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The Great Ottoman Debasement, 1808–1844: A Political Economy Framework

Şevket Pamuk

At the threshold of the modern era, from the 1770s until the 1840s, Ottoman state finances frequently experienced large budget deficits arising mostly from wars and, to a lesser extent, from costs of military reform. These deficits reached their peak during the 1820s and 1830s. In response, the government attempted to increase its control over revenue sources and made use of various forms of internal borrowing. However, the state's demand for funds in relation to both the size of the economy and the ability of the fragile domestic institutions to handle them was too large.[1] As a result, when short-term fiscal pressures mounted, the government resorted to debasements. The highest rates of debasement in Ottoman history took place during the reign of the reformist and centralizing Sultan Mahmud II (1808–1839). This chapter will argue that debasements were not the result of a haphazard process but were undertaken or not undertaken by the government after the weighing of associated benefits and costs. In other words, far from being an exercise in futility, debasements are viewed here as a potentially effective instrument of fiscal policy, especially in the short term. In fact, one may even argue that debasements were used as an instrument of centralization by Mahmud II. The timing and magnitude of the debasements also suggest, however, that the government was quite sensitive to the political opposition they generated among the janissaries and other urban groups.

Toward a Political Economy Framework

The causes and consequences of premodern debasements, that is, the reduction of the specie content of the currency by the monetary authority, have been the focus of much debate.[2] Some of the causes, such as the wear on the existing stock of coins in circulation or the mismanagement of the mints, appear technical or administrative in nature. Another possible cause was the increase in the economy's demand for money and the need to increase the money stock in circulation. In the short term, debasements provided relief from shortages of specie and coinage in circulation by increasing the nominal value of coinage in circulation. However, the alteration and expansion of the money supply through debasements could provide only temporary relief because prices tended to adjust upward sooner or later, and the volume of coinage in circulation adjusted for the price level tended to return to its earlier level. For this reason, the efforts of premodern states to offset the detrimental effects of a bullion shortage by means of debasement were doomed to frustration.

The persistence of debasements throughout the medieval and early modern periods suggests that these interventions were not simply futile efforts. Although they did not solve the problems of specie shortages, debasements did provide fiscal relief for the states, and there lay their appeal. Because the obligations of the state to the soldiers, bureaucrats, and suppliers are expressed in terms of the monetary unit of account, a reduction in the silver content of the currency enabled the state to increase the amount it could mint from or the payments it could make with a given amount of silver. As a result, debasements were frequently utilized as an alternative to additional taxation.

Prices almost always rose in the aftermath of debasements because a debasement typically increased the nominal value of coinage in circulation. Even if the prices did not rise quickly because of the shortages of specie or for some other reason, long-distance trade acted as the ultimate equalizer in the long term. If prices expressed in grams of silver in a given region became less expensive vis-à-vis the neighboring areas, increased demand for the lower-priced commodities attracted large quantities of silver, thus raising prices. Price adjustments after a debasement tended to be more rapid, the more open the economy and the more frequently debasements were used.[3]

Another possible cause of debasements was the pressure from some social groups in favor of inflation. Even if a social group did not always benefit from debasements and inflation, it could still prefer debasements to additional taxation. For example, merchants sometimes preferred debasements to increased taxation whenever the government faced fiscal difficulties. This is because the prices of goods held by the merchants typically rose together with other prices after a debasement. On the other side of the coin were social groups who stood to lose from debasements and the accompanying inflation and therefore opposed them. Under these circumstances, the fate of the currency was not determined solely by the government but often depended upon the struggle between it and various social groups. Before we begin an examination of Ottoman debasements in the early decades of the nineteenth century, let us examine how different groups in Ottoman society fared in the face of such debasements.

For a long time it has been assumed that the use of money in the Ottoman Empire was limited to long-distance trade and parts of the urban sector.[4] Yet recent research has shown that the urban population and some segments of the countryside were already part of the monetary economy by the end of the fifteenth century. Even more significant, there occurred a substantial increase in the use of money during the sixteenth century, both because of the increased availability of specie and increasing commercialization of the rural economy. There also emerged an intensive pattern of periodic markets and market fairs where peasants and larger landholders sold parts of their produce to urban residents. These markets also provided an important opportunity for the nomads to come into contact with both peasants and the urban population. Large sectors of the rural population came to use coinage, especially the small denominations of silver akçe and the copper mangır, through their participation in these markets.[5]

