

# **Micro-Perspectives on 19<sup>th</sup>-century Russian Living Standards<sup>1</sup>**

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## I. Introduction

The widely accepted view of the rural Russian in the pre-revolutionary period is that of a poor peasant scratching out a meager living in a harsh climate. The Russian peasant, in this view, lived at the very edge of subsistence, his (or her) survival always threatened by the vagaries of the weather and the ever-increasing demands of either feudal overlords or the central state. According to this view, Russian peasants were not integrated into local or regional markets; they were concerned mainly with their own subsistence and, besides, they had very little money to spend. Richard Hellie, in his study of material culture in seventeenth and eighteenth century Russia, summarizes this view, arguing that peasants “were largely excluded by the market because they raised and made most of what they had, and had few resources left after paying rent and taxes to buy anything”.<sup>2</sup> A historian of the post-emancipation period has expressed a similar view, maintaining that Russian peasants used money only to discharge their communal and state responsibilities and on the “traditional staple of salt and such items as tea, matches, and kerosene”.<sup>3</sup> Thus the Russian peasantry is thought to have remained largely autarkic, even after the supposedly liberalizing reforms of the 1860s.

How accurate is this widespread view? In fact, we still know very little about the standard of living of rural inhabitants, who comprised some 85 per cent of the Russian population in the nineteenth century. The existing literature tends to treat the peasantry as monolithic across space and time, immiserated in the pre-emancipation period by the demands of feudal landlords, and in the post-emancipation period by the demands of the central state. There is little or no sense of variation from region to region or of change over time (in particular, before and after the abolition of serfdom). Research on living standards has tended to focus primarily on factory

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<sup>2</sup> R. Hellie, *The Economy and Material Culture of Russia*, p. 645.

<sup>3</sup> C. Worobec, *Peasant Russia*, p. 34.

workers in Moscow and St Petersburg, using a limited range of measures – mainly wages and very basic data on consumption patterns. Very little of the work devoted to living standards sheds light on the situation in the countryside, where most Russians lived.<sup>4</sup>

This is probably due, at least in part, to the fact that the Russian peasant's standard of living is difficult to ascertain. Rural wage and price data are often incomplete – especially for the pre-emancipation period – making it difficult to compile the kinds of measures employed for other parts of Europe. Moreover, imperial Russia covered a vast amount of territory, and wages, prices, and other measures of quality of life varied significantly from place to place. Donald MacKenzie Wallace, an Englishman who spent considerable time in Russia in the late nineteenth century, summed it up very nicely when he said that

“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”. (Wallace, *Russia*, vol. 2, p. 345 quoted in Moon, 1999)

While we cannot claim to “convey ... a clear conception of the peasants' actual condition” at this stage, we hope, in this paper, to cast further doubt on the conventional view of an autarkic, subsistence-oriented peasantry and, perhaps more important, to suggest a number of future research possibilities.

We intend to do this in three ways. First, we have broadened the range of measures used to evaluate living standards. Allen et al.'s (2005) multi-dimensional interpretation of living standards provides a framework for exploring developments in imperial Russia. In this view of

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<sup>4</sup> Some exceptions include recent work by Steven Hoch and Boris Mironov, as discussed below.

living standards, income is translated into goods (including health, education, and possibly other non-market “goods”) that provide utility. This process is mediated through markets (prices); the social, political, and physical environment; and additional personal and household characteristics. Thus, a complete discussion of “living standards” in a certain population and over a certain period entails the consideration of the inputs (income), the intermediate goods (consumption, health, etc.), and the environment that this “production process” takes place in. Wages and cost-of-living data are an important component of our investigation, but we are also interested in how these measures correspond to four other components of living standards: indicators of harvest adequacy, mortality rates, consumption and material culture, and the level of human capital accumulation. More recent work on standards of living in rural Russia do incorporate measures of these different components – for instance, Steven Hoch’s demographic research and Boris Mironov’s work with anthropometric data – and we hope to build on these.

Second, we have tried to expand the temporal dimension, by exploring the question of living standards for both the pre- and post-emancipation periods. The data presented here cover a period of roughly 150 years (c. 1750-1900). Ideally, we would have constructed long-run data series for a number of variables (wages, prices, demographic events, harvests) for one geographical area, but due to the constraints imposed by data availability for the pre-1861 period, such a project remains beyond the scope of this paper. Thus there are certain asymmetries in both the quantity and quality of the data we employ. This makes it very difficult for us to say anything concrete about the effects of the 1861 reform on standards of living. Nonetheless we feel that these data do shed light on new aspects of quality of life in the countryside in *both* periods, and thus help us to move the discussion of the Russian peasantry forward. Furthermore, these data enable us to make some broad, general comparisons and to map out a course for future research.

Finally, we bring a different geographical focus and new source materials to the study of Russian living standards. As mentioned earlier, much of the work on living standards has focused on Moscow and St Petersburg. The (very) few existing studies of the rural population are for areas in the grain-belt in the south (Tambov Province, studied by Hoch; the Volga region studied by Mironov and A’Hearn). Our focus is on two provinces in the Central Industrial Region: Vladimir and Iaroslavl’. We dial in even further by concentrating on available information on the residents of two contiguous districts of these provinces: Iur’ev district of Vladimir and Rostov district of Iaroslavl’. Although residing in the so-called “industrial” zone of European Russian, the households in these two districts engaged in agricultural and a mix of non-agricultural activities. The rural populations of these two districts were both overwhelmingly Orthodox and members of the peasant estate (*soslovie*). Neither of these districts were significant destinations for migration, while seasonal and permanent out-migration (especially of males) was quite prominent. Economic linkages to Moscow were prevalent, but these districts were not the most industrially developed in either province. On the whole, these two districts appear to have been typical for this region in terms of their mixed economies and population characteristics. In Table 1, we offer descriptive data comparing the two districts – we come back to some of the similarities and differences in our discussions below.

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

	Iur'ev	Rostov
Approximate % Former Serfs (of Peasant Population)	73.9	54.7
Households in 1897	17014	29242
Total Males in 1897	41230	65292
Total Females in 1897	51399	83678
Average Household Size, 1897	5.4	5.1
% Population Born in District, 1897	92.6	92.6
% Working-Age Males in Agriculture (Primary Occupation), 1897	69.3	76.9
% Working-Age Females in Agriculture (Primary Occupation), 1897	47.2	73.9

**Note:** The approximate percentage of former serfs was calculated from information in *Materialy dliia statistika Rossii*, Vol. 2, 1859; Troinitskii, 1982; and *Ezhegodnik*, 1880. The other data are from Troinitskii, ed., *Pervaia*, Vols. 4 and 50.

Improved access to Russian archives and libraries has made it possible to widen the set of sources beyond those utilized by previous studies. Our paper employs a wide-range of micro-level data, both published and unpublished. The pre-emancipation evidence comes largely from documents generated by one of Russia's largest landholding families, the Sheremetyevs. The post-emancipation data is drawn from published materials generated by various government bodies. The source material will be discussed in greater detail in the sections that follow.

Again, we do not profess to uncover any startling new "truths" about rural Russian living standards in this paper. The various data we discuss are only meant to provide some preliminary comparisons to the existing evidence and to be suggestive about possibilities for future work. The structure of the paper is very straightforward. The second section examines data for the pre-emancipation period, while the third section is devoted to the period after 1861. In the concluding section, we summarize our findings and offer some very tentative conclusions on both what is known and what is still to be uncovered regarding the standard-of-living debate in 19<sup>th</sup>-century rural Russia.

## **II. Pre-emancipation Rural Society**

It is especially difficult to talk about peasants' standards of living in the pre-emancipation period, because the source material is so fragmented. Only rarely does one come across information on wages and prices, and these are usually single data points rather than a series. This does not mean that we cannot talk about standards of living at all. We do have some information about the condition of the peasantry – mainly from records kept by the largest estate owners – and, as we shall see, much of it casts doubt on the widespread view of an immiserated Russian peasantry, "excluded by the market" and hovering at the edge of subsistence.

This section draws primarily on data for one particular serf estate, Voshchazhnikovo, in Rostov district of Iaroslavl Province, in the period 1750-1860. The estate belonged to the Sheremetyev family, one of imperial Russia's wealthiest landholding families. Home to roughly 3000 serfs, Voshchazhnikovo was neither the Sheremetyevs' largest estate nor their smallest. It was neither their richest estate nor their poorest. Voshchazhnikovo was a mixed agriculture/industry estate with no particular economic specialization. In this way, it seems to have been fairly representative of other large estates in this region at this time. The data presented here come from inventories of households, bailiffs' reports, soul revisions, probate inventories, credit contracts, passport registers and serf petitions to the landlord. To determine how representative the data for Voshchazhnikovo are, they will be compared, where possible, with findings presented in the existing secondary literature.

### **Agricultural Production, Grain Harvests, Subsistence Crises**

The pre-emancipation Russian peasantry has been traditionally portrayed as balanced precariously at the edge of subsistence. On this view, they were extremely vulnerable to subsistence crises when harvests failed due to fluctuations in the weather or to the other calamities – disease, warfare – that frequently befell pre-industrial societies.

Some of the data we have for Voshchazhnikovo might be viewed as consistent with the conventional view. Seed-yield ratios for the period 1841-1854 were very low, as has been noted for much of the Central Industrial Region (see Table 2). Seed-yield ratios for rye varied from 1:2 to 1:4, as did those for oats. For barley the ratio was a consistent 1:3, while wheat varied between 1:2 and 1:3.

#### **Table 2: Seed yield ratios for major cereal crops in Central Russia<sup>5</sup>**

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<sup>5</sup> The averages for Central Russia are reported in Kahan, *The Plow, the Hammer, and the Knout*, p. 49, and were taken originally from Indova, "Urozhai". The data for Voshchazhnikovo are from RGADA, f. 1287, op. 3, ed. khr. 1568 ("Reports on grain harvests").

Grain	Central Russia (average)			Voshchazhnikovo		
	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

There is no reason to think that yields at Voshchazhnikovo were low in this period because new land had been brought under cultivation; neither the estate nor the peasants themselves specialized in agricultural production. (There was no demesne land on the estate; the seed yield ratios are for peasants' own allotments.) It is possible that yields may have been low due to the availability – and affordability – of grain on local markets, which would have reduced the incentive to invest in more intensive cultivation. Grain was sold in bulk at the Voshchazhnikovo Friday market. Wheat, oats, and rye could be bought by the chetvert (roughly 130 kilograms), and flour (wheat, oat or rye) by the pood (roughly 16 kilograms).<sup>6</sup> Prices for these (discussed in the following section) were low enough, that only the very poorest serfs would have been unable to afford to them.

