

CAMBRIDGE
UNIVERSITY PRESS

Economic History Association

U.S. City Finances and the Growth of Government, 1850-1902

Author(s): John B. Legler, Richard Sylla, John J. Wallis

Reviewed work(s):

Source: *The Journal of Economic History*, Vol. 48, No. 2, The Tasks of Economic History (Jun., 1988), pp. 347-356

Published by: [Cambridge University Press](#) on behalf of the [Economic History Association](#)

Stable URL: <http://www.jstor.org/stable/2121176>

Accessed: 01/11/2011 11:22

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Cambridge University Press and Economic History Association are collaborating with JSTOR to digitize, preserve and extend access to *The Journal of Economic History*.

<http://www.jstor.org>

U.S. City Finances and the Growth of Government, 1850–1902

JOHN B. LEGLER, RICHARD SYLLA, AND JOHN J. WALLIS

In terms of revenues and expenditures, local government was the largest component of the U.S. federal system in 1902. Although it has been conjectured that this was also true during most of the nineteenth century, the evidence to support the conjecture is weak. We present a summary of a large sample of data for individual cities in 1850, 1860, and 1870, and link it to census data for 1880, 1890, and 1902. We study effects of city size and geographical location, and trends over time in city fiscal activity. Our provisional conclusion is that local government became the largest of the three components in the federal system only toward the end of the nineteenth century.

The growth of government relative to the total economy in the twentieth century is well documented and much discussed. Combined federal, state, and local spending rose from about 8 percent of GNP in 1902 and 1913 to a third or more in recent years. Unfortunately, there is no substantial basis for making similar statements about trends before this century, largely because pre-1880 censuses did not collect systematic data on state and local revenues and spending. The gap in historical knowledge is large, for the earliest census studies of American government finances in the aggregate indicate that the state and local sectors accounted for 66 percent of all public spending in 1902 and 70 percent in 1913.¹ The local sector alone accounted for 58 and 61 percent of all expenditures in the two years.

Two decades ago, Lance Davis and John Legler attempted to assess the relative importance of the three levels of government for much of the nineteenth century on the basis of relationships and regression analyses derived from the tolerably comprehensive data on state and local finances for the census years 1880, 1890, and 1902.² They conjectured that in “the nineteenth century local units were without question the

The Journal of Economic History, Vol. XLVIII, No. 2 (June 1988). © The Economic History Association. All rights reserved. ISSN 0022-0507.

John B. Legler is Professor of Banking and Finance in the College of Business Administration at the University of Georgia, Athens, GA 30602 and Research Associate, National Bureau of Economic Research; Richard Sylla is Professor of Economics and Business at North Carolina State University, Raleigh, NC 27695 and Research Associate, NBER; and John J. Wallis is Assistant Professor of Economics, University of Maryland, College Park, MD 20742 and Faculty Research Fellow, NBER. The research on which this paper is based is funded by National Science Foundation Grant No. SES-8419857.

¹ Derived from U.S. Bureau of the Census, *Historical Statistics of the United States*, bicentennial edition (Washington, D.C., 1975), series Y522, p. 1120; Y592, p. 1123; Y671, p. 1127, and Y819, p. 1134.

² Lance E. Davis and John B. Legler, “The Government in the American Economy 1815–1902: A Quantitative Study,” this JOURNAL, 26 (Dec. 1966), pp. 514–52.

most important of the three levels of government.” That was certainly the case in regard to revenues and expenditures in 1902 and 1913, but Davis and Legler acknowledge that their estimates for earlier years were subject to reasonable doubt.

In this article, we study nineteenth-century trends in local public finance, with emphasis on the finances of cities. The main body of evidence underlying our study is a large sample of primary source data on the finances of cities in 1850, 1860, and 1870. We link these data to the more complete census data for the years 1880, 1890, and 1902. The entire data set allows us to study trends in per capita U.S. city finances between 1850 and 1902, as well as differences in each of the years among cities of different sizes and cities in different geographical regions of the United States.