Second, small-scale but intensive networks of credit relations developed in and around the urban centers. Evidence from thousands of court cases in these towns and cities involving lenders and borrowers leave no doubt that the use of credit, small and large, was widespread among all segments of urban as well as parts of rural society. It is clear that neither the Islamic prohibitions against interest and usury nor the absence of formal banking institutions prevented the expansion of credit in Ottoman society.[6] As a result, debasements had an impact on virtually all groups in Ottoman society, and in turn, each group took a position. Most men and women, both urban and rural, were clear about the consequences of different ways of dealing with the coinage, and who gained and who lost. In general, all those who had future obligations expressed in terms of the unit of account—mainly borrowers and tenants paying fixed rents in cash—stood to gain from debasements. Conversely, those who expected to be paid fixed amounts in terms of the unit of account stood to lose from debasements.[7]

In the rural areas, taxes and rents on both public and privately held lands were paid almost entirely in kind during the eighteenth and nineteenth centuries. Moreover, those producers who sold part of their crop in local markets received higher prices during periods of inflation. As a result, debasements and inflation did not have a major impact on rural producers. The significant exception, of course, were the lenders and borrowers in the countryside. Local court records indicate that numbers of court cases involving lending and borrowing by rural as well as urban residents typically showed sharp increases during periods of frequent debasement and rapid inflation.

In the urban areas there existed a dense network of credit relations, most of which involved small-scale lenders and small-cash *vakıf*s (pious foundations) that lent on interest. The local *sarraf*s (money changers), with their expert knowledge of the markets, often benefited from the uncertainty and fluctuations in exchange rates as well as the requirements to surrender old coins in the aftermath of debasements. Most of them were net lenders, though, and they stood to lose from the inflation that followed debasements.

As the fiscal problems of the Ottoman state intensified in the second half of the eighteenth century, the *sarraf*s of Istanbul began to provide increasingly larger loans to the state, utilizing their connections to the financial markets in Europe. This lucrative process soon transformed the traditional money changers into the so-called Galata bankers, named after the financial district in the capital city. The Galata bankers also held considerable amounts of *esham* (long-term government bonds). As a result, they were in favor of monetary stability.[8]

It would be interesting to explore the attitudes of the *ayan* (notables) of the provinces toward money and inflation during the eighteenth and early nineteenth centuries. Many *ayan* were the holders of various types of tax farms, both short-term and long-term. To the extent that the tax farmers were expected to make fixed payments to the state each year, they tended to benefit from debasements and inflation. At the same time, however, many *ayan* were engaged in trade, especially long-distance trade. In their role as long-distance merchants, they must have favored monetary stability.

Merchants and shopkeepers in the urban areas did not appear to lose from debasements, as the prices of goods they sold tended to rise during periods of inflation. There was always the risk, though, that the government would impose price ceilings on essential goods sold in the urban markets whenever prices rose too fast. As a result, they were also wary of debasements.

The groups that stood to lose the most from debasements were those who were paid fixed amounts in terms of the unit of account. The most important groups in this category were the employees of the state, the bureaucracy, the ulema, and especially the janissaries. There existed a large overlap between the guild members and the janissaries after the latter began to moonlight as artisans and shopkeepers in the seventeenth century.

The Great Debasement, 1808–1844

When Mahmud II ascended the throne in 1808, the standard kuruş or piaster contained 6.90 grams of silver, unchanged since the debasement of 1789. During the next three decades, the silver content of the Ottoman currency declined at times sharply, at times more slowly. The lowest point was reached in 1831–1832 at 0.5 grams of silver, although the kuruş subsequently rose to 0.9 grams in 1832 and then to 1.0 gram in 1844, where it stayed until World War I. All in all, the kuruş lost more than 83 percent of its silver content from 1808 to 1844.[9] (See Table 2.1.)

Table 2.1 The Silver Kuruş and Its Exchange Rate, 1780–1914

Year	Weight (grams)	Fineness (percent)	Pure Silver Content (grams)	Exchange Rate of the British Pound (in kuruş)
1780	18.50	54.0	10.00	11.0
1789	12.80	54.0	6.90	15.0
1800	12.60	54.0	6.90	15.0
1808	12.80	46.5	5.90	19.0
1809	9.60	46.5	4.42	20.5
1810	5.13	73.0	3.74	19.8
1818	9.60	46.5	4.42	29.0
1820	6.41	46.0	2.95	35.0
1822	4.28	54.0	2.32	37.0
1828	3.20	46.0	1.47	59.0
1829	3.10	22.0	0.72	69.0
1831	3.00	17.5	0.53	80.0
1832	2.14	44.0	0.94	88.0
1839	2.14	44.0	0.94	104.0
1844	1.20	83.3	1.00	110.0
1914	1.20	83.3	1.00	110.0

