, Departament okladnykh sborov, *Materialy vysochaishe uchrezhdennoi 16 noiabria 1901 g. komissii po izsledovaniiu voprosa o dvizhenii s 1861 g. po 1900 g. blagosostoianiiia sel’skago naseleniia srednezemel’ cheskikh gubernii, sravnitel’no s drugimi mestnostiami Evropeiskoi Rossii* (St. Petersburg, 1903), 3 v. Also Vladimir Lenin, *The Development of Capitalism in Russia* (Moscow, 1974; orig. pub. 1899); Gerschenkron, “Agrarian Policies”; Stefan Plaggenborg, “Who Paid for the Industrialization of Russia?” *Revolutionary Russia*, III (1990), 183–210.

cultural productivity and local-market turnover. This section investigates living standards in our study districts by using evidence from a variety of zemstvo and non-zemstvo sources.⁸

Agricultural Production, Incomes, and Tax Obligations Although Iaroslavl' and Vladimir lay at the heart of the Central Industrial Region, rural households still produced at least some of their own food after emancipation. Rye and oat yields were slightly higher after 1861 than before (see below), and they continued to rise slowly throughout the period. However, productivity on peasants' communal land remained below that on individuals' private property (mostly owned by non-peasants), likely reflecting persistent differences in land quality, production technologies, labor inputs, and capital investment. Agriculture in Iur'ev appears to have been slightly more productive than in Vladimir as a whole, whereas Rostov closely resembled the rest of Iaroslavl' province.⁹

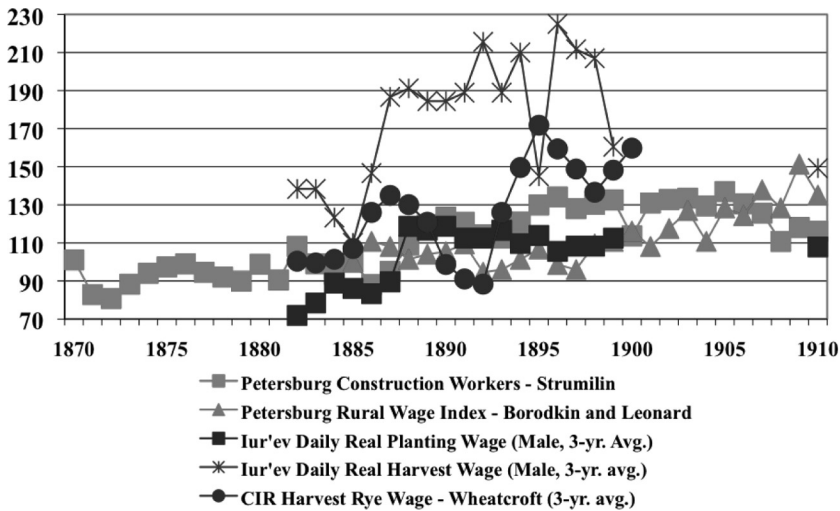
In the absence of farm accounts, it is difficult to compute the income generated from agricultural activities precisely. However, zemstvo tax valuations in the late 1890s calculated net income per *desiatina* (roughly 2.7 acres) of land allotted to peasants in Rostov and Iur'ev districts at 3.55 and 3.81 rubles, respectively. Land

8 On the zemstvo, see Nafziger, "Did Ivan's Vote Matter? The Political Economy of Local Democracy in Tsarist Russia," *European Review of Economic History*, XV (2011), 393–441, and the literature cited within. Some scholars have questioned the ideological motivations behind zemstvo statistics—for example, David Darrow, "Statistics and 'Sufficiency': Towards an Intellectual History of Russia's Rural Crisis," *Continuity and Change*, XVII (2002), 63–96. Although the zemstvo researchers occasionally had political agendas, the majority of their efforts appear relatively unbiased. Indeed, the zemstvo data constitute one of the most important sets of empirical evidence on any developing country in the nineteenth century.

On the debate over post-1861 rural living standards, see Simms, "Crisis"; Hoch "On Good Numbers"; *idem*, "Did Russia's Emancipated Serfs Really Pay Too Much for Too Little Land? Statistical Anomalies and Long-Tailed Distributions," *Slavic Review*, LXIII (2004), 247–274. Of particular note among zemstvo research efforts are household and village surveys, which were undertaken in Vladimir and Iaroslavl' in 1898. See Iaroslavskoe gubernskoe zemstvo, Statisticheskoe biuro, *Statisticheskoe opisanie Iaroslavskoi gubernii* (Iaroslavl', 1904); Vladimirskaia gubernskaia zemskaia uprava, Otsenочно-ekonomicheskoe otdelenie, *Materialy dlia otsenki zemel' Vladimirskaia gubernii* (Vladimir na Kliaz'me, 1898–1910), 13 v.

9 From 1861 to 1900, seed ratios on peasant land in Iaroslavl' province rose from 3 to 4.7 for rye and 2.8 to 3.4 for oats. In Vladimir, the increase was 3 to 3.6 and 2.7 to 2.9. On privately owned land, the increases were 5.3 to 6.1 for rye and 2.9 to 4 for oats in Iaroslavl', 2.9 to 4.3 and 2.7 to 3.2 in Vladimir. See Russia, Ministerstvo finansov, Departament okladnykh, *Materialy*, I; Russia, Ministerstvo zemel' i gosudarstvennogo imushchestva, Otdel sel'skoi ekonomii i sel'skokhoziaistvennoi statistiki, *Svod statisticheskikh svedenii po sel'skomu khoziaistvu Rossii k kontsu XIX veka* (St. Petersburg, 1900–1902), 2 v. For comparative data about Iur'ev and Rostov districts, see Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Urozhai 1888 goda, Urozhai 1891 goda, and Urozhai 1908 goda*, VI, XIX, LXIX, in *Statistika Rossiskoi imperii* (St. Petersburg, 1889, 1892, and 1908).

Fig. 1 Male Daily Wage Series, 1885 = 100



NOTE Sources and methods for calculating these series are provided in the text.

holdings averaged about 2.6 desiatina per adult male, implying a mean level of 15 to 20 rubles per household in agricultural income (roughly 11.5 to 15 1890 dollars).¹⁰

Beyond these rough calculations of own-farm revenues, a number of wage and salary observations are available for our study districts. Figure 1 presents two agricultural wage series for Iur'ev and compares them with existing real and nominal wage series for nearby areas. We take nominal daily planting and harvest wage series and deflate them by a “subsistence index,” which is calculated as the difference between wages paid with or without provisions provided by employers (1885 is the base year for this “cost-of-

10 A silver ruble was exchangeable for a “gold” one at roughly 1.3:1 in 1890 and 2:1 in 1897, when Russia adopted the gold standard. One “gold” ruble was worth slightly less than \$1.00 in 1890 and roughly \$0.65 after 1897. The ruble amounts noted here and below are nominal values. When possible, we distinguish whether such amounts were in paper (*assignaty*, or credit), silver (as in the amounts here), or gold rubles. For references and conversions to a constant ruble of account, see the discussions in nn. 17 and 20. For the “purchasing power” of such amounts, compare to the price data presented below. Total obligations per desiatina were 2.2 to 2.4 rubles at that time, which left little more than 1.25 rubles per desiatina in net income. The underlying land valuations were conducted sometime between 1896 and 1901. See Russia, Ministerstvo finansov, Departament okladnykh, *Materialy*, I. There are few farm accounts available for the post-1861 period, and none to our knowledge for peasants from our study districts.

living” series). Unfortunately, these wage data for Iur’ev only begin in 1883 and are spotty after 1902.¹¹

This exercise suggests that the agricultural labor market in Iur’ev was probably well integrated with the market for low-skilled labor in central Russia, at least by the 1880s. The rise in wages from around 1885 to the mid-1890s, followed by stagnation, is apparent across all of the series. By the late 1890s, a male summer agricultural worker in Iur’ev district was making approximately 60 rubles, and by 1910, about 65 rubles (roughly 40 and 44 1890 dollars—see n. 10). In the last decades of the nineteenth century, the levels and trends of nominal agricultural wages paid in Iur’ev and Rostov were comparable to the rest of Vladimir and Iaroslavl’ provinces. Day and summer pay in Iaroslavl’ slightly exceeded that in Vladimir, and both provinces showed higher wages in agriculture than the European Russian average, probably due to demand for labor in other sectors.¹²

Although most of the residents in the region under study

11 Mironov extends Sergei Strumilin’s work on St. Petersburg construction wages with better controls for changes in the cost of living. For rural wages, Leonid Borodkin and colleagues have uncovered nominal wage data from Petersburg zemstvo reports, and Wheatcroft has contributed rye-equivalent wage series for different agricultural tasks. See Mironov, “Wages and Prices”; Strumilin, “Oplata truda v Rossii,” *Planovoe khoziaistvo*, 7–8 (1930), 135–161; Borodkin, et al., “The Rural/Urban Wage Gap in the Industrialisation of Russia, 1884–1910,” *European Review of Economic History*, XII (2008), 67–95; Wheatcroft, “Crises.”

The Iur’ev series are calculated from data reported by rural correspondents of the zemstvo. Given significant short-run fluctuations in the Iur’ev wage series, we present a three-year moving average. These data are taken from Vladimirskoe gubernskoe zemstvo, *Obzor Vladimirskoi gubernii v sel’sko-khoziaistvennom otnoshenii* (Vladimir na Kliaz’me, 1897–1913); Russia, Ministerstvo vnutrennykh, Tsentral’nyi, *Statistika Rossiiskoi Imperii*. LXXX. *Tseny na rabochiia ruki v sel’skikh khoziaistvakh chastnykh vladel’tsev v Evropeiskoi i Aziatskoi Rossii v 1910 godu* (St. Petersburg, 1913). The four non-Iur’ev series are each derived in a different way, especially with regard to how they are deflated by cost-of-living indices (except the Borodkin et al. nominal wage series). The Mironov series is interpolated between decades, and the Wheatcroft series represents a three-year average.

12 The difference in planting and harvest wages in Iur’ev reflected seasonal demands for labor in the late summer and early fall. Between 1884 and 1900, this gap (nominal harvest minus planting wages) averaged 11 kopeks for Iur’ev (63 versus 52) and 4 kopeks for Rostov (69 versus 65). Across European Russia, the seasonal wage gap averaged approximately 20 kopeks. These data come from the same type of correspondent reports underlying the Iur’ev series in Figure 1. See Russia, Ministerstvo zemel, *Svod*, I; Vladimirskoe, *Obzor*. In 1910, summer salaries in Rostov were roughly 65 rubles. These 1910 figures, which assume four months of work, are derived from the monthly salaries reported in Russia, Ministerstvo vnutrennykh, Tsentral’nyi, *Tseny*.

Average male daily wages in the two provinces rose from roughly 62 kopeks to slightly more than 70 between 1870s and 1890s, compared to an increase from 57 kopeks to 60 kopeks for all of European Russia. Summer laborer salaries were roughly 5 to 10% higher in Iaroslavl’ than in Vladimir. See Russia, Ministerstvo finansov, Departament okladnykh, *Materialy*, I.

continued to have some involvement in agricultural production (see Table 1), non-farm activities inside and outside the home played a significant role in rural incomes after 1861. For many peasants assigned to villages in our study districts, these activities entailed seasonal or yearly migration to St. Petersburg, Moscow, or other nearby destinations. Such forms of labor migration increased over time; by 1897, local officials were issuing roughly one passport (required for internal migration) for every five residents of Rostov district. By 1899, more than 88 percent of households in Iur'ev district had members working in occupations other than farming, and about 44 percent of the males there were engaged in nonagricultural pursuits.¹³

Before 1861, income from nonagricultural trades (*promysly*) was equivalent to approximately 40 percent of overall household earnings (*soderzhanie*) among the state peasantry in Rostov district. A full-time factory worker in Rostov district made between 100 and 300 silver rubles a year during the early 1860s (Table 2). Nominal monthly wages for spinners in factories of nearby Shu'ia district of Vladimir province (an area that attracted numerous migrants from our study districts) rose from 14.6 rubles during the late 1850s to 16.3 to 18.9 rubles during the early 1880s and to 20.8 rubles during the mid-1890s. If peasant net farm incomes were roughly 15 to 20 rubles per household per month by the late 1890s, and labor markets were fairly well integrated, less than one-quarter of the income earned by a two-earner household in this region came from agricultural revenues.¹⁴

13 Vladimirskaiia, Otsenочно-ekonomicheskoe, *Materialy*. IX (no. 2). *Iur'evskii uezd: svedeniia o krest'ianskom khoziaistve* (Vladimir na Kliaz'me, Russia, 1904). In 1898/99, there were 23,078 males of working age in Iur'ev district; 16,983 (73.6%) had some nonagricultural employment (*ibid.*). Compare this data to Table 1. On Rostov work passports, see Iaroslavskoe, *Statisticheskii sbornik po Iaroslavskoi gubernii*. XIX. *Otkhoznie promysly krest'ianskogo naseleniia Iaroslavskoi gubernii (po dannym o pasportakh za 1896–1902 g.g.* (Iaroslavl', 1907). In 1901, 23,166 passports were issued to males in Rostov province, and 15,253 (66%) of them spent no time on agriculture (*ibid.*).