The main goal of the article is to explore the Davis-Legler conjecture. There are problems with inferring (as Davis and Legler did) from the relative importance of local finance in the overall local-state-federal system as of 1902, that local finance was the largest of the three levels during the preceding century. Early in the nineteenth century, when Americans were largely a rural people, local finance for the most part was county finance.³ As the century unfolded, urbanization altered the character of local finance. At mid-century only 15 percent of Americans lived in urban as opposed to rural places (with “urban” defined as a place with 2,500 or more people). By 1900, 40 percent of Americans lived in urban places. The share of the population living in larger cities (defined here as places with 25,000 or more) rose even more rapidly, from 9 percent in 1850 to 26 percent in 1900.⁴ There was also, of course, a redistribution of population among regions of the nation.

Local public finance was largely urban public finance at the turn of the twentieth century. At that time it surpassed both federal and state finance, and even the combined total of federal and state finance. But the urban sector as a whole, and still more so the city component, was much less important in a relative population sense a half-century earlier. We need to know more about relative federal, state, and local spending levels at dates before 1902 to assess the Davis-Legler conjecture. This article represents a first step in that direction.

DATA SOURCES AND METHODS

We have assembled data on the revenues and expenditures of a large number of cities by decade from 1850 to 1902. A variety of primary and

³ For an example, see Richard Sylla, “Long-Term Trends in State and Local Finances: Sources and Uses of Funds in North Carolina, 1800–1877,” in Stanley L. Engerman and Robert E. Gallman, eds., *Long-Term Factors in American Economic Growth* (Chicago, 1986), pp. 819–68.

⁴ The urbanization percentages are derived from Bureau of the Census, *Historical Statistics*, bicentennial, series A57–A69.

secondary sources were used for the decade years 1850, 1860, and 1870. Data from the census reports pertaining to 1880, 1890, and 1902 complete the series.⁵ To facilitate comparisons across time, regions, and city sizes, we present the data in summary form as average real per capita revenues and expenditures.

Primary sources for cities are individual city treasurer's and auditor's reports. These are supplemented with data from general and financial histories, reports of mayors, city directories, and such periodicals as the *American Almanac*, *Hunt's Merchants Magazine*, *DeBow's Review*, and *Hazzard's Register*.⁶ In addition, we used city financial reports contained in local newspapers, a source that expanded our data base, especially in the earlier years, and broadened the geographic coverage, especially of southern cities.

Locating data was the first step in constructing a standardized data base. The data base was constructed to facilitate analysis of the relative role of municipal government in the economy. Accordingly, tax revenues were limited to those collected for city purposes, beginning and end of year balances were netted out, and intergovernmental revenues of a temporary nature were excluded.

Because complete data for each city on every category of revenue and expenditure were not available for the years prior to 1880, the average per capita figures for separate categories in these years are based on the data that were available. They represent, so to speak, a sample of our sample. Thus, in the case of cities for which the only available data were described as total revenues with no breakdown by category of revenue, we treated these data strictly as such, making no attempt to allocate among taxes, debt revenues, and other sources. In calculating average per capita revenues for a given year, the total revenue category would be affected by inclusion of the total revenues of these cities, but the average figures for other component categories (tax revenues, debt revenues, and so on) would be unaffected, that is, would be based only on the subsample of cities for which we actually have data on these categories. As a consequence the individual categories of average

⁵ U.S. Department of the Interior, Census Office, *Valuation, Taxation, and Public Indebtedness in the United States as Returned at the Tenth Census* (Washington, D.C., 1884); U.S. Department of the Interior, Census Office, *Report on Wealth, Debt, and Taxation at the Eleventh Census: 1890, Part II, Valuation and Taxation* (Washington, D.C., 1895); U.S. Department of Commerce and Labor, Bureau of the Census, *Statistics of Cities Having a Population of Over 25,000, 1902 and 1903* (Washington, D.C., 1905), bulletin no. 20; U.S. Department of Commerce and Labor, Bureau of the Census, *Statistics of Cities Having a Population of 8,000 to 25,000: 1903* (Washington, D.C., 1906), bulletin no. 45.