Sources: Chester L. Krause and Clifford Mishler, with Colin R. Bruce II, *Standard Catalog of World Coins*, 21st edition, (Iola, Wisc.: Krause Publications, 1994); Benjamin Sass, "The Silver and Billon Coins Minted at Constantinople Under Sultan Mahmud II (1223–1255 H ["Hegira/Hijra"])," *The American Numismatic Society Notes* 18 (1972): 167–175; Çüneyt Ölçer, *Sultan II. Mahmud Zamanında Darp Edilen Osmanlı Madeni Paraları*, (Istanbul: Yenilik Basımevi, 1970); Jem Sultan, *Coins of the Ottoman Empire and the Turkish Republic: A Detailed Catalogue of the Jem Sultan Collection*, 2 vols. (Thousand Oaks, Calif.: B&R Publishers, 1977), pp. 213–297; İsmail Galib, *Takvim-i Meskukat-ı Osmaniye* (Istanbul, H. 1307/1889–1890); Daniel Panzac, "La Piastre et le Cyclotron: Essai sur les Monnaies Ottomanes, 1687–1844," paper presented to the Conference on *Money and Currencies in the Ottoman Empire, 1690–1850* (Istanbul, November 1997); and Charles Issawi, *The Economic History of Turkey, 1800–1914* (Chicago: University of Chicago Press, 1980), pp. 327–331.

Note: The Tashih-i Sikke (correction of coinage) operation of 1844 introduced the new gold lira, which equaled 100 silver kuruş and fixed the gold-silver ratio at 15:09. The standards of Ottoman silver and gold coinage did not change after that date.

Closely paralleling the debasement of the currency was the sharp fall in its exchange rate and the rapid rise in the general price level, both of which were equally dramatic. In 1808, one Venetian gold ducat exchanged for 8 kuruş and one British pound sterling for 19 kuruş. By 1844 one ducat equaled 50 to 52 kuruş and the British pound exchanged for 110 kuruş. In other words, the Ottoman unit also lost about 83 percent of its value against the leading European currencies during these thirty-five years. Indices recently constructed from data obtained from the account books of *vakıfs*, their soup kitchens, and the account books of the imperial kitchen at Istanbul show that food prices increased by about fourfold between 1808 and 1844 and about tenfold between 1789 and 1844.[10] It is possible to follow the silver content of the kuruş on an annual basis from the available numismatic evidence. During his thirty-two-year reign, Mahmud II issued ten different series of silver coins each with different standards. Most of these series covered the full range of coins from the small one, or five para, to the two, five, and even six kuruş pieces. Each of these series remained in circulation anywhere from one to eight or more years. Mahmud II ended up issuing forty-seven different types of silver coins, more than any other Ottoman ruler. Detailed information is available about the standards of each coin for each of these series. In addition, a limited number of coins have been subjected to content analysis to establish their specie and alloy content (Table 2.1).

The government continued to issue varieties of gold coins such as zeri mahbub, rumi, adli, hayriye, and mahmudiye, each with different and changing standards during the reign of Mahmud II. These gold coins were not subjected to such rapid rates of debasement, however. The overall decline in the specie content of the gold coins during these three decades remained below 20 percent.[11] It is clear that the government did not view the gold coins with the same fiscal logic that was applied to the silver kuruş. This was because the obligations of the state were expressed in terms of the silver kuruş and not linked to any gold coin. As a result, the government did not stand to gain much from debasing the gold coins.[12]

An examination of the timing and magnitudes of the debasements provides important insights into the motives of the government. On the basis of the available evidence presented in Table 2.1, the debasements during the reign of Mahmud II can be divided into two subperiods. The first subperiod covers the early years of his reign, from 1808 until 1822. Six separate series, or sets, of silver coins were issued during this period. By the sixth series, the silver content of the kuruş had been reduced to 2.32 grams, by a total of 60 percent in comparison to 1808. The fiscal difficulties created by the wars against Russia, Iran, and the Greek revolution figured prominently in the decline of the currency during the first subperiod.[13] In fact, the third series of silver coins issued by Mahmud II in 1810 with lower silver were called cihadiyye, in reference to the ongoing war with Russia and the need to raise fiscal revenue for that effort. These coins remained in circulation for eight years.[14] The government also issued special cihadiyye eshamı during this period, which can be considered the first example of Ottoman war bonds.[15]

The second and even more rapid subperiod of debasement took place during and after the war of 1828–1829 with Russia. In addition to wartime expenditures, the large, 400-million kuruş indemnity the Ottomans agreed to pay at the end of the war weighed heavily on Ottoman finances and the currency for a number of years.[16] Between 1828 and 1831, the silver content of the kuruş was thus reduced sharply from 2.32 grams to 0.53 grams, a decline of 79 percent in four years. As financial conditions began to improve after 1832, the silver content of the currency was raised to 0.94 grams.[17]

