Economic Bases of Revolution and Repression in the Late Ottoman Empire

CARTER VAUGHN FINDLEY

Ohio State University

Central to late Ottoman history is a series of events that marks a milestone in the emergence of modern forms of political thought and revolutionary action in the Islamic world. The sequence opened with the rise of the Young Ottoman ideologues (1865) and the constitutional movement of the 1870s. It continued with the repression of these forces under Abdülhamid II (1876–1909). It culminated with the resurgence of opposition in the Young Turk movement of 1889 and later, and especially with the revolution of 1908. Studied so far mostly in political and intellectual terms,[1] the sequence seems well understood. The emergence of the Young Ottomans—the pioneers of political ideology, in any modern sense, in the Middle East—appears to result from the introduction of Western ideas and from stresses created within the bureaucracy by the political hegemony of the *Tanzimat* elite (*ca.* 1839–71).[2] The repression under Abdülhamid follows from the turmoil of the late 1870s, the weaknesses of the constitution of 1876, and the craft of the new sultan in creating a palace-dominated police state. The emergence of the Young Turks shows that terror ultimately fostered, rather than killed, the opposition. Too, their eventual revolutionary success shows how much more effective than the

[1] Ernest E. Ramsaur, Jr., *The Young Turks: Prelude to the Revolution of 1908* (Princeton, 1957); Bernard Lewis, *The Emergence of Modern Turkey*, 2d ed. (London, 1968), 150–74, 194–230; Şerif Mardin, *The Genesis of Young Ottoman Thought* (Princeton, 1962); *idem*, *Jön Türklerin Siyasî Fikirleri* [Young Turk political ideas] (Ankara, 1964); *idem*, "Libertarian Movements in the Ottoman Empire, 1878–1895," *Middle East Journal*, 16:2 (1962), 169–82; *idem*, "Power, Civil Society, and Culture in the Ottoman Empire," *Comparative Studies in Society and History*, 11:3 (1969), 258–81; Feroz Ahmad, *The Young Turks: The Committee of Union and Progress in Turkish Politics, 1908–1914* (Oxford, 1969); Stanford J. Shaw and Ezel K. Shaw, *History of the Ottoman Empire and Modern Turkey* (Cambridge, 1977), II, 263–67, 273ff.; Carter Vaughn Findley, "The Advent of Ideology in the Islamic Middle East, Part II," *Studia Islamica*, 56 (1982), 147–66; Donald Quataert, "The 1908 Young Turk Revolution: Old and New Approaches," *Middle East Studies Association Bulletin*, 13:1 (1979), 22–29.

[2] Mardin, *Genesis*, 121–32; *idem*, "Power, Civil Society, and Culture," 277; *idem*, "Super Westernization in Urban Life in the Ottoman Empire in the Last Quarter of the Nineteenth Century," in *Turkey: Geographic and Political Perspectives*, Peter Benedict *et al.*, eds. (Leiden, 1974), 403–46.

0010-4175/86/1481–2342 $2.50

Young Ottomans they were as political mobilizers.[3] Finally, international political forces played a part, as indicated by the role of refugees from the Russian Empire in the development of Turkish nationalism, and by the excitement that the Russo-Japanese War and the Russian revolution of 1905 roused in the Ottoman Empire, as elsewhere in Asia.[4]

No doubt, this political-intellectual interpretation covers many of the most important points. Yet, it remains to ask whether analysis of additional linkages between the sequence—ferment-repression-revolution—and its historical context would not add significantly to understanding of the sequence. This essay answers the question positively by showing that the sequence was linked to economic, as well as intellectual and political, developments.[5] In fact, as 1908 approached, the economic situation evolved into a variation on a well-known theory that seeks the origins of revolution in a "sharp reversal" following a "prolonged period . . . of economic and social development."[6]

Evidence for the interpretation offered here emerges from comparison of two sets of quantitative data: the salaries recorded in the personnel dossiers of the Ottoman Foreign Ministry, and the commodity prices published in Istanbul newspapers of the period 1851–1914. The method of analysis is to produce time series, of salary statistics in the one case, and commodity prices in the other, and then, by comparing these series, to arrive at conclusions about changes over time in the economic position of a key sector of the bureaucratic intelligentsia.[7]

[3] Since I have treated problems of ideology and political mobilization in another study, discussion of these topics here will be schematic. Interested readers should see Findley, "Advent of Ideology, Part II."

[4] Nikki Keddie, "Religion and Irreligion in Early Iranian Nationalism," *Comparative Studies in Society and History*, 4:3 (1962), 265; L. S. Stavrianos, *Global Rift* (New York, 1981), 388–90; David Kushner, *The Rise of Turkish Nationalism* (London, 1977), 10–14.

[5] A similar argument for the years right around 1908 appears in Donald Quataert, "The Economic Climate of the 'Young Turk Revolution' in 1908," *Journal of Modern History*, 51:3 (1979), D1147–D1161 (available from University Microfilms, Ann Arbor, Michigan, order no. IJ–00049). See also *idem*, "Commercialization of Agriculture in Ottoman Turkey, 1800–1914," *International Journal of Turkish Studies*, 1:2 (1980), 52–53.

[6] James C. Davies, "Toward a Theory of Revolution," in *When Men Revolt—and Why*, James C. Davies, ed. (New York, 1971), 134–47. Some scholars question whether the term *revolution* is appropriate for the Young Turk case of 1908. The view taken here is that it is meaningful to speak of revolutionary transformation of a political system—a fundamental, violent, restructuring of the political game—as distinct from more drastic revolutions that transform socioeconomic relations, and perhaps culture, as well. Revolutionary transformation of a polity is also distinguishable from the less drastic coup d'état, an irregular and usually violent change in the identity of those who wield power, without necessarily any restructuring of the political process. The view of political revolution taken here is congruent with the ideas of Davies, and other theorists of revolution. Considering what the Ottoman Empire was like before 1908, a strong case can be made that the Ottoman experience of 1908 was a political revolution as here defined.

[7] For assistance in this research, I am indebted to the late Wilford L'Esperance, and to Charles Issawi, Mehmet Genç, Andreas Tietze, Russell Major, David Landes, Metin Heper, Yılmaz Esmer, Lars Sandberg, Donald Quataert, Şevket Pamuk, Feroz Ahmad, Justin McCarthy, Tom Whitney, and Jim Wagner.

While bureaucratic salaries, particularly those of a single agency, may seem to have little bearing on the subject indicated in the title of this essay, the Foreign Ministry—aside from being the one Ottoman government agency whose personnel records are available to researchers as a discrete corpus of manageable size—was particularly important in the rise of the modernist intelligentsia. This was especially true in the generation of the Young Ottomans, almost all of whose leaders were associated with this ministry. While less strong in the generation of the Young Turks, whose leaders came from both military and civil services, the link to the civil bureaucracy was a significant fact of that period, too.[8] The economic fortunes of less elite segments of Ottoman society are now becoming better known,[9] and we shall make at least some comparative comments about them in this discussion. Given limited but growing political mobilization in this period, however, the economic fortunes of the elites surely had more to do with the origins of major political movements than did those of the masses, however important the latter were in responding to opposition appeals.

I. FOREIGN MINISTRY SALARIES

In 1877, the Ottoman government began to keep official personnel records, including regular mention of salary changes. Data collected from all recoverable files of career officials of the Foreign Ministry provide the basis for a study of bureaucratic salaries throughout roughly the second half of the nineteenth century. Analysis of the salaries presents problems pertaining to the representativeness of the data, the monetary unit of payment, the relation of the salary figures in the records to the actual receipts of the officials, and variations over the years in the numbers and seniority of the officials for whom there are data. Once the observations and adjustments that can be made in response to these problems, as set forth in the appendix, have been carried out, we are in position to open discussion of the salary structure by presenting series of adjusted means and medians. These figures are shown in Table 1, and are presented graphically in Figure 1. Consideration of the means and

[8] Phrases liked *bureaucratic intelligentsia* are justified in speaking of the Ottoman elites in the sense that, historically, government service was the predominant, almost the exclusive, way for intellectuals to earn their livelihoods. One of the best-charted themes of nineteenth-century Ottoman history is the link between reform and the creation of a Western-oriented "modernist" segment within the bureaucratic intelligentsia. In the civil bureaucracy, the Foreign Ministry played the key role in shaping the modernist leadership that dominated the government during the *Tanzimat*. The rise of the Young Ottomans in the 1860s represents the emergence from the "modernist intelligentsia" of a movement opposing the leading *Tanzimat* statesmen. About the same time, bureaucratic and literary careers were also beginning to differentiate, a process linked especially to the rise of journalism (Mardin, *Genesis*, 124–27; *idem*, *Jön Türklerin*, 94 *et passim*; Lewis, *Emergence*, 88–89, 147–50; Carter Vaughn Findley, *Bureaucratic Reform in the Ottoman Empire* (Princeton, 1980), 126–40, 209–17; *idem*, "Ideology, Part II," 151–52).

[9] Korkut Boratav, A. G. Ökçün, and Ş. Pamuk, "Ottoman Wages and the World Economy, 1839–1913," *Review* (published by the Fernand Braudel Center, State University of New York, Binghamton), forthcoming.