⁶ See Table 3 for a listing of some of the general and financial histories containing city financial data. Others include Thomas Gamble, *A History of the City Government of Savannah, Georgia from 1790 to 1901* (Savannah, 1901); Laurence M. Larson, *A Financial and Administrative History of Milwaukee*, Bulletin of the University of Wisconsin, no. 242 (Madison, 1908); Eugene E. Oakes, *Studies in Massachusetts Town Finance* (Cambridge, Mass., 1937); and Lucius R. Paige, *History of Cambridge, Massachusetts, 1630-1877* (Boston and New York, 1877).

revenues and expenditures will not always add up to the average total revenues and expenditures in our tables.

The data for 1850, 1860, and 1870 are not a random sample. Rather, they are a large, non-random sample of all cities and the urban population. By including data from nearby years when census year data were not available, we cover approximately half or more of cities with populations of 30,000 or more, and an even larger fraction of the population of such cities.⁷

REVENUES AND EXPENDITURES BY CITY SIZE

Table 1 presents the data we have derived on real per capita city revenues and expenditures from 1850 to 1902 classified by size of city.⁸ We draw two main conclusions from these data. The first is that in general real per capita revenues and expenditures vary directly with city size—the larger the city, the higher the level of fiscal activity per person. This pattern is almost always evident in the fairly complete data we have for 1880 to 1902. It is less evident in the less complete data for 1850 to 1870, but it would become clearer were we to reduce the city size categories for these years from five to three or two. Since fiscal activity tended to increase with city size, the reported averages understate the growth of fiscal activity in individual larger cities. As cities gained population over time, they moved up in size class. In 1850, New York was the only city in class I, but by 1902 several cities exceeded the 300,000 population level. San Francisco, for example, moved from a class III city in 1850 to become a class I city by the turn of the century. The inclusion over time of relatively smaller cities in the large-city class pulls down the averages for that class.

Our second conclusion is that real fiscal activity per capita increased three to four times over the five decades. In rough terms, real fiscal activity per capita in cities increased at a 2 to 3 percent average annual rate over the five decades. Such a rate is well above the annual average

⁷ We have determined from Bureau of the Census, *Financial Statistics of Cities Having a Population of Over 30,000, 1912* (Washington, D.C., 1914), p. 15, that our revenue sample covers 63 percent of cities with 30,000 or more population and 81 percent of the total population of such cities in 1850. In 1860, the corresponding average is 69 percent and 92 percent. In 1870, it is 48 percent and 68 percent. The expenditure sample covers 47 percent of the cities having 87 percent of the population of such cities in 1850. The corresponding percentages for 1860 are 58 and 76; those for 1870 are 50 and 72.

For cities of 8,000 to 30,000 population, our coverage is approximately 26, 22, and 14 percent of the population of such cities in 1850, 1860, and 1870.

For the three years 1850, 1860, and 1870, the range of the distribution of the total sample population by geographical region is: New England, 18–23 percent; Middle Atlantic, 40–55 percent; South, 9–15 percent; Midwest, 17–20 percent; and West, 2–4 percent.

⁸ To obtain real values, nominal per capita values were deflated by the Warren-Pearson Wholesale Price Index spliced with the Bureau of Labor Statistics Wholesale Price Index, with 1914 = 100. Both are taken from U.S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1957* (Washington, D.C., 1960), series E1 and E13.

TABLE I
REVENUES AND EXPENDITURES PER CAPITA BY CITY SIZE
(in constant 1914 dollars)