14 Russia, Ministerstvo gosudarstvennogo imushchestva, *Materialy dliia statistika Rossii* (St. Petersburg, 1859), II. We view this nonagricultural income as consistent with the (limited) data about incomes for the serf estate of Voshchazhnikovo in Rostov district (below). The calculation of revenues draws on numbers presented in the text and in Table 2. Complex households were not prevalent in this part of European Russia, and they would have derived a similar share of total income from own-farm production (since land allotments would have been correspondingly higher). This range is based on an average household with two working-age individuals each earning 50 to 240 rubles per year plus own farm production (crops only). On wages in Shuia district, see Mikhail I. Tugan-Baranovsky (trans. Arthur Levin and Claora Levin), *The Russian Factory in the 19th Century* (Homewood, Ill., 1970), 343–362.

Table 2 Nonagricultural Wages and Salaries, Post-1861 Period (Current Rubles)

PROFESSION	YEAR	TIME PERIOD	ROSTOV	IUR'EV
INDUSTRIAL WORKERS / ARTISANS				
Unskilled laborers (silk spinning factory)	~1861	Monthly	4-9	—
Carpenters / blacksmiths (silk factory)	~1861	Monthly	10-17	—
Spinner (silk spinning factory)	~1861	Monthly	15-19	—
Weavers / spinner (home production)	1875	Year, part time	17	—
Weavers (home production)	1881	Year	—	30-50
Factory employment (provincial mean)	~1900	Year	131	138
TEACHERS (PRIMARY)				
Private school in village	1862	Year	150	—
Employed in a rural school, all types	1879	Year	195	273
Employed in a rural zemstvo school	1897	Year	—	240
Employed in a rural school, any type	1910	Year	371	310
Employed in an urban school, any type	1910	Year	432	378
OTHER PROFESSIONALS				
Zemstvo veterinary doctor	1884	Year	—	600
Medical doctor (employed by zemstvo)	1908	Year	920	—

GOVERNMENT EMPLOYEES (PEASANT AND LOCAL)

Village elder (starosta)	1879	Year, part-time	52	—
Township clerk	1879	Year	256	—
Township elder	1879	Year	272	—
Commune (<i>sel'skoe obschestvo</i>) elder	1881	Year, part-time	54	25
Township elder	1881	Year	277	249
Township elder	1893	Year	302	273
Township elder	1908	Year	100–550	—
District police chief	1908	Year	2,375	—
District tax inspector	1908	Year	1,800	—

NOTES Data from 1861 come from one factory as reported in laroslavskii gubernskii statisticheskii komitet, *Pamiatnaia knizhka Iaroslavskoi gubernii na 1862 god* (Iaroslavl', 1863). The data about craft production in 1875 come from Russia, Komissia dlia peresmotra sistemy podatei I sborov, *Trudy komissii vysochaishe ichtezhdennoi dlia peresmotra sistemy podatei i sborov. II. Priamyie nalogi* (St. Petersburg, 1879), Pt. 3, 28–30; for 1881, from V. S. Prugavin, *Sel'skaia obshchina, kustarnye promysly i zemledel'cheskoe khoziaistvo Iur'evskago uезда, Vladimirskaia gubernii* (Moscow, 1884), 56–58. The provincial data about factory wages c. 1900 come from Russia, Ministerstvo finansov, Departament okladnykh, *Materialy*. Data about teacher salaries in 1862 can be found in Russia, Ministerstvo narodnogo prosveshcheniia, *Sbornik spravochnykh svedenii po ministerstvu narodnogo prosveshcheniia za 1862 i chast'iu, za 1863 i 1864 gody* (St. Petersburg, 1864). Teacher salaries in 1879 exclude payments to part-time religion teachers, and the data come from Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Statisticheskii vremennik Rossiiskoi Imperii. I. Sel'skitaia uchilishcha v Evropeiskoi Rossii i privislanskiikh guberniakh* (St. Petersburg, 1884). Teacher salaries for 1897 are provided in Vladimirskaia gubernskaia zemskaia uprava, *Sbornik statisticheskikh i spravochnykh svedenii po narodnomu obrazovaniiu no Vladimirskaia gubernii* (Vladimir na Kliaz'me, 1902), II. Teacher salaries in 1910 are weighted averages of male and female salaries; see V. I. Pokrovskii (ed.), *Odnodnennataia perepis' nachal'nykh shkol Rossiiskoi imperii proizvedennataia 18 ianvaria 1911 goda* (St. Petersburg, 1916), 16 v. The 1884 data about zemstvo employees come from Vladimirskaia gubernskaia, *Otdelnyi smety Vladimirskaia gubernskoi zemskoi upravly ocherednomy gubernskomu zemskomu sobraniiu, XIX–i sessii* (Vladimir na Kliaz'me, 1884); all of the 1908 observations come from A. P. Morozov (ed.), *Spravochnaia kniga Iaroslavskoi gubernii na 1908 god* (Iaroslavl', 1908). The 1879 information about peasant officials comes from Rossiiskii Gosudarstvennyi Istoricheskii Arkhiv (RGIA), f. 1316, op. 1, d. 111 ("Statistical information on . . . police in 1879 in Iaroslavl' province"). The 1881 information is calculated from district totals in Russia. Ministerstvo vnutrennykh, Tsentral'nyi, *Statisticheskii vremennik Rossiiskoi Imperii. XIII. Mirskie raskhody krest'ian za 1881 god* (St. Petersburg, 1886); the 1893 observation is from Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Vremennik tsentral'nago statisticheskogo komiteta. XXXVI. Soderzhanie volost'nykh dolzhnostnykh Lis v 47-mi guberniakh Evropeiskoi Rossii v 1890–1893 g. g.* (St. Petersburg, 1894).

Table 2 also reports available information about the salaries of rural professionals or service-sector employees in Rostov and Iur'ev. As demand for basic literacy grew and teaching standards improved, nominal salaries for rural teachers increased over time at a faster pace than those for factory workers. Teacher salaries were similar to those paid to township clerks and elders, who played a large role in local governance. These salaries, however, paled next to those received by doctors and officials employed locally by ministries of the central government (tax inspectors, police chiefs, etc.). Although these income data are limited, they imply the existence of significant inequality in our region, a topic revisited below.

The levels of taxes, land payments, and other obligations have been the basis for much debate about post-emancipation living standards. Table 3 presents information about the external burdens faced by peasants in our districts. According to these figures, the total of state, zemstvo, and township/communal burdens per tax-paying unit increased in nominal terms throughout the period at a pace that closely followed the increase in income levels. The level of accumulated tax arrears, which we present for 1895 and 1903 as a percentage of yearly assessments, suggests that the ability of peasants to pay did not worsen over time, perhaps because of the lowering of redemption obligations after 1881.¹⁵

Taking mean land holdings just after 1881 and adding the resulting redemption payments to the other tax burdens (averaging about 3.50 rubles), total direct per capita burdens on the peasantry appear to have been in the range of 5 to 6 rubles per annum in our

15 See Simms, "Crisis." Although we consider such information about obligations herein, we critique the use of tax-payments statistics as a measure of living standards below. After 1861, the basis of central government taxation shifted from adult male souls to property and, especially, to indirect consumption taxes. The zemstvo collected its revenue primarily from property taxes, whereas peasant institutions of self-government assessed member households according to land, household size, or wealth. By "land payments," we mean the several forms of mortgage-like payments made by the peasantry after 1861 in return for access to property.

Redemption refers to the post-1861 credit operation by which peasants obtained formal ownership of the land granted them by the reforms of the 1860s. Peasant rural societies were made collectively liable to the state for their land during a period of forty-nine years. The payments were revised over subsequent decades—including a reduction across the board in 1881—before finally being abolished in the 1900s. On redemption, see David Moon, *The Abolition of Serfdom in Russia, 1762–1907* (Harlow, 2001). On the measures that lowered redemption payments and other tax obligations, see Robinson, *Rural*. Local officials used a variety of mechanisms to ensure tax payments in central Russia. See Burds, *Peasant*, 45–51.

Table 3 Tracking Tax Obligations in Iur'ev and Rostov

YEAR	IUR'EV	VLADIMIR	ROSTOV	IAROSLAVL'
STATE, ZEMSTVO, AND "CLASS" (PEASANT OR MESHCHANE) OBLIGATIONS PER "SOUL" (TAXED POPULATION)				
1877	2.71	2.58	2.59	2.59
Former state peasants	3.10	3.01	2.96	2.96
Townsmen (<i>meshchane</i>)	0.49	0.60	0.58	0.58
YEARLY DIRECT TAX ASSESSMENTS PER CAPITA (RURAL POPULATION) + CUMULATIVE ARREARS (% OF CURRENT YEAR'S ASSESSMENT)				
1895	141,647	—	196,055	—
Amount of assessed land (desiatina)	3.80	—	2.99	—
Total (state, zemstvo, communal, and fire insurance) obligations	49.5	—	4.7	—
Cumulative % arrears on obligations	—	—	—	—
1903	141,600	—	196,900	—
Amount of assessed land (desiatina)	4.34	—	4.13	—
Total (state, zemstvo, communal, and fire insurance) obligations	24.7	—	1.6	—
Cumulative % arrears on obligations	—	—	—	—
REDEMPTION OBLIGATIONS PER DESIATINA, FORMER SERFS				
Prior to 1881	1.85	1.83	2.27	1.95
After 1881 lowering	1.58	1.45	1.85	1.58
Desiatina per male "soul," 1881	3.5	3.9	3.2	3.8

NOTES All monetary amounts are in nominal silver rubles. *Meshchane* were the class designation for townspeople. The 1877 numbers are from Russia, Kommissia, *Prinyati*. The 1895 and 1903 data are from Russia, Ministerstvo finansov, Department okladnykh, *Svod svedenii o postupleniih v zhinanii kazennykh, zemskikh, i obshchestvennykh okladnykh sborov za 1895-99 g.*, and . . . *za 1901-1903 g.* (St. Petersburg, 1902 and 1909). The information about redemption obligations before and after 1881 is taken from Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Mirskic*; G. Ershov (ed.), *Statisticheskii vremennik Rossiiskoi Imperii. V. Pomozhenie rybsupnago platezha po ukazu 28-ogo dekabria 1881 goda* (St. Petersburg, 1885).

districts throughout the period. If per capita incomes were in the neighborhood of 100 rubles, direct obligations constituted no more than 10 percent, a figure that was likely falling as incomes rose and redemption payments declined. This trend was partially offset by rising indirect taxes, which, by 1897, amounted to approximately 5 rubles more per capita.¹⁶

Cost of Living, Consumption, and Rural Material Culture Our understanding of changes in living standards depends on an estimation of the purchasing power of this steady growth in nominal wages and salaries. The real wage series used by Strumilin and Mironov in Figure 1 rely on household budgets and selected price series from St. Petersburg to construct cost-of-living indices. Since the data required for such calculations are not available for our study districts, we must rely on a rough estimate of the cost of provisioning a daily worker to calculate the real wage series in Iur'ev (see Figure 1).¹⁷

Despite the difficulty of constructing long-run cost-of-living series for our districts, the sources allow us to say something about consumption patterns, the availability of goods, and relative prices at certain points in time. Scholars of the Central Industrial Region have pointed to rising expenditures on all sorts of basic provisions and luxury items during the later nineteenth century. This emerging “consumer culture” was evident in rural areas, especially in districts like Iur'ev and Rostov, which sent a substantial amount of migratory labor to Moscow and St. Petersburg. According to the relatively few rural budgets available for Vladimir, Iaroslavl', and other parts of European Russia, grain and other foodstuffs took up 40 to 70 percent of household expenditures, while clothing constituted another 5 to 15 percent. A further 10 to 20 percent

16 In one township (Il'inskaia) of Iur'ev district, total per capita obligations (including redemption payments) were around 6.13 rubles in 1881 and had fallen to 5.07 by 1899. See V. S. Prugavin, *Sel'skaia obshchina, kustarnye promysly i zemledel'cheskoe khoziaistvo Iur'evskago uезда, Vladimirskaia gubernii* (Moscow, 1884); Vladimirskaia, Otsenochno-ekonomicheskoe, *Iur'evskii*. According to the aggregate data summarized by Wheatcroft, “Crises,” 160–162, yearly indirect taxes were approximately 672.5 million rubles between 1895 and 1900. The population of the Empire was 126.4 million; Troinitskii (ed.), *Pervaia vseobshchaia perepis' naseleniia Rossiiskoi Imperii, 1897 g.* (St. Petersburg, 1905).