TABLE 1

Monthly Salaries of Ottoman Foreign Ministry Officials Serving in Istanbul, Adjusted Means and Medians (gold kuruş per month)

	Means	*Medians*		*Means*	*Medians*
1863	5,536		1887	2,024	1,256
1864	4,137		1888	1,889	1,255
1865	2,691	4,550	1889	1,740	1,231
1866	2,668	3,100	1890	1,668	1,213
1867	1,655	1,500	1891	1,604	1,188
1868	2,674	3,050	1892	1,522	1,181
1869	2,600	1,550	1893	1,511	1,144
1870	2,960	3,017	1894	1,604	1,144
1871	3,386	3,025	1895	1,534	1,039
1872	3,331	1,150	1896	1,599	1,153
1873	2,148	1,150	1897	1,716	1,062
1874	2,773	1,044	1898	1,686	1,193
1875	2,680	1,050	1899	1,723	1,201
1876	2,216	1,339	1900	1,821	1,230
1877	2,461	1,035	1901	1,932	1,169
1878	1,917	1,011	1902	1,910	1,242
1879	1,887	1,218	1903	1,947	1,218
1880	1,666	1,174	1904	1,964	1,278
1881	1,753	1,212	1905	1,960	1,218
1882	1,844	1,215	1906	1,473	1,315
1883	1,916	1,216	1907	1,530	1,347
1884	1,991	1,201	1908	966	1,266
1885	2,070	1,231	1909	1,414	1,212
1886	2,151	1,242	1910	1,177	1,169
			1911		925

SOURCE: Salary statistics are computed from the salary notations in the personnel files of 366 officials of the Ottoman Foreign Ministry. The sources and procedures for the computations are explained more fully in the appendix.

medians leads on to analysis of long-term change in the salary distribution, and to an initial consideration of what the salaries shown in the table meant in terms of living standards.

Perhaps the most conspicuous point in these salary statistics is that the means are almost invariably higher than the medians. The greater the gap, the stronger the indication that the salary distribution was inegalitarian, with many low salaries and a few higher ones. The greater the inequality, the greater the extent to which the median—the midmost salary when all salaries are ranked by amount—excels the mean as an indicator of the fortunes of most members of the group studied. The mean-median gap does narrow over

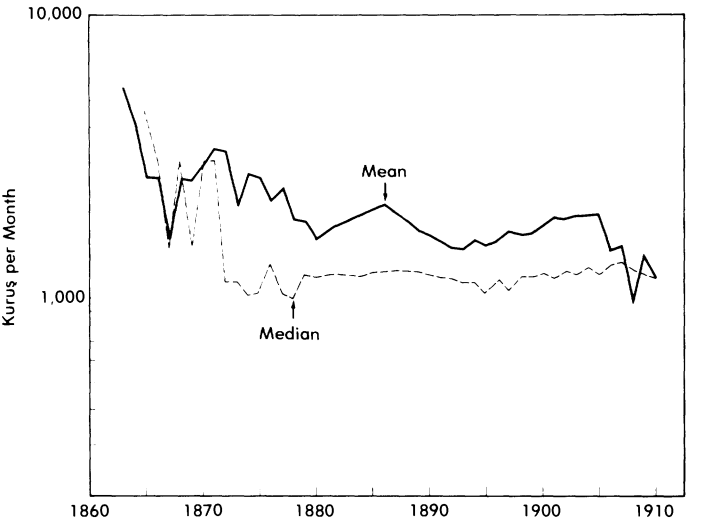

FIGURE 1. Monthly Salaries of Ottoman Foreign Ministry Officials Serving in Istanbul, Adjusted Means and Medians

time, since the means tend to fall, while the medians remain nearly on a level. The exceptionally high values in both curves for the early years may be anomalies due to computation from small numbers of cases. Or they may signal that salaries had been much higher during the *Tanzimat* (*ca.* 1839–71), a political period when the civil bureaucracy dominated the polity as never again.

The ideal way to learn more about the salary distribution would be to compute statistical measures of dispersion, but this is not possible with the manipulated data distribution that emerges from the controls for seniority. One way to get around this problem, and incidentally to learn more about salaries in the preceding period, is to compare the salary of the highest official of the ministry, the foreign minister, with the lowest salary paid there. Since Ottoman officials normally began their careers as unpaid apprentices, verification of the lowest salary presents no problem. There were always officials with a salary of zero. The salaries of the ministers, however, varied over time in ways that reinforce the implications of the mean-median gap shown in Figure 1. Because indications of these salaries appear both in the personnel records and in other sources, extending back to the 1830s, the available data on this point cover a much longer span of time than the statistics in Table 1.

Examining notations of the amounts of foreign ministers' salaries, we find that, of eight mentions for 1838–76, seven were in the range of 60,000 to 75,000 kuruş per month; and the one anomaly, in 1872, was 50,000—still

more than forty times the median for that year, shown in Table 1.[10] Recent studies indicate that an Ottoman laborer would have been fortunate to earn 250 kuruş per month in the early 1870s; thus the dimensions of Ottoman bureaucratic elitism emerge clearly from these figures.[11] The military and fiscal crises of the late 1870s lowered the minister's salary to around 40,000 kuruş per month.[12] For 1880–84, it fell again, by half, to an all-time low of 20,000 kuruş.[13] In 1885–95, the figure was again 30,000 per month.[14] From 1896 through the Young Turk revolution, the salary wavered in the range of 36–46,000 kuruş. In the purges and salary cuts that followed the revolution, the minister's salary fell to 25,000.[15] That was still about twenty times the adjusted median Foreign Ministry salary shown in Table 1, while the successor of the lucky laborer who earned 250 kuruş per month in 1872 would perhaps have earned 350 by that date.[16] World War I brought a cut of 50 percent to all bureaucratic salaries. By 1916, inflation forced a restoration of the amount cut and even the addition of cost-of-living supplements, although these proved inadequate.[17]

Since the highest salary indicates the range of salaries, the lowest salary

[10] Salaries mentioned for 1838–76 (and data sources) are: 75,000 kuruş per month (Haus-, Hof-, and Staatsarchiv, Vienna, Türkei VI/67, 18 April 1838); 65,000 (Başbakanlık Archives, Istanbul (cited as BBA), Maliyeden Müdevver (cited as MM) 11738, p. 11, entry of 17 Safer 1256/20 April 1840); 75,000 (BBA, *Dahiliye sicill-i ahval defterleri* (cited as *DSA*) II, 218, entry of 1273/1856–57); 61,455 (BBA, MM 10531, p. 20, entry of 27 Mart 1277/8 April 1861); 75,000 (BBA, MM 10529, pp. 11, 22, entries of 26–27 Mart and 10 Nisan 1279/7–8 and 22 April 1863); 50,000 (BBA, *DSA* II, 416, entry of 2 Cemaziyülahir 1289/7 August 1872); 75,000 (BBA, *DSA* XXII, 37, entry of 1 Rebiyülahir 1291/18 May 1874); 75,000 (BBA, *DSA* II, 416, entry of 8 Zilhicce 1291/16 January 1875, incumbent in office until May 1876).

[11] To compute this wage estimate, I have multiplied the highest daily wage estimates in the appendix of Boratav *et al.*, "Ottoman Wages," by twenty-six, the average number of workdays per month assuming a six-day workweek and full employment. See also Charles Issawi, *The Economic History of Turkey, 1800–1914* (Chicago, 1980), 37–43.

[12] Salaries for 1876–79 (and data sources): 39,000 kuruş (BBA, *DSA* II, 416, entry of 25 Cemaziyülevvel 1293/18 June 1876); 40,000 (*ibid.*, entry of 16 Safer 1295/19 February 1878); 39,000 (*ibid.*, entry of 9 Şaban 1296/29 July 1879). In all notes mentioning ministerial salaries of 1876 and later, consistency with the procedure outlined in the appendix would require multiplying the salaries by 0.975 to convert them into gold kuruş. Since the highest salaries may have been paid in gold (Findley, *Bureaucratic Reform*, 237)—one more inequity of the salary system—I have not done this here.

[13] BBA, *DSA* IV, 114, entries of Şevval 1297/September 1880, 14 Muharrem 1300/25 November 1882, 19 Cemaziyülahir 1301/16 April 1884; BBA, *DSA* I, 576–77, entry of 20 Cemaziyülahir 1299/9 May 1882.

[14] BBA, *DSA* I, 576–77, entry of 15 Zilhicce 1302/25 September 1885, incumbent in office through 1895.

[15] Mentions of salaries for 1896–1908 begin with 45,000 kuruş (BBA, *DSA* I, 576–77, entry of 15 Receb 1313/1 January 1896). The following are from Hariciye Archives, Istanbul (cited as Har.), Sicill-i Ahval collection (cited as SA) 429: 40,000 (entry of 18 Cemaziyülevvel 1313/6 November 1895); 36,000 (9 Şevval 1314/24 March 1896); 46,000 (4 Receb 1318/28 October, 1900); 25,000 (17 Şaban 1326/14 September 1908).

[16] Boratav *et al.*, "Ottoman Wages," appendix.

[17] Ahmed Emin [Yalman], *Turkey in the World War* (New Haven, 1930), 151–53; Zafer Toprak, *Türkiye'de "Millî İktisat," 1908–1918* [Economic nationalism in Turkey] (Ankara, 1982), 334–35.

being zero, it is clear that the scope of inequality within the ministry was fantastically wide. The elitism of this ministry and probably others, especially that of the top officials, was also of grotesque proportions when compared to the status of humble folk. The range of Foreign Ministry salaries did fall over time, however, especially with the government bankruptcy in the late 1870s,[18] the revolution in 1908, and World War I. What finally destroyed the economic elitism of the ruling class was the dilemma, from 1914 on, of the person on fixed income faced with runaway inflation.

