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COPPER EXPORT OF THE OTTOMAN EMPIRE TO ENGLAND VIA THE OTTOMAN BANK: ERGANI MINE 1880-1914

Osmanlı Devletinin İngiltere'ye Osmanlı Bankası Aracılığı ile Bakır İhracı: Ergani Madeni 1880-1914

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Abstract

Ergani Mine, which is a copper mine operated according to the trust (trusteeship) method in the territory of the Ottoman Empire, supplied the surplus product to the market after meeting the needs of the state. However, since it was not possible to wholesale copper in the country, it was sold in small pieces. This situation was far from meeting the liquidity needs of the state. For this reason, exporting copper to abroad and selling it in bulk could meet the liquidity need more quickly. When the intermediaries to be used in exports were selected from the private sector, they applied high interest to the advance received by the state, reducing the profits to be obtained from copper exports. For this reason, it was decided to carry out exports together with the Ottoman Bank, which has branches abroad -especially in England-. The export process carried out together with the Ottoman Bank seemed to be a suitable choice for the state as it had a capital structure that had no problem in meeting the liquidity need (advance) of the state as well as enabling the rapid sale of copper. In this study, the mine's export of copper, which is out of state needs, to abroad has been examined. During the export process, 24 contracts were made between the Ottoman Bank and the Ottoman Empire between 1880 and 1914, and a total of 16,578 tons of copper was exported.

Anahtar Kelimeler: Copper, Ottoman Bank, Export, Ergani Mine, Export Expence

Öz

Osmanlı İmparatorluğu topraklarında emanet usulüne göre işletilen bir bakır madeni olan Ergani Madeni, devletin ihtiyacını karşıladıktan sonra ortaya çıkan fazla ürünü piyasaya arz etmiştir. Fakat bakırların yurt içinde toptan satışı pek mümkün olmaması nedeni ile ufak parçalar halinde satılmaktaydı. Bu durum ise devletin ihtiyaç duyduğu likidite ihtiyacını karşılamaktan uzaktı. Bu nedenle bakırların yurt dışına ihraç edilerek toplu halde satılması likidite ihtiyacını daha hızlı karşılayabilmekteydi. İhracatta kullanılacak araçlar ise özel sektörden seçildiğinde, devletin aldığı avansa yüksek faiz uygulayarak bakır ihracından elde edilecek kârları azaltılmaktaydı. Bu nedenle yurt dışında -özellikle İngiltere' de- şubesi bulunan Osmanlı Bankası ile ihracatın birlikte yürütülmesi kararlaştırıldı. Osmanlı Bankası ile birlikte yürütülen

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İhracat süreci bakırın hızlı bir şekilde satılmasını sağlamakla beraber devletin likidite ihtiyacını (avans) karşılamakta sorunu olmayan bir sermaye yapısına da sahip olması nedeni ile devlet için uygun bir seçim olarak görünmekteydi. Bu çalışmada, madenin devlet ihtiyacı dışında kalan bakırın yurt dışına ihracatı incelenmiştir. İhracat sürecinde 1880-1914 yılları arasında Osmanlı Bankası ile Osmanlı Devleti arasında 24 sözleşme yapılmış ve toplam 16.578 ton bakır ihraç edilmiştir.

Keywords: Bakır, Osmanlı Bankası, İhracat, Ergani Madeni, İhracat Masrafları

INTRODUCTION

Mines have not lost their importance for centuries as a very important source of income for national economies. Even today, it maintains its importance in increasing national income and reducing foreign dependency. Archaeological researches show that Anatolia is particularly rich in copper ore. Mining activities, which started from the first ages, have been an ore of constant interest due to the closeness of copper ores to the surface (Fidan 2017). The Ottoman Empire also understood the importance of mining and did not remain indifferent to the mines as long as it ruled. Mines have never lost their importance, especially due to the needs in the military field. Among the existing mines of the Ottoman Empire in the Anatolian lands, mines such as Ergani, Küre, Gümüşhane and Keban stand out. In these mines, both high economic value and military essential ores such as gold, silver, copper, coal, iron were extracted. Another important aspect of the mines was the livelihood of the people living and working in the areas where the mines were mined. Mining workers, workers working in smelters where the raw ores from the mines are purified, those who meet the energy needs of mines and smelters (coal and wood), those who transport raw and purified metals, artisans who work with purified metals (especially copper), and metal merchants they were in the economic cycle.