17 According to an 1897 constant ruble index (see www.gpih.ucdavis.edu; Mironov, “Wages and Prices”), a paper ruble in the late 1850s represented 40 to 50% more silver or gold equivalent than a ruble under the gold standard initiated in 1897 (when the paper ruble was re-valued in 1840, the new ruble was approximately four times the value of the old one). For more on converting to a constant value ruble, see n. 19.

went toward livestock, leaving 15 to 40 percent for housing, non-essentials, and luxury goods. Although we do not have direct information about expenditures for nonessential goods in our districts, the emergence of commercial advertisements in provincial newspapers that circulated in rural areas provide one sign of growth in this area.¹⁸

The majority of households in our districts turned to the market to buy food. Thus, although peasants were buying a large variety of goods, the availability and price of grain continued to be of key importance to overall welfare. In reports to the Vladimir zemstvo during the late 1890s, less than 15 percent of peasant households in Iur'ev were considered fully self-sufficient in grain. We have scattered prices for grains and a number of other foods in these districts. Grain-price movements in Iur'ev and Rostov closely paralleled those elsewhere, suggesting that markets were relatively well integrated during the late nineteenth century. The availability of other price observations for processed flour, potatoes, butchered meat (such as beef and lamb), salt, hay, and other provisions in our two districts reveals that markets functioned well enough to allow substantial rural and urban trade. Despite limited information about other types of consumption, it is clear that the peasant population was not at all autarkic with respect to key food items. There is little evidence that consumption declined or that the cost of living was rising dramatically after 1861.¹⁹

18 Such advertisements covered the back pages of most official provincial newspapers (the *gubernskie vedomosti*). For the data underlying these household budget figures, see Russia, Ministerstvo finansov, Departament okladnykh, *Materialy*, I; F. A. Shcherbina, "Krest'ianskie biudzhety i zavisimost' ikh ot urozhaev i tsen na khleba," in A. I. Chuprov and A. S. Posnikov (eds.), *Vliianie urozhaev i khlebykh tsen na nekotoryia storony Russkago narodnago khoziaistva* (St. Petersburg, 1897), 43. For similar evidence from Kostroma and Moscow provinces, see N. K. Druzhinina (ed.), *Usloviia byta rabochikh v dorevoliutsionnoi Rossii* (Moscow, 1958); Iu. I. Kir'ianov, *Zhiznennyi*. On the emerging culture of consumption in rural areas, see Burds, *Peasant*, 143–185.

19 Vladimirskoe, *Obzor*, III, 310. The post-1861 period also saw the expansion of locally administered grain reserves that enabled some risk sharing within and across communities in our districts. See Kimitaka Matsuzato, "Sel'skaia khlebozapasnaia v Rossii, 1864–1917 gody," *Otechestvennaia istoriia*, III (1995), 185–197. Iur'ev and Rostov data are from Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Vremennik tsentral'nago statisticheskago komiteta ministerstva vnutrennikh del*, III. *Tseny na pshenitsu, rozh, oves' i iachmen v Evropeiskoi Rossii v 1881–1887 godakh, po mestnym svedeniiam* (St. Petersburg, 1888); Iaroslavskoe gubernskoe zemstvo, *Statisticheskii otdel, Otsenka pashni Rostovskago uezda* (Iaroslavl', 1913); A. A. Titov, "Statistiko-ekonomicheskoe opisanie Rostovskago uezda Iaroslavskoi gubernii," in V. P. Bezobrazov (ed.), *Narodoe khoziaistvo Rossii, chast' II: Moskovskaia (tsentral'naia) promyshlennaia oblast'* (St. Petersburg, 1885). These series parallel urban data reported in Russia, Tsentral'nyi,

The number and types of trade and market establishments provide additional evidence for the availability of goods in our study districts. In 1875, Iur'ev district had approximately 184 shops (*lavki*) and stores (*magaziny*) for roughly 390 settlements, while Rostov district possessed over 1,750 such establishments for approximately 800 settlements. These small shops and trade establishments mostly retailed basic provisions, but weekly bazaars and large periodic markets carried a wider variety of textiles, iron products, and foreign goods. Commensurate with its share of population (6.1 percent of the province in 1897), Iur'ev possessed only 5.3 percent of the officially recognized commercial enterprises (*torgovlyia predpriiatii*) in Vladimir and few trade fairs (*iarmarki*) by the end of the 1880s. Rostov possessed 13.9 percent of Iaroslavl's population, 12.3 percent of the commercial enterprises, and several large trade fairs and semi-annual markets. The difference in commercial and market development between Rostov and neighboring Iur'ev district suggests that heterogeneity in the level of market development may have been significant across European Russia, even in the late nineteenth century. Nonetheless, for these two districts the evidence points to widely available (and affordable) foodstuffs and relatively low costs of living during the latter half of the nineteenth century.²⁰

Statistika Rossiiskoi imperii. X. Sbornik svedenii po Rossii, 1890 (St. Petersburg, 1890); Russia. Ministerstvo finansov, Departament torgovli i manufaktur, *Svod tovarnykh tsen na glavnykh russkikh i inostrannykh rynkakh za 1890–1899 gody*, in *Materialy dlia torgovo-promyshlennoi statistiki* (St. Petersburg, 1900).

For other price data from Iur'ev and Rostov districts, see Titov, "Statistiko-ekonomicheskoe"; I. Kaufman (ed.), *Vremennik tsental'nago statisticheskago komiteta Ministerstva vnytrennykh del. IV. Tseny po proviant i furazh po svedeniiam intendantskago vedomstva* (St. Petersburg, 1889); Vladimirov, *Obzor; Vladimirskaia, Sbornik statisticheskikh i spravochnykh svedenii po Vladimirskaia gubernii* (Vladimir na Kliaz'me, 1900); Iaroslavl'skoe, *Otsenka*. If per capita consumption of rye remained 1.1 *chetvert* (approximately 130 km) during the late 1890s (see below), this amount would have cost approximately 6 rubles in our districts. Comparing this figure with the 14.3 ruble price on Voshchazhnikovo estate in Rostov district in 1831, when the paper ruble was approximately 40% of the value of the late 1890s ruble, suggests that the real price of grain changed little and that most peasants could afford to buy food throughout the period. On assessing the value of the ruble over time, see Mironov, *Blagosostoianie; idem*, "Wages and Prices"; Thomas C. Owen, "A Standard Ruble of Account for Russian Business History, 1769–1914: A Note," *Journal of Economic History*, XLIX (1989), 699–706.

²⁰ On *lavki* and *magaziny*, see Titov, "Statistiko-ekonomicheskoe"; Vladimirskaia gubernskii statisticheskii komitet, *Ezhgodnik* (Vladimir na Kliaz'me, 1880), III. The Rostov fair was one of the largest yearly trade fairs in Russia. Iur'ev had no substantial periodic markets in 1867 (at least none recorded) and only four by the 1880s, but Rostov district already had eight such trade fairs by the late 1860s. Iur'ev district contained only four markets out of the 281 recorded in Vladimir in 1895/96. On trade enterprises, markets, and fairs, see Vladimirskaia,

Human Capital Investments Although evidence about the cost of living and consumption in these districts sheds some light on material standards of living for this small region, it is still not possible, even with the relative availability of data after 1861, to construct long-run real income and consumption series comparable to those available for Moscow or St. Petersburg. Therefore, it is important to go beyond wages, incomes, and prices to consider indirect measures of living standards, such as education and other indicators of human-capital accumulation.

The period after 1861 saw growing school enrollments and literacy rates in our region. Table 4 shows literacy rates by sex for Iur'ev and Rostov districts in 1897, a further breakdown by township for Iur'ev district (only rural population, ages twenty-one to thirty) from the 1898/99 household survey, and information from Iaroslavl' army recruits. These data show increasing literacy over time, as well as variation across space. Females were much less likely than males to be literate, especially in Iur'ev. Although peasant literacy often derived from informal instruction or through employment or army service, much of this growth was the consequence of a slowly expanding, formal rural education system. Information collected by the Ministry of Education in 1879 and 1911 implies that in the rural areas of our two districts, male and female enrollment rates in formally recognized schools rose from 12.3 and 5.6 percent to 28 and 24 percent, respectively. Although these numbers were low relative to other European countries, they compare favorably with the rest of European Russia, possibly reflecting the greater demand for schooling in a relatively nonagricultural region.²¹

Sbornik, II, 178–179; N. S. Petlin, *Opyt opisaniia gubernii i oblastei Rossii v statisticheskom i ekonomicheskom otnosheniakh v sviazi s deiatel'nost'iu v nikh gosudarstvennogo banka i chastnykh kreditnykh uchrezhdenii* (St. Petersburg, 1893), 2 v.; Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Statisticheskii vremennik Rossiiskoi imperii. V. Iarmaki v Evropeiskoi Rossii* (St. Petersburg, 1872).

Other indicators of wealth and durable consumption are also available. In 1876, only 264 out of 13,360 private homes in Iur'ev district were built of stone. But according to the 1898/99 zemstvo survey, the portion of resident households without housing of their own varied from 1.3% in Il'inskaia township to 4.8% in Parshinskaia (*Materialy dlia otsenki*, IX). See Vladimirskaia, *Ezhegodnik*, III; Vladimirskaia, *Otsenchno-ekonomicheskoe, Iur'evskii*.

²¹ In comparison, Mironov utilizes the 1897 census and other sources to calculate literacy rates for different age cohorts throughout the nineteenth century. He estimates that the literacy rate for males older than nine years of age rose from 19.1% in 1857 to 45.2% in 1907. For females, the increase was only from 9.5% to 17%. See Mironov, "The Development of Literacy in Russia and the USSR from the Tenth to the Twentieth Centuries." *History of Education*

Table 4 Literacy Rates after 1861

NEW ARMY RECRUITS (MALES, EARLY 20S)		
	ROSTOV	IAROSLAVL' (ALL DISTRICTS)
1874	67.9	60.1
1881	68.1	65.3
1890	86.8	74.1
1898	91.1	86.6

1881 SURVEY OF IUR'EV DISTRICT, ADULT LITERACY (LITERATES / # ADULT "WORKERS")		
	PERCENT MALES	PERCENT FEMALES
Il'inskaia township	50.9	4.3

1899 LITERACY RATES, AGES 21–30, IN 1899, IUR'EV DISTRICT (RURAL POPULATION)		
	PERCENT OF MALES	PERCENT OF FEMALES
Il'inskaia township	63.2	5.1
Total (14 townships)	70.2	10.9

1897 NATIONAL CENSUS DATA, AGES 20–29		
	PERCENT MALES	PERCENT FEMALES
Iur'ev	61.5	15.0
Rostov	59.0	33.9

NOTES Recruit data from Iaroslavl' province are provided in Iaroslavskoe, *Statisticheskii sbornik po Iaroslavskoi gubernii. VIII. Istoriko-statisticheskii tablitsy po Iaroslavskoi gubernii za 1862–1898 g.g.* (Iaroslavl', 1901). The 1881 survey data for part of Iur'ev province come from Prugavin, *Sel'skaia*. The 1899 data come Vladimirskaiia, *Otsenochno-ekonomicheskoe, Iur'evskii*. Finally, the 1897 census data may be found in Troinitiskii (ed.), *Pervaiia*, IV and L.

