Black Monks and White Gold
The Solovetskii Monastery’s Prosperous Salt
Trade during the Time of Troubles of the Early
Seventeenth Century

Isaiah Gruber
The Hebrew University of Jerusalem, Israel

Abstract
This article represents a study of extant business records of the Vologda podvore of the Solovetskii
Monastery from the Time of Troubles (1598-1613). The archival records show that the monas-
tery continued to take in impressive sums from its salt trade during this period of crisis, and in
fact was able to increase its revenue during the first two thirds of the Troubles. The study addi-
tionally demonstrates that both prices and sales volume oscillated (rose and fell) in a yearly pat-
tern. However, over the longer term, volume remained constant while prices rose, thus producing
the increase in net income. The detailed records of prices also enable a comparison to the late
Prof. Hellie’s data set in The Economy and Material Culture of Russia. The Solovki salt prices
recorded at Vologda manifest distinct price levels and behavior and thus significantly enhance
Hellie’s charts for the Time of Troubles period. The study as a whole illustrates that the Time of
Troubles exerted quite an uneven effect on the population of Muscovy, with the wealthy monas-
teries often economically unaffected or at least less affected than the general population. It also
reveals the extent to which economic profit remained a principal driving force of the monasterial
“corporation” at this time.

Keywords
Russian Orthodox Church, Time of Troubles, Solovetskii Monastery, Salt Trade, Early Modern
Prices, Solovki, Smutnoe vremia

The documents tell us that monasteries in Muscovite Russia served a variety of
functions, ranging from prayer and meditation to banking and commerce.
Major institutions such as the “state within a state” centered at Solovki com-
manded impressive revenues and, as Queen Elizabeth’s ambassador Giles
Fletcher put it, “deal[t] for all manner of commodities.”¹ These were the mega-corporations of a society continually professing spiritual motives in all realms of life—whether political or social, intellectual or economic, sexual or military. In fact, the vast majority of ecclesiastic documents that have survived for the perusal of historians are simply business records of income and expense.² Though scholars sometimes speak about a stigma associated with merchantry and commercial activity in Muscovy, the negative associations appear to have vanished in certain cases when, in the words of Natalia Zarubina, “one meets with attempts to link religious and economic life.”³ At the very least, the “spiritual” raison d’être of monasteries did not inhibit them in any way whatsoever from pursuing “temporal” profit in the period of extreme crisis and catastrophe known as Smutnoe vremia or the Time of Troubles.

The present paper deals specifically with the salt trade of the Solovetskii Monastery during this period at the beginning of the seventeenth century. In Muscovy, as elsewhere during the medieval and early modern period, salt was a vital necessity and hence a highly profitable cash crop.⁴ The monastery held

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² See especially my Ph.D. dissertation, “The Russian Orthodox Church in the Time of Troubles, 1598-1613” (Washington, DC: Georgetown University, 2006), 36-56; and also: A. V. Antonov et al., “Materiali k katalogu aktov Russkogo gosudarstva,” parts 1-10, in *Russkii diplomatarii* 1-10 (Moscow: Arkheograficheskii tsentr, 1997-2004); numerous published collections of documents; Russian archival opisi; etc. In her study of Russian monasteries during the fifteenth and sixteenth centuries, Kolycheva remarked: “Trading-commercial activity imposed an imprint on the whole daily life of a monastery. A significant portion of the monks were torn away for a long time from the monastery, where they were present only episodically.” E. I. Kolycheva, “Pravoslavnye monastyri vtoroi poloviny XV—XVI veka,” in N. V. Sinitsyna et al., ed., *Monashestvo i monastyri v Rossii* (Moscow: Nauka, 2002), 103.
⁴ See, e.g.: Mark Kurlansky, *Salt: A World History* (New York: Penguin, 2003); Elena Romanenko, *Posvedennyia zhit’ russkogo srednevekovogo monastyria* (Moscow: Molodaia gvardia, 2002), 61-65; Bushkovich, *The Merchants of Moscow, 1580-1650* (Cambridge: Cambridge University Press, 1980), 127-50. Of course, the significance of salt was cultural as well as economic: the presentation of bread and salt still constitutes a characteristic Russian welcome. In the mid-seventeenth century, Boris Morozov’s tax on salt led to a popular uprising and
rights to salt-works throughout the northern territories of Russia and functioned as one of the country’s greatest purveyors of the commodity in bulk. Fortunately and unusually, the Russian State Archive of Ancient Acts (RGADA) possesses a nearly complete set of records kept by this monastery’s podvor’e or “branch office” in Vologda during the Muscovite years 7108-7117 (corresponding to 1 September 1599 – 31 August 1609). According to these records, the Vologda office alone sold roughly a million poods of salt in these ten years — about 16.4 million kilograms or 18,000 U.S. tons. The price paid for all this salt, which was sold at wholesale and not retail, amounted to more than 68,000 rubles. I calculate that this sum was roughly equivalent to somewhere between 100 and 200 million U.S. dollars today in terms of its purchasing power. If this estimate is correct, then during the Time of Troubles the Vologda branch office of the Solovetskiy Monastery took in revenue from salt sales comparable to US $10-20 million per year. For comparison’s sake, estimates place the total annual value of all trade at the major port of Arkhangel’sk in this period at 300,000 to 350,000 rubles.