In terms of management, we see that the mines are operated in 3 different ways. These are tax farming, tender and escrow. According to the tax farming method, management is the granting of the right to operate the mine and its revenues to tax farmers for a certain period of time in return for cash. According to the tender procedure, the management is to lease the miri lands and to allow the exploration and extraction of minerals in these lands. The administration according to the escrow method is the administration and administration of the state through a manager appointed by the state. Mining operating styles in the Ottoman Empire differed for many years. The reasons for these differences can be listed as the purpose of operation of the mine, local conditions, time, place and state interests. Despite these differences, there are commonalities in all operating styles (Çağatay 1943). In the Ottoman Empire, the escrow system was generally applied in areas that were not in demand because it did not bring enough income by the private sector. Especially until the middle of the 19th century, when the economy weakened and did not receive much attention from the private sector, the mining sector also weakened. In the periods when the mining industry attracted attention, it was seen that the entrepreneurs who fell into difficulties

sought capital from abroad or transferred the mine. The inadequacy of domestic capital and entrepreneurship had a negative impact on the development of mining. The lack of domestic capital and entrepreneurs, as in other countries, eventually causes foreign capital to replace domestic capital (Daloz 1862). In order to get out of this situation with the least damage, the opinion that the operation of the mines, which are very important in military and financial terms, should be done by the state and thus should not remain idle has been the dominant view (Tızlak 1996). On February 7, 1893, the Ministry of Forestry and Mines and Agriculture was established by merging the Forestry and Mining Administration and the Agricultural Administration. The reason for the establishment of the ministry was to establish a more organized and disciplined system related to forest, mining and agriculture and to increase the revenues obtained from these (Keskin 2005). Those working in the mines in the Ottoman lands and the nearby villages that met the needs of the mines had some exemptions. Among the exemptions granted, tax exemption (Refik 1989) was the most common, but it is seen that the mentioned villages and miners also demanded to be exempt from military service (BOA.A.MKT.MVL.35/92, 1850). It was very important that the operation of the mines be uninterrupted, and therefore no one other than the Maden Emni (trustee) was allowed to interfere in the legal affairs of the miners (Refik 1989). There were some legal arrangements made to prevent mining from falling behind compared to its European counterparts and reducing productivity. Among these regulations are the mining regulations that were first issued in 1525 and 1536. (Tızlak 1991). However, the regulations that only concern the mines are the Mining Regulations made in 1861, 1869, 1887 and 1906. The Mining Regulation, which entered into force on May 28, 1861, is the first comprehensive mining regulation that includes important details about mines such as mining operation, miners' rights and mine transfer.

COPPER EXPORT-ERGANI MINE

Until 1740, the Ergani Mine was operated according to the trust method, depending on the Gümüşhane mine mukataa. In 1740, it was separated from the aforementioned mukataa. From this date on, it started to be ruled by the trustees sent from the mint. It is possible to say that the Ergani mine was never managed by the Mine Mukataa item. In 1775, the period when the Ergani and Keban mines were managed together and in accordance with the trust method began. This form of government continued in the period we examined and it was named as Maadin-i Hümayûn Emâneti (Tızlak 1991). Before the export of copper or its sale to the private sector, the copper needs of the important institutions of the state had to be met. For this reason, the needs of institutions such as the mint, armory, shipyard, and firecracker, if any, were separated from the copper to be sold in the country or abroad, and the remaining parts were subject to sale. After meeting the needs of the armory, it was decided that the remaining part of the 550.000 kilos of copper to be exported in 1891 could be exported (BOA.I.MMS.128/5458, 1891). It was decided to send 400.000

