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# ABHANDLUNGEN

*John P. LeDonne, New York*

## Indirect Taxes in Catherine's Russia I. The Salt Code of 1781

The eighteenth century was for Russia a period of expansion and consolidation. A long and bitter conflict with Sweden gave Russia control over the eastern shores of the Baltic; shorter wars in 1741–1743 and 1788–1790 rounded out the gains of the treaty of Nystad and confirmed the decline of Swedish power. The agelong rivalry with Poland petered out with the gradual decomposition of the Polish body politic that ended with the three partitions and the removal of the Polish presence along the western borders of the Empire. Thirty years earlier, during the Seven Years' War, the near destruction of the Prussian state had already testified to the emergence of a formidable rival east of the Vistula. Finally, the three generations from the defeat on the Pruth in 1711 to the peace of Jassy [Iași] in 1792 witnessed a persistent assault on the Turkish position on the northern shores of the Black Sea which finally placed the Turk permanently on the defensive. The three traditional obstacles to Russian expansion had been removed or weakened, and by the end of the eighteenth century Russia had become one of the great European powers.

All this was expensive, and a resolute foreign policy placed a heavy burden on the Russian people because it was not supported by a national economy diversified enough to supply with relative ease the materials, the equipment, the food, and the skills necessary for such a large enterprise. What could not be supplied by a flexible economy responsive to the demands of the state had to be supplied by requisitions and heavier taxation until such time as the capacity of the economy was raised to meet the requirements of the military establishment. Requisitions implied the worsening of the condition of the peasants who more than ever were seen as a source to sustain an emerging bureaucracy and a growing body of officers and to supply free labor to the state. Heavier taxation implied increasing the yield of both direct and indirect taxes by introducing new ones and improving their collection. The major innovations were the capitation and the salt and liquor monopolies. The capitation introduced in 1724 yielded in that year 54,1% of the total revenue budget and 42,5% in 1769, while the revenue from the sale of salt and liquor rose from 18,6% in 1724 to 29% in 1769. Despite the change in the relationship between these two major sources of revenue their total yield continued to amount to nearly three-fourths of the national income.<sup>1</sup>

Although the capitation represented such a large share of revenue it had a defect common to all direct taxes at the time: its total yield was proportional to the total number of taxpayers, i. e. male souls registered at each census, which meant it was relatively constant from year to year. In addition it was not a graduated tax and it did not extend to the privileged classes. Its major flaw was that its high rate made it hard to collect, and it was indeed a characteristic of the Russian fiscal system to be (constantly) in arrears. Thus, the capitation, in the best times, yielded a relatively constant amount and, at other times, depending on the size of the harvest and other factors, it would yield less than the anticipated amount. In other words it was not a reliable source of revenue.

<sup>1</sup> S.M. ТРОИЦКИЙ *Finansovaja politika russkogo absoljutizma v XVIII veke*. Moskva 1966, p. 214. Conversely, military and naval expenditures amounted to about 70% of the expenditure budget in 1725 and 48% in 1767: *ibidem* p. 224 and p. 243.

Such was the context which explained the renewed interest in indirect taxation from the beginning of the 1740s. This interest, of course, was not new. A century earlier, the Swedish Chancellor Oxenstierna had proclaimed indirect taxes “pleasing to God, hurtful to no man, and not provocative of rebellion”, a strange statement which can be explained only by the novelty of the subject.<sup>2</sup> But there were several reasons for the attraction of indirect taxes. The yield of an indirect tax is tied to the level of exchange of the taxed commodity. The tax has the appearance of being voluntary and its incidence is hidden in the sale price of the product: the consumer need not be aware that he is paying a tax while purchasing a product which he needs (salt) or enjoys consuming (liquor, tea, sugar, tobacco). Also, the tax is paid in cash at the time of the purchase: the state need not wait till a certain time of the year to collect what is all too often only a part of the total sum due. On the other hand, the collection of indirect taxes requires an extensive administrative machinery to keep an eye on the sale of commodities, but this difficulty can be overcome in either one of two ways: if the commodity is produced at only a few places the tax can be collected at the source before the product is shipped out; or if it is produced at many places over a large territory, the collection can be farmed out to individuals who will pledge a definite amount to the treasury and pocket the profits from the collection. Thus an indirect tax combined several advantages. It could be very productive if the article was one of mass consumption; it was reliable since that consumption was a definite quantity unlikely to decrease unless too heavily taxed; it was elastic and adjusted automatically to increased availability and consumption; it was just because it was paid equally by all including the privileged classes and it was voluntary, at least in theory.<sup>3</sup>

Among the commodities which could be so taxed, salt occupied a special position. Salt is a vital necessity to man and a prolonged lack of it weakens the organism, breaks down its resistance to illness and ultimately causes death. For that reason it has long been recognized as a means of exchange and it traditionally followed the channels of trade to fairs and markets everywhere. A tax on such salt used for personal consumption – *sel de devoir* as it was called in France – resembled more a direct tax than an indirect tax because the amount consumed by each individual remained relatively constant and was not a matter of choice but of necessity. Hence the hatred felt by so many for the salt tax in the Europe of the *ancien régime*, especially in France.<sup>4</sup> Bread and salt, both vital to human life, were symbols of hospitality. Salt was used as a cauterizer, an agent against fever, and a diuretic. Cattle needed it just as much and no animal husbandry was possible without it. In agriculture it was used in manure, to preserve hay, to cure cheese, butter, meat and fish, and the long periods of fasting prescribed by the Orthodox Church raised the demand for salted fish. In industry salt was, and is, the basis of the chemical industry: it was used in the manufacture of glass, soap, and cement, in the production of dyes and in many other industrial processes. Thus, the extensive use and circulation of salt made it an ideal commodity for the state to tax.<sup>5</sup>

<sup>2</sup> T. ASHTON (ed.) *Crisis in Europe 1560–1660*. New York 1967, p. 211; D. OGG *Europe of the Ancien Régime 1715–1783*. New York 1966, p. 213.

<sup>3</sup> G. ARDANT *Théorie sociologique de l'impôt*. 2 vols. Paris 1965, here vol. 1, pp. 12, 14; A. G. BUEHLER *Public Finance*. New York 1940, pp. 334–340. The objection that an indirect tax falls more heavily on the masses would not change the assumption that it was a just tax since it was then taken for granted that the masses must support the privileged classes with the fruit of their labor.

<sup>4</sup> ARDANT *Théorie sociologique* vol. 1, pp. 238, 366–367, vol. 2, p. 733; OGG *Europe* pp. 251–252.

<sup>5</sup> For the role of Kolomna in the meat-salting industry see N. L. RUBINSTEJN *Sel'skoe chozjajstvo*

The salt monopoly was first introduced in Russia by Peter the Great in 1705. The major source of production was the saltworks of Solikamsk where a process of consolidation had taken place throughout the seventeenth century resulting in the rise of the Stroganov family as the major producers.<sup>6</sup> The Stroganovs were required to supply three million puds for which they were paid a fixed price per pud, and the sale price was pegged to twice the cost of the salt to the state upon delivery. It soon turned out, however, that the expenditures to run the monopoly together with the high cost of the salt and the complaints of townsmen who were required to sell it on their own time convinced a cost-conscious government after Peter's death to abolish the monopoly. Another reason was the shortage of cash caused by insufficiently developed exchanges and by the capitation that siphoned off the little cash the peasants might have. The *ukaz* of 1727 which restored free trade as of 1728 was indeed partly motivated by the necessity to let peasants barter their products for salt. A tax of five kopeks was imposed on each pud of salt sold. Results, however, fell short of expectations and the revenue from the sale of salt began to fall steadily. In August 1731 the state monopoly was reinstated.<sup>7</sup>

One can sympathize with the difficulties of the Russian government in tackling such a difficult enterprise as the supply of salt from the Urals not only to such faraway places as Pskov, Smolensk, and Orel but also to small communities cut off from roads and waterways. Free sale and farming out the collection of the sale tax brought higher prices, reduced sales, reduced revenues, and aggravated popular discontent. The monopoly meant higher transportation costs to the state and low profits but a relatively steady supply and a more reliable satisfaction of popular needs; it remained a necessity throughout the eighteenth century.

Beginning in the early 1740s the renewed interest in indirect taxation was connected with the appearance of a persistent deficit and the rise of military expenditures caused by a more forceful foreign policy. It was no coincidence that the first project to increase revenue from the sale of salt and liquor should have been submitted in 1743 during the war with Sweden.

The author of the policy of maximizing indirect revenue was Petr Ivanovič Šuvalov, the chief of the artillery, whose thinking so dominated Russian economic policy in the 1750s that he was in fact a minister of the economy.<sup>8</sup> Indirect revenue should be used not only to defray part of the military expenditures but also to relieve the burden of the capitation. The

Rossii vo vtoroj polovine XVIII veka (Istoriko-ekonomičeskij očerk). Moskva 1957, p. 410. There are at least two very useful introductions to the importance of salt: A. SCHMIDT *Das Salz. Eine volkswirtschaftliche und finanzielle Studie*. Leipzig 1874, esp. pp. 1–33, and M. J. SCHLEIDEN *Das Salz. Seine Geschichte, seine Symbolik und seine Bedeutung im Menschenleben*. Leipzig 1875. An interesting contemporary statement is W. H. A Letter to the Right Hon. Nich. Vansittart on the Benefits which would result to the Poor, and the Advantages which would accrue to the Agriculture, the Fisheries, the Manufactures, and the Commerce, of the United Kingdom, from a Repeal of the Duty on Salt. Liverpool 1816, and also: *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers*. Vol. 30, Berne, Lausanne 1780, article "Sel". For Germany see W. KAISER *Die Geschichte der Unternehmung und des staatlichen Einflusses in der Salzindustrie Hannovers und Westfalens bis zum Ende des 18. Jahrhunderts*. Köln 1938, and for the *gabelle* in France a handy survey may be found in J. PASQUIER *L'impôt des gabelles en France aux XVII et XVIII siècles*. Paris 1905.

<sup>6</sup> N. V. USTJUGOV *Solevarennaja promyšlennost' Soli Kamskoj v XVII veke. K voprosu o genezise kapitalističeskich otnošenij v russkoj promyšlennosti*. Moskva 1957, esp. pp. 134–143.

<sup>7</sup> *TROIČKIJ Finansovaja politika* pp. 98, 160–165; I. S. BLOCH *Finansy Rossii XIX stoletija*. 4 vols. S.-Peterburg 1882, here vol. 3, p. 69.

<sup>8</sup> *TROIČKIJ Finansovaja politika* pp. 55, 62–71; *Russkij biografičeskij slovar'*. Vol. 23, S.-Peterburg 1911, pp. 490–503, esp. pp. 491–492; E. AMBURGER *Geschichte der Behördenorganisation Rußlands von Peter dem Großen bis 1917*. Leiden 1966, p. 16 (= *Studien zur Geschichte Osteuropas* vol. 10).

capitation was indeed reduced from 1750 to 1756 when the heavy outlays made necessary by the Seven Years' War forced the channelling of all available funds into the war effort. The link between rising military expenditures and higher prices for salt and liquor has been pointed out by ТРОИЦКИЙ who noted the parallelism between this operation and the introduction of the capitation: in both cases the rate was calculated on the basis of anticipated receipts to be assigned to pay for a definite category of military expenditures.<sup>9</sup>

Looking ahead, the abolition of internal customs designed to foster internal trade could be expected to keep raising indirect revenue since the latter was so dependent upon the level of economic exchanges. Thus the new fiscal policy was part of a broader conception of economic policy in general that placed less emphasis on extorting cash from the population at any costs and more on tapping the sources of wealth and, by doing so, associating the rise of revenue with the development of trade and industry.

The first expression of the new policy was a steep increase in the price of salt. In January 1750 the price of a pud of salt was raised from about 21 kopeks to 35 kopeks and in August 1756, at the outset of the Seven Years' War, to 50 kopeks. This was a dangerous expedient and it backfired in the form of reduced consumption and increased smuggling. In 1751 several police agencies were set up to block the smuggling of salt along the middle course of the Volga. Salt became out of reach for so many that one of the first acts of Catherine was to reduce the price by 20% to 40 kopeks in July 1762. Yet the price increases in the 1750s had been large enough to offset reduced sales and the state's net revenue rose from 800 000 rubles in 1749 to 2,2 million rubles in 1761.<sup>10</sup>

The second component of Šuvalov's policy was to open up new and possibly cheaper sources of salt. The production of Perm' (Solikamsk) salt could not be raised beyond a certain level because it depended on the availability of labor, the supply of wood fuel, and the length of the work season.<sup>11</sup> In the late 1740s the state began the exploitation of Ileck rock salt and, more important, the extraction of salt from Lake Èpton. Transportation costs, however, were so great, resulting in part from the insecurity of the trans-Volga region, that these salts could only supplement Perm' salt, not replace it. The result of this increased production was the closing of older but uneconomical sources, at Bachmut, Staraja Russa, Balachna and Soligalič.