This inflationary catastrophe raises a question so far neglected for earlier dates: what the officials' salaries shown in Table 1 meant in terms of their living standards. This question is difficult to deal with, but there are indications of what Ottoman officials regarded as a living wage. For the end of the period, there are also two systematic, but contradictory, calculations of living costs. From these sources, some inferences emerge.

Analysis of the bureaucrats' estimates of a living wage confronts several problems. Some of the estimates range quite high, telling perhaps more about what bureaucrats wanted than about what they needed to support their families.[19] Only infrequently, moreover, do specifics about the size of the family to be supported accompany the estimates. On the other hand, the difference between nominal entitlements and net receipts (discussed in the appendix) ceases to be a concern in analysis of these estimates, for the officials obviously knew that their salaries would not be paid regularly and must have made allowance for this disparity.

Fortunately, there are some estimates of the 1890s that yield a consistent and seemingly realistic indication of what officials then thought it took to support a family. For example, one bureaucratic memoirist recorded some calculations, around the turn of this century, about how much he would need to retire. He wrote that since he had a small family, he could get by on 5 liras a month, or about 540 kuruş in silver.[20] Such a sum would not have sufficed, then, for a man with full family responsibilities. As if to support this point, a petitioner asserted in 1897 that he could not accept a post at a salary of 600 kuruş because he could not support his family on that.[21] For officials with large families, or with bad habits such as alcoholism, the definition of an inadequate salary could be much higher.[22]

[18] A. Du Velay, *Essai sur l'histoire financière de la Turquie* (Paris, 1903), 316–461; Donald Blaisdell, *European Financial Control in the Ottoman Empire* (New York, 1929), 74–107; Shaw and Shaw, *History*, II, 221–27; Issawi, *An Economic History of the Middle East and North Africa* (New York, 1982), 64–65.

[19] E.g., *Levant Herald*, 4 August 1875, p. 276, circular from grand vezir to provincial governors, implying a figure of 3,000 kuruş.

[20] Aşçıdede Halil İbrahim, *Hatıralar* [Memoirs], R. E. Koçu, ed. (Istanbul, 1960), 114–15.

[21] BBA, Bab-ı Âli Evrak Odası 6641, Hasan Tahsin to Grand Vezir, 20 Kanun-i Sani 1312/1897.

[22] Har., SA 531, entry of Cemaziyülahir 1314/1896: unable to manage on 920 kuruş per month because of size of family and alcoholism; Har., SA 270, entry of 17 Nisan 1327/1911: 2,000 kuruş per month inadequate for large family at Aleppo.

Still, it appears that an official of the mid-1890s would have considered a salary of 1,000 kuruş per month adequate to support a family. Saying that she had only a very small pension, and that her son's salary was only 250 kuruş per month, an official's widow petitioned in 1892 for the son's salary to be raised to 1,000 kuruş.[23] Also referring to the 1890s, when he, too, was an official, the writer H. Z. Uşaklıgil discussed the significance that a raise to 1,000 kuruş had for him on account of an "important death" in the family.[24] On this basis, the adjusted Foreign Ministry medians for the 1890s appear comfortable, although by definition half the officials made no more than the median, and some of those with lower salaries must have had large families.

By the Young Turk period, the most nearly comparable salary estimates are fifty to one hundred percent higher. In a report on a proposed reorganization of 1912, the director of the Foreign Press Office, a part of the Foreign Ministry, said that salaries of 1,500–2,000 per month would be necessary to attract properly qualified officials. The director general of another department reported that his staff should be reorganized in classes receiving 800–1,000, 1,000–1,200, 1,200–1,500, and 1,500–2,000 kuruş per month.[25] It is a matter of judgment to estimate at what age, on average, such an individual would become the chief provider for his family, presumably an extended one. The assumption that this occurred at about age thirty-five would again probably suggest a needed salary of 1,500. The latest medians shown in Table 1 offer little confidence that most bureaucrats made that much in 1912.

Systematic estimates of living costs computed from prices of a typical shopping list of goods, with the prices weighted by likely amounts consumed, are available only for the eve of World War I. Even then, there are wide disparities in the estimates. One places the budget of a "mid-level" official in 1914 at the low figure of 235.25 kuruş.[26] The budget is incomplete, however, since it omits such predictable expenditures as tobacco, transportation, and—most important—housing. There is a more complete estimate for 1914 that sets the budget for a family of middle standing (*orta halli*), as reckoned by the Istanbul Chamber of Commerce, at 945 kuruş.[27] Of this, 150 is for rent; tobacco and transportation again do not appear. In the present state of research, it is not clear how the difference between these estimates should be explained. The fact that the lower one comes from the European-controlled Public Debt Administration, which paid its Ottoman employees regularly and

[23] Har., Tercüme Kalemi Evrakı 1406, no. 226, petition of Enise Hanım, 20 Ağustos 1308/1892.

[24] Halid Ziya Uşaklıgil, *Kırk Yıl* [Memoirs] (Istanbul, 1969), 358.

[25] Har., Mütenevvi 249, both reports enclosed in dossier on reorganization of Foreign Ministry, *ca.* 1912.

[26] Toprak, *Türkiye'de "Millî İktisat,"* 332–33.

[27] Vedat Eldem, *Osmanlı İmparatorluğunun İktisadî Şartları Hakkında bir Tetkik* [Economic conditions in the Ottoman Empire] (Ankara, 1970), 214–15.

TABLE 2

Percentage Relatives, Ottoman Foreign Ministry Salaries (Istanbul), Adjusted Means and Medians (base period 1880–82)

	Means	*Medians*		*Means*	*Medians*
1863	316		1887	115	104
1864	236		1888	108	104
1865	153	375	1889	99	102
1866	152	256	1890	95	100
1867	94	124	1891	91	98
1868	152	252	1892	87	97
1869	148	128	1893	86	94
1870	169	249	1894	91	94
1871	193	250	1895	87	86
1872	190	95	1896	91	95
1873	122	95	1897	98	88
1874	158	86	1898	96	98
1875	153	87	1899	98	99
1876	126	110	1900	104	101
1877	140	85	1901	110	96
1878	109	83	1902	109	102
1879	108	100	1903	111	100
1880	95	97	1904	112	105
1881	100	100	1905	112	100
1882	105	100	1906	84	108
1883	109	100	1907	87	111
1884	114	99	1908	55	104
1885	118	102	1909	81	100
1886	123	102	1910	67	96
			1911		76

SOURCE: These statistics were computed from those in Table 1, using the procedure outlined in note 30.

so was able to get good service at modest rates, may have depressed the figure.[28] Since, to judge from workers' wages, it must have been possible for a family to subsist on the lower budget, the difference may stem from variant concepts of what was appropriate for the ill-defined mid-levels of Ottoman society. Given the medians in Table 1, however, the larger budget seems more realistic. An official of 1914 with a nominal salary of 1,500 kuruş might perhaps have taken home 945 a month on average. Because extrapolation from the latest medians in Table 1 suggests that most officials of 1914 did not have a nominal salary of 1,500 kuruş—yet did have one several times the

[28] Robert G. Landen, *The Emergence of the Modern Middle East* (New York, 1970), 173.

lower of the two budgets—to accept the higher estimate fits the assertion of one qualified observer that official salaries before World War I amounted to "scarcely . . . a living wage."[29]

These figures from 1914 take us as far as it is possible to go with currently available cost-of-living estimates. We can, however, prepare for a different approach to the salary-price comparison by converting the adjusted salary statistics shown in Table 1 into percentage relatives, which we shall later compare with a grain price average expressed in the same terms.[30] Table 2 presents the salary relatives, analysis of which follows in the last section of this study.

II. ISTANBUL COMMODITY PRICES

To date, no scholar has computed—or even found the sources for—a time series based on a comprehensive market-basket calculation of Istanbul consumer prices for the late nineteenth century.[31] Except for 1914, when we have the two contradictory cost-of-living figures, determination of living costs for that period therefore depends on some proxy for a systematic calculation. One recent study uses British consumer prices as a "crude indicator" of Ottoman prices.[32] Growing integration of the Ottoman economy into the world market argues for this approach. Yet, a look at the goods used to compute the 1914 cost-of-living estimates discussed in the previous section suggests that 60–75 percent of either budget went for local goods whose prices must have responded to local factors: perishable foodstuffs, from fruit to fish; firewood and charcoal; housing.[33] Persons with discretional income, businesses, or

[29] Ahmed Emin [Yalman], *Turkey,* 151.

[30] The point of recomputing time series as percentage relatives is to convert values expressed in other terms into percentages, with the value for an arbitrarily selected base period set equal to 100. This technique not only facilitates analysis of change over time in a single statistical series, but also—if the base period used for all series is the same—permits the comparison of different series. For computation of percentage relatives on a common base period turns disparate values and measures (salary per month, price per unit) into comparable values expressed on a common scale. To convert the salaries stated in kuruş in Table 1 into percentage relatives, we use 1880–82 as the base period. For the means, the divisor used to compute the relatives is the arithmetic mean of the three annual means falling in the base period. Since medians are not mathematically manipulable, I have taken as the divisor the middle value of the three salary medians for the base period. To compute the relatives, the values in kuruş for each year are divided by the appropriate divisor, and the result is expressed as a percentage. By this procedure, as Table 2 shows, the average of the means for the base period (1880–82) equals 100. In the case of the medians, it is the middle value—here appearing (because of rounding in calculation) as a paired value—for the same years that equals 100.