Since the monks recorded the price, volume, and total payment for each sale, their data can be plotted, examined for evidence of business trends, and compared to other data. According to Richard Hellie’s statistics in *The Economy and Material Culture of Russia*, the median price for salt over the long period 1600-1723 was 0.098 rubles per pood. Our Solovetskiy wholesalers sold at a somewhat lower price, as one might expect. Their average price for the ten-year period under consideration was 0.074 rubles per pood – a


5) Rossiiskii gosudarstvennyi arkhiv drevnikh aktov [hereafter RGADA], Moscow, f. 1201 (Solovetskiy monastyr’), op. 1, ed. khr. 7-11.

6) One Russian pood (pud) equals 16.32 kilograms or 36 U.S. pounds.

7) In terms of volume, individual salt sales ranged from 91.25 poods (1,495 kilograms, or 3,285 U.S. pounds) to 13,000.5 poods (about 213,000 kilograms, or 234 U.S. tons). In terms of money, individual transactions ranged from five rubles to more than a thousand rubles. These figures demonstrate that the Vologda office was a wholesaler and not a retailer. Cf. Bushkovitch, *Merchants of Moscow*, 131-32.

8) Using a basket of commodities for comparison and two different proposed rates to arrive at the upper and lower estimates. See my “Russian Orthodox Church,” 607-642; and a forthcoming article, “Estimating the Value of the Russian Ruble in the Early Seventeenth Century: A New Method.”

9) Bushkovitch, *Merchants of Moscow*, 55.

difference of 0.024 rubles per pood, or enough for a presumed 33% markup by retailers.\footnote{11}

Figure 1 portrays the quantity of salt sold per year by the Vologda office of the Solovetskii Monastery in the years 7108-7117:

![Figure 1: Salt Sales by Volume, Vologda Branch Office of Solovetskii Monastery](image)

From this chart, it is apparent that annual sales volume oscillated up and down in a fairly regular pattern, and also that these oscillations became more dramatic or accentuated as the Time of Troubles progressed. However, the overall linear trend lies nearly horizontal at just under 100,000 poods per year. In other words, the quantity of salt sold remained very nearly constant over these ten years as a whole. This fact is significant for its business implications, which will become evident below. Moreover, it demonstrates that the Smuta or Troubles did not disrupt at least this segment of the economy in the way one might normally expect.

In addition, the rather large swings in annual sales volume had relatively little influence on revenue; variations in price were far more significant. In 7113 (1604-1605), for example, the Vologda office sold a record 134,060 poods of salt (2,195,900 kg.; 2,413 U.S. tons.) However, the price of salt was

\footnotetext{11}{More precisely, the average price for these transactions comes to 0.07375 rubles per pood. The highest price recorded was 0.1325 rubles per pood; the lowest, 0.0475 rubles per pood.}
low that year, averaging only 0.052 rubles per pood; so revenue for the year remained under 7,000 rubles. By contrast, in the previous year 7112 (1603-1604), the monks had sold only 54% as much salt but had taken in more money.\textsuperscript{12} Thus, with a product such as salt, always in high demand, higher prices served the interests of producers much more than an increase in sales volume. One may observe the same phenomenon today in the production of another high-demand commodity, oil, historically called “black gold.”