Quarterly, XXXI (1991), 229–252. The slow spread of literacy and rural primary education in tsarist Russia after 1861 are described in Jeffrey Brooks, *When Russia Learned to Read: Literacy and Popular Literature, 1861–1917* (Princeton, 1985); Benjamin Eklof, *Russian Peasant Schools: Officialdom, Village Culture, and Popular Pedagogy, 1861–1914* (Berkeley, 1986); Nafziger, “The Political Economy of Rural Primary Education in Tsarist Russia,” Working paper (Williams College, 2011). Brooks emphasizes the variety of channels by which peasants acquired literacy, often in the absence of formal schools. The enrollment rates assume that the school-age population was 20% of the population, but the upward trends are robust to alternative assumptions. See Pokrovskii (ed.), *Odnodnevnaia*, for the 1910/11 data; Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Sel'skiiia*, for the 1879/80 data. Between 1876 and 1906, the number of zemstvo schools in Rostov district increased from 14 to 80. See T. I. Volkova, *Iaroslavskoe zemstvo i razvitie narodnogo zdavookhraneniia i obrazovaniia v gubernii (1865–1918 g.g.)* (Iaroslavl', 1998), 51. For comparisons to the development of basic education in other European and non-European societies, see Nafziger, “Political.”

Other indicators of human-capital development are less readily available for our districts, but, again, the data on hand suggest important insights into broader living standards. Crude demographic indicators imply that fertility and mortality rates were relatively high in our region, especially in more industrialized Iur'ev district. Such rates appear unrelated to grain prices, suggesting that food markets functioned well enough to break any link between staple prices and demographic outcomes. The high rates of mortality appear to be driven by child mortality, although substantial variation is evident even between our districts. Furthermore, although infant and child mortality in tsarist Russia began a slow decline beginning in the late 1890s, their levels, as well as overall life expectancy, compared unfavorably with those of the rest of Europe well into the twentieth century. Overall, our data suggest that high mortality may have somewhat offset income and consumption levels in the Central Industrial Region, although this subject demands further research.²²

Institutions, Rights, and Inequality After 1861 The post-1861 period saw several significant reforms of Russian political and administrative institutions in rural areas. Although institutions are not usually considered in discussions of living standards, they are worth taking into account since they influence what Sen has called the “capabilities” of a population. Indeed, the institutions created in the post-emancipation era offered new political outlets to the

22 Fertility in Vladimir and Iaroslavl' was relatively steady at 4.5 to 5 per 100 resident (although Rostov exhibits a decline over time). Mortality was high at 4 to 5 per 100 early in the period but falling 10 to 20% by 1894. For these data, see V. I. Pokrovskii, “Vliianie kolobanii urozhaiia i khlebnykh tsen na estestvennoe dvizhenie naseleniia,” in A. I. Chuprov and A. S. Posnikov (eds.), *Vliianie urozhaev i khlebnykh tsen na nekotoryia storony russkago narodnago khoziaistva* (St. Petersburg, 1897); Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Statisticheskii vremennik Rossiiskoi Imperii* (St. Petersburg, 1875 and 1882), X and XVII; Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Statistika Rossiiskoi Imperii. X. Sbornik svedenii po Rossii, 1890* (St. Petersburg, 1890); S. A. Korolenko (ed.), *Sel'skokhoziaistvennyia i statisticheskiia svedeniia po materialam, poluchennym ot khoziaev. V. Vol'nonaemnyi trud v khoziaistvakh vladel'cheskikh i peredvizhenie rabochikh* (St. Petersburg, 1892). Our finding of no correlation between grain prices and demographic outcomes contrasts with Pokrovskii, “Vliianie,” 237–238. Mortality among children younger than five averaged 27.1% of all births in European Russia between 1867 and 1881. Both Vladimir (38.8) and Iaroslavl' (34.9) exhibited high child mortality rates, with the difference between the provinces explaining their total mortality gap. See Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Vremennik tsentral'nago statisticheskago komiteta ministerstva vnutrennykh del. VI. Smertnost' mladentsev v Evropeiskoi Rossii v 1867–188 gg.* (St. Petersburg, 1889). Infant mortality rates were roughly 250 out of 1,000 births as late as 1910, whereas Germany and the Austro-Hungarian Empire saw rates below 200. See the discussion in Leonard and Ljungberg, “Population,” 113–120.

rural population, but they may have also contributed to social and economic inequality, because they continued to make formal distinctions between the rights of the peasant majority and those of other social classes.²³

The formal assignment of peasants into communes—the *sel'skie obshchestva*, or rural societies—codified a system of collective property rights and joint responsibility for tax and land payments. These new institutions of peasant self-government (including higher-level township governments) provided local fiscal mechanisms for rural residents to obtain limited public goods and services. However, the internal workings of these rural societies appear to have differed little from those of the pre-reform period (see below), in that a small group of male household heads controlled the allocation of obligations, land, and access to other collective assets. The resulting inequality of power within the commune may have contributed to persistent gender and wealth disparities among the rural population.²⁴

Table 5 reports information about peasant and other local institutions in the post-1861 period. The rural societies and township authorities of Iur'ev and Rostov financed (some) schools and local courts; paid officials; managed postal horses, local military supplies, and grains stores; and occasionally supported public-health measures, prisons, and fire services. Other social classes possessed their own political and economic institutions, including municipal authorities in the cities of Rostov and Iu'rev, corporate bodies of the local nobility, and merchant guilds and councils. But the public goods and services provided by the peasant institutions were generally meager, especially when compared to the efforts of the new zemstvo institutions. Despite the limited voice peasants

23 Amartya Sen's influential work about capabilities and "functionings" as elements of well-being—*On Economic Inequality* (New York, 1997; orig. pub. 1973), 199–214—has led to a broadening of perspectives on what constitutes the "standard of living." See also the discussion in Allen et al., "Introduction," in *Living Standards*, 7–8.

24 See Nafziger, "Peasant Communes and Factor Endowments in Late Nineteenth-Century Russia," *Explorations in Economic History*, XLVII (2010), 381–402. The township governments were comprised of a number of rural societies, both of which were explicitly *peasant* institutions of local government. In terms of expenditures, the township and rural-society governments of Iur'ev and Rostov districts spent 1.3 and 0.9 rubles per capita, respectively, in 1881 (the national mean was only 0.6 rubles per capita). For the allocation of communal and township-level expenditures on different goods and services, see Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Mirskie*; Russia, Ministerstvo finansov, Departament Okladnykh Sborov, *Mirskie dokhody i raskhody za 1905 g.* (St. Petersburg, 1909).

Table 5 Local Government in Post-1861 Iur'ev and Rostov Districts

	IUR'EV	ROSTOV
Rural Societies in 1881 [rural population per rural society] ¹	233 [369]	174 [778]
Townships in 1881 [rural population per township] ¹	14 [6,146]	22 [6,151]
District zemstvo assembly seats, 1864 Law ²	30	47
% of seats allocated to the peasant <i>soslovie</i> ²	40%	38.3%
District zemstvo assembly seats, 1890 Law ³	30	25
% of seats allocated to the peasant <i>soslovie</i> ³	30%	28%
Constable stations in 1879 [in province] ⁴	6 [110]	12 [100]
Justices of the Peace (<i>mitovaiia sud'ia</i>), 1879 [in province] ⁴	4 [46]	3 [26]
Circuit courts in 1879 [in province] ⁴	1 [23]	2 [17]
Number of Land Captains, 1889 law [in province] ⁵	3 [52]	5 [42]
Voters in 1906 Duma electoral assembly [total in province] ⁶	6 [92]	9 [60]
% of electoral votes allocated to peasantry [in province] ⁶	33.3% [28]	33.3% [27]

NOTES (1) From Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Mirskie*; numbers in brackets are district means; the corresponding national means for 47 provinces are 230 [SD = 124.8] rural societies of an average of 666.4 [SD = 422] people and 20 [SD = 9.2] townships of 6405 [SD = 2650] people each. (2) and (3) are from *Pol'noe sobranie zakonov Rossiiskoi Imperii* Series II, XXXIX, issue 3 [appendixes] and Series III, X; the peasant shares of assembly seats from all thirty-four provinces with zemstva were 40.9% (1864) and 32.7% (1890). Both the district and provincial (in brackets) totals for (4) are from f. 1316, op. 1, d. 70 ("Statistical information on . . . police in 1879 in Vladimir province") and d. 111 (" . . . in Iaroslavl' province"), Russian State Historical Archive, St. Petersburg. Both the district and provincial (in brackets) totals for (5) are taken from Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Vremennik tsentral'nogo statisticheskogo komiteta*. XXIX. *Uchastki zemleplikh nadhal'mikov v 32-ih guberniakh za 1893 g.* (St. Petersburg, 1893). (6) is derived from information in *Vestnik partii narodnoi svobody* (St. Petersburg, 1906), no. 6.

had in the zemstvo (relative to the gentry or urban classes), that institution increasingly supported measures aimed at improving rural living standards.²⁵

The rise in zemstvo expenditures was paralleled by the growing involvement of the central government in local affairs. However, neither of these developments occurred because the peasant majority was able to represent its interests directly through formal political channels. Rather, political power within the zemstva, the ministries of the central government, and the national Duma parliament after 1906 remained firmly in the hands of the nobility and a small commercial elite. Peasant “voice” was largely confined to peasant institutions of self-government, including township courts and, especially, the commune.²⁶

Indeed, the commune and the collective character of peasant property rights remained major elements of the rural institutional structure throughout the pre-Revolution period, and these factors help to explain the persistence of rural inequality after 1861. Differences across communities in the amount of land per household were fixed by the emancipation settlements of the 1860s. As a result, households in rural societies once belonging to proprietary serfs in Rostov and Iur’ev districts had, on average, 6.4 and 8.6 desiatina of allotment land in 1905, relative to 8.4 and 11.1 in peasant communities on formerly state lands. To compensate, areas where a larger share of the population was enserfed in 1860 saw

25 Per capita expenditures by the district zemstvo in Iur’ev and Rostov rose from 0.53 and 0.35 rubles in 1877 to 1.36 and 1.04 rubles in 1906. In contrast to the relatively limited role of peasant institutions, district zemstvo expenditures on education and health care in Rostov comprised 15.9% and 10.3% and in Iur’ev 29% and 12.3% of total expenditures in 1877; these shares rose steadily over time. Across European Russia, district zemstvo spending per capita went from 0.53 rubles in 1877 to 1.06 rubles in 1906 (in the approximately 70% of districts that had a zemstvo). See Nafziger, “Did Ivan’s.” Peasant, zemstvo, and state funding, all of which were based primarily on property taxes, supported institutions of local government. Table 5 suggests that our two districts had fewer constables, circuit courts, and justices of the peace (except for Rostov) than their populations warranted.

26 The increase in zemstvo financing for local schooling was matched by funds provided by the Ministry of Education after 1895. See Nafziger, “Political.” In 1906, the creation of the Duma allowed for some representation of local interests in central government affairs, but the electoral system was explicitly structured to under-represent the peasantry. Table 5 indicates that the peasant social estate received one-third of our districts’ seats in the provincial electoral assemblies. For a more detailed account of the interaction of central and local authorities with respect to education, see Nafziger, “Political Economy.” The trend toward greater central involvement in local governance explains the 1889 creation of the new position of the land captain (*zemskii nachal’nik*) to manage peasant affairs for the Ministry of the Interior (Table 5).

a greater share of *private* property among the peasantry in 1905. Since these two types of property may have entailed significantly different transaction and production costs, they may have contributed to rural inequality.²⁷

The differences in property holdings by type of rural community were matched by substantial inequality within communities. A primary reason for this condition was the power of communal authorities to allocate allotment land and shares of collective tax and redemption obligations. Evidence from the 1898/99 zemstvo survey of Iur'ev suggests that although peasant households had mean allotments of approximately 9.4 desiatina, 14.7 percent of them held more than 15 desiatina, 18 percent had 0 to 5 desiatina, and 9.8 percent had no allotment at all. Single women or those out of favor with the rest of the community likely headed households without access to allotment land. Even though agriculture was of secondary importance in our study region, allotment land contributed to household income (see above) and functioned as a form of insurance.²⁸

The male dominance in peasant government was one component of the gender inequality that characterized much of rural Russian society after 1861. Women were not allowed to sit in zemstvo assemblies or hold local positions in the central government. Female enrollment and literacy rates fell well behind male rates throughout the period (Table 4). In terms of occupational mobility, working-age males were more able to take advantage of growing seasonal off-farm and factory-employment opportunities in the central Russian provinces. By the end of the nineteenth

27 Despite the Stolypin land reforms of the 1900s, most peasants continued to hold land in communal tenure before 1917. Between 1907 and 1912, only 2.6% and 3.9% of collective land was transferred into private holdings in Vladimir and Iaroslavl'. P. N. Pershin, *Uchastkovoe zemlepol'zovanie v Rossii* (Moscow, 1922). On the Stolypin reforms, see Judith Pallot, *Land Reform in Russia 1906–1917: Peasant Responses to Stolypin's Project of Rural Transformation* (New York, 1999).

