



RESEARCH PAPER 03/82
11 NOVEMBER 2003

Inflation: the value of the pound 1750-2002

The Library is often asked how the purchasing power of the pound has changed over various periods.

Previously, the Library index was the main source of publicly available price information over such a long period, although both the Office for National Statistics (ONS) and the Bank of England had calculated indices for their own internal use.

During 2003, discussions were held between the Library, ONS and the Bank to agree the best index for long term price comparisons over the period 1750 to 2002.

This Paper presents the new index and compares it to the index previously calculated by the Library. It replaces Research Paper 02/44.

Grahame Allen

ECONOMIC POLICY AND STATISTICS SECTION

HOUSE OF COMMONS LIBRARY

Recent Library Research Papers include:

03/67	The <i>Water Bill</i> [HL] [Bill 149 of 2002-03]	04.09.03
03/68	The Swedish Referendum on the Euro	15.09.03
03/69	The <i>Northern Ireland (Monitoring Commission etc) Bill</i> [HL] [Bill 158 of 2002-03]	16.09.03
03/70	<i>Arms Control and Disarmament (Inspections) Bill</i> [HL] [Bill 50 of 2002-03]	16.09.03
03/71	Social Indicators	16.09.03
03/72	Unemployment by Constituency, August 2003	17.09.03
03/73	Tourism	23.09.03
03/74	The Burden of Taxation	23.09.03
03/75	Unemployment by Constituency, September 2003	15.10.03
03/76	The <i>European Parliamentary and Local Elections (Pilots) Bill</i> [Bill 160 of 2002-03]	16.10.03
03/77	Officers of Parliament – a Comparative Perspective	20.10.03
03/78	UK Defence Procurement Policy	20.10.03
03/79	The Private Finance Initiative (PFI)	21.10.03
03/80	The Monetary Policy Committee: decisions and performance	30.10.03
03/81	Economic Indicators [includes article: National Statistics revisions]	03.11.03

Research Papers are available as PDF files:

- *to members of the general public on the Parliamentary web site,
URL: <http://www.parliament.uk>*
- *within Parliament to users of the Parliamentary Intranet,
URL: <http://hcl1.hclibrary.parliament.uk>*

Library Research Papers are compiled for the benefit of Members of Parliament and their personal staff. Authors are available to discuss the contents of these papers with Members and their staff but cannot advise members of the general public. Any comments on Research Papers should be sent to the Research Publications Officer, Room 407, 1 Derby Gate, London, SW1A 2DG or e-mailed to PAPERS@parliament.uk

Summary of main points

- This Paper presents a price index covering the period 1750 to 2002 to illustrate the way in which the purchasing power of the pound has changed over the long-term.
- A new price index has been agreed between the Office for National Statistics, the Bank of England and the Library. It differs from the Library's previous price index only for the years 1939 to 1974.
- Over the period as a whole, prices have risen by around 136 times. This compares to an increase of 128 times using the old method. Thus one (decimal) penny in 1750 would have had greater purchasing power than a pound in 2002.
- Since 1945 prices have risen in every year. In 2002 prices were almost 27 times higher than in 1945. By contrast, prices were lower in 1939 than in 1919.

CONTENTS

I	Introduction	7
II	Sources	8
III	Results	9
IV	Specimen calculations	10
V	Table 1 Price Index 1750-2002	11
	1. Chart 1 Retail prices 1750-2002 (linear scale)	17
	2. Chart 2 Retail prices 1750-2002 (log scale)	18
	3. Chart 3 Value of the pound 1750-2002 (linear scale)	18
	4. Chart 4 Value of the pound 1750-2002 (log scale)	19
	5. Chart 5 Change in prices on previous year 1750-2002	19
VI	Table 2 Purchasing power of the pound 1752-2002	20
VII	Table 3 Purchasing power of the pound 1984-2002	21
VIII	Table 4 Comparison of old and new price indices	22

I Introduction

Inflation - the increase in the general level of prices over a specified period - reduces the internal value of a currency. So, if prices double, any given (nominal) amount of currency will buy half the goods and services it previously did. On the other hand (although unusual in the UK since the Second World War) a period of falling prices results in an increase in purchasing power.

This Paper presents a new price index, as agreed with the ONS and the Bank of England, covering the period 1750 to 2002, and illustrates the changing purchasing power of the pound over the long-term. No attempt is made to measure changes in the external value of the currency as a result of movements in exchange rates, but changes in the prices of imported goods are reflected in the price index.

It must be stressed that, for a number of reasons, such an exercise is very approximate. Expenditure patterns have changed dramatically over the past 250 years. Many products now commonly purchased (cars, electrical appliances, processed foods, etc) simply did not exist in 1750, and conversely goods that consumed a large share of household budgets in the eighteenth century - candles for instance - are now an insignificant part of most families' expenditure.

It is, however, possible to compare price levels over the long-term by linking price indices covering relatively short periods into a single series. Even so, indices covering only a few years can become unrepresentative if they are not adjusted to reflect changes in expenditure patterns. Today's **Retail Prices Index (RPI)**, for example, is annually updated to reflect changes in consumers' tastes, and new products and services. For example, pre-recorded cassette albums were taken out of the 2002 'RPI basket' of representative goods and services, while DVD players and recordable CDs came in.

A further problem with long-term comparisons involves changes in the quality of goods. For example, while it is possible to compare the price of a Mini motor car today with that of one in 1959, it is much more difficult to identify the degree that the increase in price reflects an improvement in manufacturing quality and specification.