[31] Boratav *et al.,* "Ottoman Wages," second section; *cf.* Issawi, *Economic History of Turkey,* 44–50, 332–36; Safi Yorulmaz, "İstanbulda Toptan Eşya Fiyatları (1884–1911 Yıllarında)" [Wholesale commodity prices], *Konjonktür* (1946), 45–55; and Donald Quataert, "Ottoman Reform and Agriculture in Anatolia" (Ph.D. diss., University of California, Los Angeles, 1973), 21–23, 366–70, which uses the same sources analyzed here.

[32] Boratav *et al.,* "Ottoman Wages," second section.

[33] Toprak, *Türkiye'de "Millî İktisat,"* 333; Eldem, *Osmanlı İmparatorluğunun İktisadî Şartları,* 214–15. In computing the percentage for the estimate in Toprak, I added 100 kuruş for

government agencies may well have spent more on imports. As a guide to the fortunes of the average Ottoman, however, British prices are not necessarily preferable to even a narrowly based indicator from the local market.

In this study, we shall use a composite average of Istanbul grain prices. It can be objected that grain prices give a better idea about the living standards of the poor than about those of relatively affluent officials, that most grains traded in Istanbul were imported, at least until the mid-1890s, or that the price of grain fell faster than that of other items during the price decline extending into the same decade.[34] Yet, movements in grain prices help us locate times of economic distress that, as other sources show, did have an effect on the official class. The figures will show, too, that Istanbul grain prices responded to local forces as well as to ones from far afield; and allowances can be made in discussion for the exceptional extent of the price decline.

The prices analyzed here come from commodity quotations of the years 1851–1914.[35] To reduce distortion from seasonal price fluctuations, these have been averaged on a quarterly basis, with all prices stated in gold kuruş per *okka,* a unit of weight equal to 2.828 pounds (1.283 kilograms).[36] Initial

rent (*cf.* 150 in the larger Eldem estimate). On integration into the world economy, see Şevket Pamuk, *Osmanlı Ekonomisi ve Dünya Kapitalizmi (1820–1913)* [Ottoman economy and world capitalism] (Ankara, 1984), chs. 2, 7.

[34] On provenance of grains traded in Istanbul, see note 36. With the extension of the railroad into Anatolia, Ottoman-grown grains began to assume an important—in some years, preponderant—place in the Istanbul market, but starting only in the 1890s (Quataert, "Economic Climate," D1157; *idem,* "Limited Revolution: The Impact of the Anatolian Railway on Turkish Transportation and the Provisioning of Istanbul, 1890–1908," *Business History Review,* 51:2 (1977), 151, 154–58). Boratav *et al.,* "Ottoman Wages," emphasize the exceptional decline in grain prices after 1873.

[35] I collected quotations from newspapers published on, or soon after, 1 March, 1 June, 1 September, and 1 December of each year. The publications (followed by abbreviations), with quarters and years for which they served, are: *Journal de Constantinople,* 1851–2d qtr. of 1865 (I found no quotations for 1850); *Levant Herald (LH),* 3d 1865–2d 1875; *La Turquie,* 3d 1875–3d 1880; *Constantinople Messenger (CM),* 4th 1880–2d 1881; *LH,* 3d 1881–1st 1882; *Eastern Express (EE),* 2d 1882–1884; *Journal de la Chambre de Commerce de Constantinople (JCCC),* 1st–3d 1885; *EE,* 4th 1885; *Levant Herald and Eastern Express (LHEE),* 1st–2d 1886; *JCCC,* 3d 1886–1887; *LHEE,* 1888–1891; *JCCC,* 1892–2d 1914; *Moniteur oriental,* 1 August 1914. *Constantinople Messenger, Eastern Express,* and *Levant Herald and Eastern Express* are alternate names, inspired by the censor, for *Levant Herald.*

[36] I converted newspaper quotations into gold kuruş per *okka* by relying, wherever possible, on notations, published with the prices, on the value of the monetary units and measures in which the quotations were given. In other cases, the best guidance came from "Poids et mesures en Turquie," *JCCC,* no. 456, 23 September 1893, pp. 446–67; no. 460, 21 October 1893, pp. 495–96; no. 466, 2 November 1893, pp. 567–68. Since, for every commodity, several varieties or provenances were quoted, I computed commodity averages as averages of varietal subseries. The procedure was to select for each variety all years in which there were quotations for at least three quarters. From each subseries, all other years were excluded as offering insufficient control for seasonal fluctuations. Averaging the quotations for the selected years produced varietal price series, which were then averaged to produce the commodity averages in Table 3. To minimize the impact of price differences among commodities on the composite grain price average, I computed it as an average of percentage relatives (Table 4). The computation of percentage relatives is explained in note 30. Again 1880–82—an interval intermediate, in terms of both time and price-

efforts to take account of a larger range of commodities foundered on the fact that many of the items quoted were not consumer goods, or not directly so, while varieties and quality grades of some consumer goods, such as tea and sugar, varied so widely over time as to be unintelligible.

While concentration on grains was more a matter of necessity than choice, grain products were and are extremely important in the Turkish diet. The prime example of this is bread, of which the average Ottoman at the turn of this century reportedly consumed a kilogram or more a day.[37] As a Levantine woman of Istanbul once explained to an Englishman, "vous êtes carnivore, je suis carnipain."[38] The price of bread was officially controlled in Istanbul, so that the effects of shifts in wholesale wheat and flour prices were passed on to the consumer only intermittently. This does not, however, deprive wheat and flour prices of value as indicators of movements in the economy. Too, Ottoman bakers had ways, at times, of "disadjusting" the official bread price, for example, by decreasing loaf size.[39] And Ottomans consumed other baked goods, various types of noodles, cracked wheat (*bulgur*), and other grain products.

With this introduction, we may now examine the price tables. Table 3 presents annual average prices for four cereal items—hard and soft wheats, barley, and flour. The table states the kuruş prices in decimals; in fact, the subdivision of the kuruş was the *para,* at forty to the kuruş.[40]

Of the four commodities, hard wheat was normally used for making

levels, between the highest and lowest prices recorded—served as the base period. For want of indications of consumption volumes, the composite grain average is necessarily an unweighted one. This limits its value from an economic point of view, and could be taken to indicate use of a single commodity series for comparison with salaries. Here, the unweighted average is preferred as having fewer gaps.

Varietal subseries for each commodity, with the dates for which each is quoted, follow. *Hard Wheat:* Azov-Taganrog, 1850–90; Ismail-Bessarabia, 1850–90; Galatz-Danube-Constantza, 1851–90; Rumelian (Balçık, Burgaz), 1850–96; Edirne, Rodosto, 1862–1903; Anatolia-Bandırma, 1896–1906; Anatolian First, 1905–14; Anatolian Second, 1907–14. *Soft Wheat:* Rumanian (Galatz, Galatz-Braila, Danube, Braila), 1850–88, 1893–96, 1906–13; Rumelian (Burgaz-Varna-Balçık, Varna-Balçık), 1850–96; Burgaz-Plovdiv, Plovdiv-Zagora, Zagora, 1880–96; Konya First, 1904–15; Konya Second, 1904–14; Ankara First, 1904–12; Ankara Second, 1904–12. *Barley:* Braila, Danubian, 1851–1913; Rumelian, 1858–1908; Black Sea, Odessa, 1888–1900; Mersin, 1899–1914; Anatolian First, 1903–14; Anatolian Second, 1903–14. *Flour:* Odessa 2d, 000, 1, and successor grades, 1869–1914; Odessa 3d, 00, and successor grades, 1868–1914; Danube 2d, Braila 3d, and successor middling grades, 1870–80, 1882–85, 1888, 1890–1908, 1911–14; Danube 3d, Braila 00, 4th, and successor lower grades, 1868–76, 1878–79, 1890–97, 1899–1902, 1907–08, 1911–14; Local, local Braila, local kırma, 1868–1914.

[37] Quataert, "Economic Climate," D1154.

[38] *Bulletin mensuel de la Chambre de commerce française de Constantinople,* no. 256 (31 July 1908), 156.

[39] Quataert, "Economic Climate," D1155, events of 1908.

[40] Gaps in the price series have two possible explanations. Some signify insufficient numbers of quarterly quotations. Others, especially longer gaps like that of 1896–1903 for soft wheat, or short gaps across all series, signify that no quotations were being published. The reason is never stated, but sometimes (i.e., 1855, 1915–18) it was obviously war.

