

*How Much Is That in Real Money?
A Historical Price Index for Use as a
Deflator of Money Values in the
Economy of the United States:
Addenda et Corrigena*

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THE EDITORS of the *Proceedings of the American Antiquarian Society* have kindly offered me the opportunity and the space to make a few additions and corrections to the essay that first appeared in these pages in October 1991 and that was subsequently reissued as a separate small book.¹ These revisions will, it is hoped, make my work a little more accessible, a bit more useful.

To begin, two serious mistakes occur in Table B-1, 'Consumer Price Indexes, Great Britain' (pp. 343, 344). In column 2, for 1799, the number should be 140.0 (*not* 144.4); in column 4, for 1816, the number should be 102.3 (*not* 202.3). These are the only such mistakes that I have detected. Readers who have detected or may detect others will do me a great service if they point them out.

1. *How Much Is That in Real Money?—A Historical Price Index for Use as a Deflator of Money Values in the Economy of the United States* (Worcester, Massachusetts: American Antiquarian Society, 1992). It is still in print and available from Oak Knoll Books, 414 Delaware Street, New Castle, Delaware 19720.

I have had no more enthusiastic response to the original article than that of fellow member of the American Antiquarian Society Martin E. Marty, who announced—in his regular column in *The Christian Century*, cix, no. 25 (Sept. 2, 1992):791—that 'The McCusker article turned me into a happy fool at the calculator.'

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The consumer price indexes for both the United States and Great Britain need to be and can be brought up to date. Even though my doing so here simply employs the sources indicated in the original work and is thus based on widely available information, this supplement to the original tables is the one most often requested by readers. I here report the most recent numbers, suggest that interested readers add them as appropriate to the original tables, and then say something about where readers can themselves find the information necessary for them to keep the series timely. The additional data in Table A-2, Revised, need simply to be inserted into column 5 and column 6 at the end of the same table in the original work (p. 332). The additional data in Table B-1, Revised, need simply to be inserted into column 4 at the end of the same table in the original work (p. 350). Note as well, for Table B-1, Revised, the correction to the number in column 4 for the year 1991.

The sources for these new figures are the same as they were for the more recent parts of the original tables. For Great Britain the Office of National Statistics (formerly the Central Statistical Office) compiles the retail price index monthly, releasing the index number for one month midway into the subsequent month. The figures are reported in the national press, issued in the monthly editions of the *Labour Market Gazette* (formerly the *Employment Gazette*), and included in the ONS's *Annual Abstract of Statistics*.² In Great Britain it is possible to obtain the monthly index number over the telephone through the public inquiry service of the ONS. Call the ONS in London (from the United States, 011-44-171-270-6363 or 270-6364) for information on how to access the 'talking phone' press notices. The ONS has also established a Web Site for those with access to

2. E.g., in [Great Britain, Office of National Statistics] *Annual Abstract of Statistics*, 129th ed. (London: HMSO, 1993), 331 (Table No. 18.7). More information can be found in [Great Britain, Office of National Statistics] *Retail Prices 1914 to 1990* (London: HMSO, 1991) and in pamphlets issued by the ONS such as *Retail Prices Index: A Brief Guide to the RPI* (London: [HMSO], 1996).

the World Wide Web. The monthly updates are available at <<http://www.ons.gov.uk/releases/rpi.htm>> as part of the 'ONS Databank Service.' The twelve-month average for each year calculated to the base year 1860 is the number reported in Table B-1, Revised.

For the United States, the Bureau of Labor Statistics performs a parallel function in roughly the same ways. In the middle of each month it releases the consumer price index for the month just passed. These monthly numbers are widely reported, especially in the financial pages of the major nationally-distributed newspapers. The BLS operates a telephone 'CPI Quickline' (1-202-606-6994) that plays back a recorded message reporting and commenting on the monthly numbers. The BLS Web Site <<http://stats.bls.gov:80/cpihome.htm>> offers a good deal of explanatory information as well as the price index. The yearly averages of these monthly data are also included in the annual edition of the *Statistical Abstract of the United States*.³ The annual average 'Consumer Price Index for all Urban Consumers (CPI-U),' on a reference base of 1982-1984 = 100, is reproduced in column 5 of Table A-2, Revised, and linked to the series base 1860=100 in column 6.

While these additional data allow us to bring both index numbers closer to the present, also newly available is the potential for extending the data for the United States back into the seventeenth century. (The numbers for Great Britain are already of significant lineage; they are taken from a series that begins with 1264.⁴) This new work is based on the investigations by scholars over the last three decades into the economy of the colonial Chesapeake region, investigations begun by and subsequently pursued under the direction of Lois G. Carr of Early St. Mary's

3. E.g., in the [United States, Department of Commerce, Bureau of the Census] *Statistical Abstract of the United States*, 114th ed. (Washington, D.C.: [U.S. Government Printing Office], 1994), 488 (Table No. 747).

4. E[rmest] H. Phelps Brown and Sheila V. Hopkins, 'Seven Centuries of the Prices of Consumables Compared with Builders' Wage-rates,' *Economica*, new ser., xxiii (November 1956), 296-314. This and related essays have been reprinted in Phelps Brown and Hopkins, *A Perspective of Wages and Prices* (London and New York: Methuen, 1981).