We can now examine the attitudes and behavior of the Ottoman government toward debasement during the reign of Mahmud II. In this framework the government is viewed as weighing the short-term fiscal benefits accruing from debasements against both the short-term and long-term costs of such action. If the government perceives these costs to be less than the expected fiscal benefits, then a debasement or a series of debasements may be adopted. In other words, far from being an exercise in futility, the debasements are seen as a potentially effective instrument of fiscal policy, especially in the short term. At the same time, this framework will emphasize the economic and political constraints on the state's ability to take advantage of debasements.

The fiscal benefits of a debasement are not difficult to establish. The government was able to issue a larger amount of coinage in nominal terms with the same amount of specie and meet a larger fraction of its obligations.[18] One related measure often adopted by the government in the aftermath of a debasement was to prohibit the use and sale of gold and silver in local markets and order that these be surrendered to the imperial mint at below-market prices.[19] Finally, the state also obtained revenue from the old coins brought to the mint by the public.

On the other side, there are a number of costs that may be borne by the state as a result of debasements. As prices rose, including those paid by the state in the aftermath of a debasement, many of the state revenues, fixed in nominal terms, declined in real terms. In other words, debasements generated an initial surge in revenues followed by their decline in real terms due to the inflation they created. In the longer term, a debasement might even lead to a real decline in revenues if the government did not adjust upward the taxes and other revenues that had been fixed in nominal terms.[20]

Second, if the public loses confidence in the currency and begins to anticipate further debasements, it will become increasingly difficult for the government to take advantage of further reductions in the specie content of coinage. In the open-mint system, for example, the public may begin holding another currency and stay away from the mints. A large degree of currency substitution must have taken place during the reign of Mahmud II, as varieties of foreign coinage were free to circulate.[21]

A third cost of Ottoman debasements was the spread of counterfeiting.

When the government issued new coins with a lower specie content, counterfeiters immediately began to mint the new coins with the same or even higher silver content in order to share the seigniorage revenues of the state. This opportunity declined, however, when precious metal prices adjusted upward along with other prices. Price ceilings on the specie and government attempts to obtain the specie at those official prices also encouraged counterfeiting.[22]

Another cost was the adverse implications of debasements for the ability of the state to borrow domestically. As the government began to make use of debasements, the public began to anticipate more, and it became more difficult to borrow from the public at large. There is evidence that with the acceleration of debasements after 1808, rates of interest increased even further and it became even more difficult for the government to sell the esham. For example, it appears that the ratio between the initial sale price of esham and the annual payments declined after 1808 when the government began to use debasements more frequently.[23]

Yet the most important cost of Ottoman debasements was the political opposition they generated among the urban groups, especially in the capital city. One group that disliked debasements consisted of the guild members, shopkeepers, small merchants, and the wage-earning artisans. Another group that stood to lose from debasements were those who were paid fixed salaries by the state, the bureaucracy, the ulema, and especially the janissaries stationed permanently in the capital. There existed a large overlap between the guild members and the janissaries because the latter began to moonlight as artisans and shopkeepers. This broad opposition acted as a major deterrent against the more frequent use of debasements by the government not only in the capital but also in the provincial centers. It would be interesting to explore the causal linkages between the debasements and the urban rebellions of the late eighteenth and early nineteenth centuries in Syria, Iraq, and elsewhere in the empire.[24]

The effectiveness of this urban opposition against debasements should not be measured in terms of the frequency of their rebellions, however. Just as E. P. Thompson had argued in his study of the moral economy of the English crowd in the eighteenth century, that the effectiveness of the bread riots should not be measured in terms of their frequency, it was the threat of rebellions that proved just as effective in the longer term;[25] it ensured that the governments would refrain from debasements, at least during periods of peace.

Into this framework of costs and benefits and interaction between the state and society, wars enter as exogenous shocks, events that raised both the need for short-term revenues for the state and the willingness of the public to accept extraordinary measures such as debasements. As the urgency of generating revenues increased, the state often invoked references to holy wars and even linked the new coinage explicitly to the ongoing wars, calling the new issues of coins and bonds cihadiyye, for example.

During the reigns of both Selim III and Mahmud II, the governments were well aware of the limitations imposed by the janissaries and related urban groups. From the very beginning of his reign, Mahmud II wanted to replace the janissaries with a Western-style army. But during the early years of his long reign, he did not have the political support to make this critical move. After the janissaries were finally defeated and the order was abolished in 1826—in what is usually considered one of the most important political events of this period, known as Vaka-i Hayriye, or the Auspicious Event—a major constraint in the way of debasements was lifted. Only two years later, the government began the largest debasement of Ottoman history, reducing the specie content of the kuruş by 79 percent within a period of four years.