TABLE 3

Annual Averages of Istanbul Grain Prices
(in gold kuruş per okka)

	Hard Wheat	*Soft Wheat*	*Barley*	*Flour*		*Hard Wheat*	*Soft Wheat*	*Barley*	*Flour*
1851	0.79	0.63	0.45		1883		1.12	0.79	1.72
1852	0.87	0.76	0.49		1884	0.91	0.96	0.70	1.45
1853	1.16	0.95	0.57		1885	0.94	0.95	0.59	1.49
1854	2.05	1.89			1886	1.01	1.04		1.76
					1887	1.01	0.99	0.56	1.63
1856	1.81	1.35	0.84		1888	0.98	0.93	0.53	1.39
1857	1.51	1.05	0.60		1889	0.97	0.89	0.52	1.60
1858	1.20	0.98	0.68		1890	0.96	1.02	0.63	1.60
1859	1.29	1.03	0.66		1891	1.30	1.34	0.74	1.87
1860	1.43	1.19	0.70		1892	0.98	1.01	0.62	1.57
1861	1.33	1.17	0.68		1893	0.89	0.90	0.56	1.32
					1894	0.59	0.69	0.41	1.02
1864	1.00	0.91	0.50		1895	0.61	0.76	0.47	1.04
1865	0.97	0.88	0.49		1896	0.69		0.51	1.13
1866	1.27	1.13	0.63		1897	0.90		0.51	1.50
1867	1.59	1.41	0.89		1898	1.07		0.62	1.59
1868	1.51	1.43	0.93	2.11	1899	0.98		0.67	1.42
1869	1.17	1.03	0.64	1.77	1900	0.87		0.65	1.33
1870	1.27	1.14	0.71	1.87	1901	0.81		0.55	1.33
1871	1.33	1.18	0.75	2.05	1902	0.80		0.60	1.26
1872	1.23	1.09	0.63	1.79	1903	0.88		0.61	1.31
1873	1.54	1.47	0.75		1904	0.90	0.94	0.58	1.36
1874	1.47	1.27	0.84		1905	0.94	0.96	0.63	1.38
1875	1.22	1.15	0.78	1.75	1906	0.98	0.95	0.70	1.37
1876	1.14	1.09	0.63	1.84	1907	1.14	1.10	0.87	1.64
1877	1.27	1.28	0.65	1.83	1908		1.27	0.85	1.82
1878	1.29	1.28	0.77	1.82	1909	1.37	1.26	0.89	1.72
1879	1.46	1.31	0.78	1.86	1910	1.17	1.13	0.78	1.51
1880	1.52	1.47	0.90	2.15	1911	1.13	1.03	0.80	1.54
1881	1.36	1.32	0.74	2.08	1912	1.15	1.19	0.97	1.65
1882	1.26	1.12	0.72	1.84	1913	1.22	1.21	0.93	1.67
					1914	1.14	1.13	0.78	1.60

SOURCES: Price statistics are computed from commodity price quotations published in contemporary Istanbul newspapers. The sources and procedures for the computations are explained in notes 35 and 36.

TABLE 4

Percentage Relatives, Annual Averages of Istanbul Grain Prices (base period 1880–82)

	Hard Wheat	*Soft Wheat*	*Barley*	*Flour*	*Composite Grain Price Average*		*Hard Wheat*	*Soft Wheat*	*Barley*	*Flour*	*Composite Grain Price Average*
1851	57	49	57		54	1883		86	100	85	90
1852	63	59	62		61	1884	66	74	89	72	75
1853	84	73	72		77	1885	68	73	75	74	72
1854	149	145			147	1886	73	80		87	80
						1887	73	76	71	81	75
1856	131	104	106		114	1888	71	72	67	69	70
1857	109	81	76		89	1889	70	69	66	79	71
1858	87	75	86		83	1890	70	79	80	79	77
1859	94	79	84		85	1891	94	103	94	93	96
1860	104	92	89		95	1892	71	78	79	78	76
1861	96	90	86		91	1893	65	69	71	65	68
						1894	43	53	52	51	50

1864	73	70	63		69
1865	70	68	62		67
1866	92	87	80		86
1867	115	109	113		112
1868	109	110	118	105	110
1869	85	79	81	88	83
1870	92	88	90	93	91
1871	96	91	95	102	96
1872	89	84	80	89	85
1873	112	113	95		107
1874	107	98	106		104
1875	88	89	99	87	91
1876	83	84	80	91	84
1877	92	99	82	91	91
1878	94	99	98	90	95
1879	106	101	99	92	99
1880	110	113	114	106	111
1881	99	102	94	103	99
1882	91	86	91	91	90

1895	44	59	60	52	53
1896	50		65	56	57
1897	65		65	74	68
1898	78		79	79	78
1899	71		85	70	75
1900	63		82	66	70
1901	59		70	66	65
1902	58		76	62	65
1903	64		77	65	69
1904	65	72	73	67	70
1905	68	74	80	68	73
1906	71	73	89	68	75
1907	83	85	110	81	90
1908		98	108	90	99
1909	99	97	113	85	99
1910	85	87	99	75	86
1911	82	79	101	76	85
1912	83	92	123	82	95
1913	88	93	118	83	96
1914	83	87	99	79	87

SOURCE: These statistics are computed from those in Table 3, using the procedure outlined in note 30.

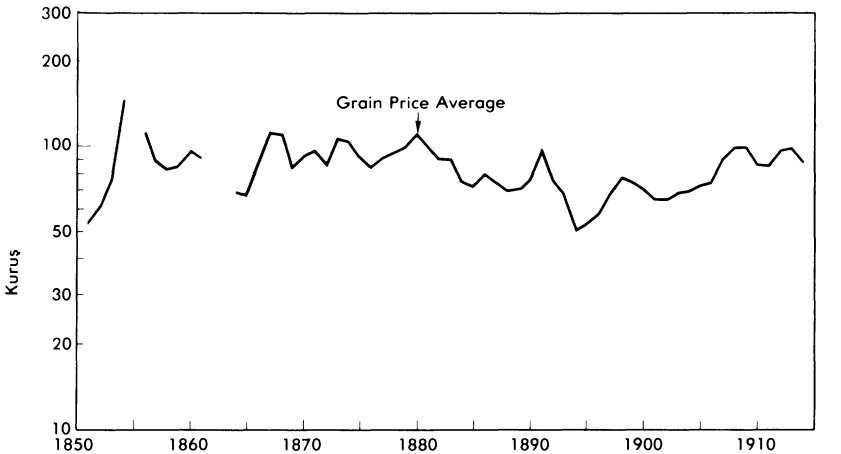

FIGURE 2. Grain Price Average, Istanbul
(in percentage relatives, base period 1880–82)

noodles. Soft wheat was chiefly used for making bread. Barley, while the second most widely cultivated grain in Turkey after wheat in the 1920s and the preferred grain for breadmaking in some provinces at that time,[41] was not a major constituent of the diet of Istanbul dwellers. In Istanbul, most barley was consumed by horses, a fact that affected living costs to the extent that people used horses for transportation. Barley was also a raw material for the brewing industry, which dates back to the late nineteenth century at least, and whose products were surely not unknown to the official class. The main justification for including barley in the average is that its record is the longest and most nearly uninterrupted of the commodity series. Including both flour and soft wheat in the average will have the effect, in years when prices for both are available, of reinforcing the representation of the commodities most directly related to breadmaking.

Since the main interest of this study is in the composite cereal price average, we may proceed, without further comment on Table 3, to the price relatives, which provide the basis for computation of this average. These statistics are listed in Table 4 and presented in graphic form in Figure 2.

The composite grain average will serve for comparison with the adjusted salary means and medians. Before looking at this comparison, it will be helpful to examine the fluctuations in the composite average and to compare them with other information about economic conditions in Istanbul during this period.

[41] G. Stratil-Sauer, "Cereal Production in Turkey," *Economic Geography*, 9:4 (1933), 324, 327–39; Quataert, "Limited Revolution," 149.

The most important feature of the composite grain average is no doubt the extent to which it parallels well-known fluctuations in other major markets of the period. In the midst of a downward price trend for grains and other commodities that spanned almost the entire nineteeth century, we find a cyclical rise into the 1870s, followed by a decline to depression levels in the 1890s, and then an upturn that lasted, on the world market, until 1920.[42]

Superimposed on this pattern, however, are short-term peaks, usually attributable to local or regional crises. The first and sharpest peak in 1854–56 coincides with the Crimean War. That of 1867–68 coincides not only with a price peak in the international grain markets,[43] but also with the Cretan crisis of 1866–69.[44] Occurring at a time when the financial position of the Ottoman government was steadily worsening, the crisis caused economic strain, which the Young Ottoman ideologues did not fail to exploit.[45] In 1868, distress was so great in Istanbul that the wives of officials serving in the provinces besieged the Ministry of Finance in screaming mobs, demanding their husbands' salaries. The finance minister had to be assigned a special guard. Public security virtually ceased to exist on the outskirts of the city and declined within it.[46]

The 1870s brought graver troubles. The Anatolian famine of the early 1870s had limited effect on the Istanbul market because little Anatolian produce could reach the capital as yet. Even so, prices went up, for 1873 marked a cyclical high on the world grain market. The first half of the 1870s was also a time of troubles for the civil bureaucracy, in the sense that instability of political leadership heightened uncertainty of tenure in office, the probability of nonpayment of salaries, and even inefficiency in tax collection.[47] The second half of the 1870s was one of the lowest points of the entire nineteenth century for the Ottomans, a fact evidenced especially in the government bankruptcy and the Russo-Turkish War, which brought the Russian army to the outskirts of Istanbul, flooded the city with refugees, and left the Ottoman government saddled with a huge indemnity. One result was the reissue of

[42] Brian K. Mitchell, with collaboration of Phyllis Deane, *Abstract of British Historical Statistics* (Cambridge, 1962), 488–89; United States Department of Agriculture (USDA), *Yearbook 1921* (Washington, 1922), 146; Quataert, "Ottoman Reform and Agriculture," 188, 389–90; Issawi, *Economic History of Middle East,* 10; Pamuk, *Osmanlı Ekonomisi,* 131–36.

[43] Mitchell, *Abstract,* 488–89; USDA, *Yearbook 1921,* 146.

[44] Shaw and Shaw, *History,* II, 151–52.

[45] Enver Ziya Karal, *Osmanlı Tarihi* (Ankara, 1977), VII, 37; Du Velay, *Essai,* 279.

