

## U.S. Annual Real Consumption and Population 1899 - 2012

| Year | Level        |          |            | Per Capita   |          | Per Capita Growth |          |                           |
|------|--------------|----------|------------|--------------|----------|-------------------|----------|---------------------------|
|      | Non-Durables | Services | Population | Non-Durables | Services | Non-Durables      | Services | Non-Durables and Services |
|      | [A]          | [B]      | [C]        | [D]          | [E]      | [F]               | [G]      | [H]                       |
| 1899 | 117          | 119      | 75         | 1,565        | 1,595    | 2.0%              | 6.8%     | 4.44%                     |
| 1900 | 121          | 130      | 76         | 1,596        | 1,705    | 4.3%              | 7.5%     | 5.94%                     |
| 1901 | 129          | 142      | 78         | 1,664        | 1,832    | 0.0%              | 6.4%     | 3.35%                     |
| 1902 | 132          | 154      | 79         | 1,663        | 1,950    | 1.7%              | 6.6%     | 4.34%                     |
| 1903 | 136          | 168      | 81         | 1,692        | 2,079    | -0.6%             | 5.1%     | 2.55%                     |
| 1904 | 138          | 180      | 82         | 1,681        | 2,186    | 3.3%              | 6.7%     | 5.20%                     |
| 1905 | 146          | 195      | 84         | 1,736        | 2,332    | 2.2%              | 6.9%     | 4.92%                     |
| 1906 | 152          | 213      | 85         | 1,775        | 2,493    | -0.7%             | 6.0%     | 3.22%                     |
| 1907 | 153          | 230      | 87         | 1,763        | 2,643    | -2.2%             | 4.0%     | 1.52%                     |
| 1908 | 153          | 244      | 89         | 1,723        | 2,749    | 5.2%              | 6.7%     | 6.14%                     |
| 1909 | 164          | 265      | 90         | 1,813        | 2,934    | -0.3%             | -0.5%    | -0.45%                    |
| 1910 | 167          | 270      | 92         | 1,807        | 2,918    | -0.5%             | -1.0%    | -0.81%                    |
| 1911 | 169          | 271      | 94         | 1,799        | 2,888    | 2.6%              | -0.3%    | 0.84%                     |
| 1912 | 176          | 275      | 95         | 1,846        | 2,881    | 1.3%              | -1.1%    | -0.13%                    |
| 1913 | 182          | 277      | 97         | 1,870        | 2,850    | -0.8%             | -2.2%    | -1.63%                    |
| 1914 | 184          | 276      | 99         | 1,855        | 2,789    | -1.1%             | -1.9%    | -1.55%                    |
| 1915 | 185          | 275      | 101        | 1,835        | 2,736    | 5.5%              | 1.9%     | 3.34%                     |
| 1916 | 197          | 284      | 102        | 1,936        | 2,789    | -1.4%             | 1.7%     | 0.43%                     |
| 1917 | 197          | 293      | 103        | 1,909        | 2,835    | -5.8%             | -1.0%    | -2.91%                    |
| 1918 | 188          | 294      | 105        | 1,799        | 2,808    | 2.1%              | -0.3%    | 0.65%                     |
| 1919 | 193          | 294      | 105        | 1,836        | 2,800    | -0.6%             | 1.6%     | 0.74%                     |
| 1920 | 194          | 303      | 106        | 1,825        | 2,846    | 5.6%              | 0.5%     | 2.53%                     |
| 1921 | 209          | 311      | 109        | 1,928        | 2,861    | 4.3%              | 6.0%     | 5.30%                     |
| 1922 | 221          | 334      | 110        | 2,010        | 3,032    | 3.9%              | 8.7%     | 6.76%                     |
| 1923 | 234          | 369      | 112        | 2,087        | 3,296    | 1.6%              | 1.0%     | 1.25%                     |
| 1924 | 242          | 380      | 114        | 2,121        | 3,329    | 0.3%              | 1.7%     | 1.17%                     |
| 1925 | 247          | 392      | 116        | 2,129        | 3,386    | 2.1%              | -0.7%    | 0.40%                     |
| 1926 | 255          | 395      | 117        | 2,174        | 3,362    | 3.2%              | -0.6%    | 0.87%                     |