In addition, the further one looks back into history, the more difficult it is to obtain reliable information. The first official consumer price index started in 1914. This was the **Cost of Living Index (COLI)** that reflected changes in the cost of providing a standard of living prevalent in working class households. There are also periods for which a number of alternative indices are available that can suggest different trends in price levels. Therefore, although the new index given in this Paper is presented in unrounded form to facilitate computation and presentation, it is not necessarily accurate to the degree suggested.

II Sources

Information on changes in prices comes from two main types of source. The more familiar are consumer price indices such as the **RPI**. An alternative measure can be derived from estimates of household expenditure in the national accounts statistics; a **price deflator for household expenditure** can be implied as expenditure data are produced at both current and constant prices. The new price index presented is derived from the following sources. Further details of source materials are available from the Library:

New agreed index	Old Library index
<u>1947 to 2002</u> The all-items RPI as published by the Office for National Statistics. (The all-items RPI includes mortgage interest payments.) Annual data are the average of monthly figures. ¹	<u>1974 to 2002</u> Same as new agreed index. ¹ <u>1948 to 1974</u> The implied deflator for household final consumption derived from the official national accounts of the UK. ²
<u>1870 to 1947</u> The implied deflator for consumers' expenditure derived from the unofficial national accounts of the UK based on the structure of expenditure in 1938 and produced by the Department of Applied Economics at Cambridge University. ³	<u>1870 to 1948</u> Same source as new agreed index. ³ However, for the period 1938 to 1948 two alternative estimates of prices changes are available, one based on the structure of expenditure in 1938 and the other on the structure of expenditure in 1948. The figures in the old Library series for this period were adjusted so that they represented the average of these two estimates.
<u>1850 to 1870</u> A retail price index constructed by Sir Walter Layton and Geoffrey Crowther covering the period 1850 to 1933. The index for the period 1850 to 1870 is a reproduction of earlier work by GH Wood from the Board of Trade's Report on Wholesale and Retail Prices and Cooperative Society records. ⁴	<u>1850 to 1870</u> Same as new agreed index. ⁴
<u>1750 to 1850</u> An index of consumables' prices constructed by E H Phelps-Brown and Sheila Hopkins covering the period 1264 to 1954. ⁵	<u>1750 to 1850</u> Same as new agreed index. ⁵

¹ The all-items RPI is published by ONS monthly and is available on their website at: www.statistics.gov.uk/statbase/Product.asp?vlnk=9412

² Source: NS database series ABJQ and ABJR

³ Source: C H Feinstein, *National Income, Expenditure and Output of the United Kingdom 1855 to 1965*, 1972, tables 24 and 25.

⁴ Source: W Layton and G Crowther, *An Introduction to the Study of Prices*, 1935, table 1

⁵ Source: E H Phelps-Brown and S Hopkins, "Seven Centuries of the Prices of Consumables compared with Builders' Wage-rates", *Economica*, November 1956, pp296-314

III Results

Table 1 (pages 11-17) shows for each year the level of the price index with January 1974 equal to 100 and the value of the pound relative to a base of 100 pence in January 1974. 1974 was chosen as the base year largely on the pragmatic grounds that as well as being one of the link years in the series, its use prevents the data at the start and the end of the period being inconveniently large or small. The table also shows the change in prices (the inflation rate) each year. Over the period as a whole, prices have risen by around 136 times. Thus one (decimal) penny in 1750 would have had greater purchasing power than a pound in 2002.

Although there was considerable year on year fluctuation in price levels prior to 1914 (reflecting the quality of the harvest, wars, etc) there was not the long-term steady increase in prices associated with the period since 1945. Prices in 1914 were roughly twice their level in 1750 but were below the level of the early nineteenth century. Prices doubled during the First World War but in most years between 1921 and 1938 they fell or showed very small increases. Although prices began to rise during the Second World War, the increase was less marked than during the First World War. Since 1945 prices have risen in every year with an aggregate rise of over 27 times. In the period 1974 to 1981, inflation was above 10% in each year except 1978, and prices more than tripled in these eight years. Despite lower inflation rates in the late 1980s and early 1990s, and very low (by post-war standards) rates in recent years, prices rose by almost 65% between 1988 and 2002.

Chart 1 (page 17) plots the price index for the period 1750 to 2002. Although such a graph illustrates the extent to which the absolute increase in prices has been concentrated in recent years, it over-emphasises the proportional impact. For example, in chart 1 a doubling of the price index in the eighteenth century from, say, 5 to 10 appears to be much less significant than a doubling in the 1970s from 100 to 200. Such problems can be overcome by use of a logarithmic scale as in chart 2 (page 18). With a logarithmic scale, equal proportional increases produce the same vertical change whatever the initial value. Charts 3 and 4 (pages 18 and 19) plot the value of the pound on linear and logarithmic scales respectively. Chart 5 (page 19) plots the rate of inflation in each year.

Table 2 (page 20) shows the value of the pound at intervals between 1752 and 2002. In each column the value of the pound is equivalent to 100 pence in a different year. Table 3 (page 21) provides a similar analysis for each year since 1984.

Table 4 (page 22) compares the difference in the inflation series calculated from the new index and the index previously calculated by the Library. It shows that the differences between the two series are accounted for by the change in the sources used to calculate the new and old indices as shown in the table on page 8.

IV Specimen calculations

The examples illustrate how the price index in table 1 can be used to answer frequently asked questions.

Example 1:

How much would have been needed in 2002 to have the same purchasing power as £100 in 1850?

From table 1 the price index for 1850 was 8.4 and the index for 2002 was 695.1. In 2002 the average price level was 82.8 times ($695.1/8.4$) the 1850 level. Thus, to have the same purchasing power as £100 in 1850 one would have needed some £8,280 ($82.8 \times £100$) in 2002.