[46] Politisches Archiv des Auswärtigen Amtes (Bonn), Abt. A (856/3), 868, I.A.B.q 95, Brassier von Saint-Simon to Bismarck, 13 February 1868; Uebel to Bismarck, 9 July 1868 (T139, mf. roll 354, in the microfilm holdings of the U.S. National Archives, Washington, D.C., where I consulted the German diplomatic correspondence).

[47] Shaw and Shaw, *History,* II, 156; Du Velay, *Essai,* 316–461; Roderic H. Davison, *Reform in the Ottoman Empire, 1856–1876* (Princeton, 1963), 301–10; Archives des Affaires étrangères (Paris), Turquie 390, 24 October 1871, Vogüé to Rémusat; Turquie 391, 9 January 1872, *idem* to *idem;* Turquie 391, 27 March 1872, *idem* to *idem;* Turquie 404, 17 May 1876, from Bourgoing.

paper money from 1876 to 1883—the only time, other than 1863, during the period for which we have salary statistics when paper money was in circulation. The paper money soon sank as low as 1,300 kuruş to the gold lira.[48]

Thereafter, in the 1880s, we see that the downward trend in prices reappears, through 1894. During this interval, there is only the price peak of 1891, which was due to a crop failure in Russia and a consequent surge in Ottoman exports. European and American grain prices showed small rises at the time.[49]

After 1894, when prices turned up again, the price high of the late 1890s coincided with crop failure in Anatolia, the Greco-Turkish War of 1897, and the Armenian crisis of the same period.[50] Thereafter, the high of 1907–9 signaled an unusual combination of woes—international financial crisis, domestic and international crop failure, exceptionally widespread distress—that provided the economic backdrop for the Young Turk revolution of 1908.[51] It is significant that similar problems, including prolonged drought (1905–10), foreshadowed the Mexican revolution of 1910. There, the international financial crisis of 1907, which began in the United States, is recognized as a major economic factor.[52] That crisis should probably be ranked with the Russo-Japanese War and the Russian revolution of 1905 as an element in inducing the wave of revolutions and disturbances that swept Asia and the colonial world in the years preceding World War I.[53] Finally, the war-induced inflation raised the cost of living by a factor of more than twenty between 1914 and 1920.[54]

To see what these price fluctuations meant in the lives of officials, we must now compare the composite grain price average with the salary statistics.

[48] Shaw and Shaw, *History*, II, 182ff., 221ff.; Du Velay, *Essai*, 354–57; Issawi, *Economic History of Turkey*, 326–29, 361–65.

[49] Quataert, "Ottoman Reform and Agriculture," 21–23, 211–12; *cf.* Mitchell, *Abstract*, 489; USDA, *Yearbook 1921*, 146.

[50] Robert Melson, "A Theoretical Inquiry into the Armenian Massacres of 1894–1896," *Comparative Studies in Society and History*, 24:3 (July 1982), 481–509. Qualified observers noted at the time how the turmoil in eastern Anatolia affected the grain trade. See "Handelsbericht für das Jahr 1897," *Deutsches Handelsarchiv* (1898), 511–16 (unfortunately, I have to cite this source from memory, as I can no longer find my photocopy; I have verified the citation from other records).

[51] Quataert, "Economic Climate," D1157, D1161; Pamuk, *Osmanlı Ekonomisi*, 135–36.

[52] Ramón Ruíz, *The Great Rebellion: Mexico, 1905–24* (New York, 1980), 120–35. On the crisis of 1907 in the United States, see Milton Friedman and Anna Schwartz, *A Monetary History of the United States, 1867–1960* (Princeton, 1963), 156–68. I have not found a good discussion of the worldwide economic effects of the crisis; see comments in William C. Schluter, *The Pre-War Business Cycle, 1907 to 1914* (New York, 1923), 13–34.

[53] Keddie, "Religion and Irreligion," 265; Stavrianos, *Global Rift*, 367–427. Detailed research into the economic history of other countries that experienced revolution just before World War I—for example, Iran (1905–11) and China (1911)—might well disclose common factors in addition to financial crisis, such as the drought or crop failure that appears in both the Ottoman and Mexican cases.

[54] Ahmed Emin [Yalman], *Turkey*, 151; Toprak, *Türkiye'de "Millî İktisat,"* 331.

III. CONCLUSION: LIVING STANDARDS AND SHIFTING LEVELS OF POLITICAL ACTIVISM

From the salary-price comparison emerge the conclusions of this essay. Since there is no sign in Ottoman sources that salaries varied systematically with prices prior to World War I,[55] the best way to compare the two is to assume no statistical dependence of one series on the other. We shall simply compute two sets of ratios by dividing each year's relatives for the adjusted salary means and medians (Table 2) by the same year's relative for the composite grain price average (Table 4). In the few years for which the grain average is missing, it will not be possible to compute these ratios. In any year when the relative for the salary statistic is greater than that for the grain average, the value for the ratio will be greater than one. When the opposite relationship occurs, the ratio will be less than one. The lower the value of the ratio, the greater the economic distress it implies. Table 5 presents these ratios.

The salary-price ratios show that the economic situation of Foreign Ministry officials varied widely over time. The late 1860s and the 1870s witnessed a marked erosion of living standards. Qualitative evidence confirms this point. In the previous section, we noted riots by the wives of officials in 1868, followed in the 1870s by problems stemming from administrative irregularities, government bankruptcy, and the Russo-Turkish War.

After 1880, an improvement in official living standards appears to have begun, as evidenced in the doubling of both of the Table 5 ratios by 1894. Even if the fall in grain prices exceeded that in other goods, there was still room for ratios computed on a broader-based price indicator to show marked improvement during this interval. While the Ottoman economy was predominantly agricultural, and agricultural prices were falling between 1880 and 1894, an improvement in the living standards of officials, or of other social groups, is not implausible. The late nineteenth century witnessed an important railroad-related expansion in Ottoman agriculture, the effects of which in some ways outweighed those of the price declines. Expansion in agricultural output and export values did not translate directly into increase in government revenues or, by extension, into funds available to the government for salary payments, as a growing number of Ottoman taxes passed under control of foreign creditors in these years.[56] The significance of this fact for official salary payments is not clear, given the limited information now available about how salary payments were actually made. In any case, the qualitative evidence for 1880–94 tacitly reinforces the evidence of Table 5 through the

[55] Toprak, *Türkiye'de "Millî Iktisat,"* 334, cost-of-living adjustment of 1916.

[56] Quataert, "Ottoman Reform and Agriculture," 15–17, 189–91, 352–54; *idem*, "Limited Revolution," 143, 159–60; *idem*, "Agricultural Trends and Government Policy in Ottoman Anatolia, 1800–1914," *Asian and African Studies*, 15:1 (1981), 83; Issawi, *Economic History of Turkey*, 353–55; *idem*, *Economic History of Middle East*, 105.

TABLE 5

Ratios of Percentage Relatives: Adjusted Salaries to Grain Price Averages

	Ratio for Means	*Ratio for Medians*		*Ratio for Means*	*Ratio for Medians*
1864	3.4		1888	1.6	1.5
1865	2.3	5.6	1889	1.4	1.4
1866	1.8	3.0	1890	1.2	1.3
1867	0.8	1.1	1891	0.9	1.0
1868	1.4	2.3	1892	1.1	1.3
1869	1.8	1.5	1893	1.3	1.4
1870	1.9	2.7	1894	1.8	1.9
1871	2.0	2.6	1895	1.6	1.6
1872	2.2	1.1	1896	1.6	1.7
1873	1.1	0.9	1897	1.4	1.3
1874	1.5	0.8	1898	1.2	1.3
1875	1.7	1.0	1899	1.3	1.3
1876	1.5	1.3	1900	1.5	1.4
1877	1.5	0.9	1901	1.7	1.5
1878	1.1	0.9	1902	1.7	1.6
1879	1.1	1.0	1903	1.6	1.5
1880	0.9	0.9	1904	1.6	1.5
1881	1.0	1.0	1905	1.5	1.4
1882	1.2	1.1	1906	1.1	1.4
1883	1.2	1.1	1907	1.0	1.2
1884	1.5	1.3	1908	0.6	1.1
1885	1.6	1.4	1909	0.8	1.0
1886	1.5	1.3	1910	0.8	1.1
1887	1.5	1.4	1911		0.9

SOURCE: These statistics were computed by dividing the salary relatives in Table 2 by the composite grain price averages in Table 4.

absence of reports of distress like that of the 1860s or 1870s, though there was suffering from irregularity in salary payments.

After 1894, things changed again, mainly thanks to the rise in prices (Table 4). For this period, both series of salary-price ratios indicate worsening conditions, especially just before 1908. Our narrowly based price indicator may again misrepresent the magnitude of the change. But the witness of other sources, noted in the previous section, becomes eloquent as we approach the 1908 revolution. The international financial crisis of 1907, together with other factors, reminds us that this was a time of economic and political disturbance around the world. After 1908, the situation of Ottoman workers improved,[57]

[57] Boratav *et al.*, "Ottoman Wages."

but the ratios of Table 5 show nothing of the sort for officials. Literary sources, already noted, indicate a drastic worsening of their plight during World War I.