But Šuvalov's policy only created an ambiguous situation because it rested on a contradiction: raising the price of salt cancelled part of the benefits that could be expected from the rise in supply. Catherine's policy was wiser. It combined a cut in prices with a major effort to develop production, and it resulted in making salt available everywhere at a reasonable price.

During the first decade of her reign, however, little was done beyond reducing the price of salt. A commission of three members under general Fermor was set up in 1764 to make a thorough examination of the salt trade and to recommend measures to remove widespread abuses. It was closed in 1768 and its work left little mark on legislation. In 1771 the president of the College of Audit was transferred to the Main Salt Board ostensibly to remedy a chaotic situation. It was decided in 1772 to reorganize the Board, to require it to purchase enough salt to have a permanent two-year reserve always available, and to improve the accounting

<sup>9</sup> ТРОИЦКИЙ *Finansovaja politika* p. 66.

<sup>10</sup> ТРОИЦКИЙ *Finansovaja politika* pp. 166–170, 56–57, 108–109; S. M. SOLOVEV *Istorija Rossii s drevnejšich vremen*. Kniga 1–15. Moskva 1959–1966, here kn. 11 (1963), pp. 457–458, kn. 12 (1964), pp. 14, 115–116, 175–177, 381.

<sup>11</sup> SOLOVEV *Istorija Rossii* kn. 11, pp. 340–343.

procedures.<sup>12</sup> Four years later, however, a major reform of local government began to take effect and the salt administration was integrated into the new structure. This was the purpose of the code of 1781. We may now examine in greater detail the operation of the salt monopoly in the last two decades of the eighteenth century after first describing the major sources of salt production.

## I

The major supplier of salt in the Empire was the province of Perm, also well-known as the heart of Russian metallurgy in the eighteenth century. Natural brines were found on the western slopes of the Ural mountains in the region of Solikamsk, which got its name from its location on the Kama river. The introduction of the salt monopoly in 1705 dealt a death blow to the small producers who had not yet been forced out of business by the ruthless enterprise of Grigorij Dmitrievič Stroganov, and throughout the eighteenth century there remained only three major groups of producers.<sup>13</sup> One was the Stroganov family whose holdings were concentrated on the right bank of the Kama. They were required to produce three million puds a year out of a total of 5,2 million in 1789. The other was the Pyskorskij monastery built on land granted by the Stroganovs at Dedjuchin, a swampy lowland on the left bank of the Kama, twenty-five versts downstream from Solikamsk. In 1764, following the secularization of church properties, the saltworks were transferred to the jurisdiction of the Treasury. Some four hundred peasants were attached to the works in the 1770s and produced 1,2 million puds in 1789. The other million puds was shared by a combination of several producers that included the Rostovščikovs and the Surovcovs who were already engaged in the salt trade in the seventeenth century.<sup>14</sup>

Perm salt was produced exclusively from natural brines. Production techniques were relatively simple, but they required careful supervision and consumed large quantities of firewood. It was first necessary to pump up the brackish water to the surface or, in favorable circumstances, to tap an artesian source. The next step was to remove the suspended impurities and to increase the salinity of the solution – even a rich natural brine might include but three percent of salt – by exposing it to the sun so as to cause evaporation. This was done by various methods, their chief purpose being to create maximum exposure and ventilation.

<sup>12</sup> Polnoe sobranie zakonov Rossijskoj imperii, s 1649 goda. Sobr. 1. S.-Peterburg 1830 (hereafter cited PSZ). 1764, N. 12105; 1768, N. 13137; and 1772, N. 13784; N. D. ČIČULIN *Očerki po istorii russkich finansov v carstvovanie Ekateriny II*. S.-Peterburg 1906, pp. 187–190.

<sup>13</sup> USTJUGOV *Solevarennaja promyšlennost'* p. 97.

<sup>14</sup> *Ėnciklopedičeskij slovar'*. Izd. F. A. Brokgauz, I. A. Efron (hereafter cited *ĖS*). Vol. X (19), S.-Peterburg 1893, p. 277; PSZ 1770, N. 13492; 1788, N. 16736, p. 1141. The best historical survey of the Perm saltworks is *Ė. JA. ROZEN* *Permjanka. Istoriya soljanogo proizvodstva v Prikam'e*. Perm 1965: see pp. 40–41, 45 for the names of the major producers. They included, beside the Stroganovs and these two *kupcy* families, the Lazarevs and Vsevoložskijs who rented part of the Stroganovs' works, and the princesses Golicyna and Šachovskaja. The four production sites were Dedjuchin, Usol'e, Lenva and Solikamsk: V. LJUBARSKIJ *O solevarenii na Permskich promyslach*, in: *Gornyj žurnal* (1825) kn. 1 (July), pp. 109, 112; the first three sites were within a few miles of each other: *Svedenija o Dedjuchinskom solevarennom zavode*, in: *Gornyj žurnal* (1827) kn. 6 (June), p. 107. These and other articles from the "Gornyj žurnal" cited below deal almost exclusively with the technical process of salt production. See also: *Dnevnyja zapiski putešestvija Ivana Lepechina po raznym provincijam Rossijskago gosudarstva. Čast' 3* (v 1771 g.) 2nd ed. S.-Peterburg 1814, pp. 128–135; N. P. RYČKOV *Prodolženie Žurnala ili Dnevnyh zapisok putešestvija kapitana Ryčkova po raznym provincijam Rossijskago gosudarstva v 1770 godu*. S.-Peterburg 1772, pp. 82–97.

The brine was then poured into large horizontal pans [*čreny*] under which a fire was kept going without interruption. The brine was brought to the boiling point and kept boiling for several hours. Impurities sank to the bottom or rose to the surface and were removed with a long hoe-like instrument called a *kočerga*. Then precipitation began. Heat was reduced and when little of the mother-liquor remained the salt was raked away. Boiling down the brine took about six hours, and the precipitation lasted from half a day to three days depending on the desired grain of salt. The most delicate part of the operation was the control of the temperature in order to produce the required grade of salt: the several salts in the brine separate in order of their solubility, and carelessness could result in the production of coarse salt where fine table salt was needed. Atmospheric conditions very much influenced the entire process, as fog and rain prevented evaporation and delayed precipitation. Finally, the salt was stored in a wooden barn to prevent its absorbing the ambient moisture and packed in barrels or mat-bags [*kuli*] of various sizes. Salt pans were grouped into saltworks [*varnicy*]. They were so interspersed as to prevent the steam and smoke of some from drifting over to the others and giving the salt a grey coloration, and each *varnica* included about a dozen pans.<sup>15</sup>

Perm salt was comparatively cheap in Russia because it was produced by serf labor and its superior quality made it the favorite of the Russian consumer. Serf owners in the Solikamsk area were paid by the state nine kopeks per pud and those further south eight kopeks. In 1790 a uniform price of 9½ kopeks was granted to all Perm producers. In addition, they were required to ship their salt to Nižnij Novgorod for which the state paid them an additional six kopeks per pud. Thus the total cost of Perm salt at Nižnij Novgorod was 14 or 15 kopeks per pud until 1790 and 15½ kopeks thereafter. The salt from the state-owned works at Dedjuchin continued to be used to supply Perm and Vjatka provinces and cost 9½ kopeks to produce.<sup>16</sup>

At the southern end of the Ural range, sixty versts south from Orenburg, exploitation by the state of a huge underground salt dome began in 1754 near the Ilek river. Rock salt is of lesser quality than salt obtained by boiling – it dissolves more slowly and is never free from impurities – but it is easier to obtain. Petr Ivanovič Ryčkov, who became the administrator of the mine in 1770, pronounced it so pure that it could not be distinguished from sugar, although the Salt Board in Moscow was of a different opinion. The Board was probably right because rock salt strata are usually interbedded with thin layers of gypsum. The salt was extracted in the form of large blocks weighing thirty to forty puds, then broken up with hammers. In such blocks a “heart” was sometimes found as pure and clear as crystal. But salt dust often became mixed with dirt and sand on the way to the stores and this lowered its general quality.

The Ilek deposit – the settlement was called Ileckaja Zaščita and was state property – occupied an area of four square versts and was of unknown depth at the time. It had the rare advantage of being near the surface beneath a layer of sandy marl. Open-pit mining was thus possible and it was carried out by hard labor convicts serving a life sentence. Three hundred were sent there in 1773 and three score were still alive at the end of the century. No replacements were sent because Ileck salt suffered from a crushing inconvenience despite its insignificant cost: there was no way to transport it to European Russia in any large amount

<sup>15</sup> *ES* vol. XXXA (60), S.-Peterburg 1900, pp. 827–836. A *kul'* was also a unit of weight equivalent to nine puds: V. N. JAKOVCEVSKIJ *Kupečeskij kapital v feodal'no-krepostničeskoj Rossii*. Moskva 1953, p. 111.

<sup>16</sup> PSZ 1783, N. 15880, pt. 2; 1790, N. 16847.

since the road from Orenburg to Samara was not opened until 1810 and the roundabout way to the Volga through the Belaja was not considered convenient. The salt was carted away to Orenburg by private carriers and consumed locally. Production fell from 750 000 puds in the early 1780s to 275 000 puds in 1789.<sup>17</sup>

The second major source of salt after Perm province was Lake Ėl'ton, 120 versts to the east of the Volga in Saratov province. This lake, together with a large number of smaller lakes in Astrachań province, constituted the largest supply of lake salt in the Empire. Salt lakes usually owe their salinity to the sea water that filled the depression they now occupy, to the hot and dry climate that fosters evaporation and to the limited inflow of fresh water. The Caspian depression, for example, is said to contain some 2000 lakes. Lake Ėl'ton has an area of 160 square versts and its approaches are made difficult by the muddy and slimy banks caused by the sedimentation of marls and clays. Like most salt lakes it is very shallow. Its waters, called *rapa*, reached a level of about sixty inches in the spring but almost completely evaporated by the end of the summer. As the level fell, salinity rose and precipitation took place: this newly-formed salt was called *novosadočnaja sol'*. It was, however, only a small part of the lake's total yield. To obtain the other salt it was necessary to "mine" it in very much the same way as it was done at Ileckaja Zaščita with the difference that lake salt is much softer material than rock salt. Layers of salt were interbedded with layers of clay, and chunks of salt had to be cleaned on the spot by rinsing in *rapa*, then were piled up in mounds [*bugry*] and left to dry. They were then ready for transportation by cart to the Kamyšin (Dmitrievsk) stores on the Volga or to Saratov, 220 versts away.

The supply of Ėl'ton salt, according to the Senate report of 1788, could be considered inexhaustible. But here again the isolation of the lake from population centers, the long trip to the Volga in hot weather on dusty roads through clouds of flies and the occasional threat of attack by the Kalmucks limited production. Extraction of Ėl'ton salt began in 1748 and reached nearly 4,5 million puds in 1765. It was down to 3,2 million puds in 1788. This salt was extracted by "salt breakers" [*lomščiki*] who charged from fifteen to fifty kopeks for a load [*fura*] of up to sixty puds and was carted away by carriers who were paid by the state five kopeks a pud to Kamyšin or eight kopeks to Saratov. In 1788 following a cattle plague that decimated their oxen the Treasury granted them an increase to 6<sup>3</sup>/<sub>4</sub> and 9<sup>3</sup>/<sub>4</sub> kopeks respectively.<sup>18</sup>

The other salts produced in the region were lumped together under the general term „Astrachań salts“ or *buzun*. Lake Baskunčak, later to become even more important than Lake Ėl'ton, provided only a small amount. Lake Manyč was even more inaccessible.

<sup>17</sup> ĖS vol. XXX<sup>A</sup> (60), pp. 824–825; vol. XII<sup>A</sup> (24), S.-Peterburg 1894, p. 915; PSZ 1788, N. 16736, p. 1143; 1801, N. 19928; P. I. RYCKOV Topografija Orenburgskoj gubernii, in: Orenburgskie stepi v trudach P. I. Ryčkova, Ė. A. Ebersmanna, S. S. Neustrueva. Moskva 1949, pp. 80–82; SOLOVEV Istorija Rossii kn. 13 (1965), pp. 234–235; Ob Ileckich soljanych kopjach, in: Gornyj žurnal (1828) kn. 3 (March), pp. 111–137; N. P. RYCKOV Žurnal ili Dnevnyja zapiski putešestvija kapitana Ryčkova po raznym provincijam Rossijskago gosudarstva v 1769 i 1770 godach. 2 vols. S.-Peterburg 1770–1772, here vol. 1, pp. 131–133 and pp. 40–41; P. S. PALLAS Reise durch verschiedene Provinzen des Russischen Reiches. 3 vols. S.-Peterburg 1771–1776, here vol. 1, pp. 237–245.