Peasants at Voshchazhnikovo do not appear to have been particularly malnourished. There are no references to increased mortality, even during those years where harvests in this region were recorded as “poor”. For instance, according to statistics gathered by the Russian central government, and early frost destroyed crops in 1847, such that grain had to be imported (Kahan, 1985). At Voshchazhnikovo, however, the bailiff called the 1847 harvest “good” and made no reference to grain imports.<sup>7</sup> Similarly a cold rainy spring in 1852 is thought to have

<sup>6</sup> RGADA, f. 1287. op. ed. khr. 1568 (“Reports on grain harvests 1842-54”)

<sup>7</sup> *Ibid.*



resulted in lower yields across Russia. But the Voshchazhnikovo harvest is called “adequate” and no references to subsistence crises or grain imports are noted.<sup>8</sup>

This is consistent with European travelers’ accounts in this period. Foreigners were often struck by the availability and affordability of grain. The Prussian traveler August von Haxthausen remarked during his travels in Iaroslavl’ Province in the 1840s that one day’s wages for a weaver in rural Russia could buy 1 Scheffel (1 US bushel) of grain, where in Westphalen during the same period a weaver’s wages for one day could buy only 1/10 Scheffel.<sup>9</sup> The evidence for Voshchazhnikovo is also consistent with more recent empirical findings. Hoch, for instance, has found that mortality in nineteenth-century Tambov Province did not peak during subsistence crisis, indicating that peasants (even under serfdom – his investigation covers the period 1830-1912) were perhaps less vulnerable to food shortages than historians have thought.<sup>10</sup> And the anthropometric data analyzed by Mironov (1999) suggests that heights among military recruits in selected parts of tsarist Russia gradually increased across the nineteenth century, casting doubt on the notion of an “agrarian crisis” (either before or after the abolition of serfdom).<sup>11</sup> Such findings suggest that while peasants in imperial Russia were poor, they were not necessarily starving.

### **Incomes and Obligations**

Data for wages and prices are used most often to assess living standards in the past. Unfortunately such data – in unbroken, long-run series – are very difficult to come by for rural areas in the period before 1861.<sup>12</sup> They do not exist for Voshchazhnikovo, though we do know

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<sup>8</sup> *Ibid.*

<sup>9</sup> Haxthausen, *Studien*, p. 119.

<sup>10</sup> Hoch, “Famine”.

<sup>11</sup> Mironov, “New approaches”, 1999.

<sup>12</sup> This is not to say that they don’t exist anywhere. But it is highly unlikely that such data could be found to cover a fairly broad geographical area over a reasonably long period of time. And if such data do exist they are probably only for the estates of the largest landholders, who were most likely to keep such records in this period. There are

there were lively labor and retail markets in this area in the eighteenth and nineteenth centuries. Instead we have only a set of individual data points – prices and earnings mentioned in passing in reports on other estate issues. We know, for instance, that estate officers (who were themselves serfs) in the 1840s earned between 250 and 700 paper rubles per year.<sup>13</sup> A serf hired in 1844 to serve as an estate coachman earned 350 paper rubles per year.<sup>14</sup> Nikolai Chernikhin, a migrant laborer in St Petersburg, reported earnings in 1846 of 500 paper rubles per year.<sup>15</sup> Among the poorest households on the estate were those headed by widowed or never married women. These, it was noted in 1796, could earn 50-90 paper rubles per year working in textiles.

What about prices and the cost of living? Interestingly, it seems that grain available at the local market would have been affordable to most of those with salaries in this range. In 1831 a *chetvert* of rye (approx 130 kilograms) 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*.<sup>16</sup> At Voshchazhnikovo prices, this would mean an expenditure of roughly 14.3 rubles per person per year (for rye).

The wage and price figures reported here make it appear as if Voshchazhnikovo peasants had quite substantial disposable incomes, even after grain purchases. But Voshchazhnikovo peasants were still serfs in this period, and thus a large portion of their earnings were siphoned off by the landlord in the form of quitrent dues and assorted taxes. Quitrent at Voshchazhnikovo was levied on land allotments, and in the nineteenth century stood at 15 silver rubles per *tiaglo* of

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some urban data, such as the series compiled by Mironov for St Petersburg as part of the Global Price History Project.

<sup>13</sup> The value of silver rubles to paper rubles (*assignaty*) changed over our period of study; in the 1840s one silver ruble was worth approximately 3.5 paper rubles. See Footnote 46 for additional discussion of ruble comparisons over time. The data on estate officers is in RGADA, f. 1287, op. 3, ed. khr 1635, ll. 4-6 (“Communal resolutions 1844”).

<sup>14</sup> *Ibid.*, l. 3.

<sup>15</sup> RGADA, f. 1287, op. 3, ed. khr. 1713, l. 43.

<sup>16</sup> Blanchard, *Age of silver*, p. 239.

land (the amount that could be worked by one husband-wife work team). The poorest serfs, such as the unmarried women mentioned above, were not allocated land and were therefore exempt from payment. But there were numerous other taxes which were levied on all serfs regardless of income: a tax on marriage, a tax on remaining unmarried, a tax on land transfers, a tax on mobility, a tax on non-agricultural earnings, and many more.

The conventional way of measuring Russian peasants' well-being in this period is to focus on arrears in these feudal dues and taxes. In the Soviet literature, evidence of rising quitrent levies and the corresponding growth of arrears in quitrent payments among peasants are viewed as an indication of a feudal "crisis" and a declining standard of living in the countryside.<sup>17</sup>

The problem with this view is that it assumes that serfs always first allocated their cash earnings to feudal rents, and only then, if anything were left over, would they purchase goods on the market. Thus if peasants were in arrears in their feudal rent payments, they must have been in dire financial straits more generally. Evidence from the Voshchazhnikovo estate, however, suggests otherwise. There were indeed some serfs on this estate who were in arrears in feudal rents; however, at least some of these appear to have purchased consumer goods for themselves *instead of* paying their feudal dues and taxes. In fact the Count Sheremetyev issued a decree in 1843 to say that it had come to his attention that serfs who were in arrears in their quitrent payments also had "several changes of the best sorts of clothes."<sup>18</sup> In order to discourage such behavior, he asked his bailiff to prohibit serfs in arrears, their wives, and children from having more than two changes of clothes. If such serfs were found to have more than two changes of

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<sup>17</sup> See, for instance, the discussion in Koval'chenko, *Russkoe krepostnoe khoziaistvo*.

<sup>18</sup> RGADA, f. 1287, op. 3, ed. khr. 1615 ("Decree prohibiting serfs in arrears from having the best sorts of clothing, 1843")

clothes – or any luxury items such as silk scarves – then these items were to be “confiscated and sold and the money put toward their quitrent payments”.<sup>19</sup>

This decree suggests that figures on arrears in taxes and feudal obligations are not wholly reliable as indicators of peasants’ standards of living. While there were some households in arrears on dues (perhaps 5 or 10 households of over 200), we cannot assume that it was because they were *unable* to pay their taxes and dues. Some evidently chose to allocate their earnings to things other than their feudal rents, fulfilling their obligations only when forced by the landlord. Much better data about peasants’ incomes and consumption habits is needed before we can say anything more definite about this pattern.

### **Demographic Indicators of Well-Being**

Demographic variables – mortality, in particular – can shed additional light on the question of living standards in pre-industrial society. Hoch’s work on two settlements in Tambov province suggests that there was considerable variation in mortality patterns in nineteenth-century Russia. On the Petrovskoe estate of the Gagarin family, mortality appears to have risen – especially among infants and children – in years of dearth (1827 and 1848-9).<sup>20</sup> In Borshevka, however, in the period 1830-1912 there is only a weak correlation between mortality and subsistence, with crisis mortality driven mainly by the disease environment (especially the presence of cholera).<sup>21</sup> It is worth noting that Tambov was owned by one landholding family, while the Borshevka settlement in the pre-emancipation period was comprised of serfs of six different landlords, as well as crown serfs. The different responses to famine may thus be linked to institutional factors (in particular estate management). More generally, though, it is difficult to

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<sup>19</sup> *Ibid.*

<sup>20</sup> Hoch, *Serfdom and social control*, pp. 51-2. Hoch’s analysis is based on estate reports regarding poor harvests and census-like documents which reveal changes in the age structure.

<sup>21</sup> Hoch, “Famine”. In this study, Hoch compares long-run grain price data with mortality data from parish burial registers.

say whether mortality crises due to epidemiological variables indicate a higher standard of living than the presence of those due to food shortages (Hoch argues that they do).

Unfortunately the documents for Voshchazhnikovo are not particularly illuminating on this point. Burial registers for the estate parishes are very fragmented, making it difficult to establish long-run patterns. Furthermore, infants and children – the groups that are often most significantly affected – seem to have been underregistered. Finally there are no long-run data for grain yields or prices and the yields and price data we do have do not correspond temporally with the demographic data.

All that can be said for now is that there are no references in the Voshchazhnikovo documents (of which there are several thousand) to grain or seed shortages or to mortality crises. There are no special instructions to bailiffs regarding coping with grain failures. There are 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. It is entirely possible that documents referring to such things existed but were lost or destroyed over time, but this seems unlikely. So many different kinds of documents did survive, touching on so many different aspects of estate life, that one would expect to see at least a few scattered references to harvest failure or famine-related hardship or mortality, if these had existed. There are no such references. In fact, the few references we do have indicate that there was grain available on the estate (there were landlord-supported granaries) and, as noted above, the grain available at local markets was affordable to most of the estate population. A more rigorous investigation of this question will have to wait until we find a settlement in Rostov district which offers both parish-level demographic data and prices for grain.