Former serf owners often sold private land to their former serfs, and they may have exploited local market power to charge an especially high price. The correlation between the population share of serfs in 1860 and the share of peasant land that was *not* collective allotment (*nadel'naia*) land in 1905 was 0.39. However, the share of non-allotment land in Rostov district in 1905 (17.4%) was higher than in Iur'ev (14.0%), despite serfdom being relatively more prevalent in Iur'ev. The 1905 land data are derived from volumes of Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Statistika*. Across European Russia, the differences in mean land holdings for different types of peasants were stark—7.5 desiatina per household in former serf villages and 11.2 for former state peasant villages (*ibid.*).

28 See Vladimirskaiia, Otsenochno-ekonomicheskoe, *Iur'evskii*.

century, only 8 percent of females but 28 percent of males from the villages of Iur'ev district worked outside their communities in some capacity. Moreover, substantial gender wage gaps existed, even for identical occupations. In our study districts, female agricultural wages remained well below those for males into the twentieth century.²⁹

Although most micro-level evidence on living standards hints at improving conditions during the last decades of the tsarist era, other findings point to the persistence of inequality and low living standards in certain locations and among certain groups in the population. Crop yields on peasant land remained low in the Central Industrial Region. Infant and child mortality rates were high through the end of the century. Although the provision of basic schooling slowly improved, the majority of the rural population—especially girls—received almost no formal education. Finally, limitations on property, legal, and political rights continued to exist for much of the population, still subject as it was to autocratic, communal, and class restrictions, despite efforts at institutional reform.

RUSSIAN RURAL SOCIETY, 1750 TO 1861 The common assumption is that any improvements in the living standards of nineteenth-century Russia were associated with the reforms of the 1860s. The period before 1861 is not often viewed as particularly dynamic, especially since it was characterized mainly by the existence of serfdom, which is thought to have hindered economic growth and development in the Russian countryside. Nonetheless, archival evidence indicates that a nascent consumer culture was emerging during this period, despite the obstacles to growth imposed by serfdom. This section uses primarily estate-level data to investigate standards of living in the era of serfdom.³⁰

29 Between 1896 and 1902, men's daily agricultural wages were roughly 30 to 90% higher than women's, and male seasonal and yearly salaries were approximately double those of females in Iur'ev. See Vladimirkoe, *Obzor*; Russia, Ministerstvo finansov, Department, *Materialy*, I. For data on peasant labor mobility, see Vladimirskaia, *Otsenochno-ekonomicheskoe, Iur'evskii; Iaroslavskoe, Otkhozhie*. The gender imbalance of labor mobility in the Central Industrial Region is also discussed by Barbara A. Engel, *Between the Fields & the City: Women, Work, & Family in Russia, 1861–1914* (New York, 1996).

30 Some research indicates that the pre-1861 rural Russian economy was considerably more dynamic than the larger historiography has generally asserted. For examples, see Dennison, *Institutional*; Mironov, *Blagosostoianie*, esp. 621–640; Richard Rudolph, "Agricultural Structure and Proto-Industrialization in Russia: Economic Development with Unfree Labor," *Journal of Economic History*, XLV (1985), 47–69.

Any discussion of peasants' standards of living before the abolition of serfdom is constrained by the paucity of source material. Information about wages, prices, or other indicators in archival documents usually involves a single data point, rather than a series. But this fact does not mean that we cannot talk about standards of living at all. The information about the condition of the peasantry that is available—mainly in records kept by the largest serf estate owners—suggests a more variegated picture of rural living standards than that of the “subsistence” view of an immiserated Russian peasantry “excluded by the market.”³¹

The data in this analysis cover the period from 1750 to 1860 and come from Voshchazhnikovo, a serf estate in Rostov district, belonging to the wealthy Sheremetyev family. Home to roughly 3,000 serfs, Voshchazhnikovo was neither the Sheremetyevs' largest estate nor their smallest. It featured both agriculture and industry, with no particular economic specialization. Table 6 provides a summary snapshot of the larger serf estates in Rostov and Iur'ev districts. Voshchazhnikovo was the largest estate in these two districts, but it seems to have been representative of other large estates in the region at this time.

The archival findings presented herein come from inventories of households, bailiffs' reports, soul revisions (census-like listings), probate inventories, credit contracts, passport registers, and serf petitions to the landlord. We use available contemporary accounts and quantitative publications to provide additional context about our districts and to fill gaps in the Voshchazhnikovo documentary record. Finally, we consider, whenever possible, evidence about the nonseigniorial population. As Table 1 notes, serfs comprised 66.4 and 45.3 percent of the populations of Rostov and Iur'ev districts, respectively, in 1858; many peasants resided on state and appanage (*udel'naia*, or crown) land. An understanding of the experiences of proprietary serfs relative to those of other types of peasants can help to bring out the broader implications of how serfdom affected living standards and the Russian economy.

31 The paucity of source material before the abolition of serfdom means fewer contemporary publications and a smaller secondary literature dealing with Russian living standards before 1861. Hellie, *Economy*, 645. A number of studies emphasized the development of regionally and nationally integrated grain and commodity markets prior to 1861, but they are based on provincial-level prices and production figures, rather than micro-level or specifically peasant source material. For example, see I. D. Koval'chenko and L. V. Milov, *Vserossiiskii agrarnoi rynek XVIII—nachala XX v.: Opyt kolichestvennogo analiza* (Moscow, 1974); Mironov, *Khlebnye tseny v Rossii za dva stoletia (XVII–XIX vv.)* (Moscow, 1985).

Table 6 Serfdom in Iur'ev and Rostov Districts, c. 1858

	IUR'EV DISTRICT	ROSTOV DISTRICT	VOSHCHAZHNIKOVO
Total serfs	55,027	62,945	—
Males	26,758	29,307	—
Females	28,269	33,638	—
% household (<i>dvoroye</i>) serfs	5.6	3.5	—
% male agricultural serfs on quit rent estates	32.0	92.1	—
LARGE ESTATES (> 100 SOULS)			
Number	39	49	—
Male serfs ("souls")	12,824	21,039	1,598
Male souls / estate	329	429	1,598
% "household" serfs (males)	4.6	2.3	0.7
% <i>tiagla</i> (labor units) in:			
Quitrent	51.9	76.3	100
Labor services	15.7	3.2	0
Mixed obligations	32.4	20.4	0

NOTES The data about the total serf population are from Troimskii, *Serf*, except for the portion of male agricultural serfs on quitrent estates, which is derived from Aleksandr Skrebitskii (ed.), *Materialy dlia istorii osvobodivshiesia krest'ian. II. Krest'ianskoe delo v tsarskoe imenie Aleksandra* (Bonn, 1968), III–IV. The data on large estates come from *Svedeniia o pomeshchich'ikh imeniakh*, in *Prilozheniia k trudam redaktsionnykh kommissii, dlia sostavleniia polozenii o krest'ianskikh vykhodshchikh iz krestnoi zarabimosti* (St. Petersburg, 1860), I and IV. *Tiagla* were typically husband and wife labor teams.

Table 7 Seed-Yield Ratios for Major Cereal Crops in Central Russia, Pre-1861

GRAIN	CENTRAL RUSSIA (AVERAGE)					
	1750S	1770S	1790S	1841–2	1844–5	1853–4
Rye	1:3.7	1:4.2	1:3.1	1:4	1:2	1:2
Wheat	1:3.3	1:4.3	1:3	1:2	1:2	1:3
Oats	1:3.5	1:4.8	1:3.6	1:4	1:1.6	1:2
Barley	1:4.3	1:4.2	1:3.1	1:3	1:2	1:3

NOTES The averages for Central Russia are reported in Kahan, *The Plow, the Hammer, and the Knout: An Economic History of Eighteenth Century Russia* (Chicago, 1985), 49. The data for Voshchazhnikovo are from f. 1287, op. 3, ed. khr. 1568 (“Reports on Grain Harvests”), Russian State Archive for Ancient Acts, Moscow.

Agricultural Production, Rural Incomes, and Tax Obligations

The traditional view of the pre-emancipation Russian economy portrays serfs and other peasants as balanced precariously at the edge of subsistence, vulnerable to harvest failure and the other calamities—like disease and warfare—that frequently befell pre-industrial societies. Some of the data for Voshchazhnikovo might well be construed as consistent with this conventional wisdom. Seed-yield ratios for the period from 1841 to 1854 were extremely low, as they were for much of the Central Industrial Region (Table 7). For rye and oats, they varied from 1:2 to 1:4. For barley, the ratio was a consistent 1:3, whereas wheat varied between 1:2 and 1:3.

There is no reason to think that yields at Voshchazhnikovo were low in this period because additional land had been brought under cultivation; neither the estate nor the peasants themselves specialized in agricultural production (the estate had no demesne land; the seed-yield ratios in Table 7 are for peasants’ own allotments). Yields may have been low due, in part, to the availability—and affordability—of grain at local markets, which might have reduced the incentive to invest in more intensive cultivation. Furthermore, household incomes did not derive solely from agricultural production; many peasants in this region worked for a wage or engaged in some form of rural industry prior to 1861.³²

32 Rostov district was also well known for commercial vegetable production in the pre-emancipation era. See V. A. Fedorov, “Ogorodniki-predprinimateli Rostovskogo uezda Iaroslavskoi gubernii (Pervaia polovina XIX veka),” in *Zazhitochnoe krest’ianstvo Rossii v istoricheskoi perspektive* (Moscow, 2000), 58–60.

Data about wages, salaries, and the prices of locally produced goods are difficult to obtain for rural areas before 1861, especially in long unbroken series. Such series do not exist for Voshchazhnikovo, though this area is known for its lively labor and retail markets during the eighteenth and nineteenth centuries. Instead, we have a set of individual data points—wages and earnings mentioned in reports about other estate issues. We know, for instance, that serf officials, who were in the “middling” stratum earned between 250 and 700 paper rubles (*assignaty*) per year during the 1840s. A serf hired in 1844 to serve as an estate coachman earned 350 paper rubles per year. Nikolai Chernikhin, a migrant laborer in St. Petersburg, reported earnings in 1846 of 500 paper rubles per year. Among the poorest households on the estate were those headed by widows or women who never married, who, as was noted in 1796, could earn 50 to 90 paper rubles per year working in textiles.³³

These wages and salaries are reassuringly consistent with those given in other sources. According to state valuations of peasant economic conditions during the late 1850s, male agricultural workers typically earned 35 (silver) rubles for the summer and 40 for the year in the Rostov district, which slightly exceeded the provincial average. Rostov state peasant households earned about 32 rubles per year from their own agricultural production (versus roughly 27 rubles across the province). Local industrial and handicraft (*kustar'*) male workers in the district earned approximately 44.6 rubles in a year (versus 42.5 across the province). By comparison, data about earnings for estates with more than 100 male serfs during the late 1850s shows that seasonal and annual male agricultural workers in Iur'ev district had average earnings of 35.5 and

33 The point about data for wages, prices, and salaries is not to say that they do not exist anywhere, though it is highly unlikely that data could be found to cover a broad geographical area over a long period. Data that do exist generally relate to single estates of large landholders, who were most likely to keep such records. There are some urban data for the period before 1861, such as the series compiled for St. Petersburg. See Mironov, “Wages.” Again, the value of the paper ruble (*assignat*), and the conversion rate between silver rubles and paper rubles, changed during our period of study; in the 1840s, one silver ruble was worth approximately 3.5 paper rubles (see above). For additional discussion of ruble comparisons over time, see Mironov, “Wages”; Owen, “Standard Ruble.” Data on wages and salaries on Voshchazhnikovo may be found in f. 1287, op. 3, ed. khr 1635 (“Communal resolutions 1844”), ll. 4–6, estate officers; *ibid.*, 1–3, coachman; f. 1287, op. 3, ed. khr. 1713 (“Communal resolutions”), l. 43, Nikolai Cherninkin; f. 1287, op. 3, ed. khr. 555 (“Instructions, 1796/1800”), female textile workers, Russian State Archive for Ancient Acts, Moscow (hereinafter RGADA).