<sup>18</sup> ĖS vol. XIV (27), S.-Peterburg 1895, pp. 149–150; vol. XXX<sup>A</sup> (60), p. 827; PSZ 1788, N. 16736, pp. 1140–1141; I. G. ROZNER Jaik pered burej. Moskva 1966, p. 93 (for the health hazards that accompanied the extraction of Ėl'ton salt); PALLAS Reise vol. 3, pp. 630–636; Dnevnyja zapiski putešestvija Ivana Lepechina . . . Čast' 1, 2nd ed. S.-Peterburg 1795, pp. 399–412; Ėl'tonskoe soljanoe ozero, in: Gornyj žurnal (1827) kn. 9 (Sept.), pp. 111–133.

Another source – unusual in the region – was the rock salt of Čapčaci, eighty versts from Lake Baskunčak. The Russians first heard about it from the Kalmucks in 1768 and several explorers of the region took note of it. Astrachan salts were used mostly for local consumption and in the fishing industry of the Caspian Sea and the lower Volga. They were drier than Ėpton salt and for this reason were not popular with carriers. The salt code gave them no bonus for losses due to the drying up of wet salt nor for transportation losses (*utečka i usečka*), and so the amount lost had to be paid for from their own pockets. They were also more expensive to extract. Production exceeded two million puds in the 1780s.<sup>19</sup>

Salt lakes were also found in the Crimea especially around Kinburn, the Perekop isthmus, and Kozlov. Before the annexation of the peninsula in 1783 the Khan farmed out the collection of the salt revenue which made up some sixty percent of his income. The Russians took over the exploitation of the lakes and hired labor to extract the salt at two kopeks per pud in 1787. But a reliable work force was hard to find in such a sparsely populated region and the extraction usually coincided with the harvest from which the peasants were removed by force to work in the lakes. As a result the revenue fell until the governor-general of New Russia and the Crimea Platon Aleksandrovič Zubov suggested in 1794 to restore the farming out of the lakes to private enterprise. The annexation had ended the chronic insecurity of the region and the second partition of Poland brought into the Russian ambit territories which had formerly been supplied with Crimean salt.

The arrangement proposed by Zubov provided that the tax-farmer – who would pledge between 250 000 and 300 000 rubles to the Treasury – would not mine the salt himself but would charge traders ten rubles for each ninety-pud load hauled away from the mounds or from the stores; if they took the salt directly from the lakes they would receive a bonus of three puds per load for losses [*rastruska*] incurred in the process. If the Treasury needed salt for shipment anywhere, it would pay the tax-farmer ten kopeks per pud. The latter would take over the existing stores and their contents on the condition that he return both to the Treasury at the end of four years. The new system seems to have worked well and the lakes yielded three million puds at the end of the eighteenth century.<sup>20</sup>

Moving northward across the whole expanse of European Russia we find another source of salt at the other end of the arc of circle into which the major deposits were arranged: the sea salt of *Pomoře* – the coastal margin from Keń to Archangeľsk – and the brines of Vologda province along the axis Vologda–Jarensk. Along the coast of the White Sea salt water moved in and out with the tides, invaded lagoons in which the coastline abounds and penetrated sedimentary formations. Salt water, heavier than fresh water, sank underground and formed sources that could be tapped. The climate did not permit the commercial exploitation of seawater – total production in 1788 was only 106 000 puds – but brines, already concentrated, could be boiled as in Perrñ province. *Pomorskaja* salt (also called *morjanka*) was

<sup>19</sup> ĖS vol. XXXVIII (75), S.-Peterburg 1903, p. 390; PSZ 1788, N. 16736, pp. 1142–1143; ROZNER Jaik p. 63; PALLAS Reise vol. 1, pp. 406–409, vol. 3, pp. 543–546; S. G. GMELIN Reise durch Rußland zur Untersuchung der drey Natur-Reiche. 4 vols. S.-Peterburg 1770 [?]–1784, here vol. 2, pp. 249–260; Dnevnyja zapiski putešestvija Ivana Lepechina . . . Čast' 1, 2nd ed. S.-Peterburg 1795, pp. 493–494; Inderskoe soljanoe ozero, in: Gornyj žurnal (1827) kn. 8 (August), pp. 109–114.

<sup>20</sup> PSZ 1794, N. 17186; E. I. DRUZININA Severnoe Pričernomoře v 1775–1800 gg. Moskva 1959, pp. 55, 85, 138–139, 141, 178; N. SUŠKOV O krymskich soljnych istočnikach, in: Gornyj žurnal (1827) kn. 3 (March), pp. 89–120; P. PALLAS Kratkoe fizičeskoe i topografičeskoe opisanie Tavričeskoj oblasti. S.-Peterburg 1795, pp. 35–39; Zapiski D. B. Mertvago 1760–1824, in: Russkij archiv (1867), supplement, col. 171.

produced at Sumskij posad and Njuchotskoe below Kem', and at Ludskij, Unskij and Nenokskij west of Archangel'sk, and along the Kuloj river north of Pudož. Vologda salt was produced at Tořma and nearby Ledengskij, at Soľvyčegodsk and Sergovskoe, an important landing on the Vyma, 104 versts east of Jarensk. The annual quota of both *Pomorskaja* and Vologda salt was 466 000 puds in 1788 and was raised to 562 000 puds in 1789.

This salt was expensive to produce and one of the reasons for the decline in production in the 1760s and 1770s was the refusal of the Treasury to pay adequate compensation to producers. Some producers claimed in the 1770s that it cost them ten or eleven kopeks to produce a pud of salt, but the Treasury paid only from seven to four kopeks depending on the location. The environment was unsuitable. Firewood had to be hauled over ten or fifteen versts, there was no arable land to grow crops and food was expensive to obtain. But the policy of the government in the 1780s to make as many areas as possible self-supporting in salt in order to reduce high transportation costs forced the Treasury to raise its payments to the producers. The 1783 *ukaz* set new prices which varied from place to place: the average was 12¼ kopeks per pud.<sup>21</sup>

Salt was also found in several other places within European Russia, but the two most important places were Balachna and Staraja Russa. Balachna is on the Volga, twenty-five versts upstream from Nižnij Novgorod, and local salt was produced there until operations ceased in 1753 due to the shortage of firewood and the marketing of the new salt from Lake Ėřton. Thirty years later Catherine ordered the governor-general of Nižnij Novgorod and Penza Rebinder to re-open the state-owned works and to invite private producers to renew production and submit bids. The reason behind this decision was to reduce the immediate demand on the Nižnij Novgorod depot which acted as a clearing house for all shipments of Perm' salt to the central provinces. This was only an expedient, however, as the Balachna salt was not economical to produce. In 1788 the state-owned works supplied 200 000 puds at 13½ kopeks per pud and private producers sold their 530 000 puds to the state for 19½ kopeks. The entire production was shipped mostly to Rjazań and Petersburg provinces until the temporary shortage in Perm' salt eased and was then cut to 440 000 puds to supply the needs of Nižnij Novgorod province alone.<sup>22</sup>

Staraja Russa was the center of salt production in the northwest, and at the beginning of the eighteenth century some seventy *varnicy* belonged to the Treasury, monasteries and private producers. In 1731 the annual quota of salt was fixed at 312 364 puds to supply towns in Novgorod, Pskov and Petersburg provinces. Production costs were high and, together with the cost of transport, brought the price to 20⅓ kopeks per pud. In 1759 the Senate ordered the Treasury to stop buying this salt and the works closed. But in 1771 general Bauer, Quartermaster General of the army and later commanding general of the Engineers, obtained a concession to reopen the Staraja Russa works with himself as director subordinated to the Empress alone. He proposed to raise production to 300 000 puds by 1777 at less than thirty kopeks a pud. After 1777 he pledged to cut production costs to seven kopeks. The

<sup>21</sup> PSZ 1774, N. 14128; 1776, N. 14466; 1783, N. 15827; 1788, N. 16736, pp. 1147–1148; J. A. BALAGUROV *Pripisnye krest'jane Karelii v XVIII–XIX vv.* Petrozavodsk 1962, p. 186; N. M. RASKIN, I. I. ŠAFRANOVSKIJ Ėrik Gustavovič Laksman. *Vydajuščijsja putešestvennik i naturalist XVIII v.* Leningrad 1971, p. 105 (= *Akademija nauk SSSR. Naučno-biografičeskaja serija*); *Dnevnyja zapiski putešestvija Ivana Lepechina . . . Čast' 3*, pp. 292–294 and *Čast' 4*, S.-Peterburg 1805, pp. 32–35.

<sup>22</sup> PSZ 1785, N. 16155 and 16305; 1788, N. 16736, pp. 1146–1147. The shortage of Perm' salt is discussed in part II.

concession was a failure and the tension between the administration staffed with native Germans and the Russian workforce may not have been its least important cause. The works never produced the promised amount and the average for the years 1777–1785 was 150 000 puds a year at twenty kopeks per pud. This was a high price to pay but Staraja Russa salt could be competitive with Perm salt in the Novgorod region where high transportation costs made the price of even Perm salt prohibitive. After the death of Bauer in 1783 the saltworks passed under state administration.<sup>23</sup>

Two other sources of salt may briefly be mentioned to conclude this survey of salt production in European Russia. In Ekaterinoslav province the state-owned works of Bachmut and Tor (Slavjansk) were supplying salt to the garrisons that manned the southern defense line against the incursions of the Crimean Tartars. The creation of the province of New Russia in 1764 made their existence no longer necessary and the works were turned over to private enterprise. Later the southward shift of the Russian frontier after the first Turkish war and the proximity of Crimean salt made them superfluous. Production was down to 14 200 puds in 1774 from about 300 000 puds in 1767 and their operations ceased altogether in 1782. The high cost of firewood certainly played a role: the discovery of coal near Lugansk was used to justify their reopening in 1798.<sup>24</sup>

The other source was the Soligalič saltworks in Kostroma province. They were in operation until 1753 when the area began to be supplied with Ėpton salt through Nižnij Novgorod. However, it proved difficult to ship the salt from Nižnij Novgorod and, in line with the policy of the government to develop local production in order to reduce dependence on faraway salt, an attempt was made to reopen the Soligalič works. Several merchants pledged to produce 200 000 puds a year at 12½ kopeks. Nothing was said about transportation costs or the availability of firewood, but it was estimated that this salt would cost 7½ kopeks less than Perm salt and 19 kopeks less than Ėpton salt. However, nothing seems to have come of the attempt because this salt is not listed in the production tables for 1788–1789.<sup>25</sup>

In the eighteenth century Siberia was still a closed regional economy as it was not connected with the Kama-Volga network by any convenient road or river. Salt was found in abundance in the region but no thought could be given to shipping it across the Urals. It was costly enough to supply the population centers of Siberia from the three major centers of salt production.

The first consisted of a group of lakes in the west Siberian depression. In Kolyvañ province there were more than twenty lakes. The most important was Lake Korjakov, twenty-one versts from the Irtyš north of Pavlodar. It cost only 1‰ kopeks to produce and transport to the store on the Irtyš. Production levels varied from year to year: in 1774 258 000 puds

<sup>23</sup> PSZ 1788, N. 16736, pp. 1145–1146; 1771, N. 13564; 1799, N. 14866; 1784, N. 16051; 1786, N. 16492; A. SLEZKINSKIJ Volokita staroruskago magistrata, in: *Russkaja starina* (1899) kn. 2, pp. 475–480; Ju. R. KLOKMAN *Očerki social'no-ekonomičeskoj istorii gorodov severo-zapada Rossii v seredine XVIII v.* Moskva 1960, pp. 51–53; I. ČAJKOVSKIJ *Opisanie Staroruskago solevarennogo zavoda*, in: *Gornyj žurnal* (1825) kn. 4 (October), pp. 95–121; N. JA. OZERECKOVSKIJ *Obozrenie mest ot Sanktpeterburga do Staroj Rusy i na obratnom puti*. S.-Peterburg 1808, pp. 53–56, 64–67, 74–76. – Staraja Russa was often spelled with only one *s* in the eighteenth century; I have used the modern spelling.

<sup>24</sup> PSZ 1765, N. 12409; 1781, N. 15174, art. 10; 1798, N. 18348; DRUZININA *Severnoe Pričernomoře* p. 55; J. A. GOLDENSTADT *Reisen durch Rußland und im Caucasischen Gebürge*. Vol. 2, S.-Peterburg 1791, pp. 235–253.