Example 2:

What was the purchasing power of a pound in 2002 compared to the pound in 1930?

From table 1 the price index for 1930 was 17.3 and the index for 2002 was 695.1. In 2002 the average price level was some 40.2 times ($695.1/17.3$) the 1930 level. Thus, relative to 1930, a pound in 2002 was worth under 3 (decimal) pence ($100p/40.2$).

Example 3:

Cheddar cheese cost 17 pence per kilogram in 1923 and £5.10 per kg in 2002. How did the price change in real terms?

From table 1 the price index for 1923 was 18.7 and the index for 2002 was 695.1. In 2002 the average price level was 37.2 times ($695.1/18.7$) the 1923 level. Over the same period the price of cheese rose 30.0 times ($510/17$). Thus, in real terms, the price has fallen by 19.3% [$((30.0/37.2)-1) \times 100$].

V

Table 1 Price Index 1750-2002

Year	Price index Jan 1974=100	Value of the pound Jan 1974= 100 pence	Change in prices on year before
1750	5.1	1,962	-3.1%
1751	5.0	2,016	-2.7%
1752	5.2	1,926	4.7%
1753	5.1	1,978	-2.7%
1754	5.3	1,882	5.1%
1755	5.0	2,002	-6.0%
1756	5.2	1,923	4.2%
1757	6.3	1,579	21.8%
1758	6.3	1,583	-0.3%
1759	5.8	1,720	-7.9%
1760	5.6	1,800	-4.5%
1761	5.3	1,885	-4.5%
1762	5.5	1,814	3.9%
1763	5.7	1,767	2.7%
1764	6.2	1,623	8.9%
1765	6.4	1,568	3.5%
1766	6.5	1,549	1.2%
1767	6.8	1,465	5.8%
1768	6.7	1,482	-1.1%
1769	6.2	1,614	-8.2%
1770	6.2	1,621	-0.4%
1771	6.7	1,493	8.5%
1772	7.4	1,349	10.7%
1773	7.4	1,354	-0.3%
1774	7.5	1,341	0.9%
1775	7.0	1,420	-5.6%
1776	6.9	1,452	-2.2%
1777	6.9	1,458	-0.4%
1778	7.1	1,401	4.0%
1779	6.5	1,531	-8.5%
1780	6.3	1,585	-3.4%
1781	6.6	1,523	4.1%
1782	6.7	1,491	2.1%
1783	7.5	1,332	12.0%
1784	7.6	1,324	0.6%
1785	7.2	1,379	-4.0%
1786	7.2	1,379	0.0%
1787	7.2	1,388	-0.6%
1788	7.5	1,335	4.0%
1789	7.4	1,352	-1.3%

Table 1 (continued)
Price Index 1750 to 2002

Year	Price index Jan 1974=100	Value of the pound Jan 1974= 100 pence	Change in prices on year before
1790	7.5	1,329	1.8%
1791	7.5	1,330	-0.1%
1792	7.6	1,311	1.5%
1793	7.8	1,275	2.8%
1794	8.5	1,183	7.7%
1795	9.4	1,061	11.6%
1796	10.0	997	6.4%
1797	9.0	1,108	-10.0%
1798	8.8	1,132	-2.2%
1799	9.9	1,008	12.3%
1800	13.5	739	36.5%
1801	15.1	661	11.7%
1802	11.6	859	-23.0%
1803	11.0	913	-5.9%
1804	11.3	884	3.2%
1805	13.1	761	16.2%
1806	12.6	796	-4.4%
1807	12.3	811	-1.9%
1808	12.8	784	3.4%
1809	14.0	715	9.7%
1810	14.4	693	3.2%
1811	14.0	714	-2.9%
1812	15.9	630	13.2%
1813	16.3	615	2.5%
1814	14.2	705	-12.7%
1815	12.7	789	-10.7%
1816	11.6	861	-8.4%
1817	13.2	758	13.5%
1818	13.2	756	0.3%
1819	12.9	776	-2.5%
1820	11.7	855	-9.3%
1821	10.3	973	-12.0%
1822	8.9	1,125	-13.5%
1823	9.5	1,053	6.8%
1824	10.3	970	8.6%
1825	12.1	827	17.4%
1826	11.4	875	-5.5%
1827	10.7	936	-6.5%
1828	10.4	964	-2.9%
1829	10.3	973	-1.0%

Table 1 (continued)
Price Index 1750 to 2002

Year	Price index Jan 1974=100	Value of the pound Jan 1974= 100 pence	Change in prices on year before
1830	9.9	1,010	-3.6%
1831	10.9	919	9.9%
1832	10.1	992	-7.4%
1833	9.5	1,056	-6.1%
1834	8.7	1,145	-7.8%
1835	8.9	1,126	1.7%
1836	9.9	1,014	11.0%
1837	10.1	990	2.5%
1838	10.2	983	0.7%
1839	10.9	916	7.3%
1840	11.1	900	1.8%
1841	10.9	921	-2.3%
1842	10.0	997	-7.6%
1843	8.9	1,124	-11.3%
1844	8.9	1,125	-0.1%
1845	9.3	1,073	4.9%
1846	9.7	1,032	4.0%
1847	10.9	921	12.0%
1848	9.5	1,047	-12.1%
1849	8.9	1,118	-6.3%
1850	8.4	1,194	-6.4%
1851	8.1	1,231	-3.0%
1852	8.1	1,231	0.0%
1853	8.9	1,127	9.3%
1854	10.2	979	15.1%
1855	10.5	948	3.3%
1856	10.5	948	0.0%
1857	10.0	1,004	-5.6%
1858	9.1	1,096	-8.4%
1859	9.0	1,116	-1.8%
1860	9.3	1,076	3.7%
1861	9.5	1,048	2.7%
1862	9.3	1,076	-2.6%
1863	9.0	1,116	-3.6%
1864	8.9	1,127	-0.9%
1865	9.0	1,116	0.9%
1866	9.5	1,048	6.5%
1867	10.1	987	6.1%
1868	10.0	1,004	-1.7%
1869	9.5	1,057	-5.0%