kilos of the 1.200.000 kilos of copper planned to be exported from the Ergani Mine in 1902 to the Tokat smelter factory to be given to the bullet factory (BOA.BEO.1990/149202, 1903). It was emphasized that the priority of domestic needs was emphasized by stating that 300.000 kilos of copper from the annual returns of Ergani Mine can be sent to the Tokat smelter factory for smelting and sent to the armory, shipyard, and other places, and then the remaining part can be sold (HAT.567/27828, 1833). The annual copper need of the Ottoman Empire was around 102 tons only for the armory factories and the navy (BOA.C.AS.1009/441772, 1800). Table 1 shows the amount of copper sent from Ergani Mine to Tokat smelter factory for purification. The coppers sent to the Tokat smelter factory were primarily purified to meet the needs of state institutions and were shipped to Istanbul from Samsun Pier. In the table below, the transferred coppers are those that are not available for sale and were sent to the relevant institutions after being purified in the Tokat smelter factory.

Table 1
Unrefined Copper Transfer From Ergani Mine to Tokat Smelter Factory –Ton

Annals	1886	1887	1888	1889	1892	1893	1894
Total	657	421.2	356.1	400.1	239.1	0	610.9

Source: (Aras 2020)

The route to be followed for the export of copper from the Ergani Mine to England has been clearly stated in line with the decisions taken in the Meclis-i Mahsus (BOA.I.MMS.128/5458, 1891). Accordingly, the whole road map has been determined with the decisions taken as a result of the correspondence with the amount of copper to be exported, the institutions or organizations responsible for the export, the units to which the income to be obtained after export will be transferred, and the ministries authorized and responsible in this whole process. The Ottoman Bank was authorized for the export of copper from the Ergani Mine to England and it was decided to be responsible for the export process (BOA.YA.RES.122/7, 1903, BOA.BEO.1765/132360, 1901, BOA.BEO.3417/256269, 1908, BOA.BEO.1990/149202, 1903). As stated in the decisions of the Meclis-i Mahsus the Ottoman Bank was authorized to export the amounts determined in the export phase of the remaining copper after the determination of domestic needs as a result of the agreements made between the central government and the Director of the Ottoman Bank. As of the period we examined 24 agreements were made. According to the decision of the Meclis-i Mahsus of 1891, "As the purity level of 550.000 kilos coppers in Ergani Mine reached 85.5%, it was decided that these coppers would be transported directly to London and sold by the Ottoman Bank on behalf of the government..." It was also stated that "...then the mine will not be allowed by the central administration to have a result that may cause it to replace the bank...". To prevent the mine and the bank from interfering in each other's affairs, it was decided in the Meclis-i Mahsus, by writing that only the officers to be determined by the bank would perform a transfer and sale transaction, that the

bank officers would never interfere in the manufacture and administration of the mine, and that the sales price obtained after the sale would be transferred to the treasury account. In this process, the relevant ministries were the Ministries of Finance, Agriculture and Forestry, and Mines (BOA.İ.MMS.128/5458, 1891). The responsibility of the Ottoman Bank included the transportation of the copper extracted from the mine to the Iskenderun pier, the expenses at the port: freight and insurance fees, the labor and crane fees required to load the copper on the ship, the fees given to the British companies for unloading the copper from the port in England and for the analysis of the purity of the copper (BOA.Td.1015-1016-1017)¹. Apart from all sales processes, there was also the issue of advances between the Ottoman Bank, which made a contract for the export of copper, and the government. After selling the copper and deducting the expenses, the bank was liable to deposit the remaining amount into the government account. However, in some periods, the government received advance payment from the Ottoman Bank to set off after-sales. For this advance, it was decided in the Meclis-i Mahsus that the bank would apply the 7% interest rate, which is the interest rate applied to its other customers, to the government (BOA.İ.MMS.128/5458, 1891, BOA.Y.A.RES.122/7, 1903, BOA.BEO.1765/132360, 1901 BOA.BEO.3417/256269, 1908, BOA. BEO.824/61741, 1896, BOA.BEO.1340/100499, 1899). For this reason, while the bank was calculating the expense items during the sale of copper, the 7% interest paid was deducted from the main amount obtained after the sale of copper as an expense, and the remaining amount was deposited into the government account. We see from the archival documents we have examined that some advance payments have been explained as to why they are requested. One of these explanations was made for the Rumeli Province improvement, which was planned to be built for the Rumeli Province and was calculated to cost a very high amount. After it was decided to export the product of Ergani Mine in 1902, it was decided that 400.000 kilos of 1.200.000 kilos of copper would be sent to Tophane for bullet production, and the remaining 800.000 kilos could be sold in London through the Ottoman Bank. The revenues and expenses to be obtained from the copper to be sold in London are calculated separately, and it was decided to collect 6.300 Ottoman Liras from the bank as an advance payment to be set off after the correspondence between the Ministry of Finance and the Ministry of Forestry, Mining and Agriculture after the sale, which is estimated to be retained (BOA.BEO.1990/149202, 1903). Mines exports were also made by private entrepreneurs. In 1877, it was stated that there were no customers for the domestic sale of 1.500.000 kg copper from the Ergani Mine in cash. For this reason, this concession was given to a trader without a tender and was agreed upon. According to the agreement, the transportation, insurance, freight, and analysis costs of the coppers to be sold by the trader in Europe will be borne by the trader. The agreement with the aforementioned merchant shows some differences compared to the agreement with the Ottoman Bank. Accordingly, the agreement with the merchant was made not on the sale