52.9 silver rubles, respectively. Workers employed year-round in local industry or handicraft work earned approximately 62 silver rubles per annum. These data imply that total income per *tiaglo* (a husband and wife labor team, or the amount of land such a unit was allocated) in Iur'ev district was approximately 138 rubles per year by the late 1850s. Although these figures come from different years and sources, they suggest that peasants in Iur'ev were slightly better off than those in Rostov.³⁴

Voshchazhnikovo serfs were burdened with state taxes and had a portion of their earnings appropriated by the landlord in the form of quitrents. Quitrent, which at Voshchazhnikovo was attached to land allotments, stood at 15 silver rubles per *tiaglo* of land in the nineteenth century. According to additional data collected during the late 1850s in preparation for emancipation, quitrent levels in Rostov and Iur'ev districts averaged 25.5 and 21 silver rubles per *tiaglo*, respectively, suggesting that feudal burdens at Voshchazhnikovo may have been low relative to those on other estates in the region.³⁵

Although the poorest serfs, such as unmarried women, were not allocated land, and were therefore frequently exempt from quitrents, numerous other estate fees were levied regardless of income or allotment status—for marriage, for remaining unmarried, for land transfers, for permission to migrate, for nonagricultural occupations, etc. State and appanage peasants, however, appear to have been liable only for a small quitrent-like payment that varied to some extent across provinces. All peasants (and other tax-paying classes) were responsible for the infamous soul tax (levied exclusively on males), which reached roughly 1 silver ruble by the 1850s, as well as for other “rural obligations,” such as supporting the postal system, provisioning troops, and road maintenance.³⁶

34 The averages for male agricultural earnings across Iaroslavl' were 27.80 and 36.80, respectively. Female workers made considerably less. For these and the following data on the economic conditions of state peasants in Rostov and Iaroslavl', see Russia, Ministry gosudarstvennogo, *Materialy*, II. For the Iur'ev observations, see A. P. Smirnov, “Svedeniia o polozhenii dvorianских imenii Vladimirskoi gubernii v 1858 i 1859 godakh,” *Vladimirskii zemskii sbornik*, II (1883), 249–403. Data from the descriptions of noble estates in the 1850s were published only for Vladimir province. Voshchazhnikovo serfs, like others belonging to the Sheremetyevs, appear to have been relatively well off, even by regional standards. See Dennison, *Institutional*.

35 f. 1287, op. 3, ed. khr. 555 (“Instructions”), RGADA. For district-level data on quitrents, see Skrebitskii (ed.), *Krest'ianskoe*, III.

36 Such obligations became the responsibilities of the *zemstvo* and the peasant institutions

As noted in Table 3, one approach to analyzing peasant well-being in both the pre- and post-1861 periods is to focus on arrears in feudal dues and taxes. In the Soviet literature, evidence of rising quitrent levies and growing arrears in payment thereof was viewed as an indication of a feudal “crisis” and declining living standards in the countryside. The problem with this view is the assumption that serfs first allocated their earnings to quitrents and then purchased goods on the market only if money remained. Evidence from the Voshchazhnikovo estate, however, paints a more complicated picture. There were indeed serfs on this estate who were in arrears in quitrents, but at least some of them appear to have purchased consumer goods *instead of* paying their obligations. For that reason, Count Sheremetyev issued a decree in 1843 to condemn serfs who were in arrears in quitrent payments but who also had “several changes of the best sorts of clothes.” To discourage such behavior, serfs in arrears (and their families) were prohibited from having more than two changes of clothes. The “excess” clothing of serfs in violation of this decree was to be “confiscated and sold and the money put toward their quitrent payments.”³⁷

The count’s decree suggests that figures on arrears in taxes and feudal obligations are not wholly reliable as indicators of peasants’ standards of living. Much like after 1861, we cannot assume that serfs were in arrears because they were *unable* to pay quitrents. Some of them evidently chose to allocate their earnings to items other than their feudal rents, fulfilling their obligations only when forced to by the landlord. Overall, despite the fiscal and seigniorial extractions imposed on the local peasantry, the evidence presented herein indicates that peasants in this region had disposable income before 1861. But what, apart from clothing, could they buy?

Consumption, the Costs of Living, and Rural Material Culture

The real purchasing power of incomes was determined by the prevailing prices of important consumption goods. Grain was a key

of self-government after 1861. On Voshchazhnikovo estate levies, see Dennison, “Did Serfdom Matter? Russian Rural Society, 1750–1860,” *Historical Research*, 79, no. 203 (2006), 74–89. See also the discussion of taxes and seigniorial obligations in Mironov, *Blagosostoianie*, 297–315.

37 E. I. Indova, *Krepostnoe khoziaistvo v nachale XIX veka po materialam voichinnogo arkhiva Vorontsovykh* (Moscow, 1955); Koval’chenko, *Russkoe krepostnoe krest’ianstvo v pervoi polovine XIX veka* (Moscow, 1967). f. 1287, op. 3, ed. khr. 1615 (“Decree prohibiting serfs in arrears from having the best sorts of clothing, 1843”), RGADA.

component of peasant budgets, especially for those employed in nonagricultural pursuits. The documents from Voshchazhnikovo show an active market for grain and other goods. Wheat, oats, and rye could be bought by the *chetvert* (roughly 130 kg), and flour (wheat, oat, or rye) by the *pod* (roughly 16 kg). In 1831, a chetvert of rye sold for 13 paper rubles, and a chetvert of oats went for 6 rubles, 50 kopecks. Figures for the late eighteenth century indicate that average per capita grain consumption in Russia stood at approximately 1.1 chetvert. At Voshchazhnikovo prices, this amount would mean an expenditure of roughly 14.3 rubles per person per year (for rye). Thus, grain available at the local market seems to have been affordable to everyone except the poorest residents of the estate.³⁸

Indeed, peasants at Voshchazhnikovo do not appear to have suffered subsistence crises. There are no references to increased mortality, even during those years when harvests in this region were recorded as “poor.” For instance, according to statistics gathered by the Russian central government, grain had to be imported in 1847 because of an early frost that destroyed crops. At Voshchazhnikovo, however, the bailiff called the 1847 harvest “good” and made no reference to grain imports. Foreign visitors to the region were often struck by the availability and affordability of grain. Haxthausen, a visitor from Germany, remarked during his travels in Iaroslavl’ in the 1840s that one day’s wages for a weaver could buy one *scheffel* (a U.S. bushel) of grain, whereas in Westphalia during the same period, a weaver’s wages could buy only one-tenth of a *scheffel*.³⁹

38 f. 1287, op. 3, ed. khr. 1568 (“Reports on grain harvests 1842–54”), RGADA. Data collected by the Ministry of Finance in 1859 puts the Rostov (town) market prices of a chetvert’ of rye at 4.15 silver rubles and a chetvert’ of oats at 2.72 in January of 1857. The mean prices in the provincial capital of Iaroslavl’ were similar. See f. 18, op. 4, d. 826 (“Reports on market grain prices 1857–1863”), Russian State Historical Archive, St. Petersburg (hereinafter RGIA). For grain consumption in the eighteenth century, see Ian Blanchard, *Russia’s ‘Age of Silver’: Precious Metal Production and Economic Growth in the Eighteenth Century* (London, 1989), 239. In his memoirs, Savva Purlevskii, a serf from the village of Velikoe in Rostov district, notes that his family ate a variety of meats, vegetables, and grains during the early nineteenth century. He mentions purchasing bread from bakers in Tambov province and grain prices similar to those in Voshchazhnikovo. See Boris Gorshkov (ed. and trans.), *A Life under Russian Serfdom: The Memoirs of Savva Smitrievich Purlevskii, 1800–1868* (Budapest, 2005), 59–60.

39 Kahan, *Plow*; f. 1287, op. 3, ed. khr. 1568, RGADA (a similar example is noted for 1852). One reason for the disconnect between harvests and grain availability may have been the system of grain stores demanded by the Ministries of State Property and the Interior. According to records of the Iaroslavl’ governor’s office, 187 grain stores in Rostov district contained

What about other indicators of consumption? Surprisingly, the notion of a self-sufficient Russian peasantry, who “raised and made everything [they] had,” persists in the literature, despite the data available about periodic fairs and markets in the seventeenth, eighteenth, and nineteenth centuries. Tarlovskaiia, in her study of trading peasants in the Volga region during the seventeenth and eighteenth centuries, presents evidence of networks of local markets, some of which had as many as 140 different items for sale. The Friday market at Voshchazhnikovo did not provide so many options, but it certainly offered peasants more than tea, matches, and kerosene. In addition to affordable grain, peasants could buy beef, eggs, butter, sugar, and flour, as well as needles, linen cloth, thread/yarn, tobacco, paper, quills, and ink. Several documents provide information about housing and household furnishings. Only the poorest 25 percent of households (45 out of roughly 200) lived in traditional wooden huts with thatched roofs. The better-off members of this society lived in two-story stone houses with numerous glass windows. These grander houses were described as having “merchant style” furnishings.⁴⁰

A small number of probate inventories (fewer than ten) have survived for Voshchazhnikovo, and they, too, are revealing. In addition to basic items of clothing and household furnishings (linens, etc.), the lists include silk stockings; French headscarves; various kinds of jewelry (men’s and women’s), including pearl necklaces, rings, and earrings; icons; mirrors; samovars; coffee pots; a silver tea pot; and a forty-piece tea service. The temptation is to think that, given what we know about pre-emancipation Russia, these peasants must have been exceptional. However, too little empirical work has been done on material culture in the pre-emancipation countryside to give any sense of what “typical” consumption habits might have been. Did all Russian peasants have French scarves

more than 1.8 chetverti of grain per male peasant in the district in 1858. See f. 1281, opis’ 6, delo 33 (“Po otchetu nachal’nika Iaroslavskoi gubernii za 1858 god”), RGIA. August Freiherr von Haxthausen, *Studien über die inneren Zustände, das Volksleben und insbesondere die ländlichen Einrichtungen Russlands* (Hannover, 1847), I, 119. Such comments should be interpreted cautiously, since affordability of grain may not be the optimal measure of rural living standards. See Dennison, *Institutional*, pp. 199–200.

40 f. 1287, op. 3, ed. Khr. 1070, ll. 57–8, RGADA; V. R. Tarlovskaiia, *Torgovlia Rossii v period pozdnego feodalizma: torgovyie krest’iane v vtoroi polovine XVII—nachele XVIII v.* (Moscow, 1988), especially chp. 4.pp? All information on dwellings in Vozhazhnikovo comes from f. 1287, op. 3, ed. khr. 1598 (“Descriptions of stone and wooden dwellings”), RGADA.

and silver tea services? Probably not. But it seems equally unlikely that these probates represent the only nine peasants in Voshchazhnikovo who did. Generally, few signs of subsistence crises exist prior to 1861. Grain and other kinds of food were available at affordable prices at local markets, and peasants bought a wide variety of clothing and household items in Voshchazhnikovo and, most likely, in the surrounding districts.⁴¹

Human Capital We have little information about human-capital accumulation in pre-emancipation rural Russia. Formal schooling was not widespread. Voshchazhnikovo did not get its first school until 1868. In 1842, the town of Iur'ev had one school with 126 male students, while Rostov had three schools and 138 students. According to retrospective data from the 1890s, Rostov district had three rural schools by 1860 and Iur'ev district had only one. But the lack of formal schooling does not mean that no serfs or state peasants could read or write. After each Voshchazhnikovo communal meeting, attendees were required to sign the resolutions; on the surviving documents, roughly 50 percent of those present signed their names (instead of placing a cross by their name or having someone sign for them). Many signed their names on contracts and petitions as well. The ability to sign one's name, however, does not necessarily imply "literacy." It seems unlikely that all those who could write their names could write more generally, since contracts and petitions were nearly always drawn up in another hand. Moreover, when one of the parties to the contract was female, a male relative always signed for her. In not a single instance did a woman sign her own name.⁴²

We also have no way of knowing whether those who could

41 Inventory data come from f. 1287, op. 3, ed. khr. 1325; 1143; 766, RGADA. There are the only three documents actually called probate inventories in the archival record, but another handful of inventories that had been drawn up in the context of a dispute about a parent's or spouse's estate also exist. The serfs who left them behind were described as middling, and the inventories seem to have survived by accident. There is no *a priori* reason to think they were exceptional.