Table 1 (continued)
Price Index 1750 to 2002

Year	Price index Jan 1974=100	Value of the pound Jan 1974= 100 pence	Change in prices on year before
1870	9.5	1,057	0.0%
1871	9.6	1,042	1.4%
1872	10.0	996	4.7%
1873	10.4	966	3.1%
1874	10.0	999	-3.3%
1875	9.8	1,018	-1.9%
1876	9.8	1,021	-0.3%
1877	9.7	1,028	-0.7%
1878	9.5	1,052	-2.2%
1879	9.1	1,100	-4.4%
1880	9.4	1,068	3.0%
1881	9.3	1,080	-1.1%
1882	9.4	1,069	1.0%
1883	9.3	1,074	-0.5%
1884	9.1	1,103	-2.7%
1885	8.8	1,137	-3.0%
1886	8.7	1,156	-1.6%
1887	8.6	1,162	-0.5%
1888	8.7	1,154	0.7%
1889	8.8	1,139	1.4%
1890	8.8	1,136	0.2%
1891	8.9	1,128	0.7%
1892	8.9	1,124	0.4%
1893	8.8	1,132	-0.7%
1894	8.7	1,155	-2.0%
1895	8.6	1,167	-1.0%
1896	8.5	1,171	-0.3%
1897	8.7	1,154	1.5%
1898	8.7	1,150	0.3%
1899	8.8	1,142	0.7%
1900	9.2	1,087	5.1%
1901	9.2	1,081	0.5%
1902	9.2	1,081	0.0%
1903	9.3	1,078	0.4%
1904	9.3	1,080	-0.2%
1905	9.3	1,076	0.4%
1906	9.3	1,076	0.0%
1907	9.4	1,063	1.2%
1908	9.4	1,058	0.5%
1909	9.5	1,053	0.5%

Table 1 (continued)
Price Index 1750 to 2002

Year	Price index Jan 1974=100	Value of the pound Jan 1974= 100 pence	Change in prices on year before
1910	9.6	1,044	0.9%
1911	9.6	1,042	0.1%
1912	9.9	1,012	3.0%
1913	9.8	1,017	-0.4%
1914	9.8	1,019	-0.3%
1915	11.0	906	12.5%
1916	13.0	767	18.1%
1917	16.3	613	25.2%
1918	19.9	502	22.0%
1919	21.9	456	10.1%
1920	25.3	395	15.4%
1921	23.1	433	-8.6%
1922	19.9	503	-14.0%
1923	18.7	535	-6.0%
1924	18.6	539	-0.7%
1925	18.6	537	0.3%
1926	18.5	542	-0.8%
1927	18.0	555	-2.4%
1928	18.0	556	-0.3%
1929	17.8	561	-0.9%
1930	17.3	577	-2.8%
1931	16.6	603	-4.3%
1932	16.2	619	-2.6%
1933	15.8	633	-2.1%
1934	15.8	633	0.0%
1935	15.9	628	0.7%
1936	16.0	624	0.7%
1937	16.6	603	3.4%
1938	16.8	594	1.6%
1939	17.3	578	2.8%
1940	20.2	495	16.8%
1941	22.4	446	10.8%
1942	24.0	417	7.1%
1943	24.8	403	3.4%
1944	25.5	392	2.7%
1945	26.2	382	2.8%
1946	27.0	370	3.1%
1947	28.9	346	7.0%
1948	31.1	321	7.7%
1949	32.0	312	2.8%

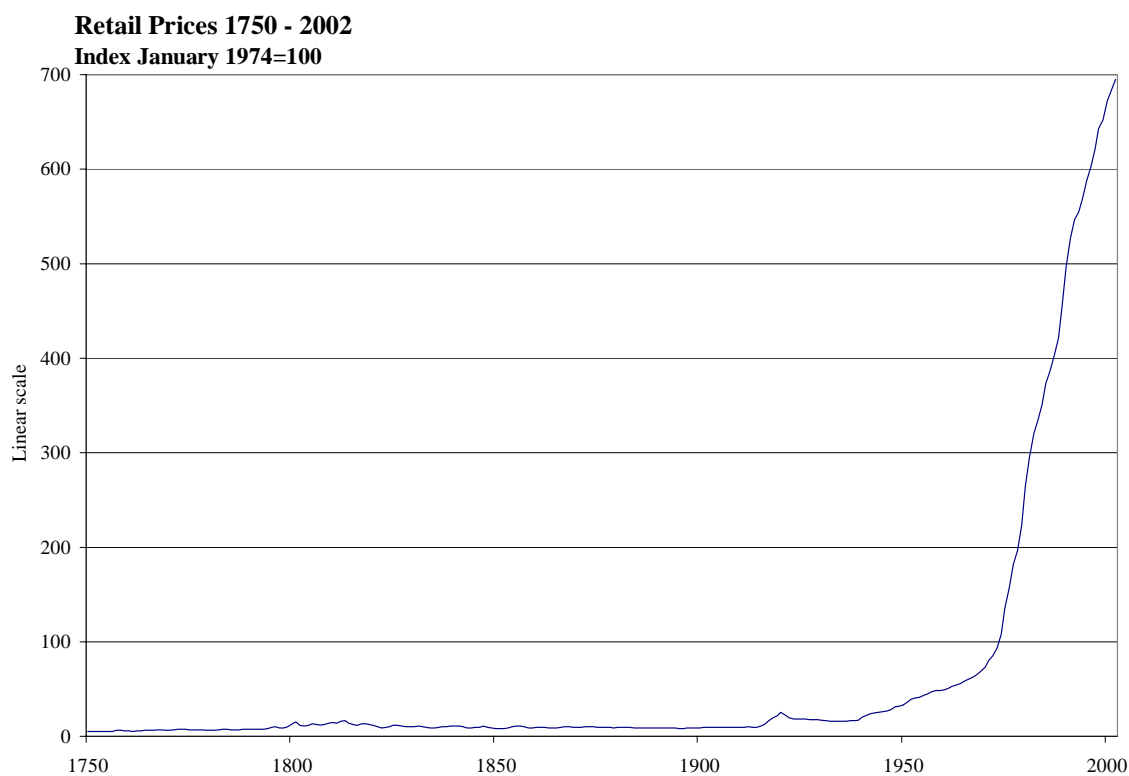
Table 1 (continued)
Price Index 1750 to 2002