In terms of revenues for the state, the debasements of 1828–1831 were considered a major success by the contemporaries. The credit for this accomplishment was given to Artin Kazaz, an Armenian financier who had risen through the ranks of the *sarraf* guild to head the imperial mint in the 1820s. Kazaz was actually only one in a long chain of Armenian financiers to administer the imperial mint from the late eighteenth century until the 1840s. One of his biographies relates that during the war of 1828–1829 with Russia, the grand vizier considered issuing copper coinage. However, Kazaz convinced the sultan that there should be at least some silver in the new coinage. He then went on to produce a very large volume of five kuruş pieces.[26] His rationale was that the presence of some silver would help the state raise more revenue by making the coins more acceptable to the public and helping the state retain the opportunity to raise additional revenues by lowering the silver content in the future.[27]

One unique aspect of this debasement episode was that the contemporaries calculated the seigniorage revenues of the state from the mint records. According to these calculations, during the regnal years of 22 to 25 (approximately 1828–1831), the imperial mint produced 23 million units of the large five kuruş pieces as the eighth series of Mahmud II after lowering the silver content of the coins. The net seigniorage revenues of the state were estimated at 39.7 million kuruş. During the regnal years 25 and 26 (1831–1832), an additional 245 million kuruş worth of new coinage with even lower silver content was issued as the ninth series. This operation is estimated to have provided the state with net revenues of 119 million kuruş. After the end of the war, during the regnal years 26 through 32 (1832–1838), the mint issued a variety of new coins with a total value of 137.8 million kuruş as the tenth series. The silver content of these coins, however, was higher than both the eighth and the ninth series, and the state did not obtain any seigniorage revenue from them. The purpose of this last phase was to bring back price stability and renew confidence in the currency.[28]

These were large magnitudes in relation to the size of total state revenues and expenditures at the time. Since the various revenues and expenditures were not yet incorporated into a single budget, it is difficult to estimate total annual revenues, but the sum of 250 to 300 million kuruş appears as a reasonable figure for these years. Yavuz Cezar provides an estimate of 300 million kuruş for the budget of 1838.[29] In other words, the debasements of 1828–1832 provided the state with total revenues associated with the debasements amounting to more than one-half of one year's total revenues, or an average of more than 10 percent of annual revenues for these five troubled years.

The debasements provided another, and somewhat unexpected, benefit to the treasury by reducing the borrowing requirements of the state and bringing down interest rates. The decline in interest rates then provided fiscal relief through its impact on the tax-farming system as well. Tax farmers who entered state auctions for the right to collect specific tax revenues were required to make a certain fraction of these payments in advance for which they typically borrowed from private financiers. When the domestic interest rates declined, therefore, the auction prices of tax farms tended to rise.

Bimetallism and External Borrowing

Monetary conditions had assumed crisis proportions by the end of the 1830s. While the government had succeeded in raising short-term revenue from frequent debasements, the resulting inflation created serious political problems. In addition, the production of a large variety of coins since the beginning of the century and the inability of the government to retire the earlier series from circulation had added to the difficulties. These conditions created difficulties both for daily transactions and international trade. At the same time, the appeal and use of European coinage had increased, especially in international trade and for store-of-wealth purposes.[30]

For European governments and especially the British, who were concerned about Russian expansionism to the south, the success of Ottoman reforms was considered essential for the territorial integrity of the empire. European governments also believed that rapid expansion of commercial ties with Europe based on the principle of comparative advantage and European direct investment were essential for the development of the Ottoman economy. As a result, they began to exert considerable pressure on the Ottoman government to abandon debasements and establish a more stable monetary system. Bimetallism was proposed as a monetary regime that would bring the Ottoman Empire more in line with the prevailing international trends and help expand both trade and European investment. The

European governments also linked Ottoman access to European financial markets to fiscal reform and monetary stability. They made clear that they were ready to provide the technical expertise necessary for this purpose.

After the death of Sultan Mahmud II in 1839, the new government openly expressed the intention to carry out such an operation. New machines and technology were imported from England. Mint technicians and other specialists were invited from England and France to install the machines and advise the Ottoman government about the new standards of coinage.[31] After some delay, the government finally decided to adopt the bimetallic standard in which the silver kuruş and the new gold lira were both accepted as legal tender, freely convertible at the fixed rate of 100 kuruş for one gold lira and obtainable at the government mint. The new gold coins began to be produced in 1843, and the new silver coins were issued the following year along with an official declaration from the imperial mint, setting out the reasons for the reform. The gold-silver ratio was fixed at 15:9. The open mint system was to be continued. All silver and gold coinage minted until 1922 adhered to the standards established in 1844.