Figure 2 plots all 573 sales prices recorded by the Vologda office in the years 7108-7117:

\begin{figure}
\centering
\includegraphics[width=\textwidth]{salt_prices_plot.png}
\caption{Salt Prices (Wholesale), Vologda Brance Office of Solovetskii Monastery}
\end{figure}

Two principal features of this chart stand out. First, as with sales volume, prices fluctuated up and down in a fairly regular cycle, causing definite peaks and troughs. In the early years of Tsar Boris’ reign, salt prices were both low and relatively invariant, mostly hovering between 0.05 and 0.06 rubles.

\textsuperscript{12} More precise figures are as follows: 6,968.645 rubles for the Muscovite year 7113; 72,255 poods (1,183,537 kg. or 1,301 U.S. tons) and 7,267.7725 rubles for the year 7112. All such numbers given in this paper are mathematical sums of the sales records of the Vologda Office. The office’s own recorded yearly totals sometimes differed slightly due to the unique (and unwieldy) system of monetary units in Muscovy — and hence of rounding numbers. Cf. also: A. A. Savich, Solovetskaia votchina XV-XVII vv. Opity izucheniiia khoziaistva i sotsial’nykh otnoshenii na kratnem ruskom severe v drevnej Rusi (Perm: IOIFSN, 1927), 147-49; Bushkovitch, Merchants of Moscow, 132.
per pood. Then from about the spring of 1602 until approximately the winter of 1604 — i.e., during the Famine — prices skyrocketed to an eventual high of 0.13 rubles per pood. This rise was followed by an even more dramatic decline, apparently in the spring of 1604.\textsuperscript{13} From the summer of 1604 until the summer of 1605, prices again held at the low price of 0.05 to 0.06 rubles per pood. In the autumn of 1605 they shot way up again, briefly, before landing back at 0.06 rubles per pood in the summer of 1606, around the time of the overthrow of Tsar Dmitrii. From then until the summer of 1608, salt prices rose fairly steadily. Around September 1608 they dropped significantly but made some gradual recovery over the course of the next year.

The second feature of note concerns the two major troughs of 1599-1602 and 1604-1605, near the beginning and end of Boris’ reign. In contradistinction to the jagged peaks in other years, these troughs show remarkable constancy. Why was the nadir much more stable than the zenith? The price of 0.05 rubles per pood seems to have served as a rock-bottom, non-negotiable minimum. With a few minor exceptions, the Solovki monks refused to sell below this price in order to protect their profit margins.

Figure 3 simplifies the price data by plotting yearly averages:

\textsuperscript{13} These dates (spring 1604, etc.) are not certain. The Vologda Office personnel recorded a sequence of transactions for each year but did not give the exact dates of these sales. The graph of Figure 2 assumes equal distribution of sales over time, which was probably not the case. Cf.: Hellie, Economy and Material Culture, 158.
This graph again shows the oscillations in price that we have already noted. More importantly, it demonstrates that salt prices were in general rising throughout these first two stages of the Time of Troubles. If we only recall that the linear trend of sales volume over the same period was virtually constant (see Figure 1), then simple mathematics tells us that income from salt sales must have been on the increase as well. Despite the catastrophic historical context, this was in fact the case, as demonstrated by Figure 4:

![Graph showing income from salt sales](image)

*Figure 4: Income from Salt Sales, Vologda Branch Office of Solovetskii Monastery*

As seen from the above, the Solovetskii Monastery’s income from salt sales in Vologda fluctuated greatly but in general increased over the period 1599-1608. The final year, 7117 (1608-1609), represents something of an exception, both because revenue tumbled to 36% of the previous year’s total and because only in this year did it fall below 4,000 rubles.\(^{14}\) One may surmise that the country’s problems had finally begun to affect even the northern salt traders. Be that as it may, if 7117 were excluded, then the slope of the linear trend would be even greater, demonstrating a very high rate of increase in revenue during this period of extreme crisis. Thus, the first two-thirds of the Smuta actually profited the Solovetskii monasterial business, which had the good fortune to control large supplies of a high-demand natural resource.