¹ The data obtained from the notebooks were compiled and created by the author.

of coppers in Europe, but the terms and timing of the delivery of the coppers to the merchant. As the merchant receives the copper, he is obliged to pay the copper price to the treasury. However, in this agreement with the merchant, there is an advance payment also. The advance amount to be paid for copper, whose total amount is 1.500.000 kg. is 2 kuruş for each 1 kg. Therefore, the total advance amount is 30.000 Ottoman Liras. It has been agreed with the trader to pay 12% interest and 0.5% commission annually for this advance payment. Another important detail about the interest was that the interest payment, which was calculated as 12% annually, would decrease to 6% after the copper delivery from the mine to the merchant started (BOA.İ.MMS.54/2414, 1876). The fees to be paid for the transportation of the copper to be exported were determined per kilo. Calls for tenders were made by making announcements for transportation both centrally and locally. However, it is seen in the documents examined that there are no applications for these tenders within the specified time (BOA.BEO.3236/242698, 1907). For this reason, the transport tender was made by the names who had previously carried out the transport work, over the transport fee determined by the Meclis-i Mahsus. Therefore, the tender, who should normally be awarded to the lowest bidder, was awarded at the highest price.

The coppers loaded on the ships were received by the representatives of the Ottoman Bank and a local company named Henry Bath and Son at the ports in London, and the sample selection for weighing and analysis was made by the relevant company official (BOA.HR.SFR.3.477/84, 1899). According to this information, the company was collecting offers from the market and submitting the highest offer to the Ottoman Bank. If the Ottoman Bank found the offer positive, the sale would take place. This information was also sent as a report to the Ottoman embassy in London (BOA.HR.SFR.3.477/51, 1899). According to the information in the report, it was possible to compare the amount of copper sent from İskenderun with the amount of copper received. An example of a report about the delivery sent by Henry Bath and Son to the Ottoman Embassy in England in 1892 is as follows;

Table 2

Delivery Report of Henry Bath and Son in 1892

Port	Ship Name	Pieces	Ton	CWT	Quarter	Lb	Number of Analyzed Pieces	Copper Purity %
Port Of London	Guadima	829	63	12	2	27	83	76 1/8
	Carlo Poorio	878	72	11	3	6	87	80 3/4
	La Bourdonmais	450	33	14	2	17	45	76 3/4
Red Lion Pier	Guadalquive	993	85	3	3	20	105	76 1/2
	Silvio Spavento	930	78	4	1	14	93	75 1/4
	Douro	525	49	1	2	22	58	77 1/4
	Guadima	1073	87	17	0	15	116	80 1/4
	Guadalquive	721	62	1	3	20	88	78 3/4

Source: (BOA.HR.SFR.3.394-50, 1892)