Year	Price index Jan 1974=100	Value of the pound Jan 1974= 100 pence	Change in prices on year before
1950	33.0	303	3.1%
1951	36.0	278	9.1%
1952	39.3	254	9.2%
1953	40.5	247	3.1%
1954	41.3	242	1.8%
1955	43.1	232	4.5%
1956	45.3	221	4.9%
1957	46.9	213	3.7%
1958	48.4	207	3.0%
1959	48.6	206	0.6%
1960	49.1	204	1.0%
1961	50.8	197	3.4%
1962	53.0	189	4.3%
1963	54.0	185	2.0%
1964	55.8	179	3.3%
1965	58.4	171	4.8%
1966	60.7	165	3.9%
1967	62.3	161	2.5%
1968	65.2	153	4.7%
1969	68.7	146	5.4%
1970	73.1	137	6.4%
1971	80.0	125	9.4%
1972	85.7	117	7.1%
1973	93.5	107	9.2%
1974	108.5	92	16.0%
1975	134.8	74	24.2%
1976	157.1	64	16.5%
1977	182.0	55	15.8%
1978	197.1	51	8.3%
1979	223.5	45	13.4%
1980	263.7	38	18.0%
1981	295.0	34	11.9%
1982	320.4	31	8.6%
1983	335.1	30	4.6%
1984	351.8	28	5.0%
1985	373.2	27	6.1%
1986	385.9	26	3.4%
1987	402.0	25	4.2%
1988	421.7	24	4.9%
1989	454.5	22	7.8%

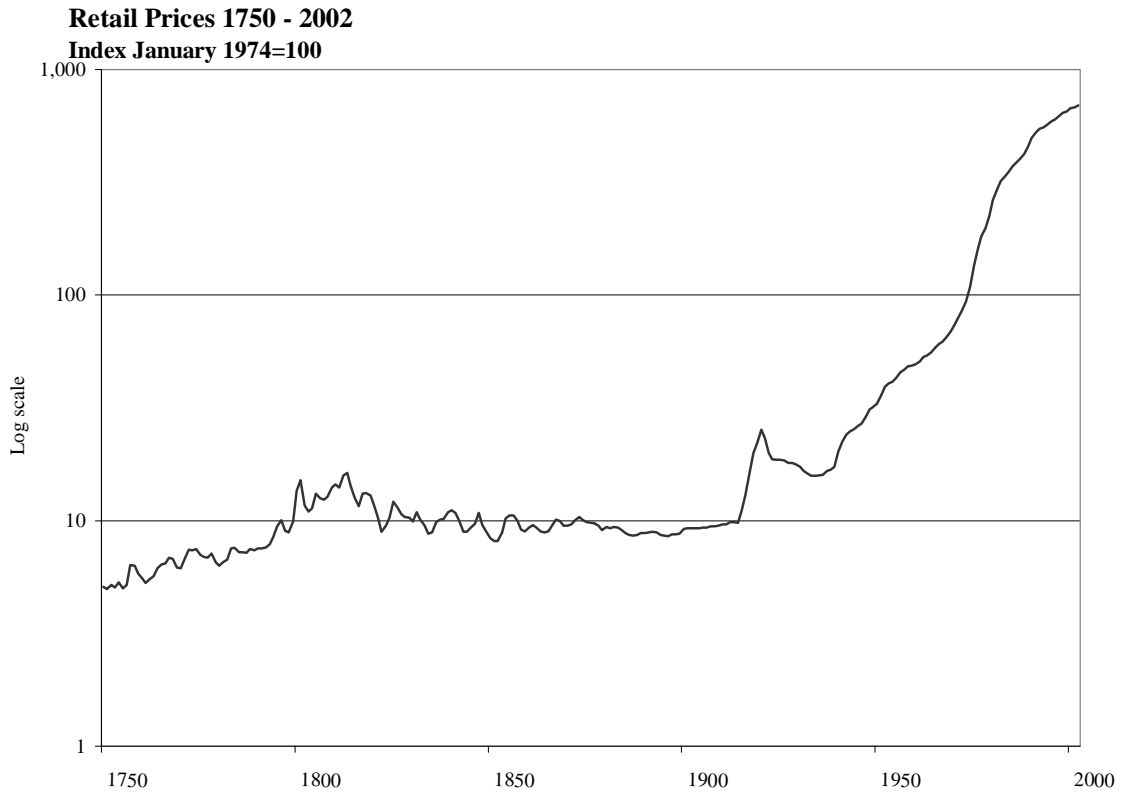
Table 1 (continued)
Price Index 1750 to 2002