| 1927 | 267          | 398      | 119        | 2,243        | 3,341    | -1.5%             | 2.2%     | 0.73%                     |
| 1928 | 266          | 412      | 121        | 2,209        | 3,416    | 3.2%              | 3.9%     | 3.61%                     |
| 1929 | 278          | 432      | 122        | 2,280        | 3,548    | -6.3%             | -3.2%    | -4.77%                    |
| 1930 | 263          | 423      | 123        | 2,136        | 3,434    | -1.9%             | -3.3%    | -2.60%                    |
| 1931 | 260          | 412      | 124        | 2,096        | 3,321    | -9.4%             | -6.6%    | -7.95%                    |
| 1932 | 237          | 387      | 125        | 1,899        | 3,100    | -1.0%             | -4.3%    | -2.78%                    |
| 1933 | 236          | 373      | 126        | 1,880        | 2,968    | 7.5%              | 4.2%     | 5.78%                     |
| 1934 | 256          | 391      | 126        | 2,021        | 3,093    | 5.1%              | 2.8%     | 3.95%                     |
| 1935 | 270          | 405      | 127        | 2,124        | 3,179    | 10.7%             | 5.5%     | 8.19%                     |
| 1936 | 301          | 430      | 128        | 2,351        | 3,353    | 1.8%              | 4.1%     | 2.89%                     |
| 1937 | 309          | 450      | 129        | 2,394        | 3,489    | 0.6%              | -1.6%    | -0.42%                    |
| 1938 | 313          | 446      | 130        | 2,410        | 3,434    | 3.7%              | 3.0%     | 3.39%                     |
| 1939 | 327          | 464      | 131        | 2,499        | 3,539    | 3.4%              | 3.0%     | 3.21%                     |
| 1940 | 341          | 482      | 132        | 2,584        | 3,645    | 5.0%              | 4.9%     | 4.97%                     |
| 1941 | 362          | 510      | 133        | 2,714        | 3,825    | -0.8%             | 4.4%     | 1.65%                     |
| 1942 | 363          | 538      | 135        | 2,692        | 3,992    | -0.7%             | 6.5%     | 2.64%                     |
| 1943 | 365          | 581      | 137        | 2,672        | 4,251    | 0.9%              | 4.3%     | 2.50%                     |
| 1944 | 373          | 614      | 138        | 2,696        | 4,435    | 5.0%              | 4.2%     | 4.65%                     |
| 1945 | 396          | 647      | 140        | 2,832        | 4,622    | 7.9%              | 3.5%     | 5.80%                     |
| 1946 | 432          | 676      | 141        | 3,055        | 4,782    | -2.5%             | -1.5%    | -2.03%                    |
| 1947 | 429          | 679      | 144        | 2,979        | 4,711    | -1.0%             | 0.9%     | -0.14%                    |
| 1948 | 433          | 697      | 147        | 2,950        | 4,753    | -0.3%             | 0.7%     | 0.14%                     |
| 1949 | 439          | 714      | 149        | 2,942        | 4,784    | 1.2%              | 2.3%     | 1.72%                     |
| 1950 | 454          | 745      | 152        | 2,978        | 4,893    | -0.2%             | 4.1%     | 1.85%                     |
| 1951 | 460          | 789      | 155        | 2,973        | 5,095    | 2.0%              | 2.7%     | 2.34%                     |
| 1952 | 478          | 825      | 158        | 3,032        | 5,234    | 1.4%              | 2.5%     | 1.94%                     |
| 1953 | 493          | 859      | 160        | 3,075        | 5,365    | -0.2%             | 1.7%     | 0.74%                     |
| 1954 | 500          | 889      | 163        | 3,069        | 5,455    | 3.3%              | 3.2%     | 3.27%                     |
| 1955 | 526          | 934      | 166        | 3,172        | 5,629    | 1.7%              | 3.0%     | 2.34%                     |
| 1956 | 545          | 979      | 169        | 3,225        | 5,796    | 0.2%              | 1.6%     | 0.91%                     |
| 1957 | 556          | 1,013    | 172        | 3,231        | 5,889    | -0.4%             | 1.5%     | 0.63%                     |
| 1958 | 563          | 1,046    | 175        | 3,220        | 5,980    | 2.8%              | 3.2%     | 3.00%                     |