In the early part of the nineteenth century, governments in Cairo and Tunis, facing very similar constraints and pressures, also abandoned fiscally motivated debasements in favor of bimetallism and stable coinage.[32] It was not so much the interaction between these governments that brought about the monetary regime shift. In addition to the growing domestic costs of debasements, it was the rising forces of globalization, the rapid increase in trade with Europe, and the growing interaction with European merchants and governments as well as their advice and pressure that led these governments to embrace those monetary institutions that conformed to the requirements of international trade.

The decision to abandon debasements as a means of raising fiscal revenue without the elimination of the budget deficits proved very costly in the long term. All three governments began to borrow in the European financial markets during the 1850s in order to meet their short-term budgetary needs. By the middle of the 1870s, with their annual debt payments far in excess of their ability to pay, they were all forced to declare moratoriums on their outstanding debt. The establishment of the European Public Debt Administration in Istanbul (1881) and, even more dramatically, the occupation of Tunis (1881) and Egypt (1882) by the European powers were directly linked to these moratoriums.[33]

Notes

1. For state attempts to increase its control over revenue sources and the evolution of the domestic institutions for credit during the late eighteenth and early

nineteenth centuries, see Şevket Pamuk, *A Monetary History of the Ottoman Empire* (Cambridge, UK: Cambridge University Press, 1999), pp. 188–192.

2. Carlo. M. Cipolla, "Currency Depreciation in Medieval Europe," *Economic History Review* 15 (1963): 413–415, provides a useful list of the causes of debasements and a good starting point. Also see Harry A. Miskimin, *Money and Power in Fifteenth-Century France* (New Haven, Conn.: Yale University Press, 1984); Michael D. Bordo, "Money, Deflation, and Seigniorage in the Fifteenth Century," *Journal of Monetary Economics* 18 (1986): 337–346; and Nathan Sussman, "Debasements, Royal Revenues, and Inflation in France During the Hundred Years' War, 1415–1422," *The Journal of Economic History* 53 (1993): 44–70.

3. Bordo, "Money, Deflation, and Seigniorage."

4. F. Braudel, *Civilization and Capitalism, 15th–18th Century,* Vol. III: *The Perspective of the World* (New York: Harper and Row Publishers, 1984), pp. 471–473.

5. R. C. Jennings, "Loans and Credit in Early 17th-Century Ottoman Judicial Records," *Journal of the Economic and Social History of the Orient* 16 (1973): 168–216; Suraiya Faroqhi, "The Early History of Balkan Fairs," *Südost-Forschungen* 37 (1978): 50–68; Suraiya Faroqhi, "Sixteenth Century Periodic Markets in Various Anatolian Sancaks," *Journal of the Economic and Social History of the Orient* 22 (1979): 32–80; Suraiya Faroqhi, "Rural Society in Anatolia and the Balkans During the Sixteenth Century," *Turcica* 9 (1977):161–196, and vol. 11 (1979):103–153; and Halil İnalcık, "Osmanlı İdare, Sosyal ve Ekonomik Tarihiyle İlgili Belgeler: Bursa Kadı Sicillerinden Seçmeler," *Türk Tarih Kurumu, Belgeler* 14 (1981): 1–91. See also the studies on the rural economy by these authors that appeared in two collections: Halil İnalcık, *The Middle East and the Balkans Under the Ottoman Empire: Essays on Economy and Society* (Bloomington: Indiana University Turkish Studies and Turkish Ministry of Culture Joint Series, 1993); and Suraiya Faroqhi, *Coping with the State, Political Conflict, and Crime in the Ottoman Economy, 1550–1720* (Istanbul: ISIS Press, 1995).

6. Pamuk, *Monetary History*, pp. 77–87.

7. For greater detail on the responses of different social groups to Ottoman debasements during the fifteenth, sixteenth, and seventeenth centuries, see ibid., pp. 55–58, 138–142.

8. Araks Şahiner, "The Sarrafs of Istanbul: Financiers of the Empire" (M.A. thesis, Department of History, Boğaziçi University, 1995); Mehmet Genç, "Esham," in *Islam Ansiklopedisi*, Vol. XI (Istanbul: Diyanet Vakfı, 1995), pp. 376–380.