What is most interesting is the correspondence between these economic fluctuations and the political and intellectual history of the period. Here we find a parallelism clear enough to suggest a causal link between economic distress and political agitation. A statistical argument, like that central to this article, cannot in itself prove the existence of such a link; but some of the evidence here considered, and some that emerges from other scholarship, does indicate a causal connection, which we must emphasize as our final point.[58]

[58] One way to appreciate the strength of the causal argument in this case is to obey the dictates of a strict concern for method and consider the null hypothesis that there was *no* connection between economic distress and political behavior. Aside from some contrary evidence already presented, one of the best ways to assess this hypothesis is to examine how von Wangenheim, then German chargé at Istanbul—he was ambassador there in 1914—dealt with the same idea in a dispatch of 1901 (Politisches Archiv des Auswärtigen Amtes (Bonn), Türkei 134, Bd. 18, to von Bülow, 26 August 1901, corresponding to T 139, roll 392, in the microfilm collection of the United States National Archives). Commenting on press reports that Ottoman officials in Istanbul and Salonica had petitioned the sultan to have their back salaries paid, on the ground that they and their families would starve otherwise, Wangenheim argued that it would be wrong to conclude from this that there was any danger of revolution. One of his arguments was that officials and military officers blamed their problems, not on the sultan, but on their superiors, with the result that complaints like these served the sultan's efforts to maintain his own political dominance. Another argument concerned the likelihood of starvation. The ability of poor Turks to get by on very little excelled even what he had seen in Spain, wrote Wangenheim. To back up the point, he described how elderly Turks would fish on the landing in front of the embassy summer residence at Tarabya on the Bosphorus. Too, poor Turks carried the sharing of goods "to the social-democratic ideal," and shopkeepers also would take mercy on the poor, so that the shocking indigence observable in other European capitals was unseen. Turks in office had the added advantage of enjoying influence, which enabled them to extract bribes from the public. Knowing that they did so enabled the sultan to accustom his officials to irregular salary payments. Salary payments had thus reached the point of being "a special act of grace by the ruler, announced in the newspapers, and celebrated almost like a national holiday," not only by the officials, but also by the tradesmen who supplied them on credit between paydays. Only Christians and foreigners in Ottoman service suffered, Wangenheim argued, as they lacked access to the Muslims' business arrangements and love for their fellows. Wangenheim's comments on the sultan's manipulation of salary payments are probably worth taking seriously. Yet it is quite unclear why a Christian Ottoman official could find no support among his coreligionists, at any rate. Even more perplexing is the ingenious way Wangenheim's argument channeled the grievances of Ottoman officials into a limbo where they had neither severe human costs for the officials nor political costs for the regime. Perhaps in gratification at this conclusion, a pencil note below Wangenheim's signature, probably by von Bülow, states: "very well written and correctly observed." In fact, the argument is a piece of orientalism in the sense of Edward Said. Why should the behavior of poor old Turks, fishing on a landing, have provided any better guide to the political behavior of Ottoman officials and military officers than that of peasants digging potatoes in Prussia would have provided to the behavior of German diplomats like Wangenheim? Apart from having discussed these old men with his Montenegrin doorman, as he says, how well did Wangenheim understand them? It is not worthwhile to belabor such questions, since the kind of argument Wangenheim sought to make could be updated and strengthened. Yet the fact remains that revolution came only seven years after he wrote this dispatch and that Salonica and Istanbul, the sources of the news reports on which he commented, were its most important centers.

To sum up the evidence for this causal link, we may start from the point that both periods of political and ideological ferment, those of the Young Ottomans and the Young Turks, were times of economic distress. In both periods the distress extended well beyond the official milieu from which the salary statistics derive.[59] And in both periods the ideologues and activists displayed at least some responsiveness to economic problems. Among the Young Ottoman leadership, almost all of whom came from extremely privileged backgrounds, the response may not have gone much beyond denunciation of general grievances, such as foreign commercial privileges or the public debt.[60] Given the massive long-term problems of the Ottoman economy, it was perhaps natural for the earliest ideologues to respond more to them than to specific short-term problems. Later, the Young Turks appear to have coupled discussion of general issues with exploitation of specific crisis conditions. No doubt, the extent to which the scope of political mobilization had broadened by then contributed to this result. Those who joined or responded to the Young Turk movement included not only civil bureaucrats and large elements of the military, but also nonbureaucratic elites, members of the non-Muslim communities, sometimes even workers. The connections between Young Turk activists and these various groups are not all well established. The roots of the movement in the civil bureaucratic and military elites are, of course, best known.[61] In the case of the workers, to cite a less-known example that is particularly significant where political mobilization is concerned, Young Turk activists had forged alliances with aggrieved worker groups before revolution broke out in 1908, and had apparently led at least one Luddite disturbance, which resulted in good part from the current economic crisis. Considering how little research has been done in Ottoman labor history, it is highly likely that more such examples of economically motivated political activism await discovery.[62]

[59] With particular reference to agrarian difficulties of 1873–75 and 1907–8, Quataert, "Commercialization of Agriculture," 52–53, makes much the same point by speaking of social and political "dislocations" that arose out of crises in agriculture.

[60] Mardin, *Genesis*, 166–68, 321–23, 354, 388. As noted in the preceding section, there is evidence that the Young Ottomans did seize upon the economic problems that surrounded the Cretan crisis (1866–69), at least.

[61] Among the many sources that could be cited on this point, Shaw and Shaw, *History*, II, 263–66; Mardin, *Jön Türklerin*, 11, 22–27, 32–33, 39–41, 225–26, *et passim*.

[62] Donald Quataert, *Social Disintegration and Popular Resistance in the Ottoman Empire, 1881–1908* (New York, 1983), chs. 4, 5; *idem*, "Ottoman Luddites and the Changing Carpet Industry in Uşak, Anatolia, 1860–1914" (Paper presented at the Third International Congress on the Social and Economic History of Turkey, Princeton, 24–26 August 1983); *idem*, personal communications, November–December 1983. Further on the working class and on the beginning of socialist influence, especially among non-Muslims, see Paul Dumont, "Une organisation socialiste ottomane: La Fédération ouvrière de Salonique," *Etudes balkaniques*, 11:1 (1975), 78; *idem*, "Sources inédites pour l'histoire du mouvement ouvrier et des courants socialistes dans l'empire ottoman au début du XX^{e} siècle," in *Social and Economic History of Turkey (1071–1920)*, Osman Okyar and Halil İnalcık, eds. (Ankara, 1980), 383; *idem*, "A propos de la 'classe

In considering the correspondence between economic and political-intellectual history, the interval in the 1870s and 1880s between the Young Ottoman and Young Turk periods is also significant. Economically, it was a time of relief for the bureaucratic intelligentsia, and probably for other sectors of society, too. Politically, it was the period when Abdülhamid quashed the opposition and consolidated his palace regime. Making due allowance for his intelligence and the authority of his office, it seems—unless we suppose these economic and political facts to be unrelated—that the last great flourish of Ottoman sultanism was made possible in some degree by a détente, if it was no more than that, in the general economic decline of the empire. When the benefits of this détente began to dwindle, political opposition re-emerged, sultan or no sultan. After the economic situation took a sharp downturn in 1907, revolution broke out. Here we have another example of James C. Davies's "J-curve" theory of revolution, with the variation that the period of improvement (in this case not so prolonged: *ca.* 1880–94) yielded to a period of gradual economic erosion (*ca.* 1894–1907), prior to the "sharp reversal" of 1907, which precipitated the crisis.[63]

In the case of the bureaucratic intelligentsia and, at key moments, other sectors of Ottoman society, economic patterns thus varied over time in ways that display a clearly intelligible relationship to the rise and fall of political activism. Extensive documentation of the *causal* connection will require further research of a kind different from the statistical analysis presented here. Yet, it is clear that the familiar political and intellectual explanations of the sequence of events that ran from Young Ottoman ferment, through Hamidian repression, to Young Turk revolution must, as comparative or theoretical analysis suggests, expand to include the economic dimension.

APPENDIX
COMPUTATION OF SALARY STATISTICS

Sources and Methods

The main source for calculation of the salary statistics is the collection of personnel records (Sicilli-i Ahval, cited in the notes as SA) in the archives of the Ottoman Foreign Ministry in Istanbul (Hariciye, cited as Har.). This collection includes 771 envelopes, each containing documentation on one official. In addition, records of some high-ranking individuals associated with the Foreign Ministry appear only in the Prime Ministers' Archives (Başbakanlık Arşivi, cited as BBA), Istanbul, in the *Dahiliye sicill-i ahval defterleri* (cited as *DSA*), consisting of 196 large registers; see Attilâ Çetin, *Başbakanlik Arşivi Kilavuzu* [Guide to BBA] (Istanbul, 1979), 46; and Carter Vaughn Findley, *Bureaucratic Reform in the Ottoman Empire: The Sublime*

ouvrière' ottomane à la veille de la révolution jeune-turque," *Turcica,* 9:1 (1977), 229–52; Georges Haupt and Paul Dumont, *Osmanlı İmparatorluğunda Sosyalist Hareketler* [Socialist movements in the Ottoman empire] (Istanbul, 1977; not seen).

[63] Davies, "Toward a Theory of Revolution," 136.

Porte, 1789–1922 (Princeton, 1980), 267. Many of the files in the Foreign Ministry personnel records show only brief career records, since young men often accepted one or two appointments, but did not continue (*cf.* Findley, *Bureaucratic Reform,* 234–39). To distinguish careerists from noncareerists, I collected only files with service records spanning fifteen solar years. The result was a group of 366 individuals, not all in service at once. In the analysis, I recorded the salary of each official, as of 1 June of the Gregorian calendar, for every year of service. Since the price data come only from the Istanbul market, only salaries of officials serving in that city have been used in computing the statistics presented here. As the program for executing the computer analysis of both salaries and prices, I used the Statistical Package for the Social Sciences. See Norman H. Nie *et al., SPSS: Statistical Package for the Social Sciences,* 2d ed. (New York, 1975).