### **Consumption and Material Culture**

What about consumption in rural Russia? It is worth referring back to the conventional view of the Russian peasant, who was self-sufficient and “raised and made everything [s/he] had”. It is interesting that this view persists in the literature, given all the data we have on periodic fairs and markets in the seventeenth, eighteenth, and nineteenth centuries. Tarlovskaiia, in her study of trading peasants in the Volga region in the seventeenth and eighteenth centuries, presents evidence of vast networks of local markets, some of which offered up to 140 different items for sale.<sup>22</sup>

**Table 3: Goods for Sale at the Voshchazhnikovo Market c. 1831 (prices in rubles)<sup>23</sup>**

‘Everyday Supplies’ Sold Locally	Average Price
beef, per <i>pood</i> *	5.50
salt, per <i>pood</i>	2.30
green onions, per <i>chetverik</i> *	0.60
oat flour, per <i>pood</i>	1.20
hops, per <i>pood</i>	11.00
butter, per <i>pood</i>	15.00
eggs, per 100	1.80
white sugar, per <i>funt</i> *	1.00
hemp straw, per <i>chetverik</i>	2.50
rye flour, per <i>pood</i>	1.30
candles, per <i>pood</i>	12.50
hemp oil, per <i>pood</i>	9.50
hay, per <i>pood</i>	0.80

\* 1 *pood* = 16.38 kg; 1 *chetvert* = 8 *poods* (roughly 130 kg); 1 *funt* = 1/40 *pood* (400g)

The Friday market at Voshchazhnikovo did not offer so many options as that, but it certainly offered peasants more than tea, matches and kerosene. Table 3 shows some of the items for sale and their prices. In addition to affordable grain, as mentioned earlier, peasants could buy needles, linen cloth, thread/yarn, tobacco, paper, quills, and ink, plus a wide variety of vegetables and fruits, mustard, yeast, milk, honey, lard, rapeseed oil, vinegar, beer, wine and spirits. (They could also purchase coffins, which perhaps should have been mentioned in the preceding section,

<sup>22</sup> Tarlovskaiia, *Torgovlia Rossii*, esp. chap 4.

<sup>23</sup> All information comes from RGADA, f. 1287, op. 3, ed. khr. 1070, ll. 57-8 (‘Instructions and decrees from the Rostov administration, 1831’).

though one should perhaps refrain from drawing hasty conclusions about mortality from the availability of coffins at local markets!)

But Voshchazhnikovo peasants did not buy only grain, candles, and tobacco. Several documents – including a few surviving probate inventories – provide detailed information on household furnishings and other possessions. Only the poorest twenty-five per cent of households (45 of roughly 200) lived in traditional wooden peasant huts with thatched roofs. Others lived in larger, 2-storey dwellings, often wooden with wood-shingled roofs. The better off members of this society lived in two-storey stone houses, with numerous glass windows (one was described as having 18 glass windows facing front). Many of these grander houses were described as having “merchant style” furnishings.<sup>24</sup>

A very small number of probate inventories (under 10)<sup>25</sup> have survived for Voshchazhnikovo for the period 1800-1840, and they, too, are revealing. 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. In one case, the deceased was only 26 years old, and had thus not had a great deal of time to accumulate wealth. In addition to basic items of clothing and household furnishings (linens, etc), the items recorded in the inventories include: silk stockings, French headscarves, various kinds of jewelry (men’s and women’s) including pearl necklaces (2), rings, and earrings, icons, mirrors, samovars, coffee pots, a silver tea pot, and a 40-piece tea service.<sup>26</sup>

One is tempted to think that, given what we do know about pre-emancipation Russia, these peasants must have been exceptional. However, there has been so little empirical work

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<sup>24</sup> All information on dwellings from RGADA, f. 1287, op. 3, ed. khr. 1598 (“Descriptions of stone and wooden dwellings”)

<sup>25</sup> There are only three documents that are actually called probate inventories, but another handful of documents exists, comprised of inventories that had been drawn up in the context of a dispute over a parent’s or spouse’s estate.

<sup>26</sup> Inventory data from RGADA, f. 1287, op. 3, ed. khr. 1325; 1143; 766.

done on material culture in the countryside, that there is really no sense of what “typical” consumption habits might have been. Did all Russian peasants have French neck scarves and silver tea services? Probably not. But it seems equally unlikely that these were the only nine who did. Inventories of this sort do exist for at least some estates in the nineteenth century. A more systematic analysis of them could shed much-needed light on an important – but so far neglected – aspect of rural living standards.

### **Human Capital Accumulation**

The most direct way in which human capital accumulation might affect standards of living is through higher wages. Literacy is often used as a proxy for higher levels of human capital in pre-industrial societies, where more sensitive measures – such as years of schooling – are difficult to find. We have very little information about literacy in pre-emancipation Russia. Voshchazhnikovo did not get its first school until 1868, several years after the abolition of serfdom.<sup>27</sup> This does not mean that no estate serfs could read or write before this time. After each communal meeting, all attendees were required to sign the book of minutes and, in those books that survived, roughly 50 per cent of those present signed their own names (instead of placing a cross by their name or having another peasant sign for them). The same is true for contracts and petitions. Of course, the ability to sign one’s name 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, probably that of the estate scribe. When one of the parties to the contract was female, a male relative always signed for her. There is not a single instance of a woman signing her own name (more will be said about this shortly). It does seem to be the case that those chosen to work as

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<sup>27</sup> Titov, *Rostovskii uezd*, p. 515. Most schools in rural Russia were only established after the 1861 reforms, making it near impossible to measure years of schooling in the pre-emancipation period.



communal officials could all sign their own names. Whether there was a correlation between ability to sign and earnings is not clear. Interestingly, the scribe was not the highest paid official – the elders and bailiffs earned almost twice as much as the scribe. And even more interesting is the fact that some well-off serfs avoided communal office as they felt they could earn more in trade or rural industry.

We also have no way of knowing whether those who could write their names could also read. At least some of them probably could, since Pelageia Kokina, a 55-year old unmarried peasant woman resident on the estate, was noted in 1838 as “earning a living teaching local village children to read”.<sup>28</sup> That the demand for literacy was there – well before a village school appeared – suggests that serfs themselves thought reading and writing would improve their earning potential. Documents for other estates might provide additional clues as to whether this was indeed the case.

### **Some Reservations**

The fragmentary evidence presented for Voshchazhnikovo suggests that, at least in this part of central Russia, the standard of living of peasants may have been much higher than historians have previously acknowledged. There are few signs of subsistence crises, grain and other kinds of food were available at affordable prices on local markets, peasants consumed a wide variety of clothing and household items, many could sign their names to petitions and contracts, and some were even willing to pay for their children to learn to read. There are other findings, though, which might inspire a more pessimistic view – even for this seemingly well-off estate.

*Incomes and Inequality.* One thing that quickly becomes evident in sifting through the material for Voshchazhnikovo is that the gap between the wealthiest peasants and the poorest

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<sup>28</sup> RGADA, f. 1287, op. 3, ed. khr. 1143, l. 46 (“Pelageia pri dome zanimaet’sa obucheniem detei gramote”)

was enormous.<sup>29</sup> (In fact, it was very similar to Russia today.) On the same estate we find serfs who claimed capital and earnings worth over 10,000 rubles, as well as those – mainly unmarried women – who earned 40-50 rubles per year.<sup>30</sup> The landlord divided households into three categories: wealthy, middling, and poor. The wealthiest peasants were those who had capital and earnings “over 1000 rubles”, while the middling had between 500 and 1000 rubles. Roughly 15 per cent of households were in the first category and 60 per cent in the second (roughly 200 households). Of those in the first category, 50 per cent had capital and earnings over 5000 rubles. Of those households at the bottom, 60 per cent were too poor to even take on a communal allotment. The majority of that 60 per cent (19 of 30) were headed by women.<sup>31</sup>

Perhaps not surprisingly, it was those whose earnings were highest – the so-called “first rank” peasants, who held communal offices, worked in estate administration, were members of guilds, and who had various other special privileges, which gave them considerable power over their fellow villagers. The poorest serfs on the estate were unmarried women – either never married or widowed – many of whom lived alone or with other female relatives, but whose opportunities to improve upon their standard of living were limited by the institutional constraints outlined below.

*Institutional Obstacles.* The findings for Voshchazhnikovo – and indeed for Petrovskoe and Barshevka and other settlements across Russia – raise an important question. If Russian peasants were in fact relatively well off before 1861, why was Russia so poor? Although institutions are not usually considered in discussions of standard of living, they are an important

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<sup>29</sup> Other estate studies have reported similar findings. See, for instance, Bohac, “Family”; Melton, “Household economies”; Prokof’eva, *Krest’ianskaia obshchina*; Shchepetov, *Krepostnoe pravo*.

<sup>30</sup> “Capital” is never defined in the documents, but it seems likely that it included cash savings and earnings as well as trade inventory (many of the wealthy serfs engaged in trade of some sort) and other assets (mainly land and buildings).

<sup>31</sup> A more detailed discussion of inequality at Voshchazhnikovo can be found in Dennison, “Economy and society”, chapter 4.

consideration here in that they affected what Sen has called the “capabilities” of village inhabitants.<sup>32</sup> A detailed discussion of the institutional framework on this estate is beyond the scope of this paper, but a few points might be made. First, Russian serfs were not even considered legal persons in this period: they were the property of their landlords. They had no formal rights to property, and they were forbidden to engage in credit transactions. They were not protected by custom, so 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 no recourse beyond the manor. There was no equivalent in Russia to the King’s Courts, where serfs could bring suits against their lords. This put serfs in a very vulnerable position. In order to engage in market activities, they had to be prepared to pay bribes to landlords and local officials, and to have some not insignificant portion of their profits expropriated. The better off serfs could afford to do this, but the poor usually could not. For women it was especially tricky, as they were often forbidden by landlords to travel beyond the estate for work, but were also forbidden by local guilds to engage in trade closer to home.<sup>33</sup>

To complicate things, land in rural Russia was held in communal tenure, and taxes and quitrent dues levied on the commune as a lump sum, to be divided among households by communal officials. This gave communal officials, who came from among the wealthier serfs, additional possibilities to allocate resources in their favor. The archive is 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 stealing from communal funds.<sup>34</sup> This abuse of power by the wealthiest and most powerful members of the commune is not unique to

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<sup>32</sup> “Capabilities” are not always directly measurable and can include things like individual liberty and other aspects of one’s “psychic state”. See Sen, *Inequality*; Allen, et al., “Introduction”, pp. 7-8.

<sup>33</sup> See Dennison, “Did serfdom matter?”

<sup>34</sup> Specific examples can be found in Dennison and Ogilvie “Serfdom and Social Capital”.

Voshchazhnikovo. Edgar Melton's study of the Baki commune in nearby Kostroma province paints a similar picture of estate life. At Baki, too, the poorer members of the society were prevented from improving their situation by both a rent-seeking landlord and a powerful (similarly rent-seeking) communal elite.<sup>35</sup>

In 1861 serfdom in Russia was finally abolished and an attempt was made to establish a new institutional framework. How did these measures of standard of living look in the period after the reforms?