Year	Price index Jan 1974=100	Value of the pound Jan 1974= 100 pence	Change in prices on year before
1990	497.5	20	9.5%
1991	526.7	19	5.9%
1992	546.4	18	3.7%
1993	555.1	18	1.6%
1994	568.5	18	2.4%
1995	588.2	17	3.5%
1996	602.4	17	2.4%
1997	621.3	16	3.1%
1998	642.6	16	3.4%
1999	652.5	15	1.5%
2000	671.8	15	3.0%
2001	683.7	15	1.8%
2002	695.1	14	1.7%

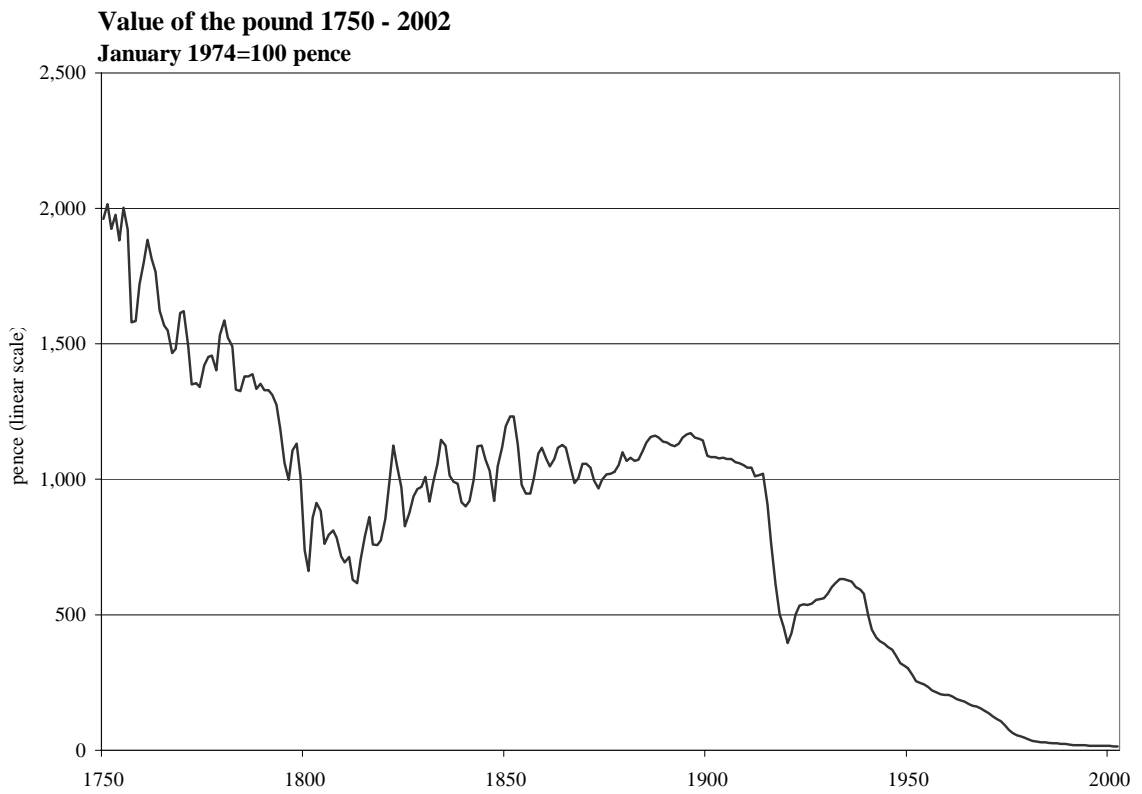
1. Chart 1 Retail prices 1750-2002 (linear scale)



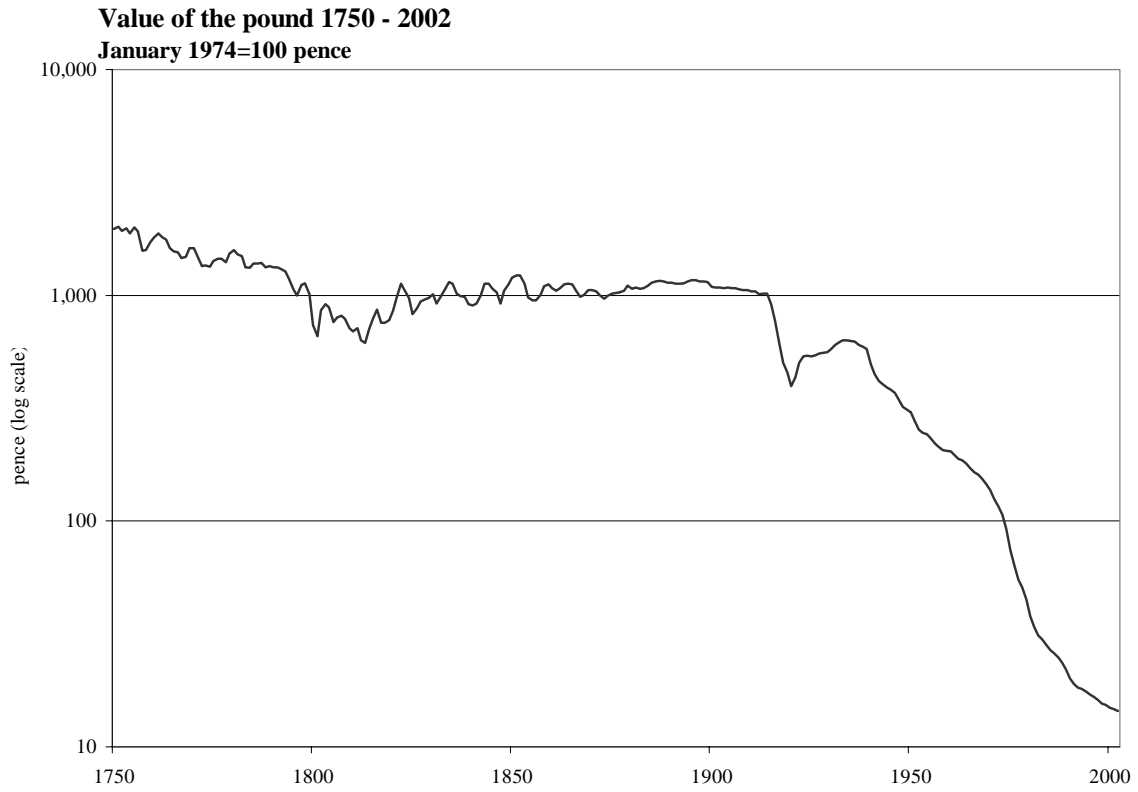
2. Chart 2 Retail prices 1750-2002 (log scale)