\(^{14}\) Also, only in 7117 did sales volume fall below 60,000 poods of salt. See Figure 1.
Comparison of Figures 1 and 3 leads to the conclusion that higher prices often accompanied lower sales volume, and vice versa. For example: in 7112 and 7114 prices were up and sales volume down; in 7113 and 7115 sales volume rose and prices fell. These facts naturally raise the question of the applicability of ordinary supply-and-demand economics to the situation under consideration. An increase in demand relative to supply should theoretically cause prices to increase; an increase in supply relative to demand should cause prices to fall. I speculate that the situation with regard to salt – the “white gold” of its day – was similar to the situation with regard to oil today. Demand was always high, even regardless of cost, but it could vary somewhat – especially in crisis situations. Meanwhile, the volume of the commodity that could be supplied remained almost constant, as suggested by Figure 1. However, suppliers were able to manipulate prices to a more or less significant degree by restricting or opening supply as they saw fit. The Solovki monks – not to mention other businessmen in Russia – may well have exploited these realities for their own advantage during the Time of Troubles.  

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15) Morozov’s theory, alluded to above, was that a tax on salt would cause an increase in price but would not reduce demand. The uprising of 1648, if it ended his experiment, also proved him correct: salt was so essential that people could or would not simply reduce their consumption in order to compensate for higher prices.

16) Historical evidence suggests that such business practices were not unheard-of at the time. For instance, although it is a highly controversial topic in historiography, several annalists of the period accused leading boyars and churchmen of speculation and grain hoarding during the famine of the Time of Troubles. In the words of Isaac Massa: “[Many] who had provisions to last three or four years, wanted the scarcity to continue; they hoped to sell their grain at enormous profits…. In fact, there was enough grain in the country to feed all the population for four years, but the people were hungrier than ever…. Lords, convents — which are very numerous — and many rich people had full granaries, so much so that being shut up there for years, the grain became mouldy.” Whether or not these accusations were accurate, it is clear at least that many institutions (such as Solovki) did have plenty of grain and other supplies during the Time of Troubles, as shown by their business records. Inventories of the Kirillo-Belozerskii Monastery during the famine years as well as purchase records of the Vologda podvorye of the Solovetskii Monastery repeatedly mention very large quantities of grain and other food-stores. Z. V. Dmitrieva also remarks that the at the turn of the seventeenth century the Kirillo-Belozerskii Monastery was flourishing, with full granaries and enough fodder to feed hundreds of animals. Isaac Massa, A Short History of the Beginnings and Origins of These Present Wars in Moscow under the Reign of Various Sovereigns down to the Year 1610, trans. G. Edward Orchard (Toronto: University of Toronto Press, 1982), 53; Avraamii Palitsyn, Skazanie Avraamii Palitsyna, ed. L. V. Cherepnin (Moscow: AN SSSR, 1951), 105-6; Jacques Margeret, The Russian Empire and Grand Duchy of Muscovy: A 17th-Century French Account, trans. and ed. Chester S. L. Dunning (Pittsburgh: University of Pittsburgh Press, 1983), 58; Conrad Bussow, The Disturbed State of the
In addition, it is worth noting that as wholesalers, the Solovki brothers sold to other substantial establishments and not to the general population. Their merchant clients were themselves able to speculate, to outlay considerable funds, and to absorb losses in one year if they would lead to profits in the next. Some customers, in other words, may have bought more or less salt in a given year based on business prospects rather than actual needs. Comparison to Hellie's data set supports this supposition. His graph contains some thirty (30) prices from the period 1600-1613; in contrast to our records from the Vologda monasterial office, these are dispersed in no discernable pattern and over a much broader range. Thus, Hellie's prices fall below 0.025 rubles per pood and mount up to an incredible 0.75 rubles per pood. The contrast between the two data sets demonstrates the necessity of distinguishing between wholesale and retail prices, which were not only different in amount but also “behaved” differently — i.e., followed different trends. Finally, as Hellie notes, prices also varied from location to location.  

The Vologda office's records of salt sales from 7118 (fall of 1609) on are missing from the RGADA collection. However, expense records from the last years of the Smuta have survived. Typically, the elders in Vologda would spend the majority of their proceeds from salt sales on purchases of grain and other supplies for the monastery. In the year 7120 (1611-1612), they had enough money to spend more than 9,000 rubles for such purposes — an amount well above average annual expenditure. Such figures prove that this enormous monasterial corporation had considerable sums of money available to be spent all throughout the Troubles, even during years of horrible famine and war. In fact, in the sixteen years 7108-7123 (1599-1615), the Vologda office of the Solovetskii Monastery recorded purchases totaling 116,517.095 rubles. Using my rough approximation, this would correspond to perhaps a quarter billion

\textsuperscript{17} Hellie, \textit{Economy and Material Culture}, 157-59.
U.S. dollars today. Remarkably, most if not all of this money came from income, not savings.