<sup>25</sup> PSZ 1771, N. 13626.

were extracted from it. Upstream from Pavlodar were the Jamyšev lakes which yielded 21 000 puds in that year. Finally, there was Lake Burlinskoe, further east toward the Ob', 220 versts away where a store was built to accommodate its production before it was shipped down the river. Total production in 1774 was 29 000 puds. While more expensive than Korjakov salt, eight kopeks a pud was still a reasonable price. Altogether, this Kolyvaň group of lakes yielded 541 000 puds in 1788.

The second center consisted of two saltworks near the Enisej river that belonged to two monasteries until 1764 when they passed under state control. The total production, under 20 000 puds, was consumed locally. The third center, in eastern Siberia, was more important and produced 97 000 puds a year. Most of it was extracted from Lake Borzinskoe, 200 versts south of Nerčinsk near the Chinese border where the governor of Irkutsk proposed in 1770 to develop a permanent settlement, or was produced at state-owned and private saltworks near Lake Selenginskoe, south of Lake Bajkal, forty versts from Selenginsk. Production costs varied widely from 2½ kopeks to 10 kopeks per pud, and it was also consumed locally. It may also be of interest to mention the extraction of salt from sea water near Ochotsk. The operation began in 1735 but its cost was prohibitive: 94 kopeks per pud in the 1780s.<sup>26</sup>

It may be convenient to summarize now the above findings in the form of a table. For the sake of consistency I have selected the figures for 1788 found in the Senate's report of December 1788 which clearly show the relative importance of each separate source of salt and its cost to the state.

Table 1: Salt Production in 1788

Source of salt	Production (in puds)	Cost per pud (in kopeks)
1. Perrñ	4 300 015	8–9
2. Ileck	748 386	¾
3. Èpton	3 228 335	9¼ & 6¼
4. Astrachaň	2 144 627	5 <sup>9</sup> / <sub>10</sub>
5. Crimean	499 490	45
6. <i>Pomorskaja &amp; Vologda</i>	465 887	12¼
7. Balachna	772 329	13½ & 19½
8. Staraja Russa	117 395	20
9. Kolyvaň	540 553	1 <sup>9</sup> / <sub>10</sub> to 8
10. Enisej	19 851	12
11. Irkutsk	96 558	2½ to 10
Total	12 933 428 <sup>27</sup>	

<sup>26</sup> PSZ 1788, N. 16736, pp. 1144–1145; 1781, N. 15174, art. 10; ÈS vol. V (9), S.-Peterburg 1891, p. 41, vol. XLI<sup>A</sup> (82), S.-Peterburg 1904, p. 665, vol. XXIX (57), S.-Peterburg 1900, p. 347, vol. IV (7), S.-Peterburg 1891, p. 401; F. I. Sojmonov, in: Russkij biografičeskij slovař. Vol. 19, S.-Peterburg 1909, p. 46; RASKIN, ŠAFRANOVSKIJ Laksman pp. 67, 255 ff. Laksman discovered a huge salt mountain near the Kempendjaj river, a tributary of the Viljuj in Yakutia in 1789, but its exploitation was unthinkable at the time: RASKIN, ŠAFRANOVSKIJ Laksman pp. 155, 233. See also PALLAS Reise vol. 2, pp. 476–483, vol. 3, pp. 281–283; Svedenija o Selenginskom solevarennom zavode, so vremeni perechoda ego v kazennoe upravlenie po 1818 god, in: Gornyj žurnal (1828) kn. 2 (Feb.), pp. 77–101.

<sup>27</sup> This total figure includes the fractions of pud not shown here. At 36,1 lbs a pud it is the equivalent of 466 896 750 lbs or 208 436 tons.

A few comments are in order. It is necessary first to remember that the cost of Perm salt was the price paid to producers at the source while that of Ėlton and Astrachan salts was the cost at the stores on the Volga. If we add the cost of transporting Perm salt to the Nižnij Novgorod depot, then the real cost of Perm salt to the state was 15½ kopeks in 1790. Thus, of the three most important sources Astrachan salt was the cheapest followed by Ėlton and Perm salts, but difficulties in transportation gave a net advantage to the last two. Second, the table shows that salt from central Russia was far more expensive and in fact uneconomical to produce. For this reason, its production was sharply reduced after 1788. Finally, the high cost of Crimean salt was explained by the tense situation in the area in 1788.

## II

In the decade following the introduction of the code of 1781, the total production of salt was determined, as will be shown, not only by the annual consumption but also by the requirement to maintain in each province a permanent reserve equivalent to twice the annual consumption in the province. Before we examine the procedures by which salts were shipped and stored it is necessary to glance briefly at their distribution which was largely dependent on two factors: access to major waterways and transportation costs. This can be done by studying the production and distribution tables prepared by the Main Salt Board in Moscow and later by the Expedition of State Revenues in Petersburg. Two of these are available in the Collection of Laws – one dated 1783 and the other 1788 – and they will serve as a major source of reference in the following discussion.<sup>28</sup>

In 1783 European Russia was unevenly divided into several regions, each supplied with salts of different origin. The entire north, soon to include the three provinces of Archanġel'sk, Vologda and Olonec, was supplied with local salt from Vologda and *Pomoře*. Further west the three Baltic provinces of Vyborg, Estonia and Latvia retained their earlier privileges confirmed by Catherine to consume salt imported from abroad, mostly from Spain and Portugal. The tariffs of September 1782 and September 1796 forbade the transshipment of this salt into other provinces of the Empire and limited it to local consumption. In the two Byelorussian provinces of Mogilev and Polock, annexed in 1772, imported salt could be obtained from Riga and the Crimea. A mixed system was in operation in these two provinces, and they began to be supplied with Perm salt in 1784.<sup>29</sup> Continuing counter-clockwise along the border of Great Russia, we find the three provinces of Little Russia: Kiev, Novgorod-Seversk and Černigov where a similar system was introduced: salt was imported from the Crimea and sold freely for local consumption while additional salt was brought in from Lake Ėlton. The southern provinces were supplied with Astrachan and Crimean salt. Siberia was self-sufficient.<sup>30</sup>

This leaves three regions which are of immediate interest to us.<sup>31</sup> One of them was supplied with Ileck salt: it included the provinces of Nižnij Novgorod and Ufa (Orenburg) and the

<sup>28</sup> The code is in PSZ 1781, N. 15174 and the tables are in 1783, N. 15849 and 1788, N. 16736.

<sup>29</sup> PSZ vol. 45 (Kniga tarifov), pp. 86–89, 206–208; 1773, N. 13980; 1774, N. 14127; 1789, N. 16793; 1794, N. 17242.

<sup>30</sup> PSZ 1768, N. 13213; 1769, N. 13250; 1788, N. 16736, pp. 1148–1149.

<sup>31</sup> A map showing the territorial division of the Empire may be found among those annexed to: *Očerki istorii SSSR. Period feodalizma. Rossija vo vtoroj polovine XVIII v. Pod red. A. I. Baranoviča, B. B. Kafengauza, P. K. Alefirenko [et al.]*. Moskva 1956.

eastern towns of Kazań province. Despite its size, it was still sparsely populated and its annual needs were estimated at 850 464 puds. The remainder of European Russia was divided in the east-west direction into two regions. One was a northern group of ten provinces (Vladimir, Vjatka, Kaluga, Moscow, Novgorod, Perm, Petersburg, Pskov, Smolensk, and Tver) centered around an axis that was the lifeline of the region, an uninterrupted waterway from Perm to Petersburg *via* the Kama, the Volga, the Tverca, the Msta, and the Volchov. The Oka linked its southern part with the Volga at Nižnij Novgorod. These ten provinces had a total population of 3,8 million in 1782<sup>32</sup> and their annual needs in Perm salt were set at 4 458 677 puds in 1783. The other region was a dense cluster of eleven southern provinces (Voronež, most of Kazań, Kursk, Orel, Penza, Rjazań, Saratov, Simbirsk, Tambov, Tula, and Čařkov) together with Kostroma and Jaroslavl' with a total population of 5,2 million and annual requirements of 4 550 830 puds. This salt came from Lake Ėlton.

According to the code, each treasury chamber was required to determine its approximate needs for the coming year based on the past consumption of every town and county in the province and a minimum rate of twelve to eighteen *funt* – there are forty *funt* in a pud – per registered male and female. It was not always an easy matter to anticipate accurately future consumption as the exact number of consumers was often unknown, since official statistics recognized only individuals listed in the fiscal census. Total needs also depended on the demand for salt in agriculture and in the food processing industry – the salting of meat, fish and fish-roe [*ikra*].

The central innovation of the code in matters of salt distribution was the establishment of stores in each county large enough to contain a full two-year supply of salt.<sup>33</sup> Its purpose was to guarantee a regular flow of salt everywhere and to cushion the supply mechanism against the effects of a sudden rise in demand caused either by larger needs in agriculture or industry or the neglect of local authorities resulting in a dearth of salt. Therefore the chamber was required to plan the construction of stores, one in each county, at a place easily accessible by land and especially by water. The store had to be built of baked brick – and where brick was scarce, of wood – with a wooden floor, a solid roof, and a strong lock to guard against theft; and no salt could be stored in it until the walls and the floor were absolutely dry. The chambers were given four years – until the spring of 1786 – to complete their procurement of the two-year reserve. In other words, each chamber drew up an estimate of its needs for the coming year, i. e. the anticipated amount of total consumption less whatever salt remained from previous purchases or had already been contracted for, and added an average of one half of its anticipated regular needs each year for the next four years. This estimate, together with a statement of preference based on popular tastes and considerations of cost, was submitted to the Senate where the Expedition of State Revenues drew up a general table of all salt requirements in the Empire and matched it against the existing level of production to determine whether increased production was required and, if so, where and for what destination.

If we now assume that these provisions were adequate to guarantee an uninterrupted flow of salt within each province, there remained to consider how to guarantee the same continuous supply of salt at the interprovincial level within each region assigned to Perm or

<sup>32</sup> V. M. KABUZAN *Izmenenija v razmeščanii naselenija Rossii v XVIII – pervoj polovine XIX v. (Po materialam revizij)*. Moskva 1971, pp. 95, 99, 103.

<sup>33</sup> In fact more than a year before the code governors were instructed to store a two-year supply of salt in their province: PSZ 1780, N. 14980.

Ėlton salt. To solve this difficult problem the code called for the creation of regional reserves in each province whose salt supplied other provinces. Thus in Perm and Saratov provinces the treasury chambers had to build supply depots – in addition to their own county stores – containing twice the annual amount of salt required by the provinces supplied with their salt. The creation of these depots assumed a huge increase in the production of salt for at least four years and it took in fact longer to reach the desired end. Once filled to capacity the depots would ship the quantities ordered each year by the chambers to replenish the reserves of their county stores, and the Perm and Saratov chambers would then contract for the equivalent amount from the Perm saltworks or Lake Ėlton. In doing so it was hoped that a permanent two-year stockpile at production and distribution points all over the country could cope with any variations in demand, secure the population against any dearth in salt and, most important, would keep the price of salt steady and guarantee a definite amount of revenue to the Treasury.

Ėlton salt was stored at Kamyšin, 120 versts from the lake, and at Saratov further up the Volga, 220 versts from the source. Both depots consisted of warehouses built on both banks of the Volga. Shipments from Kamyšin went to Voronež and Kursk and further south, while those from Saratov were destined either for the other provinces or the Nižnij Novgorod depot for transshipment to Kostroma and Jaroslavl'. On either side of the Volga the warehouses were run by a manager [*pristav*] who supervised storekeepers and maintenance workers with the assistance of a small staff. The four clusters of warehouses required a total staff of 121 men and cost 14 930 rubles to maintain.<sup>34</sup>

Perm salt was shipped from the works down the Kama to the Volga, then up the mighty river to Nižnij Novgorod where it was stored in state-owned and private warehouses. The table of organization of this depot was not published in the Collection of Laws but we know that it followed the structure of the Saratov warehouses. The location of the depot for Perm salt became the object of a long controversy that lasted until 1792.<sup>35</sup> It is worth examining it in some detail for the information it yields on the conditions of shipping on the Volga and the Kama.

The increased demand for salt to fill the regional depots and the county stores to full capacity would of necessity place a heavy strain on shipping facilities. The situation was made worse by paragraph 20 of the code which required the depots to combine two assets not always easily found at the same place: the depot must be located at a place where it could most conveniently be stocked and from which the salt could then be easily re-shipped to its final destinations. The most convenient place at which to fill the depot was Perm, the ideal spot from which to begin all shipments to the provinces was Nižnij Novgorod, 1400 versts away. When the code took effect it was decided to phase out the operations of the Nižnij Novgorod depot and to build a new one nearer to the saltworks. The new setup would thus resemble the one already in existence in the lower Volga in the triangle Lake Ėlton–Kamyšin–Saratov. The idea was to concentrate within a limited area both the production center and the distribution facilities so as to reduce the red tape that grew out of the constant need to adjust both production and distribution to the changing demand in distant provinces, to remove one relay between the consumer (the county store) and the producer (the saltworks). Paragraph 55 of the code placed great emphasis on the need to avoid transshipments that caused delays, losses, and inevitably resulted in petty theft at each point. Direct shipments from the Perm area to the county stores was the answer.