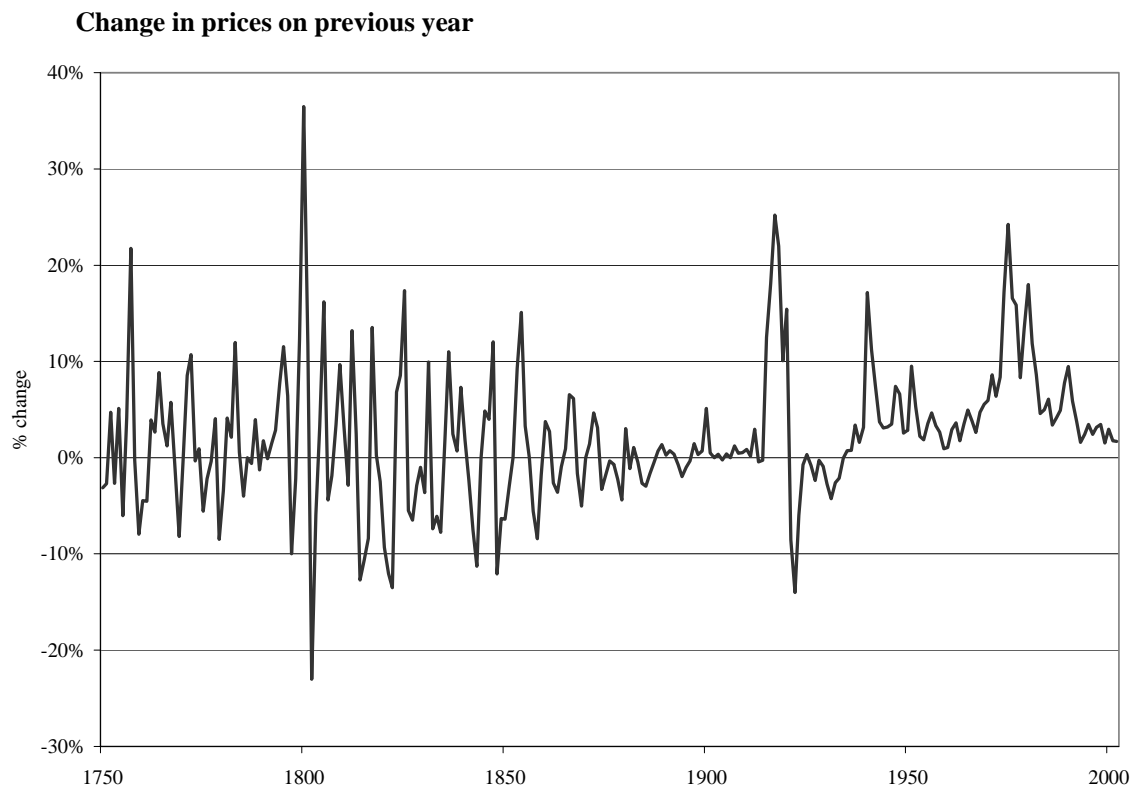
3. Chart 3 Value of the pound 1750-2002 (linear scale)



4. Chart 4 Value of the pound 1750-2002 (log scale)



5. Chart 5 Change in prices on previous year 1750-2002



VI Table 2 Purchasing power of the pound 1752-2002

	Year in which value equals 100 pence															
	1752	1772	1792	1812	1832	1852	1872	1892	1912	1932	1952	1972	1992	2002		
1752	100	143	147	305	194	156	193	171	190	311	745	1,544	9,873	12,560		
1772	70	100	103	214	136	110	135	120	133	218	522	1,081	6,916	8,798		
1792	68	97	100	208	132	106	132	117	129	212	507	1,051	6,720	8,549		
1812	33	47	48	100	64	51	63	56	62	102	244	505	3,232	4,112		
1832	51	74	76	157	100	81	100	88	98	160	384	795	5,084	6,468		
1852	64	91	94	195	124	100	124	110	122	199	476	987	6,313	8,031		
1872	52	74	76	158	100	81	100	89	98	161	385	798	5,105	6,495		
1892	58	83	86	178	113	91	113	100	111	182	435	901	5,762	7,330		
1912	53	75	77	161	102	82	102	90	100	164	391	812	5,190	6,603		
1932	32	46	47	98	62	50	62	55	61	100	239	496	3,173	4,037		
1952	13	19	20	41	26	21	26	23	26	42	100	207	1,326	1,687		
1972	6	9	10	20	13	10	13	11	12	20	48	100	640	814		
1992	1	1	1	3	2	2	2	2	2	3	8	16	100	127		
2002	1	1	1	2	2	1	2	1	2	2	6	12	79	100		