Year and Size Class ^a	Revenues				Expenditures			
	Taxes	Total Ordinary ^b	Total Debt Revenues	Total Revenues	Total Ordinary ^c	Total Debt Repayment	Total Expenditures	
1850 I	\$6.62	\$7.18	\$7.10	\$14.25	\$11.07	\$3.69	\$14.77	
II	7.35	11.80	4.88	14.23	10.26	1.24	11.50	
III	3.94	7.92						
IV	4.07	6.29	2.63	8.85	7.36	1.75	9.05	
V	4.12	4.52	4.83	8.77	6.99	3.39	9.12	
1860 I	7.46	8.98	5.32	14.30	10.14	0.88	11.02	
II	8.08	16.92	7.80	20.32	17.96	2.15	16.69	
III	10.27	11.44		11.44	8.04	0.34	8.11	
IV	6.25	8.32	4.78	11.54	5.69	3.73	8.19	
V	6.30	7.67	4.90	15.37	10.37	5.34	14.20	
1870 I	7.48	9.59	7.98	17.56	15.09	2.71	17.81	
II	13.13	19.14	19.32	28.95	16.70	6.47	20.36	
III	7.03	9.76	6.22	14.65	13.84	2.13	15.52	
IV	8.97	11.24	12.09	22.38	17.99	7.09	23.31	
V	6.04	8.34	6.81	12.93	11.35	5.64	12.67	
1880 I	15.79	20.00	14.56	34.56	19.26	14.74	34.00	
II	9.72	13.25	5.66	18.91	14.59	6.18	20.77	
III	9.24	12.21	3.74	15.95	10.20	4.67	14.87	
IV	8.20	11.05	2.97	14.02	9.94	3.71	13.65	
V	7.00	8.91	2.35	11.26	10.28	3.69	13.97	
1890 I	16.65	26.67	15.90	42.59	21.30	22.30	43.61	
II	12.61	24.68	12.37	36.93	19.51	12.68	32.20	
III	10.95	20.72	9.40	30.12	15.91	9.38	25.29	
IV	8.82	19.66	7.11	26.77	14.84	5.88	20.77	
V	7.18	13.66	4.76	18.41	10.27	3.98	14.24	
1902 I	18.46	26.98	18.42	45.39	24.01	13.20	37.20	
II	12.76	22.29	10.39	32.69	18.45	8.95	27.39	
III	11.95	20.53	7.24	27.76	16.27	5.74	22.00	
IV	9.33	15.76	6.45	22.20	12.54	4.98	17.49	
V (1903)	9.68	14.26	6.46	20.72	16.65	4.73	21.38	

^a Population size classes of cities are I: 300,000 and over, II: 100,000 to 300,000; III: 50,000 to 100,000, IV: 25,000 to 50,000, and V: less than 25,000.

^b Includes tax and non-tax revenues such as licenses, fees, and fines.

^c Includes expenditures in categories of Administration and Salaries, Police and Fires, Streets and Lighting, Welfare, Water Works, Education, and Interest. Because of space limitations, we do not present or analyze these categorical breakdowns here.

Source: See text.

real per capita GNP growth rate of 1.5 to 1.6 percent estimated by Robert Gallman for the 1840 to 1900 period.⁹ We are not yet in a position to say that it was above the rate of growth of real per capita income in cities, which likely was above the rate for the nation as a whole. The

⁹ Robert E. Gallman, "Gross National Product in the United States, 1834-1909," in National Bureau of Economic Research, *Output, Employment, and Productivity in the United States after 1800*, Studies in Income and Wealth, vol. 30 (New York, 1966), pp. 3-76.

question of the nineteenth-century elasticity of fiscal activity with respect to income remains to be investigated.

We can, however, decompose the growth of total per capita fiscal activity into demographic and non-demographic factors. Only about 5 percent of the growth in tax revenues, for example, is due to an increase in the share of the total urban population living in larger cities. Fully 80 percent of the increase can be attributed to a rise in tax collections for cities of given sizes, while interaction between the two elements accounts for the remainder.¹⁰ A broad increase in the size of the public sector of urban areas occurred in cities of all sizes, and the rate of growth of revenues and expenditures was not markedly higher in the largest cities than in the smallest.

REGIONAL DIFFERENCES IN CITY FINANCES

Table 2 presents real per capita city revenues and expenditures classified by geographical region along with the U.S. averages. From 1870 on, in both revenues and expenditures, there is a marked difference between the Northeast region and the rest of the nation. The level of fiscal activity in cities of the Northeast substantially exceeded levels in the other three regions. Average city size was larger in the Northeast. Since we have established that fiscal activity varied directly with city size, part of the explanation of the Northeast effect lies in city size. What other characteristics of northeastern cities might account for the difference? We are not sure, but suggest it as a question for future research. The Northeast contained 65 percent of the U.S. urban population in 1850, and 46 percent in 1902. Therefore, the Northeast effect exerts a strong influence on the U.S. averages.