<sup>34</sup> PSZ 1786, N. 16313.

<sup>35</sup> For this see PSZ 1788, N. 16635 (pp. 1039–1053) and N. 166697; 1792, N. 17014.

But where exactly should the depot be built? Early in 1783 the governor-general of Perm', Lt.-Gen. Kaškin, and the treasury chamber reported to the Senate that the depot could be built either at the saltworks, or near Perm', or at the confluence of the Kama and the Volga in Kazan' province. They suggested that the last location was the best because it was impossible to do without at least one transshipment. These transshipments were made necessary by the different water level of the many rivers which, like so many capillaries, constituted the lifeline of the Russian economy. The large boats that plied the Volga unloaded their goods at major stations on the river – Nižnij Novgorod and Rybinsk – and smaller boats carrying no more than 5000 puds, capable of negotiating the shallow waters of the tributaries of the Volga, continued the trip to the final destination.

The Volga boats which carried the salt to Nižnij Novgorod were called *mežeumki* and could load up to 80 000 puds; smaller ones, called *barkoty*, carried about half that load.<sup>36</sup> The journey took them down to the mouth of the Kama near Laišev, 1000 versts from the works. There they picked up additional crew for the trip upstream to Nižnij Novgorod, 400 versts away. But there was a major problem. The ice on the Kama did not break up until early May and the river remained in full flood for no more than two weeks. To load some four million puds in such a short time required intensive work that could be interrupted at any time by bad weather. It was done quickly without the possibility of weighing each load separately so that the total shipment was reckoned in round figures (*primerno* and not *vesom i meroju*). The boats arrived at Nižnij Novgorod at the end of June or early July and unloaded. Then they were sold because it was not considered profitable to send them back up the Kama and their displacement was now too great for the Kama waters. The peasants who went down with the boats to Nižnij Novgorod did not return until late summer when the harvest was over.

So the proposed closing of the Nižnij Novgorod depot was not unwelcome to the Perm' producers. However, they were not eager to have the new depot in Perm' province on the banks of the Kama. If a depot were set up there in accordance with paragraph 55 of the code it would become necessary to abandon the heavier boats and to build a much larger number of smaller boats to transport the same amount of salt directly to its final destination. The Perm' authorities rightly calculated that to ship 3,7 million puds would require the construction of 725 boats carrying a maximum load of 5000 puds and 17 280 men to run them. This was clearly impossible as there were no sawmills in the region of the saltworks: the law forbade the use of hacked-out planks [*topornoj les*] which raised the weight of the boat and wasted wood, and required the use of lighter and drier boards [*piľnoj les*].<sup>37</sup> In addition, too few carpenters were willing to work in the forests of the north, far from the banks of the rivers where even their food supply could not be guaranteed. The serfs of the producers and the state peasants were not enough and the cost of hiring several thousand carpenters on the free market in neighboring provinces would raise the transportation costs of salt to unacceptable levels. To build the depot near Perm' would not solve the problem. The city was 900 versts

<sup>36</sup> Some could even load up to 110 000 puds and required more than 300 men to run them: N. K. KARATAEV *Očerki po istorii ěkonomičeskich nauk v Rossii XVIII veka*. Moskva 1960, p. 124. On Volga boats and shipping see also: *Dnevnyja zapiski putešestvija Ivana Lepechina . . . Čast' 1*, pp. 358–360; GMELIN *Reise* vol. 2, pp. 247–249; V. V. MAVRODIN *Krest'janskaja vojna v Rossii v 1773–1775 godach*. Vosstanie Pugačeva. Vol. 1, Leningrad 1961, pp. 306–307.

<sup>37</sup> Russian lumbermen seem to have been reluctant to give up their axes and to use sawmills. Yet the waste of wood was enormous: the axe would give one or two boards to a log, a mill six to eight: BALAGUROV *Pripisnye krest'jane* pp. 166–169.

from Laišev and carriers still would not come all the way from Petersburg or Smolensk to pick up the salt. The boats would still have to be built in Perm province and that was impossible.

So the governor-general suggested a compromise: to build the depot near Laišev in Kazań province. The producers would save the upstream trip to Nižnij Novgorod and their serfs would return to the works earlier. Laišev was a very important labor market where peasants from Kazań, Simbirsk, Nižnij Novgorod and Kostroma thronged to look for work on the Volga boats.<sup>38</sup> The Kazań treasury chamber, however, which probably did not want to be saddled with the administration of the new depot, when asked for its comment replied with the cogent argument that the proposal of the Perm authorities solved nothing: either the Volga boats must be unloaded somewhere and their salt transhipped to smaller boats bound for the center and the northwest or the smaller boats will have to be built in Kazań province; and no timber was available there for this purpose. Thus the construction of a depot at Laišev would create in Kazań province the same problems which the Perm producers found insoluble in Perm. As a result, the Senate rejected the plan in August 1783 and ordered the depot to be built near the saltworks. Meanwhile, of course, transshipments continued to be made at Nižnij Novgorod.

A site was accordingly selected at Orlinskij Bor, six to ten versts from the works. Soon, however, the treasury chamber reported that it could not find free carpenters and stonemasons as all were engaged in work in the Ural mines, and an official sent as far as Jaroslavl' could find only a few who demanded ten to twelve rubles a month plus a paid trip to Perm, which was judged excessive. Finally, when the time came in 1785 to renew the contracts for 1786–1789, the producers flatly stated they would refuse to store their salt in the depot because of the concomitant requirement that they build the boats to ship it to its destination. The Senate was somewhat ruffled by this outright refusal but agreed to their demands to build the new depot near Laišev (to be known as the Ust-Kamskie stores) at a place where earlier stores had been built then abandoned. This halfhearted solution was a disaster. The stores were built at a height of some 140 feet (20 *sažen'*) above the river bank and could accommodate only three boats at a time. In 1792 an Imperial *ukaz* ordered the closing of this new depot and the restoration of the Nižnij Novgorod facilities, and tersely reminded the producers that it had always been their obligation to supply their salt in the amount and to the destinations set by the state. Thus the attempt to improve the distribution of Perm salt had fallen victim to the insufficient development of the Ural economy, the opposition of local interests and the fragmentation of the river network.

The controversy over the location of the depot for Perm salt did not, of course, affect the production and distribution of that salt, and we may now examine how the provisions of the code concerning the storing of the two-year supply in county stores and in the depots were carried out. This requires some patient collation of data which may tax the reader's patience but which is necessary before we turn to the administration of the salt monopoly in part III.

In 1783 the total demand for a two-year supply of Èl'ton salt in the provinces was 9 102 000 puds.<sup>39</sup> Of this amount 4 783 000 puds had already been shipped and received in

<sup>38</sup> On the importance of Laišev and for a description of the trip to Rybinsk and farther up to Petersburg see B. B. KAFENGAUZ *Istorija chozjajstva Demidovych v XVIII–XIX vv.* Vol. 1, Moskva 1949, pp. 402–414.

<sup>39</sup> I use here round figures to facilitate the presentation of the material. The original figures are in PSZ 1783, N. 15849; 1785, N. 16207, and the table of 1788.

the county stores, leaving a balance of 4 319 000 puds. The Saratov treasury chamber reported that it could supply 5 394 000 puds in 1783 or 1 075 000 puds more than needed. This surplus was intended to be the first installment to be stored in the Kamyšin-Saratov depots which had to include at full capacity another two-year supply of 9 102 000 puds. Assuming that the extraction of Ėlton salt remained constant – and this depended on a number of factors such as the demand for carriers in the Volga region, an adequate supply of hay and the absence of cattle-plague such as that which decimated the herds of oxen in 1787 – it could yield a surplus of 843 000 puds over the annual demands of 4 551 000 puds. This was far from adequate and it would take just under ten years to fill the depots to capacity while the code required that this be done by 1786. And since the demand was expected to rise with the increase in population, better distribution, and the greater availability of salt, it would take even longer.

The situation with Perm salt was worse. The annual demand was about the same as that for Ėlton salt: 4 458 000 puds or 8 917 000 puds for two years of which there remained 4 388 000 puds to supply to the county stores. Unfortunately, production lagged behind that of Ėlton salt and did not exceed 4 718 000 puds in 1783, leaving a surplus of 330 000 puds for storage in the depot. To build up this reserve the Perm chamber attempted to develop production at Dedjuchin beyond the present 1 200 000 puds and to encourage private owners to boil more salt, but it could not hope to fill the depot for at least ten years.

There was, however, a solution and it was found by modifying the distribution of the various salts and marketing new salts which had been abandoned in the past. The major source was Astrachań *buzun* which it was decided to ship to Voronež, Kursk and Chařkov. Of the thirteen provinces previously supplied with Ėlton salt there now remained only ten: three (Kazań, Orel, and Simbirsk) were now to be supplied through Kamyšin, and the other seven through Saratov. The annual demand for Ėlton salt was now reduced to 3 840 000 puds or 7 680 000 in two years. The surplus of Ėlton salt would now reach 1 554 000 puds and the depot could be filled in less than five years. Further reductions were achieved by shifting the supply of Rjazań from Saratov to Balachna and shipping Astrachań *buzun* to Simbirsk as well.

The production of *buzun* was expected to reach three million puds a year which was more than enough to meet the demand and yield a substantial surplus to fill a depot containing twice the annual consumption of *buzun* to be built on the Volga at Stupin Jar, thirty-seven versts upstream from Černyj Jar. Once the depot was filled, the surplus production would be used to fill the depots of Ėlton and Perm salt. To facilitate this it was also decided to reduce the demand for Perm salt by removing Petersburg from the quota of Perm salt and supplying it with salt from Staraja Russa.

These measures resulted in considerable improvement so that by 1788 the Senate noted with satisfaction that the depots were almost full. The total supply was larger and the demand had become more evenly distributed among the various salts. It was now possible to say that the marketing of salt followed faithfully the provisions of the code. The total demand in the provinces supplied with Ėlton salt had been reduced to 3 228 000 puds – meaning a two-year supply in the depots of only 6 457 000 puds – and it seems that southern salt was no longer being sent to the Nižnij Novgorod depot. This was made possible by the increased production of Perm salt which now reached 5 171 000 puds of which the same amount (1 200 000 puds) still came from the state-owned works at Dedjuchin, while the demand remained at the high level of 4 300 000 puds a year – meaning a two-year supply of 8 600 000 puds. The Perm saltworks which produced the finest salt in Russia were again the major

producers. The reintroduction of Astrachań salt, coarse and used chiefly in salting and in agriculture in the southern provinces had made the change possible. The situation in 1788 is illustrated in Table 2.

Table 2: Consumption of Salt in 1788 (in puds by province)

<b>A. Perm' Salt</b>		<b>D. Astrachań Salt</b>	
1. Vladimir	443 471	1. Voronež	315 000
2. Vjatka	460 000	2. Kursk	517 398
3. Kaluga	371 427	3. Simbirsk	333 811
4. Moscow	711 845	4. Saratov <sup>5</sup>	12 081
5. Novgorod	431 974	5. Astrachań <i>oblast'</i>	895 687
6. Olonec <sup>1</sup>	95 988	6. Caucasian	70 648
7. Perm' <i>oblast'</i> <sup>2</sup>	199 738	Total	2 144 627
8. Pskov <sup>3</sup>	435 571	<b>E. Crimean Salt</b>	
9. Smolensk	650 000	1. Mogilev	200 000
10. Tver'	450 000	2. Chařkov	299 490
11. Polock	50 000	3. Little Russia: no data	
Total	4 300 015	Total	499 490
<b>B. Ileck Salt</b>		<b>F. Vologda &amp; Pomorskaja Salt</b>	
1. Kazań <sup>4</sup>	89 112	1. Archangel'sk	85 000
2. N. Novgorod	440 000	2. Vologda	252 059
3. Ufa	219 274	3. Olonec <sup>1</sup>	98 828
Total	748 386	Total	465 887
<b>C. Èpton Salt</b>		<b>G. Balachna Salt</b>	
1. Kazań <sup>4</sup>	318 954	1. Petersburg <sup>3</sup>	308 329
2. Kostroma	505 600	2. Rjazań	420 000
3. Orel	600 000	3. Tambov <sup>6</sup>	44 000
4. Penza	391 436	Total	772 329
5. Saratov <sup>5</sup>	246 316	<b>H. Staraja Russa Salt</b>	
6. Tambov <sup>6</sup>	422 000	1. Petersburg <sup>3</sup>	31 973
7. Tula	370 000	2. Pskov <sup>3</sup>	85 422
8. Jaroslavl'	374 028	Total	117 395
Total	3 228 335		

<sup>1</sup> Note the two sources of supply for Olonec. The total (465 887) includes 30 000 puds scheduled for export, probably to Sweden: for the chronic dearth of salt in Swedish Finland see A. P. LAJINEN *Očerki Istorii Finljandii vtoroj poloviny XVIII v. Leningrad 1972*, pp. 58–59, 61.