42 For the first school in Voshchazhnikovo, see Titov, *Rostovskii uезд Iaroslavskoi gubernii: istoriko-arkheologicheskoe i statisticheskoe opisanie s risunkami i kartoiu uezda* (Moscow, 1885), 515. For 1842, see Russia, Statisticheskoe otdelenie soveta Ministerstva vnutrennikh del, *Statisticheskaia tablitsy o sostoianii gorodov Rossiiskoi imperii, velikago kniazhestva finliandskago i tsarstva pol'skago* (St. Petersburg, 1842). For 1860, see G. Fal'borg and V. Charnoluskii (eds.), *Nahal'noe narodnoe obrazovanie v Rossii* (St. Petersburg, 1900), I. The serf Sasha Puvlevskii faced such poor instruction under the local priest that his father pulled him out of school to study at home. See Gorshkov (ed. and trans.), *Life*.

write their names could also read. At least some of them probably could, since Pelageia Kokina, a fifty-five-year-old unmarried peasant woman resident on the estate, was noted in 1838 as “earning a living teaching local village children to read.” This apparent demand for literacy—well before a village school appeared—suggests that serfs themselves thought reading and writing would improve their earning potential. This supposition is consistent with several accounts written by serfs or former serfs. Yet, quantifiable evidence on enrollment rates, educational investments, and returns to schooling are limited for the pre-emancipation era. What we have suggests that the supply of basic schooling began to show steady growth only later in the century.⁴³

As noted earlier, demographic variables—mortality, in particular—can shed additional light on the question of living standards in pre-industrial societies. Although we do not observe much of a link between grain availability and mortality, the available documents for Voshchazhnikovo are not particularly illuminating about the determinants of mortality. The fragmentation of the burial registers for the estate parishes make long-run patterns difficult to discern. Furthermore, infants and children—the groups most often significantly affected—seem to have been under-registered. All that can be said for now is that the Voshchazhnikovo documents have no references to grain or seed shortages or to mortality crises, no special instructions to bailiffs regarding efforts to cope with grain failures, and no petitions from serfs to either the commune or the landlord requesting famine-related relief. There is no indication that the record-keeping system broke down at any point, due to higher than usual mortality. Documents referring to such things might have been lost or destroyed, but we have no reason to think so.⁴⁴

We do have access to more aggregated data that allow us to

43 For the supposition that literacy improved earning potential, see, for example, Gorshkov (ed. and trans.), *Life*. On Pelageia Kokina, see f. 1287, op. 3, ed. khr. 1143, l. 46 (“Pelageia pri dome zanimaet’sa obucheniem detei gramote”), RGADA. Mironov utilizes the 1897 Russian census to estimate literacy rates for cohorts born in the decades before 1861, which generates rural literacy rates of less than 15% among the population older than nine years prior to 1861. See Mironov, “Development,” 240.

44 Hoch’s work in *Serfdom*, 51–52, on Tambov, a more agricultural province that Iaroslavl’ or Vladimir, shows little connection between mortality and harvests or grain availability. In “Famine,” Hoch compares a grain price data series with mortality data from parish burial registers for the nearby Borshevka settlement. So many different kinds of documents survived, touching on so many different aspects of estate life, that one would expect to see at least a few

calculate crude birth and death rates for Rostov and Iur'ev districts. These data suggest that the two districts had high birth and death rates relative to the rest of Russia and relative to developed nations at that time. Although mortality rates remained largely constant in Iur'ev, as well as in Russia as a whole, their sharp decline in Rostov district from 1846 to 1856 suggests substantial geographical heterogeneity in demographic indicators of living standards. Despite seemingly adequate food consumption, these measures hint at the underdeveloped state of rural health and health care in the pre-1861 period, especially given the relatively high infant and child mortality rates. Unfortunately, the documentary evidence does not provide any indication about broader health or morbidity patterns in Voshchazhnikovo, and little quantitative information has been unearthed (as yet) about the incidence of disease or causes of death for our two districts prior to the 1860s. However, the available information about human-capital investments qualifies, to some extent, the evidence about relatively high income and consumption levels prior to 1861.⁴⁵

Institutions and Inequality under Serfdom The fragmentary evidence presented for Voshchazhnikovo and the surrounding districts indicates that, at least in this part of central Russia, the standard of living of peasants may have been much higher prior to 1861 than historians have previously acknowledged. Yet, these findings for Voshchazhnikovo—and for most other villages across Russia—raise an important question. If living standards were relatively high, why did rural Russia appear so poor relative to West-

scattered references to harvest failure or famine-related hardship or mortality, if such had occurred.

45 Between 1846 and 1856, crude fertility rates showed some signs of decline—from 5.51 to 4.45 per 100 residents in Rostov (4.45 to 4.33 across European Russia)—but the same data show an increase in Iur'ev from 4.95 to 5.15. Mortality rates in Rostov fell sharply from 5.07 to 3.58, while mortality rose in Iur'ev and Russia as a whole (4.5 to 4.56 and 3.4 to 3.49, respectively). The 1846 data come from tax rolls and parish evidence reported in A. K. (ed.), *Vedomost' o narodonaselenii Rossii po uezdnam, gubernii, i oblastei* (St. Petersburg, 1850). The similar 1856 data are provided in Russia, Ministerstvo vnutrennykh, Tsentral'nyi, *Statisticheskaia tablitsy Rossiiskoi imperii za 1858 god* (St. Petersburg, 1858). Compare these crude birth and death rates to those reported for other European countries during the mid-nineteenth century in Mitchell, *Europe*, 93–128. Rostov's infant and child mortality rates were 33.6 (< one year) and 4.8 (one to five years) in 1860. These crude infant and child mortality rates are calculated as the number of deaths per 100 infants or children who were alive at any time in 1860. These data were compiled from parish records by the Iaroslavl' bishopric. See Apollinariii Krylov (ed.), *Istoriko-statisticheskii obzor Rostovsko-Iaroslavskoe eparkhii* (Iaroslavl', 1861).

ern Europe? As in the post-1861 period, one possible explanation concerns the nature of local institutions and their effects on peasant society.⁴⁶

A detailed discussion of the institutional framework of Voshchazhnikovo is beyond the scope of this paper, but a few points can be made. First, Russian serfs were not considered legal persons at this time. They had no formal rights to property, and they were legally forbidden to engage in credit transactions. They were not protected by custom; landlords could raise rents and introduce new taxes at any time. Mobility was restricted; landlords charged fees for permission to travel beyond the estate boundaries. Serfs had limited legal recourse beyond the manor. They possessed little access to outside courts and had practically no voice in local government outside of the village. To engage in market activities, they had to be prepared to pay bribes to landlords and local officials, and to expect a not insignificant portion of their profits to be expropriated. The more prosperous serfs could afford these expenses, but the poor usually could not. Conditions for women were especially difficult; women were often forbidden by landlords to travel beyond the estate for work and forbidden by authorities to engage in trade closer to home.⁴⁷

The institutional restrictions on market activity and the limited legal rights of serfs contributed to significant inequality within pre-emancipation peasant society. Indeed, the documents from Voshchazhnikovo show that the gap between the wealthiest peasants and the poorest ones was enormous—from capital and earnings worth more than 10,000 rubles to earnings of just 40 to 50 rubles per year. Landlords explicitly acknowledged this inequality with a system of progressive taxation, according to which peasants were divided into categories—the wealthiest having capital and earnings “greater than 1,000 rubles” and the middling possessing

46 Beyond the widespread availability (and affordability) of grain, as noted by Haxthausen and others, the living conditions of many rural inhabitants (as described by Hoch, for instance) were well below what one would find in nineteenth-century northwest Europe. Moreover, the array of consumer goods available to ordinary Russians appears to have been much narrower than in Western Europe. See the discussion in Ogilvie, “Consumption,” esp. 287–290.

47 Russian peasants had some contact with Tsarist officials through formal petitions, but they rarely influenced local policies. See Moon, *Russian Peasants and Tsarist Legislation on the Even of Reform* (Basingstoke, 1992); S. Frederick Starr, *Decentralization and Self-Government in Russia, 1830–1870* (Princeton, 1972). A more detailed discussion of the restrictions on women can be found in Dennison, “Did Serfdom Matter?” esp. 85–88.

between 500 and 1,000 rubles. Roughly 15 percent of households were in the first category and 60 percent in the second (about 200 households). Of those households in the bottom category, 60 percent were too poor to take on even a communal allotment. Women headed over 60 percent (19 of 30) of these very poor households.⁴⁸

Such inequality was perpetuated by the structure of peasant property rights. Even before 1861, land in much of Russia was held in communal tenure, and taxes and quitrent dues were levied on the commune as a lump sum, to be divided by communal officials. This policy gave officials of serf and non-serf peasant communities, who generally came from the wealthier group of peasants, additional ways to allocate resources in their favor. The Voshchazhnikovo documents are full of petitions from poorer serfs complaining that their land had been taken away, that additional taxes had been levied on them, and that communal officials were embezzling communal funds. This abuse of power by the wealthiest and most powerful members of the commune was not unique to Voshchazhnikovo.⁴⁹

Those peasants with greater wealth are the ones who frequently held communal offices, worked in estate administration, belonged to guilds, and enjoyed other special privileges that gave them considerable power over their fellow villagers. The poorest serfs on Voshchazhnikovo were unmarried women—either never married or widowed—many of whom lived alone or with other female relatives. The opportunities for such households to improve their standard of living were usually constrained by the

48 Calculated from data in inventories of households (*podvornye opisi*): f. 1287, op. 3, ed. khr. 1143, RGADA. *Capital* is never defined in the documents, but it seems likely to have included cash savings and earnings, as well as trade inventory and other assets (mainly land and buildings). Other estate studies have reported similar levels of inequality. See, for instance, Rodney Bohac, "Family, Property, and Socioeconomic Mobility: Russian Peasants on Manuilovskoe Estate, 1810–1861," unpub. Ph. D. diss. (Univ. of Illinois, Urbana-Champaign, 1982); Edgar Melton, "Household Economies and Communal Conflicts on a Russian Serf Estate 1800–1817," *Journal of Social History*, XXVI (1993), 559–585; L. S. Prokof'eva, *Krest'ianskaia obshchina v Rossii vo vtoroi polovine XVIII–pervoi polovine XIX v.* (Leningrad, 1981); K. N. Shchepetov, *Krepostnoe pravo v votchinakh Sheremetevykh* (Moscow, 1947).

49 Melton's study of a commune in nearby Kostroma province—Melton, "Household," 559–585—paints a similar picture. Examples of petitions by the poor on Voshchazhnikovo can be found in Dennison and Ogilvie, "Serfdom and Social Capital in Bohemia and Russia," *Economic History Review*, LX (2007), 513–544.

more powerful inhabitants of the village or estate-level institutions.⁵⁰

Some of the largest serf estates, however, such as those of the Sheremetyev family, may have possessed certain institutional advantages. The Voshchazhnikovo archive indicates that the Sheremetyev family installed an estate-level system of judicial appeal, offered contract-enforcement services, and allowed serfs considerable freedom to engage in economic activities. Since the Sheremetyevs were among the largest landowners in imperial Russia, they could afford to develop such an institutional structure on their many estates. Other estates—especially those belonging to smaller landowners—probably exhibited less flexibility.