In two respects the South and the Midwest reverse positions between 1850 and 1902. In 1850, the South had a larger urban population than the Midwest.¹¹ Moreover, fiscal activity per capita in 1850 and 1860 was greater in southern cities than in midwestern cities. By the turn of the century both positions reversed. The South in 1900 contained only 14 percent of the nation's urban population while the Midwest had 34 percent. City revenues and expenditures per capita were roughly the same in the South and Midwest from 1870 to 1890, but by 1902 the Midwest had substantially higher levels. Not all of these changes were a result of the Civil War and its aftermath; the Midwest had passed the South in its share of the U.S. urban population by 1860.

Cities of the West region exhibit a high level of fiscal activity

¹⁰ These estimates are generated by comparing average actual tax revenues in all cities in 1850 and 1900 to average tax revenues using the 1850 population shares and the 1900 tax revenues by city size, and to average tax revenues using the 1850 tax revenues and the 1900 population shares by city size. Similar results are found for expenditures and other fiscal measures.

¹¹ U.S. Bureau of the Census, *Historical Statistics*, bicentennial, series A172 and A178. In 1850, the South and the Midwest had about the same percentage of urban population to total population.

TABLE 2
REVENUES AND EXPENDITURES PER CAPITA OF CITIES BY REGION
(in constant 1914 dollars)

Year and Region	Revenues				Expenditures		
	Taxes	Total Ordinary	Total Debt Revenues	Total Revenues	Total Ordinary	Total Debt Repayment	Total Expenditures
1850							
Northeast	\$6.23	\$7.62	\$5.18	\$12.43	\$10.96	\$3.20	\$13.82
South	6.31	6.98	7.87	15.01	7.73	1.92	9.43
Midwest	3.96	6.30	0.25	6.55	4.19	1.56	5.13
West	9.65	11.69	n.a.	n.a.	n.a.	n.a.	n.a.
U.S. average	5.92	7.42	5.55	12.55	10.87	2.52	13.23
1860							
Northeast	7.30	9.59	6.63	14.43	10.56	1.13	11.38
South	8.72	16.55	4.84	26.27	15.91	4.49	20.34
Midwest	6.75	7.88	1.67	7.70	4.74	0.26	5.09
West	13.89	14.85	n.a.	14.85	n.a.	n.a.	n.a.
U.S. average	7.55	10.84	6.17	15.00	11.33	1.77	12.65
1870							
Northeast	10.82	12.76	10.55	22.78	17.34	5.61	21.92
South	6.76	9.75	6.67	13.43	11.99	2.20	13.41
Midwest	7.22	7.25	4.10	10.77	12.59	0.21	12.76
West	8.46	11.65	n.a.	11.91	11.26	0.73	11.92
U.S. average	9.20	11.50	9.26	19.32	15.30	4.13	18.53
1880							
Northeast	13.33	16.75	12.27	29.02	16.09	12.77	28.86
South	7.82	11.93	1.89	13.82	10.34	1.49	11.83
Midwest	7.90	9.99	1.53	11.52	9.42	2.19	11.61
West	10.36	15.37	1.57	16.94	15.14	4.39	19.53
U.S. average	10.95	14.18	7.47	21.65	13.48	8.09	21.57
1890							
Northeast	14.59	21.13	14.43	35.56	18.01	19.13	37.15
South	9.46	12.65	8.56	21.21	12.94	6.05	18.99
Midwest	8.63	14.38	5.94	20.32	15.38	4.67	20.05
West	10.18	20.41	3.11	23.52	21.29	5.06	26.35
U.S. average	11.78	17.83	10.46	28.29	16.65	12.21	28.85
1902							
Northeast	16.07	18.52	14.79	33.31	16.86	7.97	24.83
South	9.87	12.72	4.06	16.78	11.35	3.72	15.07
Midwest	11.22	14.14	7.48	21.62	15.82	5.92	21.75
West	12.07	18.22	5.59	23.81	18.52	2.78	21.31
U.S. average	13.25	16.43	10.75	27.18	15.94	6.45	22.39

Notes: The regional definitions follow census classifications. The Northeast is the New England and Middle Atlantic states; the South is the South Atlantic, East South Central, and West South Central states; the Midwest is the East North Central and West North Central states; the West is the Mountain and Pacific states.

Sources: See text and Table 1.

throughout the half-century, but the region contained very little of the nation's urban population—less than 1 percent in 1850 and less than 6 percent in 1900. The West data are dominated by one city, San Francisco.