VII Table 3 Purchasing power of the pound 1984-2002

	Year in which value equals 100 pence																		
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1984	100	106	110	114	120	129	141	150	155	158	162	167	171	177	183	185	191	194	198
1985	94	100	103	108	113	122	133	141	146	149	152	158	161	166	172	175	180	183	186
1986	91	97	100	104	109	118	129	136	142	144	147	152	156	161	167	169	174	177	180
1987	88	93	96	100	105	113	124	131	136	138	141	146	150	155	160	162	167	170	173
1988	83	88	92	95	100	108	118	125	130	132	135	139	143	147	152	155	159	162	165
1989	77	82	85	88	93	100	109	116	120	122	125	129	133	137	141	144	148	150	153
1990	71	75	78	81	85	91	100	106	110	112	114	118	121	125	129	131	135	137	140
1991	67	71	73	76	80	86	94	100	104	105	108	112	114	118	122	124	128	130	132
1992	64	68	71	74	77	83	91	96	100	102	104	108	110	114	118	119	123	125	127
1993	63	67	70	72	76	82	90	95	98	100	102	106	109	112	116	118	121	123	125
1994	62	66	68	71	74	80	88	93	96	98	100	103	106	109	113	115	118	120	122
1995	60	63	66	68	72	77	85	90	93	94	97	100	102	106	109	111	114	116	118
1996	58	62	64	67	70	75	83	87	91	92	94	98	100	103	107	108	112	113	115
1997	57	60	62	65	68	73	80	85	88	89	91	95	97	100	103	105	108	110	112
1998	55	58	60	63	66	71	77	82	85	86	88	92	94	97	100	102	105	106	108
1999	54	57	59	62	65	70	76	81	84	85	87	90	92	95	98	100	103	105	107
2000	52	56	57	60	63	68	74	78	81	83	85	88	90	92	96	97	100	102	103
2001	51	55	56	59	62	66	73	77	80	81	83	86	88	91	94	95	98	100	102
2002	51	54	56	58	61	65	72	76	79	80	82	85	87	89	92	94	97	98	100

VIII Table 4 Comparison of old and new indices

New series as table 1			Library series consistent with RP 02/44		
Price index Jan 1974=100	Change in prices on year before		Price index 1974=100	Change in prices on year before	Difference in year- on-year % change between two indices
1750	5.1	-3.1%	5.0	-3.1%	0.0%
1751 to 1937 - no difference in year-on-year % change between two indices					
1938	16.8	1.6%	16.5	1.6%	0.0%
1939	17.3	2.8%	17.1	3.1%	-0.4%
1940	20.2	16.8%	20.0	17.2%	-0.4%
1941	22.4	10.8%	22.2	11.2%	-0.4%
1942	24.0	7.1%	23.9	7.5%	-0.4%
1943	24.8	3.4%	24.8	3.7%	-0.4%
1944	25.5	2.7%	25.5	3.1%	-0.4%
1945	26.2	2.8%	26.4	3.2%	-0.4%
1946	27.0	3.1%	27.3	3.5%	-0.4%
1947	28.9	7.0%	29.3	7.4%	-0.4%
1948	31.1	7.7%	31.2	6.6%	1.1%
1949	32.0	2.8%	32.0	2.6%	0.2%
1950	33.0	3.1%	32.9	2.8%	0.2%
1951	36.0	9.1%	36.1	9.5%	-0.4%
1952	39.3	9.2%	38.0	5.3%	3.9%
1953	40.5	3.1%	38.8	2.2%	0.9%
1954	41.3	1.8%	39.5	1.9%	-0.1%
1955	43.1	4.5%	40.9	3.5%	1.0%
1956	45.3	4.9%	42.9	4.7%	0.2%
1957	46.9	3.7%	44.3	3.3%	0.4%
1958	48.4	3.0%	45.5	2.7%	0.4%
1959	48.6	0.6%	45.9	0.9%	-0.4%
1960	49.1	1.0%	46.4	1.1%	-0.1%
1961	50.8	3.4%	47.7	2.9%	0.5%
1962	53.0	4.3%	49.4	3.6%	0.7%
1963	54.0	2.0%	50.3	1.8%	0.2%
1964	55.8	3.3%	52.1	3.5%	-0.2%
1965	58.4	4.8%	54.6	4.9%	-0.2%
1966	60.7	3.9%	56.7	3.8%	0.1%
1967	62.3	2.5%	58.2	2.6%	-0.1%
1968	65.2	4.7%	61.0	4.7%	0.0%
1969	68.7	5.4%	64.4	5.6%	-0.1%
1970	73.1	6.4%	68.2	5.9%	0.4%
1971	80.0	9.4%	74.0	8.6%	0.8%
1972	85.7	7.1%	78.7	6.4%	0.7%
1973	93.5	9.2%	85.3	8.4%	0.8%
1974	108.5	16.0%	100.0	17.2%	-1.2%
1975	134.8	24.2%	124.2	24.2%	0.0%
1976 to 2001 - no difference in year-on-year % change between two indices					
2002	695.1	1.7%	640.7	1.7%	0.0%