The table prepared by the Henry Bath and Son Company provided both the government and the Ottoman Bank with a piece of solid information about the export of exported

copper. The information provided by the company is the name of the ship and the weight² of the coppers received, as well as the degree of purity (assaying) of the copper. Since mineral ores contain other metals in them, it is necessary to subject them to some processes to purify them. The facilities where these processes are carried out are called (kalhane) smelter. By melting the ores in the smelters, all the metals in the ore are separated from each other, and this process is repeated several times to purify the ore (Aras 2020). The degree of purity is the most important indicator of the price of copper. It is seen that the sales price of copper increases as the purity level increases (BOA.BEO.3236/242698, 1907, BOA.HR.SFR.3.394/50, 1892, BOA.HR.SFR.3.481/58, 1899). Based on the fact that there is a direct proportion between the purity of the mine and its value, the high purity level of the exported copper directly and positively affects its sales price. For example, in the analysis carried out for the coppers received in February and March of 1900, the purity level of the coppers in February was determined as 78% and an offer of 55 sterlin was received for the ton price. The purity level of the coppers received in March was determined as 79% and the highest offered price was determined as 58 sterlin per ton (BOA.HR.SFR.3.495/28, 1900). To determine the purity of copper, 10% of the number of copper pieces received was determined as a sample and included in the analysis³.

EXPENSES IN COPPER EXPORT

It is known that copper exports were made through the Ottoman Bank and the expenses were also covered by the bank. Among these expenses, the transport item is the biggest expense item of copper export. As the first stage of transportation, there was the transportation of the mine from Ergani to Iskenderun Pier. As we mentioned before, this stage started with the process of putting out the transportation tender for the coppers that were decided to be exported, but since there was no application for the tender, it was mostly given out of the tender by the same people. Transport expenses were calculated per kilo and this amount was determined by the Meclis-i Mahsus. As of the period we examined, it has been observed that these fees vary between 25 and 40 para⁴ per kilo. Another important issue for transportation was the camels used in transportation. The insufficient number of camels hindered the transportation and caused the contractual dates with London to not be respected. The transportation was disrupted since the camels kept by the transport contractors for the shipment of 1.500.000 kilograms of copper to be made in 1906 were taken into the service of the military by the Mosul Province. However, it was stated that an income of more than 100,000 liras would be obtained from this sale and this income was much needed. It has been stated that these disruptions have increased in the last 2 years, so the loss is important and needs to be corrected (BOA.Y.MTV.297/156, 1907). In another source, it is stated that due to the intervention made by the Mosul Province in the camels of the transport contractors in 1907, the coppers could not be shipped when the prices were high,

² The kg equivalents of the British weight measures given in the table; 1 Ton: 1016 kg, 1 Hundredweight: 50.8 kg, 1 Quarter: 11.33 kg, 1 Pound: 0.45 kg.

³ Henry Bath and Son company was giving information to the Ottoman Empire about the price of mines other than copper. Refer: BOA.HR.SFR.3.406/25, 1893, BOA.HR.SFR.3.515/21, 1902.

⁴ 1 kuruş=40 para, 1 Ottoman Liras=100 kuruş, 1 Sterling=1.1 Ottoman Liras in 1881

and therefore the treasury suffered a loss of around 35,000 liras (BOA.Y.MTV.301/148, 1907). After the transportation cost, the expense items that are among the other expenses of the Ottoman Bank are as follows. Freight Fee: These are the transportation fees given to the ships used for the shipment of copper from Iskenderun Pier to England. As of the period we examined, it is seen that freight charges are in the range of 6 to 14 kuruş per piece. Insurance fee: It is the insurance of the copper loaded on the ship against the premium paid. The average insurance fee is between 1.3 and 1.8 kuruş per piece. In 1881, the money received from the insurance company for a piece of copper that fell into the sea during transportation was 53 kuruş (BOA.Td.1015). Carry a load and portership: It is seen as an important item among the bank's expenses. This process includes loading the coppers arriving at the port onto the ship. In some cases, the wages paid to the machines used out of manpower were paid under this expense item. Expenses other than freight and insurance costs incurred during the loading of copper to the ship are included in the records as a tip given to the commission, tugboat, bridge, telegraph and postal, guards, and tithe officers (BOA.Td.1015-1016-1017). If we show the expenses included in the 1st contract in 1880:

Table3
Expenses in First Contract 1880

1. Contract 1.000.000 Kilos of Copper/1880	
Expenses Type	Kuruş
Given to Transport Contractors	551095
Insurance Fee	14797
Freight Charge	65773
Carry a load and portership	31900
Bridge fee and Bridge Repair	625
Casual labor	325
To Guards and Asar Officers	910
Tugboat	170
Akçe Loss	649
Telegram and Mail	357
Return of deposit received for transport	125000
7% Interest ⁵	6357
0.5% Interest ⁶	3980
Total	801938

Source: BOA.Td.1015

In the expense table of 1880 dated and exported as 1.000.000 kilos of copper, the most important expense item is seen as transportation with 551.095 kuruş. In our previous statement for transportation expenses, which account for approximately 84% of all expenses, we said that there was no participation in the tenders for transportation and they were realized by the same names. The lack of competition can be expected to explain such a high proportion of shipping costs.

⁵ The interest received by the Ottoman Bank in return for the advance given to the government.

⁶ The interest received by the Ottoman Bank for the capital of 7960.54 liras sent to Iskenderun.

In the 1st contract, the agreed fee for the transportation of 1 kilo of copper was determined as 27 para. The fee to be given to the transport contractors was paid with a deduction of 18% until the end of the transport. Once the transportation is complete, the deductions are refunded. A deduction of 18,5% was made from their progress payments when paying shipping contractors. For the refund of these deductions, the amount of copper received by the men of the Ottoman Bank at the Port of Iskenderun was calculated and the deductions were returned. In the case of missing copper, the damage was compensated from these cuts. The data in the table are given as total data. Each expense item consists of smaller units. A total of 1.000.201 kilos of copper were transported, but the transport operations were completed with 29 separate transportation processes. Deductions are also recorded in the books as 18,5% for each transport separately. As seen in the table, the total fee to be paid for transport is 676.095 kuruş, but 125.000 kuruş of this cost were not paid to the transport contractors until the transportation processes were completed, and were returned when the process was completed. Freight charges have the most value among the costs other than shipping. It is the transportation fee paid to the ships carrying the copper. For 10.681 pieces of copper loaded on ships within the 1st contract, an average of 6,15 kuruş freight per piece was paid. The insurance fee per piece paid for the same amount of copper is 1,38 kuruş on average. Loading, porter, and commission fees are paid in the process operated for the Carry a load and portership (load&unlade) of the copper arriving at the port to the ships. It is seen as the biggest expense item after shipping and freight charges.

Despite the advertisements to wholesale copper in the country, the lack of a positive response to this demand can be considered the first reason for exports (BOA.BEO.824/61741, 1896). If we look at the reasons why England was chosen for copper export: Copper was an indispensable mine for electricity used in trams and railways in Europe. The rapid spread of these services in cities and the widespread use of telephone networks increased the need for copper mines. In the world copper consumption ranking between 1892 and 1912, England ranks right after America and Germany (Porter and others 2021). England, which is the 3rd country that consumes the most copper in the whole world, used copper in ship coatings as well as the above-mentioned needs, providing gain in terms of both durability and speed in ships. Due to the copper that was exported to or imported from different regions of the world, development was seen in both ports and ships. By increasing the carrying capacity of the ships, the costs were reduced and the freight revenues were increased. In addition, the smelting facilities established on the riverbanks could reach the smelting facilities more easily because some ships could pass through the rivers and could deliver the raw copper to these facilities (Stainer 1979).

The contracts made between the Ottoman State and the Ottoman Bank included the sale of a certain amount of copper in England within a certain period. The contracts were formed as a result of the agreements reached between the Ministry of Finance, the Ministry of Forestry, Finance and Agriculture, and the Director of the Ottoman Bank. Although the full texts of these contracts cannot be reached, the existing data can be examined in the books where the accounting records of the contracts are located. We see that 24 contracts were made between the parties between 1880 and 1914. Among these contracts, the records of

contracts numbered 11-12 could not be reached. Data on other contracts were examined. The data contained in the books prepared by the Ministry of Commerce, Public Works, Agriculture, Forestry and Mines;

- Transport Contractors Account
- The Bank's Man Account in Iskenderun
- Fee Calculation of Transport Contractors
- Bank's Expenses Account
- Bank's Sales Account in London
- London Embassy Account

It is under the headings. The data included in the export are arranged separately for each contract.