Problems of Analysis

Correct interpretation of the salary data contained in these sources depends on understanding—and, where possible, eliminating distortions that result from—certain problems of either the documentation or the data collection method. These problems, and the procedures or assumptions that I have used in coping with them, are as follows.

Representativeness of the Data. Two questions of this type arise. Was the Foreign Ministry of elite status in relation to the rest of the civil bureaucracy? Was the civil bureaucracy of elite status in relation to the rest of the populace? The only answer for the first question is the impressionistic one that while the Foreign Ministry may have been exceptionally privileged during the *Tanzimat,* it was no longer so under Abdülhamid (Findley, *Bureaucratic Reform,* 135–37, 153–55, 242–43, 255–57). On the elitism of the civil bureaucracy in relation to the populace, the text presents evidence of an income gap that was wide, but narrowed with time.

Monetary Units. Because the Ottoman monetary system was complex, and the personnel records are not specific as to money of payment, care is needed to convert the salaries stated in the records into units of constant value. The Ottoman coinage of this period was officially bimetallic. The gold lira, nominally consisting of 100 kuruş, stood throughout the period at essentially 1.11 to the pound sterling. The silver coinage was minted in units nominally worth 20 kuruş (the silver *mecidiye*) and less, the gold-silver ratio having been set in 1844 at 1:15.0909. There were also small coins of base metal. Finally, paper money was in circulation, usually much depreciated, during the intervals 1839–63, 1876–83, and 1914–22. See Charles Issawi, *The Economic History of Turkey, 1800–1914* (Chicago, 1980), 326–31; *idem, An Economic History of the Middle East and North Africa* (New York, 1982), 186; George Young, *Corps de droit ottoman* (Oxford, 1905–6), V, 1; Carl Anton Schaefer, "Geldwesen und Staatsbankfrage in der Türkei," in *Das Türkische Reich,* Josef Hellauer, ed. (Berlin, 1918), 33; Roderic H. Davison, "Ḳā'ime," *Encyclopedia of Islam,* 2d ed., IV, 460–61; I have also computed money market statistics from the same newspapers used to compute commodity prices (see note 35).

Since gold was mostly hoarded, and paper money circulated for only a few of the years for which statistics appear in the tables in the text, the silver *mecidiye* must have been the primary unit for salary payment. Converting salaries assumed to be stated in silver into units of constant value becomes a problem after the value of silver began to decline in the 1870s. By the early 1880s, it took 108 kuruş in silver to buy a gold lira (equal to 100 kuruş in gold). On the world market, the value of silver declined much further thereafter. In Istanbul, however, the Ottoman silver coinage held steady around 108 kuruş to the gold lira through 1914, according to the money rates published in local newspapers. For an explanation of this stabilization, see Salgur Kançal, "La dualisation de l'espace monétaire ottoman" (Paper presented at the Third International

Congress on the Social and Economic History of Turkey, Princeton, 24–26 August 1983).

The Ottoman government responded to the decline in silver by decreeing in 1879 that the silver *mecidiye* was worth 19 kuruş in gold, rather than 20, and proceeding to use this rate in government transactions. The capitalist commercial sector did not accept this rate. In fact, there was an error in it, for if it took 108 kuruş in silver to equal 100 kuruş in gold, 100 kuruş in silver were worth 92.59 in gold. At one fifth of that, the value of the silver *mecidiye* should have been reduced, not to 19 kuruş, but to 18.52. The new official rate for the *mecidiye* represented an error of 2.6 percent of 18.52, or 2.5 percent of 19. The government did not rectify this error until August 1909, when it reset the rate for the gold lira at 102.6 kuruş in silver while holding the *mecidiye* at 19 (Schaefer, "Geldwesen," 30). For the years when government policy was based on this error, I have interpreted the personnel-record salary figures to mean payment in *mecidiyes* assumed by the payer to be worth 19 kuruş in gold. To state salaries in gold kuruş, I have compensated for the error of 2.5 percent by multiplying all salaries for the appropriate years by 0.975. Since the adjustment of the official rate was a tardy response to the decline in silver, I have made this adjustment from 1876 on, that being the first year when the money rates in Istanbul newspapers indicate an appreciable decline in silver.

Disparity between Nominal Salary Entitlements and Actual Receipts. Ottoman officials did not get paid regularly or fully. The salary figures in the personnel records thus signify gross nominal entitlements by way of salary, rather than net receipts. The difference consisted partly of deductions for things like retirement funds. By 1913, the deductions amounted to 9 percent (Har., Mütenevvi 156, Turhan Paşa to Said Halim Paşa, 9 10bre [*sic*] 1913). A larger part of the gross-net difference consisted of delays of payment, some of which were never made up. Indeterminably large gross-net differences raise questions about the value of the personnel-record salary data; yet, for a variety of reasons, they remain worthy of study. There are, for example, no known sources from which to verify the actual receipts of substantial numbers of civil officials. Similarly, despite some efforts (Findley, *Bureaucratic Reform,* 277–78, 331–32), the Ottomans never produced any comprehensive grading of officials and their salaries. Thus, there is no convenient source, like the *barem* (French *barème*) adopted under the republic, from which to verify salaries of officials of different types. Further, while the problems of the salary system are sometimes taken to mean that salaries were unimportant to officials, there is evidence, too voluminous to present here, that officials were keenly concerned about their salaries, precisely because they were not regularly paid (Findley, *Bureaucratic Reform,* 236–39; I plan to discuss this evidence more fully in a book on the "Social History of Ottoman Civil Officialdom"). Reflection shows, too, that the salary data in the personnel records do tell several things. They indicate the priorities of those with discretion to assign salaries. They indicate the upper limit of what officials legitimately received by way of salary. If we can assume that the gap between nominal and actual salaries did not vary materially over long periods, the nominal salaries yield good relative indicators of long-term changes in bureaucratic fortunes. It is essentially as relative indicators that the salaries are used here.

Variation over Time in the Number of Officials for Whom Salary Data are Available. I calculated salary statistics for the period 1850–1914, but found that the number of cases dropped off, and the statistics became erratic, at both ends of that period. For the earlier years, the cause of the trouble is that the personnel records were not created until 1877. The records cover the individual's lifespan from birth forward. Thus, the oldest files contain data for years long before 1877; yet, the further back one looks, the fewer the cases. The problem in the later years arises from the purges that followed the

Young Turk revolution of 1908 (Findley, *Bureaucratic Reform,* 296–98). Since I had decided to collect records only of officials with at least fifteen years of recorded service, the decline in the number of cases on which I have data begins, not in 1908, but some fifteen years earlier. The result is a data distribution in which the number of officials serving in Istanbul with known salaries begins at 21 in 1850, rises to 203 in 1891, then starts to fall, plunges from 125 to 53 between 1908 and 1909, and stands at 8 for 1914. To cope with this, I have adopted an arbitrary cutoff point, and show no statistics for years with fewer than fifty cases.

Apparent Increase over Time in the Seniority of the Officials for Whom Salary Data are Available. The factors that caused the number of cases to rise and fall also created a misleading appearance of a long-term increase in seniority. If the oldest records date from 1877, statistics for earlier years will reflect a population that is more and more junior, the further back the dates of the statistics. After 1893, my rule excluding officials with fewer than fifteen years of service, and the decline in maintenance of the records in 1908, will create the appearance of a population that becomes more senior with the passage of time. In the intervening period, 1877–93, the seniority distribution, though heavy with junior officials, was not changing. The increase in the degree of seniority is thus an artificial product of the data collection procedure and the properties of the records, not an attribute of the population studied. Given the likelihood of a positive association between seniority and salary, this increase must be brought under control statistically before the salary statistics can be regarded as reliable indicators.

For the means, standardization provides the needed adjustment. See R. G. D. Allen, *Statistics for Economists* (London, 1968), 111–14. I have standardized across time, dividing the salaries quoted for each year into three brackets defined according to the seniority of each official at the time, and recomputing the salary mean for each year as a weighted average of the means for each seniority bracket. The three seniority brackets were defined as including officials whose recorded careers comprised spans of 0–14, 15–29, and 30 or more years. The weights used to recompute the average represent the proportions among the average number of cases falling into the three seniority brackets during the years 1880–82, which I selected to serve as the base period for the standardization. The base period falls in the interval 1877–93, when the seniority distribution apparent in the records was not distorted by the factors discussed above. (For a different reason, I shall also use the same base period in computing percentage relatives of salaries and commodity prices). During the base period, on average 60 percent of the officials in service were in the 0–14 year seniority bracket, 30 percent were in the 15–29 year bracket, and 10 percent were in the 30-or-more bracket. I therefore used 0.6, 0.3, and 0.1 as weighting factors to recompute the mean for each year as a weighted average of the means for the three brackets. No statistics are shown for years when there were no cases in one or more of the seniority brackets.

For the median, as a positional statistic, there is no counterpart of standardization. Because the distortions of the seniority distribution lie mostly in the lack of senior officials in the earlier years, and of junior officials after 1893, the best alternative seemed to be to compute medians for only the middle seniority bracket, comprising officials with 15–29 years of service as of each year of computation. Of course, this method further reduces the number of cases used in calculation. Since the maximum number of cases in the 15–29 year bracket in any year is 84, I shall show no statistics for any year without at least 21 cases. Because of differences in the adjustment techniques for means and medians, the years for which these statistics appear in the tables differ slightly.