9. The overall rate of debasement is even higher if 1789 is taken as the beginning point. Until that year, the kuruş contained approximately 8.4 grams of silver. The Ottoman unit lost 88 percent of its silver content between 1789 and 1844. For both the 1808–1844 and 1789–1844 periods, these represent the highest rates of debasement in Ottoman history. There is no other period in which the Ottoman currency was subjected to such a high rate of debasement in such a short period of time.

10. Şevket Pamuk, *Five Hundred Years of Prices and Wages in Istanbul and Other Ottoman Cities, 1469–1998* (Ankara: Turkey State Institute of Statistics, Historical Statistics Series, forthcoming).

11. Chester L. Krause and Clifford Mishler, *Standard Catalog of World Coins,* 21st ed. (Iola, Wisc.: Krause Publications, 1994); also Remzi Kocaer, *Osmanlı Altın Paraları* (Istanbul: Güzel Sanatlar Matbaası, 1967).

12. In a different context Akira Motomura has argued that the Spanish government of the seventeenth century made a similar distinction between copper coinage on the one hand and silver and gold on the other. The government obtained large revenues from the minting and international circulation of silver coinage and, in order to maintain worldwide confidence in the currency, did not want to change the standards of these coins. However, the copper coinage used in the domestic economy was subjected to a policy of regular debasements. See Akira Motomura, "The Best and Worst of Currencies: Seigniorage and Currency Policy in Spain, 1597–1650," *The Journal of Economic History* 54 (1994):104–127.

13. Stanford J. Shaw and Ezel Kuran Shaw, *History of the Ottoman Empire and Modern Turkey*, Vol. II, *1809–1975* (London: Cambridge University Press, 1977), pp. 12–19.

14. BOA (Başbakanlık Osmanlı Arşivleri/ Prime Ministry, Ottoman Archives), Cevdet Darphane, 158, 3220, 1964, 1656, and 1632.

15. Çüneyt Ölçer, *Sultan II. Mahmud Zamanında Darp Edilen Osmanlı Madeni Paraları* (Istanbul: Yenilik Basımevi, 1970); Benjamin Sass, "The Silver and Billon Coins Minted at Constantinople Under Sultan Mahmud II (1223–1255 H.)," *American Numismatic Society Notes* 18 (1972): 167–175; Krause and Mishler, *Standard Catalog of World Coins.*

16. The Ottomans were expected to make this payment over a period of ten years. This sum amounted to approximately 150 percent of the annual revenues of the Ottoman state. It was subsequently reduced after territorial concessions by the Ottomans. Shaw and Shaw, *History of the Ottoman Empire*, Vol. II, p. 32; Yavuz Cezar, *Osmanlı Maliyesinde Bunalım ve Değişim Dönemi: XVIII. yy.dan Tanzimat'a Mali Tarih* (Istanbul: Alan Yayıncılık, 1986), pp. 244–301.

17. The exchange rate of the kuruş followed its silver content closely during these decades, with two exceptions. First, the decline in exchange rate of the kuruş slowed and even stopped during the Napoleonic wars as the European currencies also depreciated. Second, the link between the silver content of the Ottoman currency and its exchange rate was severed and the kuruş became a fiat currency during the rapid debasements of 1828–1833 (see Table 2.1).

18. Contemporary Ottoman commentators have argued that debasements were not useful for the state because the prices rose and the state revenues, which were fixed in nominal terms, declined in real terms after each debasement (Cezar, *Osmanlı Maliyesinde Bunalım*, p. 147). This argument, however, does not take into account the revenue obtained by the state during the first round by issuing additional coinage. With the time horizon shortened under the pressure of war and severe financial crises, it thus made sense to pursue debasements for short-term fiscal gains.

19. This measure was used during the debasement of 1789 and later during some of the debasements of Mahmud II (Cezar, *Osmanlı Maliyesinde Bunalım*, pp. 99, 139). For government attempts to bring in more silver to the Istanbul mint during this period, also see BOA, Cevdet Darphane 823, 13, and Hatt-ı Hümayun, 16505.

20. When the public can immediately observe or learn of the rate of debasement, prices adjust more quickly and the fiscal benefits of the debasement are exhausted sooner. If, on the other hand, both the size and the degree of fineness of the coins are constantly changed, as was the case during this period, the public might underestimate the extent of the debasement and adjust to the actual rate of debasement with a lag. In that case, the government's revenues will be higher. Sussman ("Debasements," pp. 44–70) argues that manipulating the monetary stan-

dard in this fashion offers the government the same kind of opportunity to raise revenues as with fiat money.

21. For an earlier episode of currency substitution in the Ottoman Empire arising from the instability of the akçe during the seventeenth century, see Şevket Pamuk, "In the Absence of Domestic Currency: Debased European Coinage in the Seventeenth-Century Ottoman Empire," *Journal of Economic History* 57 (1997): 345–366; and Pamuk, *Monetary History*, pp. 138–158.