Table 4

Contracts

Contract Number	Date	Tons ⁷	Expenses	To Mine Workers	To The Treasury	Total	% of total revenue/treasury
1	1880	984	8315	20000	29750	58065	51
2	1881	492	3672	10000	13800	27472	50
3	1881	492	3666	10000	15731	29397	54
4	1883	886	6229	18000	47764	71993	66
5	1883	984	8547	20000	54709	83257	66
6	1900	511	4074	10375	25310	39759	64
7	1900-1901	344	2749	7000	15486	25234	61
8	1901	984	8521	20000	42293	70813	60
9	1902-1903	166	1408	3380	5477	10266	53
10	1903	984	0	0	0	0	0
13	1903	492	4880	10000	7958	32838	43
14	1904	689	16076	14000	18600	48676	38
15	1903-1904	794	7854	16138	37400	61392	61
16-17	1904-1905	886	18918	18000	41600	78518	53
18	1906	1296	17751	26334	53000	97085	55
19	1908-1909	1020	20781	20723	32100	73604	44
20	1909-1910	1108	8946	22505	54778	86229	64
21	1909-1910	492	4957	10000	14581	29538	49
22	1910-1912	1929	25273	39200	115934	180407	64
23	1913	551	0	0	0	0	0
24	1914	492	0	0	0	0	0

Source: BOA.Td. 991, 992, 994, 995, 996, 997, 998, 999, 1000, 1004, 1015, 1016, 1017, 1029.

⁷ Since 1 Ton=1016 Kg is used in British weight measurement units, the same equation was used in this study.

According to the 22 contracts examined, a total of 16.578 tons of copper was exported in 35 years. The total revenue from the exported coppers was 1.104.545 liras. The remaining part of the total income to the treasury is 632.513 liras. Approximately 57% of the total income was transferred to the treasury account. The part of the total income spent on expenses is 176.376 liras. A portion of the proceeds from the sale of copper in England was given to the miners in the mine where the ore was extracted. The amount of money to be given to the miners is 0.02 lira per kilo. The total money transferred to the miner is 295.656 liras and it constitutes 27% of the total income. Payments to the miners were made in bulk. The first use of the advance that the Ottoman Empire received from the Ottoman Bank was also the wholesale payment to be made to the miner (BOA.BEO.1990/149202, 1903, BOA.İ.MMS.54/2414, 1876).

It is seen that no contract was made between 1883 and 1900. It is possible to see the reason for this in the London copper market. While the price of a ton of copper was around £58 per ton in London in 1880, this price increased to around £75 in 1883. However, the decline in copper prices that started from the end of 1883 continued until 1887 and decreased to about 35 pounds. It rose again in 1887 and rose to £110 in 1888. However, as of the end of 1888, it is seen that it experienced a decrease again and fell below £40. The ton price of copper, which rose to over £60 for a short time in 1890, remained below £55 from the beginning of 1891 until 1899. Copper prices, which started to increase from this date, rose to around £80 in 1900 (Delaney 2018). In the light of the available data, it is seen that the prices received for copper exported to England are lower than the prices in the London market. In the report sent to Kostaki Antopulos Pasha, the Ambassador of the Ottoman Empire in London, from Henry Bath and Son company in 1900, offers of 52 and 52.1 pounds were made for two separate copper groups of 45 and 41 tons with purity levels of 77% $\frac{3}{4}$ and 78% $\frac{3}{4}$ (BOA.HR.SFR.3.495/28, 1900). Although copper prices in the London market were above £65 per ton in the same period, the quoted figure is below the market. Kostaki Antopulos Pasha was informed that in 1897, approximately 38 tons of copper with a purity of 79% was sold for £35 per ton (BOA.HR.SFR.3.539/11, 1904), however, it is seen that the ton price of copper in the London spot copper market was around £50 at the same time.

Copper prices were determined as a result of negotiations between the buyer and the seller. But the London Metal Exchange (LME), which was established in London in 1877, had begun to set prices to a large extent. Towards the end of the 19th century, while America and Chile had not yet effectively entered the European copper market, copper prices had risen to £105 per ton. However, as a result of the involvement of American companies in the market with large amounts of copper, copper prices were suppressed and fell to £70. After the First World War, the ton price of copper, which reached £130, later fell by half due to copper cartels and remained around £75 during the Great Depression (Jessop and Thompson 2002). In the table below, the average

selling prices of coppers in London on the dates of the contract are calculated and their values in Ottoman Lira and British Pound are shown.