City. Using the valuations that contemporaries employed in the inventorying of decedents' estates, one of the people associated with the project, P. M. G. Harris, has developed an index of such prices for Maryland and Virginia extending from the 1630s through the 1830s.⁵ He has linked his index to the index published in Table A-1, column 6, of my essay and carefully analyzed the results in comparison with other price indexes for both the United States and Great Britain. Even though he fully recognizes that his data are not market prices, he is able to demonstrate that the index based on inventory values fluctuated after 1700 in tandem with indexes based on market prices. This suggests that we can rely on his index prior to 1700 to give us an indication of how market prices fluctuated during that period also. The linkage of his index numbers with mine results in a deflator—even if a less-than-perfect one—that extends from the earliest years of the colonial period down to our own time. The annual average index numbers for 1634–1700 as reported in column 6 of Table A-2, Revised, may simply be inserted at the beginning of column 6 of the original table.

An example of the use of these newer data affords another occasion to demonstrate how to reduce current values from the colonial period to present money values. Given a sum worth, say, one thousand pieces of eight (\$1,000) in Boston in 1650, what is that worth in 1996 terms?⁶ The process of reducing that sum to

5. 'Inflation and Deflation in Early America, 1634–1860: Patterns of Change in the British-American Economy,' *Social Science History*, 20 (Winter 1996), 469–505. The author has most generously authorized me to reproduce his data. I am grateful to him for his help.

6. The Spanish piece of eight, the *peso do ocho reales*, a silver coin, circulated as a hard currency in the English colonies from their founding. It was the direct and immediate progenitor of the post-Revolutionary United States dollar. In 1650, at the par value set by Massachusetts law, it was worth 5s. (five shillings) Massachusetts currency, the Massachusetts money of account. Consequently one thousand pieces of eight (\$1,000) was equal to £250 Massachusetts currency. In the same way, English law set the value of the piece of eight in the English money of account at 4s. 6d. sterling. Thus, in 1650, Massachusetts currency and sterling were in the ratio, at par, of 5 to 4.5 or 111 to 100. This means that it took £111 Massachusetts currency to purchase £100 sterling. This was the rate of exchange at par, meaning the value of the two moneys set in law; the commercial rate of exchange fluctuated in a range around par. See John J. McCusker, *Money and Exchange in Europe and America, 1600–1775: A Handbook* [2d ed.] (Chapel Hill: University of North Carolina Press, [1992]), 132, and elsewhere.

'real money' begins by ascertaining from Table A-2, column 6, the index numbers for the two years. The index number for 1996 is 1879; for 1650, it is 181. The ratio of the latter to the former is a little over 10 to 1. One could say, then, that \$1,000 in 1650, when adjusted for inflation using a commodity price, is roughly the equivalent of \$10,000 in 1996 terms.⁷

7. Statistically speaking, given the considerable variation in the index numbers from the period, it would be better to use an eleven-year average centered on 1650 as the basis for this comparison. The ratio then becomes 1879 to 229 or 822 to 100. Again one is reminded of the wise words of Bishop Fleetwood: '... you must never take a very dear year, to your prejudice, nor a very cheap one, in your favour, nor indeed any single year, to be your rule, but you must take the price ... for as many years as you can. ...' [William] Fleetwood, *Chronicon Preciosum: or, An Account of English Gold and Silver Money, the Price of Corn, and Other Commodities, ... &c. in England, for Six Hundred Years Last Past* [rev. ed.] (London: T[homas] Osborne, 1745), 135-36.

TABLE A-2, REVISED

Consumer Price Index, United States, 1634-1700, 1990-96

Year (Base=)	Bureau of Labor Statistics (1982-84)	Composite Consumer Price Index (1860)	Year (Base=)	Bureau of Labor Statistics (1982-84)	Composite Consumer Price Index (1860)
	5	6		5	6
1634		266	1659		139
1635			1660		160
1636		475	1661		134
1637		409	1662		145
1638		215	1663		145
1639		352	1664		145
1640		305	1665		125
1641		305	1666		125
1642		308	1667		134
1643		445	1668		139
1644		320	1669		129
1645		282	1670		127
1646		174	1671		129
1647		132	1672		128
1648		233	1673		122
1649		342	1674		132
1650		181	1675		122
1651		242	1676		123
1652		191	1677		123
1653		248	1678		121
1654		249	1679		120
1655		241	1680		138
1656		235	1681		141
1657		192	1682		115
1658		123	1683		115

Year (Base=)	Bureau of Labor Statistics (1982-84)	Composite Consumer Price Index (1860)
	5	6
1684		115
1685		125
1686		117
1687		116
1688		106
1689		110
1690		111
1691		114
1692		111
1693		104
1694		110
1695		102
1696		120
1697		116
1698		111
1699		121
1700		130
1990	130.7	1,563
1991	136.2	1,629
1992	140.3	1,678
1993	144.5	1,728
1994	148.2	1,773
1995	152.4	1,822
1996	156.9	1,876
1997		

TABLE B-1, REVISED

Consumer Price Indexes, Great Britain, 1900-96

Year (Base=)	Department of Employment (1967)	Composite Commodity Price Index (1860)
	3	4
1990	799.0	3,375.6
1991	845.9	3,574.0
1992	877.5	3,707.4
1993	891.2	3,765.4
1994	913.3	3,858.6
1995	944.5	3,990.2
1996	967.8	4,089.0
1997		

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