<sup>2</sup> Perm' *oblast'* was the western half of Perm' province; the other half across the Urals received its salt from Kolyvań province.

<sup>3</sup> Porchov and Cholm in Pskov and Luga in Petersburg provinces received their salt from Staraja Russa to which they were close while the rest of the provinces was supplied from Perm' and Balachna respectively.

<sup>4</sup> The eastern towns of Kazań province, on the left bank of the Volga, received their salt from Ileckaja Zaščita.

<sup>5</sup> Only the city of Caricyn at the southern end of Saratov province received Astrachań salt.

<sup>6</sup> Only the city of Elat' ma near the border with Nižnij Novgorod was supplied from Balachna.

For 1789 the Senate made few changes and these were designed to reduce further the cost of delivering salt. As will be shown in part III, the new salts introduced in the 1780s to reduce the demand for Ęlton salt were expensive to deliver. For this reason, with the depots nearly full, it was possible to return to the original plan to ship everywhere only Perrn and Ęlton salt except where local salts could possibly compete with them on local markets. Table 3 shows the annual production of each major salt projected for 1789 and subsequent years.

Table 3: Production Quotas for 1789 (in puds)

1. Perrn	5 294 450
2. lleck	275 007
3. Ęlton	4 177 643
4. Astrachan	966 336
5. Crimean	499 490
6. Vologda & <i>Pomoře</i>	561 875
7. Balachna	440 000
8. Staraja Russa	117 395
9. Siberian	601 230
Total	12 933 428

A comparison between Table 2 and Table 3 shows the true nature of the changes. Ęlton, Perrn and *Pomorskaja* salts were scheduled to increase by over 20% while all the other salts except those of the Crimea and of Staraja Russa were expected to decline. This, of course, brought about a few changes in the territorial distribution of the various salts. Perrn salt would now supply twelve provinces: Olonec and Polock were to receive their salt from Vologda and Staraja Russa respectively, and three new provinces were added: Kazań, Petersburg, and Jaroslavl'. The market for Perrn salt was now a compact one, even more so than in 1783, from the gulf of Finland to the Urals. The market for Astrachan salt was reduced to include only the northern Caucasus, and that of Ęlton salt accordingly enlarged to include again Voronež, Kursk, Rjazań, and Simbirsk; it lost Kazań and Jaroslavl'. The other salts served now purely local markets.

### III

We are now familiar with the location and the production of the major sources of salt, the division of the Empire into a number of marketing regions and the consumption of salt in the various provinces. We may now turn to the administrative structure through which the state exercised its monopoly over the sale of salt. To do so it is necessary first of all to distinguish between two slightly overlapping periods: one ending in the early 1780s and the other beginning with the local government reform of November 1775.

Since 1731 the operation of the salt monopoly had been centralized in the Main Salt Board. Patterned after the other colleges, it consisted of four members under a "chief judge". In 1772 it was considerably enlarged to include twelve members under a "chief director" who was also a senator. Another innovation was the division of the staff into three "expeditions". A similar structure had been introduced in other colleges in 1763 but had not affected the Salt Board. It was designed to rationalize the procedures by assigning one member and a staff to each major function carried out by the agency whose members now met in a body only to

discuss business that required joint discussion or the sanction of higher authority. Thus the first expedition supervised the personnel of subordinate agencies and the supply of salt. The second expedition had charge of the stores and kept statistics on the volume of sales and anticipated needs; the third combined accounting and investigating functions. Attached to the Board were several officers who were dispatched to the provinces whenever the immediate intervention of the Board was needed, to investigate shipwrecks, collect arrears and to report on any activity of interest to the Board.<sup>40</sup>

The Board exercised its jurisdiction through a network of local agencies called boards [*kontory*] and *komissarstva*. In 1763 the four boards were those of Petersburg, Nižnij Novgorod, Saratov (Nizovaja), and Siberia in Tobol'sk. There were three *komissarstva* on the northwest (Archangel'sk, Olonec and Pskov) and two in the east (Samara and Orenburg). The new table of organization published in 1772 illustrated the greater importance assigned to the supply of salt. New terminology, new offices, and larger staff showed the government's intention to strengthen state control over an activity that was both a source of revenue and a major contributor to the "general welfare". The most important was the chief administration of Orenburg with a staff of seventy-three headed at the time by the famous geographer Petr Ivanovič Ryčkov. It was not surprising to find the largest agency at the Ileck mines because the extraction of salt there was entirely a state-run activity while the production of salt elsewhere was either partly state-run or conducted by contract with private producers or carriers. Next in importance was the Perm *pravlenie* with a staff of forty-two under a "chief commander" with jurisdiction over the production and shipment of Dedjuchin salt. The four boards in existence in 1763 were retained with a few changes in staff – about twenty officials in each. A fifth was added at Bachmut; it had a small staff of ten. The *komissarstva* now numbered six: the same three in the northwest and two new ones. At Deškino on the Oka near Mčensk one was set up to run the stores that were the terminal point for large shipments of El'ton salt, and another at Kamyšin on the Volga. A sixth was established at Irkutsk with jurisdiction over eastern Siberia. As a rule a *komissarstvo* consisted of a few clerks working under a *komissar* who received 150 rubles while the heads of boards or similar agencies usually received either 375 or 600 rubles depending on the importance of the agency.<sup>41</sup>

This network of agencies, so widely scattered over a vast territory, constituted a specialized administration not subject to the control of the governors and the *voevody*. Members of local boards were appointed by the central government and their staff was dependent on them. As a result, it had exclusive jurisdiction in matters of salt administration. Police functions – the security of stores, control of theft and smuggling – were exercised by the *komissary* with the help of military units assigned by the College of War. The boards

<sup>40</sup> PSZ 1763, N. 11991 (Kniga štatov); 1772, N. 13887 (Kniga štatov). I have been able to trace four heads of the Board and there may have been others. S. F. Protasov (†1767) was made chief judge in 1762; P. D. Eropkin headed the Board from 1769 and sat in the V Department of the Senate; he retired in 1771. M. Ja. Maslov was appointed in 1771, was also a senator, and died in 1780. P. V. Chitrovo was the last director and was appointed in 1780; he sat in the VI Department. The last three belonged to what I have called the Procurator-General's party in my "Appointments to the Russian Senate 1762–1796" forthcoming in: Cahiers du Monde russe et soviétique. ТРОИСКИ (Finansovaja politika pp. 98–99) refers to M. S. Kožmin as chief judge in 1763; he might be the missing link between Protasov and Eropkin.

<sup>41</sup> PSZ 1763, N. 11991; 1772, N. 13887.

took action against carriers who did not fulfill their contractual obligations. The central board set production goals at the major centers and assigned the salts to their various destinations. The Perm *pravlenie* ran the state works at Dedjuchin, supplied them with firewood from state forests, equipment and labor, kept their budget, and shipped their salt to Nižnij Novgorod. The Saratov board extracted the salt from Lake El'ton, signed contracts with carriers to transport it to Kamyšin and Saratov, and released it for shipment to the provinces. The Nižnij Novgorod board fulfilled similar functions with Perm salt shipped to the depot by the private producers.

Accounting remained a sore point but the salt administration was not the only one to suffer from inadequate statistics. Much of the Russian state's activity in the eighteenth century derived from a centralist tradition that underestimated the means necessary to reach ambitious goals because the resources of the country were still insufficiently known. The geographical studies conducted under the patronage of the Academy of Sciences, the great interest in maps, the topographical surveys of the provinces, and the enormous achievement of the first cadaster were prerequisites to a better understanding of provincial realities.<sup>42</sup> But great distances and the ignorance and sloppiness of local officialdom would still impede the compilation of reliable statistics for a long time.

This was especially true in fiscal matters since the salt agencies were also tax collectors: they collected the salt revenue, spent part of it to cover their operational expenditures in accordance with the directions of the central Board and sent the remainder to the treasuries in Moscow or Petersburg. But there were often long delays and in 1770, for example, the Board complained that it still had not received either the statistics or the funds that were due in 1763. The Board itself was scandal-ridden and hardly set an example. The investigation conducted in the late 1770s revealed that it had persistently ignored the law by confirming contracts in excess of 10 000 rubles that should have been sent to the Senate, that it signed contracts without allowing for competitive bidding, and that it contracted for more than was needed while some thirteen million puds of salt were never recorded in the official statistics.<sup>43</sup> The reorganization of the Board in 1772 resulted in no improvement and the time was now ripe for a drastic restructuring of the salt administration in the wake of the local government reform of November 1775.

The Organic Law [*Učreždenie*] of November 1775<sup>44</sup> contained two major components which directly affected the salt administration. One was a territorial fragmentation intended to bring the provincial authorities closer to the realities of day-to-day administration and to make them more responsive to the needs of the population. The other was a deconcentration

<sup>42</sup> KARATAEV *Očerki po istorii ékonomičeskikh nauk* pp. 70–72, 98–109, 197–199, 121–161, 199–205; L. V. MILOV *Issledovanie ob "Ékonomičeskikh primečanijach" k General'nomu meževaniju (K istorii russkogo krest'janstva i sel'skogo chozjajstva vtoroj poloviny XVIII v.)*. Moskva 1965, pp. 74–81, 96–97; T. A. LUKINA *Ivan Ivanovič Lepechin*. Moskva 1965, pp. 24–81 (= *Akademija nauk SSSR. Naučno-biografičeskaja serija*); B. KRASNOBAEV *Očerki istorii russkoj kul'tury XVIII veka*. Moskva 1972, pp. 96–97, 115–118.

<sup>43</sup> PSZ 1770, N. 13439; *Istorija Pravitel'stvujuščago Senata za dvesti let 1711–1911*. Vol. 2, S.-Peterburg 1911, pp. 592–593.

<sup>44</sup> PSZ 1775, N. 14392. I have discussed the reform of the police in "The Provincial and Local Police under Catherine the Great, 1775–1796", in: *Canadian Slavic Studies* 4 (1970) pp. 513–528, and that of the judiciary in "The Judicial Reform of 1775 in Central Russia", in: *Jahrbücher für Geschichte Osteuropas*. N. S. 21 (1973) pp. 29–45.

of the many sectors of state administration achieved by transferring their personnel to the provinces and consolidating their activities in a small number of agencies under the authority or the control of the governors. The result was the abolition of the Main Board in 1783 of which only a small department was retained to close the old accounts. The purely fiscal duties of the Board – the drawing up of the salt budget, the collection of statistics and the over-all coordination of financial operations – were transferred to the Expedition of State Revenues, a new fiscal agency subordinated to the First Department of the Senate and to the Procurator-General who, as State Treasurer, was also a *de facto* minister of finance.<sup>45</sup> Thus policy in matters of salt administration ceased to be the preserve of an independent and specialized agency with narrow interests to defend and outdated policies to perpetuate, and became the intrinsic part of a unified fiscal policy seen for the first time as a major coordinating agent of the Imperial government.

The abolition of the Main Board marked the close of the reform since it presupposed a complete recasting of local agencies. The Organic Law established a treasury chamber in each province headed by a vice-governor who assumed jurisdiction over the collection, disbursement and transfer of funds and over state domains. In 1781 two “expeditions” were created within the chamber to take over the administration of the liquor and salt monopoly.<sup>46</sup> The basic idea behind the reform was that the provincial agencies must have the same authority as the central agencies which they were intended to replace. Thus, the treasury chambers assumed in each province the duties of the College of Revenue [*Kamer-Kollegija*] and of the Salt Board – among others – with the salt and liquor expeditions acting as a department of the chamber. In each of the twenty-six provinces of central Russia (instead of ten before 1775), there was now a financial authority capable of making decisions which had previously required the sanction of the Main Board in Moscow. This was especially true in the negotiation of contracts up to 10 000 rubles. Those in excess of this amount still required the confirmation of the Senate.<sup>47</sup>

The deconcentration of central authority was indeed strongest in the field of management. The assessment of the needs of each province, the evaluation of the qualities of various salts available and of popular tastes, the encouragement of prospecting to find new sources of salt in order to reduce dependence on either Perm or El'ton salt, the reopening of old works and mines, the operation of state-run saltworks, the study of production costs in areas deficient in firewood, the comparative estimate of the costs of transporting different kinds of salt, the location and construction of stores – all these activities were vested in the chambers and reflected the will of the government to obtain more reliable information on the true state of the salt trade by giving its local agencies a scope of activity hitherto reserved for the central Board.<sup>48</sup> Similar benefits were expected in accounting as well. In each county there was a salt store run by a manager [*pristav*] and a treasury. Both the manager and the treasurer were in

<sup>45</sup> PSZ 1783, N. 15880; 1787, N. 16597; 1784, N. 16105; 1783, N. 15894, pp. 1072–1074. The Expedition was set up in 1773 (PSZ 1773, N. 13962).