### **III: The Post-1861 Era**

Between 1861 and the Revolution of 1905, rural Russia experienced significant social and economic change. Emancipation of the serfs began a sequence of reforms designed to improve the civil rights of the rural population. The land reforms that accompanied emancipation transferred property rights from the gentry and the state to the peasantry. The expansion of the railway network and growing integration with global markets led to increased regional specialization as grain exports boomed in the south and substantial industrial growth took place in the north-central provinces.

Historians of this period have come to very different conclusions regarding the impact of these social and economic changes on rural living standards. A long tradition in Soviet and Western scholarship views the emancipation and land reforms as re-imposing constraints on the peasantry that amounted to a new form of serfdom. Peasants were assigned formal membership in land communes, which continued to be characterized by collective control over property rights and joint liability for land and tax obligations. According to this literature, the external burdens placed on peasant communities remained exceptionally high and even exceeded those imposed

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<sup>35</sup> Melton, "Household economies".

under serfdom. Tied to such obligations and subject to the whims of communal decision-making, peasants were unable to improve agricultural productivity, freely dispose of their land, or leave agriculture for industrial work. These restrictions kept living standards low and led the agrarian economy into crisis by the 1890s.<sup>36</sup>

This “crisis” view of rural living standards in post-emancipation Russia has steadily been questioned from a number of different perspectives, two of which have been especially influential.<sup>37</sup> In the process of compiling national income accounts for Russia between the mid-1880s and 1913, Gregory (1980) finds evidence that the amount of grain retained by peasants within their villages grew steadily over the period. He concludes that consumption levels in rural Russia must have been rising at a rate that was roughly equal to what the urban, industrial sector was experiencing. More recently, Hoch (2004) argues that Emancipation and the process of transferring land to the peasantry *lowered* overall obligation levels and allowed rural households the freedom to make significant welfare-enhancing economic decisions. Both critiques of the “crisis” hypothesis assert that the institution of the commune was quite flexible and imposed few actual constraints on rural economic development.

From Gregory’s macroeconomic study of consumption, to Hoch’s research on obligation levels, writers in this living standards debate have drawn on a much richer vein of sources than are available for the pre-1861 period. Yet it is still the case that many of these studies have not paid sufficient attention to regional variation or have taken a rather restrictive view of the various components of living standards. Moreover, few researchers have utilized what are perhaps the

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<sup>36</sup> This interpretation – often associated with Marxist writers such as Druzhinin (1978) and Western scholars like Gerschenkron (1965) and Robinson (1932 [1972]) – also viewed the high level of tax and land obligations as squeezing resources from the countryside to fund state-led industrial development. Whether such a dependency was qualitatively or quantitatively important has long been debated (Gregory, 1994; and Kahan, 1967).

<sup>37</sup> Simms (1977) initiated an earlier debate into the overall trend in living standards over this period. Hoch (1994 and 2004) critiques these earlier studies and brings the debate up to the present.

best sources for micro-level information on rural living standards: the publications of the provincial and district-level *zemstva*. These institutions were founded in 34 provinces of European Russia after 1864 to carry out various tax and administrative functions for the populations under their jurisdictions (in effect replacing and supplementing the functions of the former serf owners and the administrative apparatus of the state peasantry). In carrying out these functions, many *zemstva* established research offices to document taxable resources and social/economic conditions. These offices produced an incredible amount of statistical information on topics ranging from literacy rates and public health conditions, to agricultural productivity and the local market turnover. The *zemstva* of Vladimir and Iaroslavl' provinces produced streams of research publications that spanned the entire period. Of particular note are household and village surveys of the rural populations of these provinces.<sup>38</sup> *Zemstvo* publications offer a unique window into rural economic conditions in the post-1861 period, but Western scholars have only begun to explore them.

We consider these household surveys, other *zemstvo* publications, research by central government and provincial statistical authorities (including the 1897 census), and various secondary sources to develop some “stylized facts” about rural living standards in Iaroslavl' and Vladimir provinces in the post-1861 period. These sources allow for more detailed study of living standards in the post-1861 period than is possible for the pre-emancipation era. Again, our goal is not to necessarily overturn existing research but simply to discuss examples of alternative source materials, identify weaknesses in existing research, and point the way towards concrete

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<sup>38</sup> Many of these surveys were initiated under a law of 1893 that required that the *zemstva* establish the basis for various property taxes. The provincial *zemstva* of Vladimir and Iaroslavl' both undertook such surveys in 1898, with village-level data published in multi-volume series (*Statisticheskoe opisanie* for Iaroslavl' and *Materialy dliia otsenki* for Vladimir). These surveys offer very detailed information on demographic characteristics, economic activities, and market involvement of the rural populations. Unfortunately, the relevant volume for Rostov district is unavailable in the United States (and may have never been published).

possibilities for additional study. Given the limited geographic focus and preliminary nature of our analysis, any conclusions we draw about trends in living standards for this period, and in comparison to the pre-emancipation era, should be considered extremely tentative.

### **Agricultural Production, Grain Harvests, and Subsistence Crises**

Although the provinces of Iaroslavl' and Vladimir lay at the heart of the Central Industrial Region, mixed grain and livestock agriculture remained the peasantry's primary economic activity into the 20<sup>th</sup> century. Rural households continued to produce the bulk of their own food, so the productivity of agriculture was a critical determinant of both total income and consumption levels. Scholars have long recognized the low level of grain yields (and overall agricultural labor productivity) in Russia when compared to the rest of Europe in the late 19<sup>th</sup> century. However, Wheatcroft (1991) utilizes yearly data reported by provincial governors and finds both a diminution of the number of grain "crisis" years over the period, and sharply divergent regional trends. The south saw rising yields, while productivity levels stagnated in the center and the north. These regional differences have led to scholars to disparate conclusions regarding the trend in overall food availability.<sup>39</sup> Given the importance of agricultural production for any understanding of rural living standards, what can other sources tell us about productivity, grain availability, and the potential for subsistence crises in the post-1861 period?

According to correspondent reports to the Vladimir provincial *zemstvo*, grain productivity on peasant allotment land remained below the level on individual private property (mostly owned by non-peasants) at the turn of the century. Table 4 documents this difference in terms of seed-yield ratios for the two main crops raised in Iur'ev district: rye and oats (data on other crops are available). Yields on peasant land were low but appear slightly larger than the numbers we

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<sup>39</sup> Compare Kerans (2001) on worsening grain productivity in Tambov province to Wilbur's (1983) positive conclusions regarding nearby Voronezh.

find for nearby Voshchazhnikovo over fifty years prior. Different production technologies were likely available for the two types of land, but most evidence from this region (see similar province-level data in *Materialy vysochaishe*) consistently expresses the low productivity in peasant farming and the persistent difference between the types of farming. Detailed yield information is available at the village or township level in numerous provinces for periods considerably longer than the six years presented here for Iur'ev district.<sup>40</sup>

<b>Table 4: Seed Yield Ratios, Iur'ev District, Vladimir Province</b>	<b>Years</b>	<b>Peasant (Allotment) Land</b>		<b>Privately-Owned Land</b>	
		<b>Rye</b>	<b>Oats</b>	<b>Rye</b>	<b>Oats</b>
	1896	4.6	3.0	6.1	3.9
	1898	3.7	2.7	4.4	3.5
	1899	4.1	3.5	5.7	5.7
	1900	4.6	3.4	5.9	5.1
	1902	3.9	5.6	4.4	6.9
	<b>Mean Seed Ratios</b>	4.2	3.6	5.3	5.0
	<b>Average Number of Correspondents</b>	43.3	40.8	19.2	18.3

**Source:** Various volumes of *Obzor*.

Further information describing the availability of grain for rural households is available in various *zemstvo* publications. Two related types of data that are repeated in other provincial and district-level publications are the percentage of households purchasing grain (as opposed to relying exclusively on their own output) and how long grain stores lasted after a particular harvest. An example of the first type is displayed in Table 5, which reports data from correspondents in Vladimir province. Of course, grain self-sufficiency is not necessarily an indicator of well-being, especially given the expansion of internal agricultural trade over the 19<sup>th</sup>

<sup>40</sup> Substantial information on other types of agricultural production is also available. For example, many *zemstvo* surveys collected data on the distribution of livestock holdings, size of landholdings, and even the prevalence of different types of agricultural machinery. Such information would be useful in documenting inequality in the countryside (an aspect of overall living standards), but only if used alongside measures of the availability of off-farm opportunities and income. In a pioneering piece of scholarship, Wilbur (1983) utilizes *zemstvo* household data from Voronezh province to study the distribution of agricultural resources among the rural population. Wheatcroft (1991, p. 145) reports per capita livestock series broken down by region and shows similar patterns as with the grain yields.



century (the extent of which deserves more attention). Since the population of this region was increasingly occupied in non-agricultural activities, consumption of significant amounts of marketed grain would not only be unsurprising but a sign that markets were complete enough to allow for such specialization at the micro-level. The numbers in this table indicate that only a small minority of households were completely self-sufficient when it came to grain production.

**Table 5: Participation in Grain Markets by Peasants in Vladimir Province, 1897-98**

	Number of <i>Zemstvo</i> Correspondents Reporting	
	Iur'ev District	Vladimir Province
Households with sufficient grain from own production	3	12
Up to 10% of HHs purchase grain	5	10
11 to 20% of HHs purchase grain	5	15
21 to 30% of HHs purchase grain	1	28
31 to 40% of HHs purchase grain	6	33
41 to 50% of HHs purchase grain	3	75
51 to 60% of HHs purchase grain	1	30
61 to 70% of HHs purchase grain	3	32
71 to 80% of HHs purchase grain	0	38
81 to 90% of HHs purchase grain	0	17
91 to 100% of HHs purchase grain	0	46

**Note:** This table reports the opinions of correspondents to the Vladimir provincial *zemstvo*. The source is volume 3 (p. 310) of *Obzor*.

Iur'ev district correspondents to the *zemstvo* often reported the months in which peasant households ran out of their own grain and were “forced” into making market purchases.<sup>41</sup> These months were reported for both “middling” and “poor” households. In 1898, the modal month reported for middle households was March and 46% (11) of the 24 respondents noted that such households produced grain for the entire year. In contrast, only 12% (3 of 26) of correspondents reported that poorer households were producing enough grain (with the modal month of the end of grain reserves being December). Similar data exist for other years and other provinces.

<sup>41</sup> The data in this paragraph all come from v. 3 of *Obzor*, which covers the 1898 agricultural year.