22. For examples of counterfeiting and the circulation of counterfeit coinage during this period, see BOA, Hatt-ı Hümayun, 52541/A, 52563, 27644, 48486, 48487, 48488, 24243, and Cevdet Darphane, 1816, 1472, 1818.

23. Cezar, *Osmanlı Maliyesinde Bunalım*, pp. 79–89, 133–135, 239–241.

24. I am indebted to Dina Rizk Khoury for information on the urban uprisings in Syria and Iraq during the period 1770 to 1830.

25. E. P. Thompson, "The Moral Economy of the British Crowd in the Eighteenth Century," *Past and Present* 50 (1971): 76–135; also Charles Tilly, "Food Supply and Public Order in Modern Europe," in C. Tilly (ed.), *The Formation of Nation States in Western Europe* (Princeton, N.J.: Princeton University Press, 1975), pp. 35–151.

26. Haydar Kazgan, "İkinci Sultan Mahmut devrinde enflasyon ve darphane amiri Kazaz Artin," *Toplum ve Bilim* 11 (1980): 115–130; Diran Kelekyan, "Kazaz Artin," *Tarihi Osmani Encümeni Mecmuası*, 26 and 27 (June and August H.1330/1912).

27. According to a story still being told among the Armenian community of Istanbul, the Russian government demanded and obtained a large payment of indemnity after the war ended with the defeat of the Ottomans. Aware that the Ottoman government frequently debased the currency, however, the Russians demanded that the sum be paid in old kuruş, not new and debased currency. The Ottoman government produced new and debased coinage anyway but soon realized they had a problem on their hands. The coins were obviously new, very bright, and shiny. So, the story goes, they lined up the new reform soldiers on the Asian side of the Bosphorus for several miles and instructed them to hold out their hands. The new coinage was then passed on from hand to hand. By the time they reached the other end, they all looked just like the old kuruş. I am indebted to Dr. Nurhan Davutyan for this story. For the negotiations with the Russian government regarding the indemnity payment and the Ottoman request to pay the indemnity in silver kuruş rather than Hungarian gold coins, see BOA, Hatt-ı Hümayun, 42935, 46216, 20194.

28. A. du Velay, *Essai sur l'Histoire Financière de la Turquie* (Paris: Arthur Rousseau, 1903), pp. 28–32.

29. Cezar, *Osmanlı Maliyesinde Bunalım*, pp. 244–301.

30. For a detailed list of Ottoman and foreign coinage circulating in the Balkans, see David Cohen, "La circulation monétaire entre les Principautés Roumaines et les terres Bulgares (1840–1878)," *Bulgarian Historical Review* 4, no. 2 (1976): 55–71. For the different varieties of coinage in circulation in Baghdad in the 1830s and their exchange rates, see Hatt-ı Hümayun, 27815/D, 52490.

31. Ölçer, *Sultan II. Mahmud*, p. 17.

32. It is interesting that even during the 1820s and 1830s when Governor Muhammad Ali successfully fought and defeated the Ottoman armies for the independence of Egypt, he chose to keep the two currencies linked. The strength of commercial linkages between the two regions must have played an important role in the persistence of the monetary linkage. It is also likely that in the rapid depreciation of the kuruş in Istanbul, Muhammad Ali saw an opportunity for his own government to generate additional fiscal revenue and thus went along with the debasements. As a result, the timing of the overall decline of the para and kuruş of Egypt was remarkably similar to those in Istanbul. For the rapid decline in the exchange rate of the para of Egypt during this period, see Kenneth Cuno, *The Pasha's Peasants: Land, Society, and Economy in Lower Egypt, 1740–1858* (Cambridge, UK: Cambridge University Press, 1992), Appendix 2, pp. 211–215. Muhammad Ali was the first to invite European monetary specialists. With the monetary reforms of 1834, Egypt embraced the bimetallic system ten years ahead of the Ottomans in Istanbul. The standards adopted for gold and silver Egyptian coinage remained unchanged until World War I.

33. David Landes, *Bankers and Pashas: International Finance and Economic Imperialism in Egypt* (London: Heinemann, 1958); Roger Owen, *The Middle East in the World Economy, 1800–1914* (London: Methuen, 1981), pp. 122–135; and Abdelhamid Fenina, "Les Monnaies de la Régence de Tunis sous les Husaynides, Études de Numismatiques et d'Histoire Monétaire (1705–1891)" (Thèse de Doctorat, Nouveau Régime, Université de Paris-Sorbonne, 1993).