<sup>46</sup> PSZ 1781, N. 15141, par. 48–53, 62–64.

<sup>47</sup> PSZ 1775, N. 14392, art. 414, pt. 1; 1773, N. 14034. Assuming that a carrier obtained 12 kopeks per pud to transport salt to a given province, a 10 000-ruble contract would provide for the delivery of some 83 000 puds.

<sup>48</sup> PSZ 1781, N. 15174 (hereafter cited Code), par. 4–6, 11–12; PSZ 1782, N. 15454 and 1783, N. 15770 and 15849, pt. 7.

class IX, received the same salary (250 rubles), and were appointed for three years by the Procurator-General as State Treasurer who in this way controlled the entire personnel of local financial administration. Store managers notified the chamber each time they received salt from carriers. They deposited the proceeds from the sale of salt with the county treasurer each week and reported their sales to the chamber while the treasurers reported on the amount collected; discrepancies would reveal either negligence or human error.<sup>49</sup> The reform marked indeed a major change that brought day-to-day management of the salt monopoly from distant Moscow to the provincial capitals and it illustrated the importance of the local government reform of the 1770s which is one of Catherine's most remarkable achievements.

The deconcentration of the administrative machinery also entailed that the financing of the salt trade would be turned over to the financial chambers. It will be useful to examine these operations in some detail.

When the code took effect in 1781 the treasure chambers assumed jurisdiction over all salt revenues in the province and responsibility for all expenditures connected with the operation of the monopoly. The first step, it will be recalled, was to determine the level of current needs and to estimate the amount of the two-year supply to be kept in the county stores. Once this was done, the chamber had to calculate the cost of obtaining such and such salt. The cost of the salt to the state included three items. In the case of Perm salt it included the price paid to private producers or the cost of running the Dedjuchin works plus transportation costs to the Nižnij Novgorod depot. The cost of El'ton salt included the price paid to private contractors to extract the salt from the lake and transport it to Kamyšin or Saratov. To this initial cost which was basically constant and could not be changed without the approval of the Empress was added a transportation charge from the depots to the county stores. This third element was the variable in the equation with which each treasury chamber sought to estimate the cost of supplying its province. Public announcements inviting carriers to submit bids were made in the towns of the province and, if necessary, in Moscow and Petersburg as well. The contract signed in the chamber specified the quantity to supply from what depot, at what price and at what time of the year. These contracts were made and were renewable for one year until 1782. They were obviously to the advantage of carriers who adjusted their prices to fit the demand for their services. Along the Volga, at Laišev and Rybinsk, and in the south, the seasonal demand could be very high for boatmen and carters, and state agencies had to compete with private traders from Astrachan and Saratov who paid higher prices to transport their fish. In the 1760s the Main Board even felt compelled to send military officers to the central provinces to hire carriers because none could be found in the coastal towns of the Volga. As prices for free labor kept rising in the late 1770s and 1780s the state began to face too many uncertainties in the calculation of its future costs. As a result, the Senate ordered the chambers in April 1782 to draw up contracts for four years at a time, renewable after no more than three years for another four-year period.<sup>50</sup> Table 4 shows the transportation costs for 1788 in each province.

<sup>49</sup> Code, par. 24–26, 43–44; PSZ 1784, N. 16010; 1781, N. 15222; 1783, N. 15749.

<sup>50</sup> Code, par. 52–53; PSZ 1765, N. 12327; 1782, N. 15387.

Table 4: Transportation Costs in 1788 (kopeks per pud)\*

A. Perm Salt (from Nižnij Novgorod)		D. Astrachaň <i>buzun</i> (from Stupin Jar)	
1. Vladimir	9 <sup>7</sup> / <sub>10</sub>	1. Voronež	17 <sup>7</sup> / <sub>10</sub>
2. Vjatka	15 <sup>1</sup> / <sub>2</sub>	2. Kursk	19 <sup>7</sup> / <sub>10</sub>
3. Kaluga	12 <sup>1</sup> / <sub>3</sub>	3. Simbirsk	23 <sup>7</sup> / <sub>10</sub>
4. Moscow	11 <sup>1</sup> / <sub>3</sub>	4. Saratov	<sup>4</sup> / <sub>5</sub>
5. Novgorod	12 <sup>2</sup> / <sub>3</sub>	5. Astrachaň	3–7
6. Olonec	17 <sup>1</sup> / <sub>5</sub>	6. Caucasian	average of 2
7. Perm <i>oblast'</i>	7 <sup>2</sup> / <sub>5</sub>	E. Vologda & <i>Pomorskaja</i> Salt	
8. Pskov	26 <sup>1</sup> / <sub>5</sub>	– average of	10 <sup>7</sup> / <sub>10</sub>
9. Smolensk	17	F. Balachna Salt	
10. Tveř	9 <sup>1</sup> / <sub>5</sub>	1. Petersburg	19 <sup>1</sup> / <sub>2</sub>
11. Polock	27 <sup>1</sup> / <sub>2</sub>	2. Rjazaň	14 <sup>1</sup> / <sub>2</sub>
B. Ileck Salt		3. Tambov	10 <sup>1</sup> / <sub>2</sub>
1. Kazaň	25	G. Staraja Russa Salt	
2. N. Novgorod	30 <sup>1</sup> / <sub>2</sub>	1. Petersburg	7 <sup>2</sup> / <sub>5</sub>
3. Ufa	11–16 <sup>1</sup> / <sub>2</sub>	2. Pskov	5 <sup>2</sup> / <sub>5</sub> & 6 <sup>1</sup> / <sub>2</sub>
C. Èl'ton Salt (from Kamyšin or Saratov)			
1. Kazaň	17 <sup>2</sup> / <sub>5</sub>		
2. Kostroma	19 <sup>7</sup> / <sub>10</sub>		
3. Orel	24 <sup>7</sup> / <sub>10</sub>		
4. Penza	7 <sup>7</sup> / <sub>10</sub>		
5. Saratov	7 <sup>7</sup> / <sub>10</sub>		
6. Tambov	19 <sup>1</sup> / <sub>5</sub>		
7. Tula	22		
8. Jaroslavl'	20 <sup>7</sup> / <sub>10</sub>		

\* See the notes to Table 2 (p. 178). I do not have data for Crimean salt. Each figure represents an average for the province: it obviously cost more to transport salt to some county stores than to others.

The figures under D. for Simbirsk, Saratov (Caricyn) and Astrachaň include the total cost of the salt.

Once in possession of these data each chamber could determine which salt it was more economical to obtain. It had two separate funds at its disposal: one to pay for the cost of producing the salt [*priugotovitel'nyj kapital*], the other to defray transportation charges [*razvoznoj kapital*]. If the Kaluga chamber, for example, decided to order Perm salt, it transferred the necessary amount to the account of the Perm chamber and paid the carriers from the second fund after their return from Nižnij Novgorod. By the end of 1783 enough funds had been transferred from the center to the provincial treasuries to finance the operation, and from then on each chamber was expected to realize enough profit from the sale of salt to defray its expenditures. Each year it submitted its “salt budget” to the Expedition of State Revenues which drew up a general salt budget for the Empire and if deficiency appropriations were later needed the funds would be released from the Moscow Treasury with the authorization of the State Treasurer.<sup>51</sup>

The sale of salt took place in the following fashion. County stores were open every day of the week from sunrise to sunset except Sundays and legal holidays. If a consumer needed up

<sup>51</sup> Code, par. 45–49; PSZ 1783, N. 15849, art. 6 and N. 15894, pp. 1072–1077; 1778, N. 16736, pp. 1152–1153.

to ten puds, the store delivered it immediately; if he needed up to fifty puds, a written request had to be submitted in advance. Large customers who bought over fifty puds had, in addition, to pledge that they did not intend to corner [*perekupit*] the retail trade. This was necessary because the sale of salt did indeed take place at two levels: directly from the store and on the retail market in villages. It was understood, however, that all salt sold on the retail market had to be bought first from a state store. Those who wished to buy less than one pud could do so at stalls [*lavki*] set up near the store and run by townsmen hired by the town authorities.<sup>52</sup> Those who for any reason could not make their small purchases at the store depended on retail merchants who peddled the salt in villages and at local markets. The price must have been somewhat higher and varied with the level of the supply and demand, but the fixed price at the store never too far away and the continuous availability of salt were designed to maintain the increase within reasonable limits.<sup>53</sup>

A major danger was defrauding the consumer by using counterfeit weights and measures. To guard against these abuses a dual control was instituted by both the police and the merchants. The police – an appointed official in the town and an elected nobleman in the county – had a standing responsibility to prevent the transportation and sale of contraband salt as well as restrictive practices on the retail market, and they received complaints against alleged tampering with weights and measures. Suspicious buyers could also check their purchases on sealed copper scales kept permanently outside the store. Disputes were usually brought before a court consisting of a judge and two assessors elected by the townsmen (merchants and shopkeepers) who dispensed summary justice and kept no records. Criminal charges were brought before the *magistrat*, also elected by the townsmen, and followed the regular procedure.<sup>54</sup>

The price of salt was very high under Elizabeth and there is no better proof of the heavy burden it represented for the people than Catherine's announcement, at the very beginning of her reign in July 1762, that out of "motherly compassion" for the welfare of her subjects, she would reduce it from 50 to 40 kopeks per pud. Thirteen years later at the end of the war with Turkey, it was reduced by another five kopeks to 35 kopeks per pud.<sup>55</sup> Such price was considered "modest"<sup>56</sup> and for that reason it was decided to end the practise of selling salt wholesale to Astrachan and Archangel'sk fishermen who had been getting it at ten or twenty kopeks.<sup>57</sup> In 1791, however, concern over the continued rise of transportation charges which

<sup>52</sup> The town charter of 1785 (PSZ 1785, N. 16188, art. 101) freed townsmen from the duty to sell state salt.

<sup>53</sup> But such *perekupka* took place often enough to call the Senate's attention: PSZ 1797, N. 18044 and 1798, N. 18393.

<sup>54</sup> Code, par. 60–68, 72, 77. For a criticism of the procedures established by the code (the gist of which being that the store manager was a state official not subordinated to the police authorities) see "Sol' i vino v XVIII veke", in: Archiv grafov Mordvinovych. Vol. 2, S.-Peterburg 1901, pp. 496–501.

<sup>55</sup> PSZ 1762, N. 11597; 1775, N. 14303.

<sup>56</sup> And apparently it was, if compared with the price of salt in other countries. Salt was certainly cheaper in Russia than in Poland for example: see PSZ 1765, N. 12482 and I. v. GLASENAPP Staat, Gesellschaft und Opposition in Rußland im Zeitalter Katharinas der Großen. München 1964, p. 168 and ČECULIN Očerki p. 186. The Code, par. 2, assumed an annual consumption of 12 to 18 *funt* per person. At 40 *funt* in a pud costing 35 kopeks, using an average of 15 *funt*, an individual's supply of salt would cost him 13 kopeks a year. The average consumption of salt in France in 1789 was 6 kilograms per person or also 15 *funt*: see SCHMIDT Das Salz p. 42. But it is true that the price of salt was still high compared with that of other commodities: GLASENAPP Staat pp. 123, 165–170.

<sup>57</sup> PSZ 1783, N. 15720 and 1785, N. 16243. The official price had traditionally been lower in those two areas: SOLOVEV Istorija Rossii kn. 12, pp. 14, 381.

threatened to drain the transportation fund of the chambers compelled the government to raise again the price to 40 kopeks. If placed in the context of the inflation and the depreciation of the currency characteristic of the latter part of the reign, this increase was hardly noticeable, and we may conclude that salt had become a much cheaper commodity at the end of Catherine's reign.