Wheatcroft (1991) and other scholars (e.g. Hoch, 1994) have emphasized the decline in the severity of subsistence crises as a key piece of evidence for improving living standards in the post-1861 period. A critical element of the capability of the rural population to withstand grain shortfalls was the status of local grain stores (we discuss related consumption and demographic issues below). Under their initial statutes in 1864, the *zemstva* were given the mandate to administer a system of township, district, and provincial stores of grain and money, which were both to be loaned to villages suffering from either consumption shortfalls or a dearth of seed for planting.<sup>42</sup> *Zemstvo* officials were obligated to enforce repayments of loans and to collect submissions to the system in order to maintain a certain amount of grain per capita. In Table 6, we show the status of the grain storage systems in our study area in 1891 and 1899. The year 1891 saw sharp harvest shortfalls across Russia, which appear here as high system arrears for both provinces. Due to this earlier agricultural crisis, the *zemstvo*'s legal mandate for administering the grain system was strengthened in 1893. The resulting expansion of the system is evident in 1899, while the recovery of production resulted in lower arrears. This system of insurance may have been especially important to the lower strata of rural society.

**Table 6: Grain Storage Systems in Vladimir and Iaroslavl', 1891 and 1899**

<b>On September 1, 1891</b>	<b>Iur'ev District</b>	<b>Vladimir</b>	<b>Rostov District</b>	<b>Iaroslavl'</b>
Grain Stores	251	4217	648	3004
Winter Grain in Storage Units	1717	86965	12082	90290
Spring Grain in Storage Units	583	30233	1851	30129
Winter Grain Out on Loan	8049	63229	17779	80725
Spring Grain Out on Loan	4168	54149	13877	68551
Winter Grain in Arrears	22549	335844	17381	147515
Spring Grain in Arrears	11410	174936	8353	68082
<b>Winter Grain, Percent in Arrears</b>	69.8	69.1	36.8	46.3
<b>Spring Grain, Percent in Arrears</b>	70.6	67.5	34.7	40.8

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<sup>42</sup> Although almost completely unstudied, this system likely allowed for some risk-sharing between villages in the same district.

**On October 1, 1899**

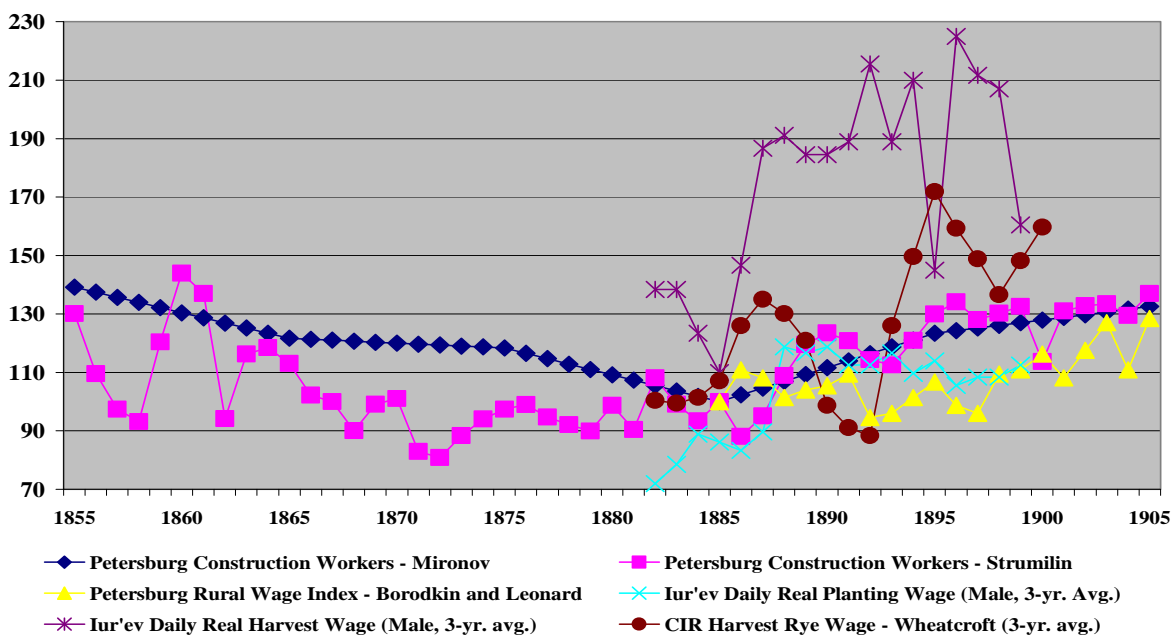
Grain Stores	345	4676	...	...
Population Covered, in Male Tax Units	34434	479885.5	...	...
Winter Grain, Required by Statute	34434	481163.6	...	...
Spring Grain, Required by Statute	17217	244968.5	...	...
Winter Grain in Storage and On Loan	28542.38	367814.6	...	...
Spring Grain in Storage and On Loan	11917	153435	...	...
<b>Winter Grain, Percent in Arrears</b>	17.1	23.6	...	...
<b>Spring Grain, Percent in Arrears</b>	30.8	37.4	...	...

**Note:** All grain measures are in *chetverti*, where 1 *chetvert'* = approx. 6 bushels. 1891 data come from Dubrovskii (1892), and 1899 data come from various volume 4 of *Obzor*. Data for 1899 on Iaroslavl' province are currently unavailable.

### **Income, Cost of Living, and External Obligations**

Agricultural production – both marketed and consumed at home – was a critical determinant of rural incomes and one that can be explored further in the post-1861 period with existing sources. At the same time, several authors have asserted that the necessary *direct* evidence on real wages, household incomes, and cost-of-living trends between 1861 and 1905 is simply not available (e.g. Hoch, 1994). The long-run series that do exist are almost entirely limited to the capitals of St. Petersburg and Moscow, or represent very aggregate observations (e.g. Strumilin, 1960; and Wheatcroft, 1991). However, the *zemstva* and other government agencies collected considerable *micro-level* wage and price data for much of European Russia. We provide here some snapshot evidence from a number of underutilized sources to illustrate some of the possibilities for future work.

## Male Daily Wage Series, 1885 = 100 (approx.)



The most widely cited wage series for this period is that of Strumilin (1960) and relates exclusively to construction workers in St. Petersburg.<sup>43</sup> Recently, Mironov (2004) has introduced a long-run series for real St. Petersburg construction wages that stretches back to 1700. This series updates and improves upon Strumilin's original work by making better use of existing price data to control for changes in the cost of living. For rural wages, Borodkin and Leonard (2005) have complemented Strumilin's work with nominal wage data from Petersburg provincial *zemstvo* reports, and Wheatcroft (1991) has contributed real (rye equivalent) wage series for different agricultural regions and tasks. We present several of these series (harvest wages in the Central Industrial Region for Wheatcroft), along with new wage data from Iur'ev district.

The figure presented above is only meant to be illustrative of the possibilities for additional research. The new data from Iur'ev district take nominal wages and deflate them by a

<sup>43</sup> Strumilin's 1960 collection of essays contains edited versions of research from the 1920s, which incorporated wage data and cost-of-living indices originally formulated by Strumilin and other scholars in the Ministry of Planning. Strumilin also reported several different cost-of-living indices and other, more limited, wage data from individual factories and other locations.

“subsistence index,” which is calculated from the difference between wages paid with or without provisions provided by employers (with 1885 as the base year for this “cost-of-living” series).<sup>44</sup>

What we can conclude from this initial foray is that real wages appear to have declined from the 1860s into the 1880s, before rising slowly to the end of the century (the initial decline must be confirmed with further research). There were significant short-run fluctuations in these secular trends, but whether these were driven by cost-of-living changes or shifts in the supply/demand of labor remains to be studied. Differences in these wage series may have also resulted from geographic or institutional imperfections in the labor market for unskilled workers.

To adequately utilize these and similar data to compare living standards across space and time, a host of other issues must be addressed. Interpretations are confounded by differences in converting to real wages, possible index number problems, and whether these series are representative for other parts European Russia. Each available wage series utilizes a different cost-of-living deflator to convert to real wages.<sup>45</sup> Price data on various components of the cost of living are available for our districts and the region as a whole in the post-1861 period, but much of the necessary information has yet to be culled from the archives (we discuss consumption patterns further below).<sup>46</sup> Converting each series into an index with 1885 = 100 (or with 3-year averages and approximately 1885 = 100) also creates difficulties for comparing levels of actual purchasing power at any point in time. Sharp seasonal variations in the demand for labor by sector may make the *daily* wage series unrepresentative of overall income levels.

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<sup>44</sup> The Iur’ev series are calculated from data reported by rural correspondents of the *zemstvo*. These data are recorded in various volumes of *Obzor* and summarized (the versions used here) in *Sbornik statisticheskikh*, vol. 2 (1900). Other provinces provide similarly detailed wage information for a variety of agricultural tasks, period of hire, and different genders/ages of workers.

<sup>45</sup> The four non-Iur’ev series are each derived in a different way, especially with regards to how they are deflated by cost-of-living indices (excepting the Borodkin and Leonard nominal wage series). The Mironov series is interpolated between decades, while the Wheatcroft series represents a 3-year average. This latter series is in kilograms of rye equivalent units, while the other series all represent ruble amounts.

<sup>46</sup> Archival work by one of the authors in the records of the Moscow provincial *zemstvo* uncovered substantial local (village or township) price information on consumer goods, often reported at a monthly or quarterly frequency.

Moreover, comparisons over time – especially with agricultural wages in the pre-1861 period – are difficult given the changing value of the ruble.<sup>47</sup> Finally, given the region’s ongoing specialization in non-agricultural activities, it is unclear whether agricultural wages can be taken as representative of overall income levels.

Most households in Rostov and Iur’ev were also engaged in seasonal or migratory work in various artisan trades, industrial establishments, urban service jobs, or other forms of supplementary income outside of agriculture. According to data on the economic development of state peasant communities in Rostov district before 1861 (c. 1858), yearly per capita income from these sorts of trades (*promysly*) was approximately 45 rubles, as compared to 13 (females) to 35 rubles (males) for a summer of agricultural work (*Materialy dliia statistiki*, vol. 2). The same source notes that state peasants in the 1850s received income from “trades” that was equivalent to approximately 40% of their overall needs (*soderzhanie*). In the late 1890s, agricultural incomes for summer work in Iur’ev ranged from 20 (female) to 60 (male) rubles, but detailed information on non-agricultural incomes have yet to be collected.<sup>48</sup> By the late 1890s in Iur’ev district, only 22% of males of working age were exclusively occupied in agriculture, 45.3% were only working in different “trades”, and the rest generated income from both agricultural and non-agricultural activities (*Materialy dliia otsenki*, vol. 9, p. 275).<sup>49</sup> According to the data collected by Tugan-Baranovsky, textile factory workers in nearby Shu’ia district (Vladimir province – an area that likely attracted numerous migrants from our study districts)

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<sup>47</sup> According to Mironov’s 1897 constant ruble index (see [gpih.ucdavis.edu](http://gpih.ucdavis.edu)), a paper ruble in the late 1850s represented 40-50% more purchasing power (in silver or gold equivalent) than a ruble under the gold standard initiated in 1897 (the paper ruble was re-valued in 1840, with the new ruble approximately four times the value of the old one). The income figures of Voshchazhnikovo from the 1840s (see above) should be converted to silver rubles (divided by 3.5) to compare to the numbers presented below for the 1890s.