Table 5

Copper Average Sales Prices

Contract	Date	Tons	Tons/ Liras	Tons/ Sterlin ⁸
1	1880	984	39	35
2	1881	492	36	32
3	1881	492	39	36
4	1883	886	61	55
5	1883	984	64	58
6	1900	511	58	52
7	1900-1901	344	53	48
8	1901	984	52	47
9	1902-1903	166	41	38
10	1903	0	0	0
13	1903	492	46	42
14	1904	689	50	46
15	1903-1904	794	57	52
16-17	1905	886	68	62
18	1906	1296	55	50
19	1908-1909	1020	52	47
20	1909-1910	1108	58	52
21	1909-1910	492	40	36
22	1910-1912	1929	73	47
23	1913	551	0	0
24	1914	492	0	0

Source: BOA.Td. 991, 992, 994, 995, 996, 997, 998, 999, 1000, 1004, 1015, 1016, 1017, 1029.

The prices in this table are obtained in terms of averages. Accordingly, the date we saw the highest average price per ton was 1905. At this date, the average price of a ton of copper is 68 liras and £62 in the 17th contract. Contract 17 is also the contract with the highest price per tonne of all contracts. 17. The highest price reached on the contract is £82. The average lowest price of exported copper was in 1881 and the second contract. The average price of copper per ton is 36 liras and £32.

⁸ Between 1880 and 1914, the period we examined, the value of the Ottoman Lira against the British Pound was recorded as 1 Sterling = 1.1 Ottoman Liras on average.

CONCLUSION

In some articles in the literature, the Ottoman State's debts to the Ottoman Bank were cited as the reason for the Ottoman Bank to be authorized in the sale of copper. This information could not be verified in the archive documents belonging to the Ottoman Empire, on the contrary, the government received an income from these sales and did not transfer any significant income other than paying interest to the bank, which was organized in particular by the Ministry of Trade, Public Works, Agriculture, Forestry, Mines and was detailed for this study appear in the examined notebooks. In addition, as we mentioned before, the interest paid to the bank was determined as 7%, but this interest rate was up to 12% in exports made by private individuals. For this reason, the fact that the Ottoman Bank acts as an intermediary in exports is seen as the lowest cost among the available possibilities. It is understood that the domestic demand is insufficient as the reason for exports. Even if there is domestic demand, the thought that the entire amount of copper to be sold cannot be sold at once and that the speed of converting copper into cash will be faster abroad than in the country are among the reasons for exports. The money transferred to the miner is not included in the expense items. Because this expense belongs to the Ottoman Empire, not the Ottoman Bank. In addition, the money to be paid to the mine worker was paid *maktûan* (wholesale).

In the transportation phase, which is the most important expense of exports, the failure to apply to tenders for transportation and therefore the inability to reduce transportation prices adversely affected the income to be obtained from copper exports. Another important issue to be discussed is the selling prices of copper exported to England. We can see that the prices of exported coppers are below the market price. The reason for this situation can be explained by the fact that the copper subject to sale is sent to England in its raw form and sold in that way (BOA.BEO.824/61741, 1896). Copper ore is a mine that can be used after being purified by smelting before being used. Exporting the ores from the Ergani Mine as raw means that these ores are not yet ready for use, and it means an additional cost by going through the smelting processes again. This situation is thought to explain the fact that the sales prices of Ergani coppers in England are below the market prices.

As a result, it was concluded that the difficulty of transportation between Ergani Mine and İskenderun Pier, the inability to modernize the transportation, and the failure to establish a modern smelter facility in Ergani Mine limited the revenues of the Ottoman Empire from this mine and disrupted its continuity. In addition to all these factors, the power of America and Chile to influence the European market with their large mining companies and high stocks, as well as the rapid development of mining technology and the Ottoman Empire's inability to follow this technology quickly enough had an impact on Ottoman mining and exports.

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