The relatively low price of salt raises the question of the state's margin of profit. It varied, of course, from province to province and was largest near the production centers. Table 5 (which must be studied together with Table 4) shows the total cost to the state of a pud of salt in each province. Each figure is obtained by adding to the cost of the salt at the major depots (15½ kopeks in Nižnij Novgorod for Perm salt, 9¾ kopeks at Saratov for Ėlton salt) the prices charged by carriers in 1788. The difference between this figure and the selling price of 35 kopeks gives the margin of profit per pud.<sup>58</sup>

Table 5: Cost of Various Salts to the State in Each Province (kopeks per pud)

A. Perm Salt		D. Astrachan Salt	
1. Vladimir	25½	1. Voronež	23⅓
2. Vjatka	25	2. Kursk	25½
3. Kaluga	27¾	3. Simbirsk	23¾
4. Moscow	26⅙	4. Saratov	⅙
5. Novgorod	28⅙	5. Astrachan	2⅓ to 6⅙
6. Olonec	33⅓	6. Caucasian	22
7. Perm <i>oblast'</i>	16⅓	E. Vologda and <i>Pomorskaja</i> Salt	
8. Pskov	42⅓	– Archangel'sk, Vologda & Olonec:	
9. Smolensk	32½	average of 22⅓	
10. Tver'	25⅓	F. Balachna Salt	
11. Polock	43	1. Petersburg	39
B. Ileck Salt		2. Rjazan'	34⅙
1. Kazan'	25	3. Tambov	30
2. N. Novgorod	30½	G. Staraja Russa Salt	
3. Ufa	13⅙	1. Petersburg	27⅙
C. Ėlton Salt		2. Pskov	25⅙ & 26½
1. Kazan'	27⅙		
2. Kostroma	29⅓		
3. Orel	34⅓		
4. Penza	17⅓		
5. Saratov	16⅙		
6. Tambov	29⅙		
7. Tula	31¾		
8. Jaroslavl'	30⅓		

Perm salt yielded very little profit. Delivery to the county stores from Nižnij Novgorod cost on average from nearly 10 kopeks in Vladimir to nearly 27 kopeks in Pskov.<sup>59</sup> If we add to this the six kopeks to ship the salt to Nižnij Novgorod, total transportation costs varied from

<sup>58</sup> PSZ 1788, N. 16736. ROZEN (*Permjanka* pp. 42–43) states that the Perm producers received 18 kopeks in 1794 (instead of 15 in 1787) but I have found no evidence of this in the published sources. At any rate the price increase from 35 kopeks to 40 kopeks in 1791 would have compensated the state for its increased expenditure. It is worth noting that the Perm producers did not find the monopoly to be a profitable operation either: a pud of salt was said to cost them 28 kopeks in 1795–1797.

16 to 33 kopeks or from 46% to 94% of the selling price; it was an enormous drain indeed.<sup>59</sup> Élton salt was even more expensive since the production costs were insignificant. Much of this salt was carted away by land and the cost of land transportation exceeded that of water transport. Thus the high price of transporting salt shows strikingly how the underdeveloped transportation network made the exploitation of Russian natural resources a costly and even prohibitive undertaking.<sup>60</sup>

There remains by way of conclusion to examine the supply of the western provinces and the Ukraine. As stated earlier, salt was sold on the free market and this at considerably higher prices. This was no doubt a concession by the Tsarist government to the merchant class of the more active towns of the Baltic Sea and the south. Nevertheless, a definite trend is noticeable toward the introduction of the code everywhere (except in the Baltic provinces) and this was very much in line with the policy of Catherine's government to extend Russian legislation to the newly annexed provinces, either in its entirety or in part. The trend took the form of a mixed system combining the introduction of sale by the state at the fixed price of 35 kopeks with the retention of free sale. Such a system was introduced in 1768 in Čařkov province (*Slobodskaja Ukraina*) after governor-general Rumjancev reported that the price of salt was rising and that the state would make a profit by selling its own salt. It was also introduced in Kiev and the rest of Little Russia.<sup>61</sup> The region was of course supplied with Crimean salt which could be obtained in the late 1760s for 30 kopeks on the Ukrainian line and at Poltava, but which cost 40 to 50 kopeks at Černigov and Perejaslav and 69 to 80 kopeks at Nežin.<sup>62</sup> By the late 1780s the total cost of Crimean salt came to 30<sup>2</sup>/<sub>5</sub> kopeks in Čařkov, 36 kopeks in Kiev, 40<sup>1</sup>/<sub>4</sub> kopeks in Černigov and 40 kopeks in Novgorod-Severskij provinces. In Mogilev and Polock salt from Riga and the Crimea cost from 60 to 65 kopeks and the mixed system was introduced immediately after the annexation in 1773; the price of state salt was fixed at 50, then reduced to 45 kopeks. The Polock quota was 50 000 puds a year and came from Perm' in 1788 and from Staraja Russa thereafter; that of Mogilev was 200 000 puds from the Crimea. But, here too, transportation charges were a heavy burden, so heavy indeed that in 1794 free sale was restored in Byelorussia and Catherine ordered the Senate to examine whether the free sale of salt should not be restored in Pskov, Smolensk "and other" provinces.<sup>63</sup>

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A few general conclusions are now in order. The salt trade remained throughout Catherine's reign a state monopoly and it is thus possible to distinguish its two major components. It was first of all a fiscal and economic operation. Its purpose was to increase state revenue by exploiting a natural resource in which Russia was particularly rich. The very

<sup>59</sup> The price of salt in Polock was 45 kopeks.

<sup>60</sup> By contrast the cost of transporting their metal from the Urals to Petersburg cost the Demidovs in 1770 20% of their selling price; KAŦENGAUZ considers this very substantial (*Istorija* pp. 422–423).

<sup>61</sup> PSZ 1768, N. 13188; 1770, N. 13412 and N. 13509.

<sup>62</sup> PSZ 1766, N. 12765.

<sup>63</sup> PSZ 1773, N. 13980 and 1774, N. 14127; 1794, N. 17242; *Archiv Gosudarstvennago Soveta*. Vol. 1, S.-Peterburg 1869, čast' 2, cols. 331–332, 343–344. In the territories acquired following the third partition of Poland a mixed system was also introduced: free sale was encouraged and the price of state salt was fixed at between 50 kopeks in Braclav province to 80 kopeks in Lithuania: PSZ 1795, N. 17366, pt. 1,8.

location of the deposits on the outer rim of European Russia from the desolate shores of *Pomoře* to the inhospitable slopes of the western Urals and the barren lands of Astrachan and the Crimea contributed to the integration of these borderlands into the Russian economy. Their other native products – fish or meat – were already well known to the Russian consumer but none could rival salt which was as well known as it was necessary. The salt “caravans” from Perm followed the same route as the iron caravans of the Demidovs bound for Petersburg, and these two products – salt and iron – gave the Urals their great economic importance throughout the eighteenth century. It is not without interest to compare the relative volume of these two products. The total production of iron in the Empire was eight million puds in 1790.<sup>64</sup> Assuming that 65% of it came from the Urals 5,2 million puds of iron is the equivalent of the 5,3 million puds of salt projected for 1789. And it throws light on the importance of the salt trade and the pressure it placed on the transport facilities and the carrier trade to realize that the total production of iron represented only 61% of the total production of salt in 1789 (13 million puds).

The salt monopoly was also an operation which fitted in very well with the concept of enlightened despotism, conducted as it was in the name of the “public good” and the “general welfare”. These terms were not merely figures of speech on the lips of cynical monarchs but they also represented a new conception of governmental policy, more comprehensive in its understanding that the knowledge of geography, the development of natural resources, and a closer association between social forces and the state were a prerequisite to sustain the military might of the state.

The major innovation of the code was the creation of stores in all counties under managers appointed by the state and the requirement that they must keep a two-year reserve so that salt would be available at all times in adequate amount. The reform of 1781 was only a part of the broad restructuring of the Russian state that took place under Catherine, the main thrust of which was to break up a distant and swollen bureaucracy and scatter it over the vast expanse of a continent in order to realize that new conception of government.

In any such vast undertaking there are bright spots as well as many shadows which need not concern us here except as they relate to the salt monopoly. The salt revenue did not rise and in this sense the monopoly was a failure. A few figures provide an eloquent testimony of the gradual worsening of the state’s account. In 1762 3,3 million rubles were collected, operational expenditures amounted to 1,1 million rubles and the state’s profit was 2,2 million rubles. By 1783 it was down to 1,1 million. In 1791 the state incurred a first loss of 13 000 rubles and by 1795 operational expenditures of 6,6 million rubles, balanced against 5,4 million in revenue resulted in a net loss of 1,2 million rubles.<sup>65</sup> On the other hand, production rose considerably and the construction of a vast network of stores brought sufficient salt within reach of the population at reasonable prices. This of course does not exclude the possibility of shortages here and there due to the activities of local merchants taking advantage of the difficulties of access in certain counties to keep retail prices artificially high. But these were the inevitable consequences of rural isolation. One finds indeed in the published sources practically no references to shortages after the 1770s, which is, of course, no proof that there were none. On the other hand, the references to high transportation costs

<sup>64</sup> Očerki istorii SSSR. Period feodalizma. Rossija vo vtoroj polovine XVIII v. pp. 101, 104.

<sup>65</sup> ČECULIN Očerki pp. 196, 199–200, 203–204.

are many and this only confirms that more salt was moving across the land than the transportation network could normally accommodate. Thus, the monopoly, while a failure from the fiscal point of view, was a success as an operation designed to serve the general welfare.

Catherine died in November 1796 and the short reign of her son witnessed a sharply different orientation toward provincial administration which was bound to affect the salt monopoly as well. Its fiscal and economic operations did not undergo drastic changes. The price of salt remained fixed at 40 kopeks a pud; some reduction was effected in the number of stores following the consolidation of counties. Production continued to rise – it reached 14 million puds in 1797. However, a first breach in the code of 1781 was to cancel the requirement for a two-year reserve and the substitution of a more flexible policy in matters of storage. One even suspects that the government wanted to abolish the reserves altogether and sell the salt already stored, thus reducing the demand in Perm and Saratov, but shrank from the risks. Instead, the provinces were divided into three groups. In Astrachan and Saratov stores were to keep just enough to meet their annual needs. In the ten provinces supplied with Perm salt, a one-year reserve was considered adequate in seven, and a six-month reserve in the other three. The difference was motivated by varying difficulties in shipping the salt from the Nižnij Novgorod depot. The eleven provinces supplied with El'ton salt were also to keep a six-month reserve.

Another feature of Paul's policy was to create new depots to offset the possibly negative consequences of reduced reserves. Moscow was to keep a one-year reserve, not because it was difficult to supply, but because it could offer assistance to areas closer to Moscow than to Nižnij Novgorod. Similarly, plans were made for a new depot at Rybinsk where there was a heavy demand, as at Laišev, for pilots and workmen to take smaller boats up the Šeksna and the Mologa toward Olonec and Petersburg. A permanent depot there would enable the government to place contracts with carriers when the demand was low and prices were moderate. Finally, it was Paul's policy to return their "privileges" to the borderlands and we must assume that the monopoly ceased to operate there even partially since none of these areas was included in the table of 1798.<sup>66</sup> Altogether the reign of Paul was a period of retrenchment in this area.

But it was in the field of administration that the change was greatest. Catherine, as I stated, transferred to the provinces a large number of executive agencies and concentrated in the First Department of the Senate the coordinating functions of the central government. Her administration of the Empire rested on a territorial principle under which the governor, and especially the governor-general, was a powerful agent that gave the provincial administration a purpose in accordance with the instructions of the Empress and the Procurator-General. Paul operated under different assumptions and restored the central departments and their local agencies, and each separate administrative hierarchy assumed responsibility for a given sector which had till then been integrated into a common channel of decision-making. In March 1797 the Main Salt Board was reopened in Moscow under a chief director with six members and a total staff of twenty-eight. The expeditions attached to the treasury chambers were abolished and then restored in all but name, but subordinated to the Board and no longer to the chamber. Two local boards were also restored, one in Nižnij Novgorod with a staff of thirteen and a larger one in Saratov with a staff of twenty-five. Also reminiscent of the

<sup>66</sup> PSZ 1798, N. 18703.

earlier organization and typical of the military style which Paul introduced in the civilian bureaucracy was the institution of *komissary* directly responsible to the Main Board who acted as its agents in mission and were sent wherever their services were needed. Upon termination of their mission they reported to the local chamber and to the Board and stood ready to undertake another assignment.<sup>67</sup>

Such was the situation of the salt monopoly at the end of the eighteenth century. In 1802 its operations were split between the ministries of Internal Affairs and Finance and then consolidated again in the ministry of Finance. But it became less and less profitable as the expenditures to run it absorbed more and more of its revenue despite the rise of a pud of salt to one ruble in 1810. In 1811 the free sale of salt was finally allowed for the first time since 1731 and the code of 1818 confirmed the abandonment of the sale of salt by the state at fixed prices.

<sup>67</sup> PSZ 1797, N. 17793 and 17894 and 17936; 1797, N. 17815, 18084; ČECULIN Očerki p. 204; Ministerstvo finansov 1802–1902. 2 vols. S.-Peterburg 1902, here vol. 1, pp. 121–124. Relevant to this study are pp. 109–119 and pp. 396–406 of M. V. KLOČKOV Očerki pravitel'stvennoj dejatel'nosti vremeni Pavla I. Petrograd 1916.