<sup>48</sup> The data on summer agricultural wages are reported alongside the daily wages already cited (from volumes of *Obzor*). The various volumes of *Obzor* and *Materialy dliia otsenki* do report some information on yearly *promysly* or *kustar’* (craft) incomes. Publications from other provinces provide even better data.

<sup>49</sup> Similar data can be derived from the Iaroslavl’ provincial survey and from the occupational data provided in the 1897 National Census.

made between 8 and 25 rubles per month by the 1880s, depending on gender and exact occupation. Wages then increased 10-15% (on average) by the mid-1890s (1970, pp. 352-355). This loosely matches the trends evident in the figure above. Overall, and very tentatively, average rural household incomes were likely in the range of 100-600 rubles in the 1890s in Iur'ev and Rostov districts.<sup>50</sup> Conclusions regarding trends in real compensation and their impact on overall living standards demand considerable additional work, but intriguing prospects are offered by the different types of data highlighted here.

Data on the level of taxes, land payments, and other obligations have been the basis for much commentary on rural living standards in post-emancipation Russia.<sup>51</sup> The basic question of whether the change in per capita burdens due to emancipation and land redemption was positive or negative has yet to be convincingly answered. Influential early writers such as Ianson (1881) argued that post-1861 obligations were even higher than before emancipation, and many subsequent commentators argued that the size of the burdens and the level of arrears upon them indicated an emerging crisis in living standards.<sup>52</sup> This fits in well with the argument of Gerschenkron (1965) and others that the agrarian population was being squeezed by the state to finance industrial development. More recent studies by Hoch (1994 and 2004) and Simms (1977) argue that rate of arrears on tax and land payments (rather than the total accumulated debt) was remarkably low and overall obligation levels were not very high in the post-1861 era.

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<sup>50</sup> This range is a rough “guesstimate” based on an average household with 2-3 working-age individuals making 50-200 rubles per year. These per worker income numbers are derived from the yearly agricultural salary figures in the volumes of *Obzor* and the snippets of information available on incomes from supplementary non-agricultural work. They should not be considered at all definitive. Tugan-Baranovsky (1970) cites several additional sources on wages and incomes for factory workers in late 19<sup>th</sup>-century Russia. We compare these numbers with the pre-1861 figures in the concluding section.

<sup>51</sup> By “land payments,” we refer to several forms of mortgage-like payments made by the peasantry after 1861 to the state or the former serf-owning class in return for the transfer of property rights.

<sup>52</sup> Under this view, the 1881 reduction in land redemption payments by the central government was a sign that the rural population was overburdened by the obligations placed upon it.

Further research into how changes in tax policies (in the tax base and the direct/indirect break-down) and land obligations affected rural living standards is necessary. After Emancipation, the basis of taxation shifted from adult male tax units (or souls, which were also utilized to denominate state head taxes under serfdom) to property, and then to indirect sources (primarily consumption taxes). Within this shift, the newly created *zemstvo* collected its revenue primarily from property taxes. Overall, property tax rates were apparently higher for peasant land than for other types of property, but these rates varied substantially across Russia.

A hint of how the burden of various obligations might have affected the overall living standards of the rural population may be observed in a very simple way by comparing per capita burdens to the rough income data presented earlier. Village and household-level information on the level and breakdown (by type) of direct obligations is available from a large number of *zemstvo* publications and central government sources. To take one example, Table 7 displays data from two *zemstvo* surveys of households in a township (Il'inskaia) of Iur'ev district, one in 1881 and one in 1899. Obligations here include land redemption payments, *zemstvo* taxes, obligatory fire insurance premiums, and various central government property taxes. These data are not broken down by social class or types of property ownership, but such decompositions are often possible. If per capita yearly income was approximately 100 rubles by the 1890s (see the earlier discussion), direct obligations in this township were around 10% of the total, and these amounts were likely falling over the last decades of the 19<sup>th</sup> century (inflation was minimal over this period). Indirect taxes were increasing over the same period, and by 1897 represented approximately another 5 rubles per capita.<sup>53</sup>

**Table 7: Il'inskaia Township, Iur'ev District, Vladimir Province: Tax, Land, and**

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<sup>53</sup> According to the aggregate data summarized in Wheatcroft (1991, pp. 160-162), yearly indirect taxes were approximately 672.5 million rubles between 1895 and 1900. The population of the Empire according to *Pervaia* (1905) was 126.4 million.



### Insurance Obligations

	Total Population from Household Surveys	Total Obligations	Yearly Per Capita Obligations (Rubles)
1881	12155	74567	6.13
1899	12929	65567	5.07

**Note:** These numbers are only for the peasant population of Il'inskaia township, but they also include a very small number of residents with a share of communal property rights from other social classes. Sources - Prugavin (1884) for the 1881 data, *Materialy dliia otsenki*, Vol. 9 for the 1899 data.

Taking these numbers together, per capita obligations by the end of the century were in the range of 10 rubles. To understand whether these numbers should be considered large or not requires additional analysis of what the relevant tax bases and consumption needs were. But when compared with the pre-1861 obligation levels, it appears that obligation levels by 1900 were unlikely to have been *more* burdensome.

### Demographic Indicators of Well-Being

Demographic research into rural living standards over the period 1861-1905 has resulted in somewhat contradictory conclusions. A long historical tradition viewed rural Russia, especially in the central provinces, as increasingly overpopulated after 1861 (e.g. Robinson (1932 [1972])). The main (and weak) evidence for this argument was a declining amount of land per capita, although most studies have failed to account for land rented in or purchased by peasants. Moreover, the overpopulation hypothesis has never adequately dealt with issues of economic specialization rising agricultural productivity in certain areas, or exactly why demographic behavior should be treated as exogenous to resource pressures.

Taking a generally positive view of living standards, Hoch (1994) notes that population growth increased after Emancipation – due to an excess of births over deaths – but rising population *did not* press against resources in any Malthusian sense. Hoch and others have cited factors such as communal land tenure, childcare practices, and marriage customs which kept

fertility rates high, but none of these lines of causality have been adequately tested.<sup>54</sup> Hoch (1994 and 1998) goes on to argue that a key piece of evidence for improving living standards was the rarity of mortality crises after 1861, a point also emphasized by Wheatcroft (1991). Both of these writers emphasize the expansion of markets for grain and other foodstuffs during the latter half of the 19<sup>th</sup>-century as a key factor behind falling mortality rates.

Calculations of birth and death rates (and any conclusions about their relationship to overall living standards) are limited by the absence of information before the National Census of 1897.<sup>55</sup> As is also apparent for the pre-1861 period, the necessary demographic sources at the micro-level are quite scarce. This has prevented any firm conclusions on whether high population growth and falling mortality were associated with improving living conditions. To document fertility and mortality trends, Hoch (1998) is able to take advantage of parish registers, which only exist for a few scattered locations. Such micro-data sources offer the possibility of detailed population reconstructions, but their scarcity – especially in long series – means that almost all studies of demographic trends in the post-1861 period have been undertaken at a high level of aggregation. At this point in our research, we have not attempted to match Hoch's (1998) work on Borzhevka parish with any similar study of records from our districts or others. We focus, instead, on more aggregate figures that are available.

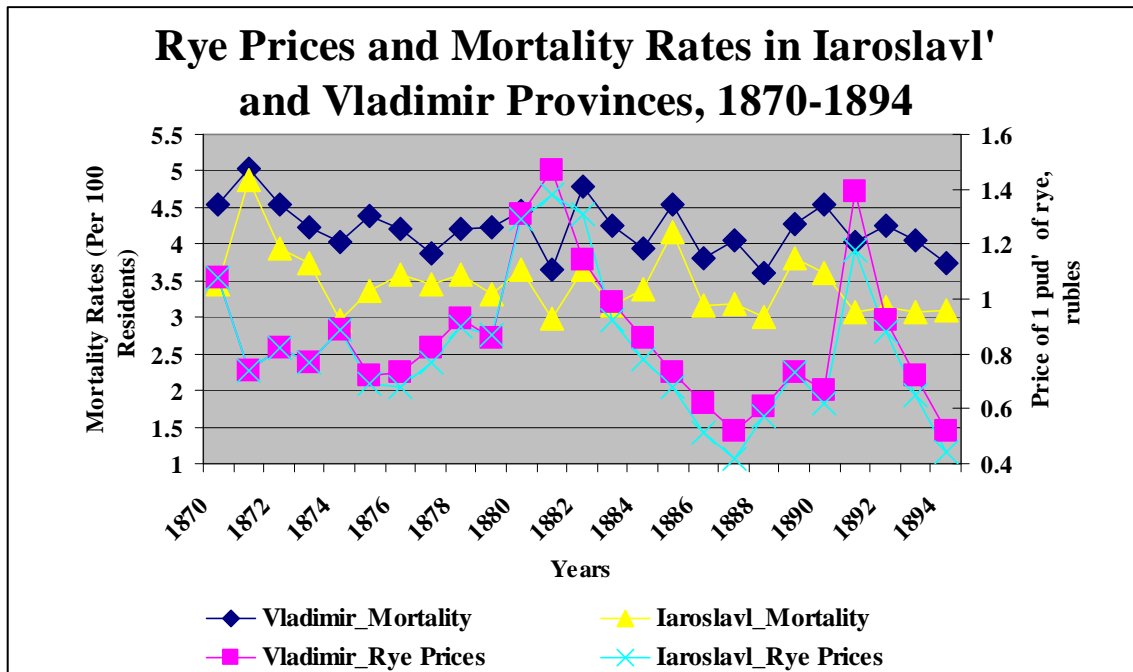
For the purposes of taxation, authorities did keep tabs on the approximate size of the population under their authority. The resulting province-level series can be compared to data on grain prices and harvests to provide some indication about the possibility of subsistence-related

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<sup>54</sup> The Princeton Fertility project did produce a volume on Russia (Coale et al., 1979). However, their findings (little correlation between various fertility measures and socio-economic conditions) suffer statistical shortcomings as recently noted by Brown and Guinnane (2007).