This heterogeneity across seigniorial estates can be contrasted with conditions on state lands and appanage estates, which were integrated into bureaucratic structures beyond the manor. The *udel'nyi* (crown) administration served this function for the appanage peasants. After the famous Kiselev reforms of the 1830s and 1840s, the Ministry of State Domains and newly constituted institutions of self-government provided governing structure for state peasant settlements. These and other institutions allowed state peasants to own purchased land on an individual basis, and granted many of them other substantial legal, tax, and property rights above what serfs typically held. A more thorough investigation of the evolution of rural Russian inequality and living standards during the course of the nineteenth century will require a deeper understanding of exactly how these and other institutions functioned across rural society, and how interactions changed over time.⁵¹

This article draws on a wide variety of sources to address questions concerning living standards in the neighboring districts of Rostov

50 Our information about the local presence of guilds is limited. In 1851, approximately 3,500 and 5,800 males were members of either the first, second, or third guilds in Iaroslavl' and Vladimir provinces, respectively. See Petr Keppen, *Deviatiaia reviziia* (St. Petersburg, 1857).

51 The distinctions among peasants included differences in property and civil rights, and in access to various trade privileges. See Russia, Ministerstvo gosudarstvennykh imushchestva, *Istoricheskoe obozrenie piatdesiatiletnei deiatel'nosti ministerstva gosudarstvennykh imushchestv 1837–1887, chast' II: popечitel'stvo. pozemel'noe ustroistvo* (St. Petersburg, 1888); N. M. Druzhinin, *Gosudarstvennye krest'iane i reforma P. D. Kiseleva* (Moscow, 1958), II, 113–128. Quantitative information about aspects of state peasant society is available. For example, there were nine police stations on state property in the Rostov district (out of forty-seven in the province) in 1861. By the late 1860s, there were roughly a dozen. The state peasantry of Rostov district

and Iur'ev, both before and after the abolition of serfdom. The limitations of the data, especially from the pre-1861 period, make cross-period comparisons difficult. But we contend that such efforts are useful nonetheless in providing micro-level context for the more macro-level studies that have dominated the literature about nineteenth-century Russian economic development.

How do our micro-level findings compare with those in the existing literature? Soviet studies have generally portrayed serfdom as increasingly exploitive in the period before 1861, with rising seigniorial burdens, stagnating agricultural productivity, and generally declining living standards. Our evidence for pre-reform Voshchazhnikovo, however, is more consistent with recent empirical studies that stress the dynamism of economic activity before 1861. Mironov and colleagues draw on height data to argue that the early nineteenth century saw a recovery in living standards after a decline in the late eighteenth century. In other work, Mironov documented rising real wages in St. Petersburg during the decades leading up to 1861, arguing (without direct empirical support) that trends in the provinces were likely similar. Although we are not able to provide such long-run data series for our study districts, the thrust of our evidence about income, obligations, and consumption seems to suggest a similar upward trajectory. Our micro-level analysis accentuates the limited human-capital investments and evident inequality—even within a small locality—that institutions of rural Russia generated prior to 1861.⁵²

An older scholarly tradition argued that emancipation—by reducing land holdings, raising obligation levels, and solidifying institutional constraints—laid the groundwork for an emerging agrarian crisis in the later part of the nineteenth century. In contrast, our evidence is in line with more recent studies by Hoch, Simms, and others showing that, overall, obligation levels did not increase after 1861, that the rate of arrears on tax and land pay-

was integrated into four townships (*volosti*) that included 344 settlements by the 1850s. See Iaroslavskii, *Pamiatnaia*, 57–58; Russia, Ministerstvo gosudarstvennogo, *Materialy*, II. For conditions among the court peasants, see Russia, Glavnoe upravlenie udelov, *Istoriia udelov za stoletie ikh sushchestvovaniia 1797–1897* (St. Petersburg, 1902), 3 v.

52 Mironov, *Blagosostoianie*. Hoch—in *Serfdom* and in “Serf Diet in Nineteenth-Century Russia,” *Agricultural History*, LVI (1982), 391–414—documents relatively high consumption levels among serfs in the black-earth province of Tambov. Soviet studies of pre-1861 living standards among the serf population include Koval'chenko, *Russkoe*; Indova, *Krepostnoe*.

ments was remarkably low, and that rural living standards were not made worse by the reforms of the 1860s. Hoch even asserts that emancipation and the process of transferring land to the peasantry actually *lowered* obligation levels and allowed rural households greater freedom to make significant welfare-enhancing economic decisions. We would not go so far; the heterogeneity of the reform process suggests that some areas may well have experienced worse outcomes than Iur'ev or Rostov.⁵³

Other recent works have identified a decade or so of stagnation after 1861, followed by steady, albeit punctuated, improvements in living standards until World War I. Mironov's *Blagosostoianie* supports this latter interpretation, based on anthropometric evidence and other aggregate indicators of living standards. However, on the basis of the height data for army recruits compiled by Mironov, the men in the provinces of Iaroslavl' and Vladimir grew taller than did those in the Empire as a whole, suggesting the importance of taking regional variation into account in any analysis of Russian living standards. Our evidence of relatively high and improving living standards for Iur'ev and Rostov districts after 1861 period may be generalized to European Russia only through additional micro-studies in other regions with different geographical and socioeconomic characteristics.⁵⁴

53 See Hoch, "Did Russia's"; *idem*, "On Good Numbers"; Simms, "Crisis," and subsequent articles. Hoch's conclusions are based on an analysis of pre- and post-1861 land holdings and obligation levels from the emancipation settlements of Tambov and several northern provinces. See also Sergei G. Kashchenko, *Otmena krepostnogo prava v stolichnoi gubernii* (St. Petersburg, 2002). The emancipation settlements in Rostov or Iur'ev districts may well have forced serfs to overpay for their land. Although our evidence does not support this notion, we do not analyze land settlements as Hoch does. A key source for the less optimistic interpretations of the emancipation reforms is Iu. Ianson, *Opyt statisticheskoi izsledovaniia o krest'ianskikh nadelakh i platezhakh* (St. Petersburg, 1881).

54 Soviet scholarship emphasized a growing agrarian crisis as a precursor to the Revolution of 1917, reflecting the Marxist view that the Russian peasantry experienced "capitalist differentiation" after 1861, which led to declining living conditions for much of the rural population. See A. M. Anfimov, *Ekonomicheskoe polozhenie i klassovaia bor'ba krest'ian Evropeiskoi Rossii v 1881–1904 gg.* (Moscow, 1984).

The heights of army recruits in Vladimir and Iaroslavl' converged from well below the Empire's mean to reach it, at roughly 167 cm. For information about how these data were compiled, see Mironov, *Blagosostoianie*, 75–120. We have not undertaken anthropometric research for our study districts, mostly because there are numerous *direct* measures of consumption and living standards that deserve further exploration. As other Russian historians recently pointed out, Mironov's use of evidence from military recruits creates difficulties in making inferences about the general population or the timing of any changes. See Ostrovskii, "K itogam."

Although scholars have long recognized persistently low grain yields (and low overall agricultural productivity) in Russia when compared to the rest of Europe, recent works tend to emphasize the adequacy of aggregate food production, alongside divergent regional trends—rising yields in the southern and southwestern provinces and stagnation in the central and northern region. These differences have led to disparate conclusions regarding trends in agricultural production. We would emphasize the role that trade and regional specialization played in improving overall food availability, even for our increasingly nonagricultural study districts. To date, little empirical work has been done on consumption beyond simple foodstuffs. Our reading of the limited evidence suggests that before, and increasingly after, 1861, rural residents could purchase a wide variety of nonessential goods from a growing number of outlets, especially in the Central Industrial Region.⁵⁵

Data about the availability of foodstuffs and anthropometrics are consistent with the limited evidence we and others have compiled for rural and urban real wages, showing that after the 1860s, rural Russia saw improvements in living standards. But the long-run real-wage series that provide proof for this conclusion are almost entirely limited to the capital cities of St. Petersburg and Moscow. Thus, our consideration of data from Iur'ev and Rostov districts might be seen as a first step toward understanding geographical variation in rural incomes. Such variation is just one source of inequality that we identify for both the pre- and post-1861 periods. Soviet and Western scholars have noted growing social differentiation in the countryside, but their interpretations have been generally based on agricultural asset ownership rather

55 Wheatcroft, "Crises"; Gregory, "Grain." A pioneering piece of scholarship—Elvira Wilbur, "Was Russian Peasant Agriculture Really That Impoverished? New Evidence from a Case Study from the 'Impoverished Center' at the End of the Nineteenth Century," *Journal of Economic History*, XLIII (1983), 137–144—utilizes zemstvo data from Voronezh province to study the distribution of resources among the rural population. Compare her positive conclusions regarding Voronezh to those of David Kerans, *Mind and Labor on the Farm in Black-Earth Russia, 1861–1914* (Budapest, 2001), which argues for declining post-1861 agricultural productivity in nearby Tambov province. In *Blagosostoianie*, Mironov argues that Russian food consumption was rising steadily by the late Tsarist period, but Nefedov—in "Uroven' zhizni naselenia v dorevoliutsionnoi Rossii," *Voprosy istorii*, 5 (2011), 127–136—and others pointed out that this finding makes implausible assumptions about the retention of grain for feed. On persistently low grain yields, see A. S. Nifontov, *Zemnoe proizvodstvo Rossii vo vtoroi polovine XIX veka* (Moscow, 1974). Yields can be a problematical indicator in a society with an abundance of land.

than broader measures of household income. In contrast, our consideration of inequality focuses not just on income differentials (by household or gender) but also on general living standards. We argue that much of the observed inequality was driven by the institutional structure of the countryside, particularly the distributional effects of serfdom, the peasant commune, and the *zemstvo*. Informal and formal political mechanisms, and the unequal social and economic relationships that characterized them, limited the provision of such public goods as schooling and generated differences in living standards at the local level.⁵⁶

In this regard, our micro-level evidence is not entirely consistent with those revisionist accounts that see the trajectory in living standards in Russia as similar to that in Western Europe. Our findings suggest that nineteenth-century rural Russia was more heterogeneous than implied by either the conventional view or the revisionist accounts. In some areas, we observe signs of a dynamic rural economy, which looks superficially similar to parts of Europe in this period, but not everywhere. It is far from clear that the general trajectory was in this direction. The work of Mironov and others has been valuable in challenging the conventional view of stagnating living standards in pre-revolutionary Russia. The optimism of this revisionist view, however, is difficult to reconcile with persistently high infant and child mortality, widespread gender discrimination, and high levels of income inequality even within rural societies. The evidence for Rostov and Iur'ev suggests that explanations for this heterogeneity can be found in local institutional arrangements. Furthermore, the findings for these districts raise a number of important questions about the political and economic determinants of living standards in other contexts and the extent to which they might account for the range of outcomes observed on a global scale.

56 See Mironov, "Wages;" Strumilin, "Oplata," both of which discuss wage-and-salary evidence from other locations but provide no systematic discussion of geographical variation. Many other authors offer observations on wages, salaries, and even entire family budgets for specific occupations or smaller geographical units. For example, see Tugan-Baranovsky, *Russian*, esp. 147–170, 343–362. Growing differentiation was the argument of Lenin, *Development*, which led to subsequent Soviet scholarship. Studies by Daniel Field—"The Polarization of Peasant Households in Prerevolutionary Russia: *Zemstvo* Censuses and Problem of Measurement," *Research in Economic History*, Supplement 5 (1989), 477–505—and Robert E. Johnson—"Family Life-Cycles and Economic Stratification: A Case-Study in Rural Russia," *Journal of Social History*, XXX (1997), 705–731—utilize micro-level *zemstvo* asset data and a quasi-Marxist framework to analyze inequality in the countryside.

In shifting the focus toward a more comprehensive analysis of living standards over time in a small region of Russia, our goal is not to overturn existing conclusions so much as to emphasize the varied dimensions of living standards, to provide examples of alternative source materials, and to indicate new directions for research in this area. At this point, given the narrow geographical focus and the incommensurability of data sources before and after 1861, our conclusions regarding general trends in rural living standards can be only tentative. Nonetheless, by placing our micro-level findings in the context of existing debates about rural living standards, we advance the current discussion of nineteenth-century Russian economic development in important ways.

In short, the preliminary findings presented herein paint a more complex and variegated picture of Russian rural life than is usually found in the historical literature, one that is consistent with other micro-level studies. We acknowledge, however, that these findings raise at least as many questions as they answer. How representative of the Russian countryside were Rostov and Iur'ev districts? What other measures of well-being might be considered? How do findings for Russia compare with those for other parts of the world during this period? Much remains to be done before these and other questions can be addressed.