To investigate further the effect of the fiscal activity of larger cities on

TABLE 3
PER CAPITA TAX REVENUES OF LARGE CITIES, 1850-1902
(in constant 1914 dollars)

City	1850	1860	1870	1880	1890	1902
Northeast						
Boston	\$10.81	\$14.99	\$26.93	\$27.90	\$32.10	\$37.49
New York	7.46	11.25	11.30	25.22	26.15	25.68
Providence	3.97	5.98	11.64	15.33	19.19	18.05
South						
Baltimore	2.68	3.80	5.83	6.73	9.78	14.68
New Orleans	10.43	9.95	14.21	7.68	13.43	12.78
Midwest						
Chicago	1.00	3.67	10.26	7.75	10.60	6.58
Cincinnati	7.51	10.95	11.17	16.55	15.53	11.82
Cleveland	1.68	4.92	6.41	8.61	8.20	12.77
St. Louis	3.94	6.18	4.80	7.79	8.84	9.45
West						
San Francisco	9.66	14.41	8.85	13.14	12.33	17.06
10-city average	6.96	9.60	12.93	16.47	17.40	18.64
U.S. city average	5.92	7.55	9.20	10.95	11.78	13.25

Sources: For Baltimore: J. H. Hollander, *The Financial History of Baltimore* (Baltimore, 1899); Boston: Charles P. Huse, *The Financial History of Boston from May 1, 1822 to January 31, 1909* (Cambridge, Mass., 1916); New York: Edward Dana Durand, *The Finances of New York City* (New York, 1898); Providence: Howard K. Stokes, *The Finances and Administration of Providence, 1636-1901* (Baltimore, 1903); New Orleans: *Comptroller's Report*, Statement S (New Orleans, 1914); Chicago: *Chicago Daily News Almanac and Year Book for 1904* (Chicago, 1904); Cincinnati: *Journal of Banking, Currency, and Finance* (1860), p. 723; Cleveland: Charles C. Williamson, *The Finances of Cleveland*, Columbia University Studies in History, Economics and Public Law, 25, no. 3 (New York, 1907); St. Louis: *Journal of City Council*, "Appendix: Statistical and Financial Review of the City of St. Louis" (St. Louis, 1871); San Francisco: Terrence J. McDonald, *The Parameters of Urban Fiscal Policy: Socio-economic Change and Political Culture in San Francisco, 1860-1906* (Berkeley, 1986). The 1880, 1890, and 1902 data are from the census reports cited in fn. 5. The deflation procedure is described in fn. 8.

regional averages, we have assembled data in Table 3 on the real per capita tax revenues of a group of large cities, that is, cities that were large by the turn of the century. For this group tax revenue data were available for each census year or a nearby year. We find that on average the per capita tax revenues of these cities exceed the corresponding figures for all cities in each census year. It is likely, as we suggested earlier, that fiscal activity in individual large cities grew at a faster rate over time than did the averages for all large cities as reported in Table 1. Nonetheless, by the turn of the century, when all of the cities listed in Table 3 were large, there were considerable differences in the per capita tax burdens among residents of different cities.

RELATIVE IMPORTANCE OF CITY FINANCES IN THE FEDERAL SYSTEM

How do per capita city revenues and expenditures during the 1850 to 1902 period compare with similar federal and state measures? Federal

TABLE 4
FEDERAL, STATE, AND LOCAL TAX REVENUES PER CAPITA, 1850–1902
(in constant 1914 dollars)

Year	Federal	State and Local	State	Local
1850	2.05	2.20	0.74	1.46
1860	2.05	3.22	0.89	2.33
1870	8.64	5.36	1.30	4.06
1880	6.82	6.02	1.04	4.98
1890	7.24	9.01	1.74	7.27
1902	7.54	12.64	2.29	10.35

Notes: To derive the local column, we subtracted State from State and Local. The deflation procedure is described in fn. 8.