<sup>55</sup> Fertility and mortality events were only crudely measured between 1861 and 1905 (and really only for Orthodox populations), although Hoch (1998) notes that the registration of births and deaths improved over time. Total population numbers are especially vague before the National Census of 1897.

demographic crises. We present such comparisons for the provinces of Vladimir and Iaroslavl' in the figure below.<sup>56</sup> We can make only crude statements regarding overall trends that are based on these aggregate, rather than more exact analyses at the level of the household, village, or district.



These series suggest that mortality was relatively high at 45-50 per 1000 residents early in the period and fell 10-20% by 1894. Tests of causality (or cointegration) are beyond the scope of this paper, but rising rye prices in the early 1880s and early 1890s did not apparently translate into spikes in mortality.<sup>57</sup> This suggests that Hoch's interpretation may very well be correct, as grain markets functioned well-enough to break the link between local production and demographic outcomes. It is also interesting to note that the two neighboring provinces displayed

<sup>56</sup> The source for these data is Pokrovskii (1897, Appendix). "Mortality" is simply defined as the number of deaths divided by the total population, multiplied by 100. These two provinces were overwhelmingly Orthodox, which means that the existing parish-based records likely provided good coverage of demographic events. Research into *zemstvo* documents from Moscow Province did uncover some yearly birth/death records at the village level.

<sup>57</sup> Pokrovskii (1897, pp. 237-238) does find some evidence of a negative correlation between grain prices and fertility rates and a positive correlation between grain prices and mortality rates. However, he only calculates rough correlations without any controls for age structure or other socio-economic conditions.

very different demographic characteristics – Vladimir province exhibited a more “high-pressure” system (this is true if fertility rates are also considered, implying that population growth rates were similar). This could stem from differences between the occupational structures, as Vladimir was more industrialized than Iaroslavl’. This issue requires further research, for such variation may translate into (or reflect) differences in living standards.

Utilizing such aggregate demographic data, Adamets finds that life expectancy at birth was flat at slightly below 30 years for both men and women between the 1860s and the 1890s (2002). Hoch (1998) argues that infant and child mortality rates in Borshevka parish of black-earth Tambov province were persistently high (1998). In other work, Hoch employs data from Borzenskii uezd (Chernigov province) between 1887/9 and 1897 to conclude that life expectancies rose dramatically over this relatively short period (2004).<sup>58</sup> Hoch argues that this case study, along with high fertility rates and *constant or falling* mortality, shows that in demographic terms, living standards were improving after 1861. Such detailed demographic studies of living standards are possible in other locations such as Vladimir and Iaroslavl’, but considerable archival work will be required to compile the necessary micro-data.

### **Consumption and Material Culture**

Income and the level of agricultural production matter for living standards in that they both result in goods or services that households and individuals actually consume. Moreover, demographic outcomes are, to a great extent, a function of food and other types of consumption. So what can we say about consumption patterns (and trends) or rural Russian households in the post-1861 period? Just as with the pre-1861 era, data on exactly what rural Russians consumed in this period are extremely scarce. Gregory (1980) does show that per capita grain consumption rose over the last four decades of the Tsarist regime, but his calculations are based on aggregate

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<sup>58</sup> Thus, contradicting the findings of Adamets (2002) for the entire country.

data only. In his important study of labor mobility in the Central Industrial Region between 1861 and 1905, Burds (1998) argues for the emergence of a modern consumer culture in the countryside. The rural population experienced growing labor, communication, and family ties to the commercial power of Moscow, and, according to Burds, these developments were reflected in rising consumption expenditures and tastes for new goods. He offers anecdotal evidence of these changes but almost no empirical evidence on the scale or speed of commercialization or on how widespread this phenomenon was outside of Moscow's immediate hinterland.<sup>59</sup>

In lieu of direct measurements of consumption, scholars like A'Hearn and Mironov (2006), Mironov (1999), and Wheatcroft (1999) have turned to anthropometric data, especially on heights. Data on heights indirectly measures consumption in the form of nutritional intake over the first couple decades of life. Thus, heights are a relatively poor indicator of short-run changes in consumption, although such data do summarize other dimensions of living standards into one variable (especially health and disease environment). Better short-run measures such as BMI (body mass index) would be preferable but are unavailable for this period.

Moreover, the story told by the anthropometric studies for the post-1861 period has not been entirely convincing. Mironov (1999) and Wheatcroft (1999) argue that the trend in heights AND living standards was upwards, but their evidence comes primarily from military recruits, a sample whose bias remains unknown.<sup>60</sup> Furthermore, there is no way to unpack what underlying factors were driving these changes in heights. We have not done any new anthropometric

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<sup>59</sup> Burds focuses primarily on Moscow province, which is unlikely to have been representative of rural developments, even in other parts of the Central Industrial Region. The only quantitative evidence he provides comes from one household inventory (of a relatively wealthy manufacturer) and some very mixed data on changes in housing characteristics for one semi-industrialized district of Moscow province. Soviet scholars often remarked on the consumption patterns of workers in late Tsarist Russia, but the vast majority of their work covers only Moscow or St. Petersburg.

<sup>60</sup> The recent work by Mironov and A'Hearn (2006) on Saratov province confirms Mironov's earlier findings of rising heights over the latter half of the 19<sup>th</sup> century. However, Saratov was one of the more advanced agricultural provinces of the Empire, and it is perhaps unsurprising that heights were rising quickly over the 19<sup>th</sup> century.

research, mostly because we feel that there are numerous *direct* measures of consumption and living standards that deserve further exploration.

What can *zemstvo* and other data tell us about consumption in the Central Industrial Region of post-1861 Russia? Some *zemstvo*-produced budget surveys are available which document how peasants spent their cash incomes, but these research efforts really only took off after 1900. Summarizing a few budgets available from the 1880s and 1890s for Iaroslavl', Vladimir, and other provinces close-by, Shcherbina (1897) divides the cash expenditures of “workers” and peasants into major categories. According to these numbers, food products took up slightly over 40% of overall expenditures (Table 8).<sup>61</sup> Much more work is needed before any conclusions may be drawn from such numbers, especially as these budget studies frequently only focused on cash purchases and *not* the consumption value of own-produced goods.

**Table 8: Rural Worker and Peasant Consumption Expenditures, 1880s and 1890s (Percentages)**

	<b>Industrial Region</b>	<b>All Russia</b>
Number of Budgets	< 10	284
Grain	32.41	32.59
Feed for Livestock	11.59	15.25
Fruits and Vegetables	2.31	2.34
Meat and Dairy Products	6.94	7.02
Clothing	5.05	4.77
Land Rental	0.60	1.84
Remaining Expenditures	41.10	36.19
<b>Total Rubles Spent Per Capita</b>	<b>61.8</b>	<b>55.54</b>

**Note:** The sources of the data is Shcherbina (1897, p. 43). The exact years of the underlying budgets are not provided.

Some more indirect indicators of consumption levels and changes at lower levels of aggregation are available from *zemstvo* and other publications. For example, the number and

<sup>61</sup> In his edited volume surveying living conditions among industrial workers in pre-Revolutionary Russia, Druzhinina (1958, p. 11) summarizes budget data from textile workers in nearby Kostroma province, as well from Petersburg, Kiev, and Moscow. These workers spent approximately 50% of their income on food and 5-10% on tobacco and alcohol. 10-25% (25% among workers in Kostroma) was spent on clothing and shoes.

type of trade or market establishments hints at the local availability of different types of goods. According to information published by Vladimir province's statistical committee for 1875, Iur'ev district had approximately 151 shops (*lavki*) and stores (*magaziny*) for 390 settlements (*Ezhegodnik*, vol. 3). Information collected by the Vladimir province *zemstvo* shows that Iur'ev district had relatively few markets (*iarmarki*) given its share of Vladimir's population (*Sbornik statisticheskikh*, vol. 2, p. 179).<sup>62</sup> Much more detailed data on market penetration is available for other provinces and different points in time. As of now, we have yet to explore any price information for the goods available in these shops and markets.<sup>63</sup>

Another type of indirect, consumption-based indicators of living standards are data on housing availability and quality. According to the 1899 Vladimir *zemstvo* survey, the portion of resident households without any sort of housing structure of their own varied from 1.3% in Il'inskaia township to 4.8% in Parshinskaia (*Materialy dliia otsenki*, vol. 9). In 1876, and in contrast to the evidence from Voshchaznikovo, only 264 out of 13,360 private homes in the district were built from stone (*Ezhegodnik*, vol. 3). In summary, although direct consumption data are relatively hard to find, especially over time and at any sort of disaggregate level, various indirect measures may offer valuable information on changes in living standards.<sup>64</sup>

## **Human Capital Accumulation**

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<sup>62</sup> Even though it had approximately 6.5% of the province's population, the district only contained four markets out of the 281 recorded in the province for 1895-96. These numbers only include markets (*iarmarki*), which occurred on specific days in a year, and not bazaars (*bazary*), which occurred at regular (weekly, monthly) intervals.

<sup>63</sup> Some limited price information from volumes of *Obzor* is available. If per capita consumption of rye remained 1.1 *chetvert* in the late 1890s, this amount would have cost approximately 6 rubles in Iur'ev district. Compare this sum (likely in paper rubles) with the 14.3 ruble cost in Voshchazhnikovo in 1831, when the paper ruble was approximately 40% of the value of the late 1890s ruble (see the Mironov ruble series).

<sup>64</sup> Archival research on the Moscow province *zemstvo* turned up considerable documentation of fire insurance valuations, as well as other records pertaining to housing conditions of the rural population. Substantial information on markets and prices for consumer goods is available in the documents generated by the Moscow province statistical committee. The relevant documents in the archives of Iaroslavl' and Vladimir have yet to be explored.