Although it is beyond the scope of this paper to describe the monastery’s other sources of income and its many expenses, one brief example may be instructive. In 1605, shortly after the accession of the first Dmitrii of the Time of Troubles, Hegumen Antonii, Elder Protasii, and their retinue traveled to Moscow. During the trip, they recorded income of nearly 1,100 rubles, from sources such as: donations (vklady), loans, internal (monasterial) transfer of funds, selling cow suet, and the like. At the same time, they expended almost 500 rubles, mostly on: internal transfer of funds; lavish gifts for the new tsar, tsaritisa, and patriarch; and official recertification of usufructory or real estate rights, such as those enabling their salt trade. In addition to these large expenses, a laconic entry at the end of the document read, “nishchim rozoshlosia [to the poor was expended] 5 altyn, 2 dengi [0.16 rubles].” This minimal almsgiving — scrupulously recorded by the business-like monks — contrasts starkly with the tens of thousands of rubles brought in by their commercial activity. Of course, after three years of famine and one of war, it was likely not a dearth of poor people that kept charity expenses so low.

This example may help to illustrate the point that major monasteries in Russia functioned essentially as major corporations do today. Their principal business was business, and they had a board of directors (or elders) who oversaw business matters and signed off on all financial reports, much as CEOs and CFOs do nowadays. During the Time of Troubles, the Solovetski Monastery continued to pursue its business interests aggressively. The catastrophic situation in the country as a whole did not prevent the monks from actually increasing their revenue from salt sales — and quite possibly from

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18 RGADA, f. 1201, op. 1, ed. khr. 7, l. 43; RGADA, f. 1201, op. 1, ed. khr. 8, ll. 35, 57; RGADA, f. 1201, op. 1, ed. khr. 9, ll. 39, 77ob., 125ob., 165; RGADA, f. 1201, op. 1, ed. khr. 11, l. 119; RGADA, f. 1201, op. 1, ed. khr. 12, ll. 40b., 17ob., 53, 81, 108-108ob; Gruber, “Russian Orthodox Church,” 280-83 [where one conversion figure is mistakenly given as “billion” instead of “million”].

other sources as well, although that is a topic beyond the scope of this paper.\(^{20}\) It is likely that revenue fell off somewhat during the last years of the Troubles, since recorded savings, or income minus expenses, decreased.\(^{21}\) Even if so, however, the prosperity enjoyed by the monastery during Smutnoe vremia stands out against a background of great suffering among the common population.

What have we learned from the black monks and their trade in white gold? First, the Time of Troubles was not an unmitigated disaster for all segments of Muscovite society. For some, the country’s misfortune was to a certain degree their windfall, at least during the first two stages of the period. Second, the goal of an ostensibly spiritual institution remained to a very significant extent economic profit, not (for example) relieving widespread poverty or resisting supposedly illegitimate tsars. Third, the extant records suggest that Hellie’s groundbreaking statistical work on the economy can and should be pushed further. The more plentiful data on salt prices from Solovki’s Vologda office yield different results – and also a different kind of results, due to the trade in bulk and location in a specific part of the country.

As William Aydelotte complained in 1971 with regard to English history, a lack of sufficient quantitative research hinders the development of historiography and even produces “strange disagreements on some of the fundamental historical issues of the period, issues on which one would expect that precise statements could be made.”\(^{22}\) The most precise statement that can be made about the period under discussion will probably remain Chester Dunning’s: “To this day the Time of Troubles defies simple recitation of its basic facts!”\(^{23}\) Nonetheless, the research presented in this paper has clarified a small but important aspect of life during that “unfathomable abyss” (bezdonnaia


\(^{21}\) See: Gruber, “Russian Orthodox Church,” 265; RGADA, f. 1201, op. 1, ed. khr. 12, ll. 17 ob., 53, 81, 108-108 ob.

\(^{22}\) William O. Aydelotte, Quantification in History (Reading, Mass.: Addison-Wesley, 1971), 8, 140, passim.

\(^{23}\) Dunning, Russia’s First Civil War, 2.
propast’), as Kovalenskii put it, that divides Russian history.\textsuperscript{24} Evidence about the salt trade during the Time of Troubles adjusts our data concerning price trends, instructs us about the motives and pursuits of the monastic corporation, and also suggests a revised understanding of the nature of the period itself in historiography.