Sources: Federal and State and Local columns are derived from data reported in *Bankers Magazine* (Feb. 1876), p. 617, and the census reports cited in fn. 5, as are the 1870, 1880, 1890, and 1902 data in the State column. For 1850 and 1860, we derived state taxes per capita from partial data available to us in Charles Frank Holt, *The Role of State Government in the Nineteenth-Century American Economy, 1820–1902* (New York, 1977) combined with results from our own ongoing work on the Atlantic states (see fn. 13). These partial estimates cover states with 81 percent of the U.S. population in 1850, and 71 percent in 1860.

revenues (in 1914 dollars) increased from approximately \$2 per capita in 1850 and 1860 to approximately \$8 per capita in 1890 and 1902.¹² Our ongoing research on state finances indicates, for a ten-state sample of Atlantic seaboard states, that real per capita revenues and expenditures grew from an average of \$1.25 in 1850 to \$3.27 in 1902.¹³ The data presented here indicate that real per capita city revenues ranged from \$12.55 in 1850 to \$27.18 in 1902 (see Table 2). Thus per capita city revenues in our sample exceeded corresponding federal and state revenues by a substantial margin. Nonetheless, since not all Americans lived in cities, it would be premature to conclude, as Davis and Legler conjectured, that local government in an aggregate fiscal sense was the largest of the three components of the U.S. fiscal system during much of the nineteenth century.

If we focus strictly on tax revenues, a comparison encompassing a broader sample of states is possible. Although this analysis is limited to tax revenues, the relative importance of local government in an aggregate sense at various dates can be demonstrated. As Table 4 shows, per capita federal tax revenues in real terms increased from \$2.05 in 1850 to \$7.54 in 1902. Aggregate state and local per capita tax revenues increased from \$2.20 in 1850 to \$12.64 in 1902. Of these totals, the

¹² The calculations are based on U.S. Bureau of the Census, *Historical Statistics, Colonial*, series A3, E1, E13, Y254, and Y255.

¹³ These estimates, which are weighted by state population, are yet unpublished, but an idea of the nature of our on-going project can be obtained by referring to two published papers: Richard Sylla, "Long-Term Trends in State and Local Finance: North Carolina, 1800–1977"; and Richard Sylla, John B. Legler, and John J. Wallis, "Banks and State Public Finance in the New Republic: The United States, 1790–1860," this JOURNAL, 47 (June 1987), pp. 391–403.

estimated state portion is \$0.74 in 1850 and \$2.23 in 1902. The remainders, \$1.46 in 1850 and \$10.35 in 1902, are estimates of per capita local tax revenues (including those of cities) for the entire U.S. population. They are comparable with the federal and state figures, and allow inferences to be made regarding the relative importance of the three levels of government at each date. Federal tax revenues equaled or exceeded local tax revenues for much of the period 1850 to 1880. In 1890 the two are about the same, and local revenues per capita pull well ahead by 1902. State tax revenues were much less than either the federal or the local at all dates. Thus, although city tax burdens per person were well above those imposed by the federal and state levels, it appears from the tax revenue data that local government in the aggregate became the largest of the three components of the U.S. federal system only in the 1890s.

This finding, although tentative and based only on tax revenues, negates the Davis-Legler conjecture about the importance of local government throughout the nineteenth century. Local government became the largest component only toward the end of the century. One of the major reasons for this development is that more and more Americans chose to live in cities where tax burdens (and public expenditures) per person were high. Why they made this choice is more a question of urban economics than simply of urban public finance. A succinct answer is that of Eugene Smolensky: "City growth and national economic growth proceeded together because cities constitute the most efficient way to organize economic activity in space."¹⁴ To obtain the efficiencies of cities a variety of costs—some private, others collective—were incurred. The issue of whether (or better, to what extent) U.S. cities grew historically because of, or despite, the higher per capita tax burdens incurred to provide collectively consumed goods and services remains to be investigated as more historical data on urban public finance accumulate. On a related issue, however, we can be more positive. The research reported here suggests to us that the historical origin of government's rising relative share of U.S. economic life lies not, as many believe, in the increased federal fiscal activity of the twentieth century but rather in the increased local activity, especially of large city governments, in the latter decades of the nineteenth century.

¹⁴ Eugene Smolensky, "Industrial Location and Urban Growth," chap. 15 in Lance Davis et al., *American Economic Growth: An Economist's History of the United States* (New York, 1972), p. 607.