If more education or additional skills translate into higher pay (via productivity gains) or more rewarding work, then improvements in human capital will lead to dramatic improvements in living standards. Moreover, as emphasized in the United Nations' Human Development Index, literacy and education may, themselves, be considered critical dimensions of living standards. There have been some limited efforts at understanding trends in literacy in Russia between 1861 and 1905. Mironov (1991) utilizes the 1897 census (which asked questions regarding written literacy) and other sources to calculate literacy rates for different age cohorts over the 19<sup>th</sup> century. He estimates that the literacy rate for males over 9 years of age across Russia rose from 19.1% in 1857 to 45.2% in 1907. For females, the increase was from 9.5% to 17% - female literacy lagged well behind male education and was low in comparison with other European countries in the late 19<sup>th</sup> century.<sup>65</sup>

Post-1861 data on literacy rates are also available at finer levels of aggregation. Table 9 shows the percent literate by gender for Iur'ev and Rostov districts (total population, ages 20-29) in 1897, with a further breakdown by township for Iur'ev district (only rural population, ages 21-30) from the 1899 household survey. We again see the gender differences in literacy, but the 1899 data also indicates a significant amount of variation across these townships. Considering that such data exist at the village and even the household level for much of European Russia over the last decades of the 19<sup>th</sup> century, it should be possible to study the correlation of literacy rates and other measures of living standards.<sup>66</sup>

**Table 9: Literacy Rates, Ages 20-29, 1897 Census Data From Iur'ev and Rostov Districts**

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<sup>65</sup> Differences between Mironov's estimates and the apparent level of male literacy in Voshchazhnikovo (around 50%) may derive from the methodology Mironov uses to back-project from the 1897 census.

<sup>66</sup> The 1899 survey data are actually published at the village level for the entire province of Vladimir. Similar such questions on literacy were asked in numerous *zemstvo* surveys in other provinces. The archival records of the 1898-1900 Moscow province household survey provide individual-level data on literacy. It is not entirely clear how literacy is measured in these surveys.



	Percent of Males	Percent of Females
Iur'ev	61.5	15.0
Rostov	59.0	33.9

**Literacy Rates, Ages 21-30, in 1899, Iur'ev District Townships  
(Vladimir Province)**

	Percent of Males	Percent of Females
An'kovskaia	75.6	23.4
Glumovskaia	61.6	11.7
Gorkinskaia	70.8	10.6
Gorodishcheiskaia	68.9	10.5
Davydovskaia	77.4	8.2
Esiplevskaia	72.7	7.7
I'linskaia	63.2	5.1
Mirslavskaia	67.0	8.2
Nikul'skaia	66.7	9.9
Parshinskaia	74.2	12.1
Petrovskaia	71.2	14.1
Sem'inskaia	69.9	7.5
Simskaia	74.8	12.0
Spaskaia	73.8	15.3
<b>Total</b>	<b>70.2</b>	<b>10.9</b>

**Note:** 1897 data are from *Pervaia*, Vols. 4 and 50. Township-level data from Iur'ev district come from *Materialy dliia otsenki*, Vol. IX.

The growing involvement of the *zemstva* in building schools and financing the expansion of private and secondary education in the late 19<sup>th</sup> century resulted in extensive data on this process. Eklof (1986) provides numerous citations and commentary on the available materials and also gives some basic summary statistics, but the underlying data have never been subjected to any sort of rigorous analysis. For a hint of the possibilities as they might relate to living standards, Table 10 displays summary information by type of school for Iur'ev district in 1899 (individual data for each school are available).<sup>67</sup> Ministry of Education schools refers to the

<sup>67</sup> This source documents every rural and urban school in Vladimir Province, with information for the years 1896-1898. Volkova (1998) studies the expansion of education in Iaroslavl' province and draws on similar sources. She notes that from 1876 to 1906, the number of *zemstvo* schools in Rostov district increased from 14 to 80 (p. 51). Eklof (1986) describes *zemstvo* education data in other provinces. An incredibly exciting source for further study of

primary schools supported by a combination of *zemstvo* and Ministry of Education resources. Parish schools were institutions run by the Orthodox Church. With approximately 3100 students in school in 1898 and a district population of around 9500 in the relevant age group (10-14 year-olds), 30-40% of eligible children were attending school.<sup>68</sup> Substantial information is available on the input side of the human capital production process, including the days and hours of instruction, student-teacher ratios, and experience of the instructor. These data could be mapped to literacy, occupation distributions, or perhaps even wages in the relevant villages in order to better understand the impact of human capital investment on overall living standards.<sup>69</sup>

**Table 10: Primary Schooling in Iur'ev District, 1898 School-Year Data**

	Ministry of Education Schools	Parish Schools
Number of Schools	48	41
Males Only	4	0
Females Only	2	2
Mixed Sex	42	39
Average Number of Enrolled Students	39	37.7
Average Years of Experience Per Teacher	8.2	5.1
Average Number of School Days	148.3	141.7
Average Hours Instruction per Day	5.7	6.1

**Note:** Informal “literacy” schools are not included in these totals. Data are from *Sbornik statisticheskikh*, Vol. 2.

Human capital accumulation also includes improvements in health and health care provision. Of course, health as a dimension of living standards is influenced by consumption levels and demographic conditions. Two of the main functions of the *zemstva* were the monitoring of rural health conditions and the provision of medical care through funding and running hospitals, networks of traveling doctors, and numerous public health initiatives. As part

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education and human capital investment is the one-day survey of all schools in the Russian Empire, which took place on the 18<sup>th</sup> of January in 1911.

<sup>68</sup> The 9500 number is only approximate, as the 1897 Census (*Pervaia*, vol. 4) only reported certain age brackets. According to the data in *Sbornik statisticheskikh*, most students of the schools were in the 9-10-11 age group, as these primary schools typically only had three grade levels.

<sup>69</sup> Data on how funds were allocated by *zemstva* to education and other inputs into living standards are also available.

of these activities, many *zemstva* collected data on health care conditions and resources under their jurisdiction. For example, Volkova (1998) reports on the expansion of *zemstvo* health care in Iaroslavl' province, noting that a single hospital in the city of Rostov in 1865 gave way to several hospitals and three traveling doctor networks by the end of the century. We have not yet undertaken significant research into health and health care, but some information on rural health conditions in this period is readily available in the archives and published contemporary sources (e.g. Kurkin, 1899; on Moscow province morbidity and mortality conditions).<sup>70</sup>

### **Some Reservations – Part II**

The bulk of the evidence on living standards at least hints at improving conditions in the last decades of the 19<sup>th</sup> century. Rising real wages (at least after 1880 or so), increasing literacy, and the absence or falling frequency of mortality crises are all consistent with this story. However, other evidence points to the persistence of extreme poverty and low living standards, especially 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 quite high through the end of the century. Into the 20<sup>th</sup> century, limitations on mobility, legal rights, and political voice remained in place for the majority of the rural population still subject to autocratic and communal restrictions. Even if these restrictions had minimal impact on material living standards (as Hoch would argue), they may still have constrained economic decisions in other dimensions, thereby leading to losses in overall utility.

Even if conditions were improving *on average*, substantial parts of the population may have seen only limited benefits. In particular, women remained well-behind by many indicators. In terms of mobility, authors such as Engel (1996) and Burds (1998) emphasize that working-age males were the ones able to take advantage of growing seasonal and factory employment

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<sup>70</sup> Information on health conditions in pre-1861 rural Russia is almost entirely lacking,

opportunities in the central Russian provinces. It was primarily women and non-working-age males who remained in the villages to work the land and undertake handicraft production. According to the data in *Materialy dliia otsenki*, 8% of females and 28% of males assigned membership in the villages of Iur'ev district worked outside their communities in some capacity. With female literacy fell well behind male rates, substantial wage gaps existed, even for identical occupations. For example, Table 11 shows relative wage differentials for hired agricultural work between males and females in Iur'ev district. These differentials represent possibly significant differences in overall living standards between men and women, especially in a society which denied women full membership.<sup>71</sup> Additional *zemstvo* data will allow for much more detailed analyses of the conditions women faced, as well as inequality along other dimensions.<sup>72</sup>

**Table 11: Gender Wage Ratios (Male/Female), Iur'ev District, Vladimir, 1896-1902**

	1896	1898	1899	1900	1902
Day Wage on Own Provisions, Spring Planting	1.75	1.67	1.91	1.79	1.94
Day Wage on Own Provisions, Harvest	1.32	1.37	1.42	1.29	1.45
Summer Work in Agriculture	2.17	2.09	2.11	2.20	...
Year Work in Agriculture	2.07	1.95	1.89	2.09	...

**Note:** These data are derived from information reported in various volumes of *Obzor*.

#### Section IV: Concluding Thoughts

Until recently, one of the main obstacles to investigating questions related to the standard of living in pre-revolutionary rural Russia was access to source materials. Since the collapse of the Soviet Union, though, archival and rare published sources have become more accessible to researchers, and a wide variety of documents covering many aspects of well being are available.

<sup>71</sup> Women were not considered full members of the commune, could not attend communal meetings or vote on communal business. That said, it is, of course, possible that these wage differentials simply reflect substantial differences in labor productivity.

<sup>72</sup> *Zemstvo* survey data typically provide village-level information on the distributions of landholdings, non-agricultural occupations, demographic characteristics, and number of hired workers. These data could serve as the basis for investigations into various forms of inequality.

Estate records for the largest landlords, located in central archives in Moscow and St Petersburg, contain thousands of documents related to different aspects of rural life. Here one can find, as in the case of Voshhazhnikovo, information about prices and wages, harvest quality, poor relief, health and demography, consumption and material culture, literacy, and institutional constraints (such as estate regulations and communal conflict). Local archives, now open to foreign scholars as well as Russians, contain parish registers and census-like documents which can be used in conjunction with estate data to further investigate demographic indicators of well-being.

For the post-1861 period, the published and archival records of the *zemstva* and other contemporary research efforts offer an incredible opportunity to explore different dimensions of living standards across a wide swath of the Russian empire. Indeed, the available and unearthed data on social and economic conditions in late 19<sup>th</sup>-century rural Russia are perhaps more extensive than any society in history at a similar level of development. Understanding which regions were best served by *zemstvo* researchers, and how their efforts might be matched to data on living standards in the pre-1861 period, are important goals of our research program. As of now, we can say little regarding the overall trend in living standards over time, even for our small case-study region on the border of Iaroslavl' and Vladimir provinces. Agricultural productivity, literacy, and opportunities for mobility do appear to have improved slightly over the century, but available information on incomes and consumption levels are too limited to make any conclusive statements.

The evidence we have presented here, based on a very preliminary examination of these new source materials, paints a more complex and more variegated picture of Russian rural life than that usually found in the historical literature, and one that is consistent with other recent micro-level studies (such as those of Hoch for Tambov province). But these data raise more

questions than they answer. How representative were Rostov and Iur'ev districts? What other measures of standard of living might be considered? How do the data for Russia compare with those for other parts of the world? There is still much to be done before these questions can be addressed.

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