| 1959 | 588          | 1,097    | 178        | 3,309        | 6,172    | 0.1%              | 2.3%     | 1.24%                     |
| 1960 | 598          | 1,140    | 181        | 3,311        | 6,313    | 0.3%              | 2.0%     | 1.23%                     |
| 1961 | 610          | 1,182    | 184        | 3,322        | 6,437    | 1.5%              | 3.1%     | 2.40%                     |
| 1962 | 629          | 1,238    | 187        | 3,372        | 6,639    | 0.7%              | 2.8%     | 1.84%                     |
| 1963 | 643          | 1,291    | 189        | 3,396        | 6,822    | 3.2%              | 4.5%     | 3.95%                     |
| 1964 | 673          | 1,368    | 192        | 3,506        | 7,128    | 3.7%              | 4.2%     | 4.00%                     |
| 1965 | 707          | 1,443    | 194        | 3,637        | 7,429    | 4.3%              | 3.8%     | 4.01%                     |
| 1966 | 746          | 1,515    | 197        | 3,795        | 7,707    | 1.0%              | 3.0%     | 2.14%                     |
| 1967 | 762          | 1,577    | 199        | 3,834        | 7,937    | 3.2%              | 4.3%     | 3.82%                     |
| 1968 | 794          | 1,661    | 201        | 3,957        | 8,277    | 1.8%              | 3.4%     | 2.74%                     |
| 1969 | 816          | 1,735    | 203        | 4,027        | 8,562    | 1.0%              | 2.7%     | 2.01%                     |
| 1970 | 834          | 1,803    | 205        | 4,069        | 8,794    | 0.6%              | 2.2%     | 1.51%                     |
| 1971 | 850          | 1,865    | 208        | 4,093        | 9,983    | 2.9%              | 4.7%     | 3.97%                     |
| 1972 | 884          | 1,973    | 210        | 4,213        | 9,402    | 1.9%              | 3.7%     | 3.02%                     |
| 1973 | 910          | 2,067    | 212        | 4,293        | 9,754    | -3.3%             | 1.0%     | -0.72%                    |
| 1974 | 888          | 2,106    | 214        | 4,151        | 9,850    | -0.1%             | 2.7%     | 1.59%                     |

**U.S. Annual Real Consumption and Population**  
1899 - 2012

| Year | Level        |          |            | Per Capita   |          | Per Capita Growth |          |                           |
|------|--------------|----------|------------|--------------|----------|-------------------|----------|---------------------------|
|      | Non-Durables | Services | Population | Non-Durables | Services | Non-Durables      | Services | Non-Durables and Services |
|      | [A]          | [B]      | [C]        | [D]          | [E]      | [F]               | [G]      | [H]                       |
| 1975 | 895          | 2,186    | 216        | 4,145        | 10,120   | 3.8%              | 3.3%     | 3.49%                     |
| 1976 | 938          | 2,279    | 218        | 4,301        | 10,454   | 1.3%              | 3.1%     | 2.39%                     |
| 1977 | 959          | 2,374    | 220        | 4,355        | 10,777   | 2.5%              | 3.5%     | 3.16%                     |
| 1978 | 994          | 2,484    | 223        | 4,465        | 11,160   | 1.5%              | 1.9%     | 1.75%                     |
| 1979 | 1,019        | 2,560    | 225        | 4,530        | 11,374   | -1.3%             | 0.4%     | -0.28%                    |
| 1980 | 1,018        | 2,599    | 228        | 4,469        | 11,414   | 0.3%              | 0.8%     | 0.60%                     |
| 1981 | 1,030        | 2,646    | 230        | 4,481        | 11,506   | 0.1%              | 1.0%     | 0.64%                     |
| 1982 | 1,041        | 2,697    | 232        | 4,484        | 11,618   | 2.3%              | 4.3%     | 3.59%                     |
| 1983 | 1,075        | 2,839    | 234        | 4,588        | 12,115   | 3.2%              | 3.0%     | 3.09%                     |
| 1984 | 1,120        | 2,950    | 236        | 4,737        | 12,481   | 2.1%              | 4.2%     | 3.53%                     |
| 1985 | 1,153        | 3,102    | 238        | 4,837        | 13,010   | 2.6%              | 2.0%     | 2.23%                     |
| 1986 | 1,194        | 3,195    | 241        | 4,963        | 13,275   | 0.8%              | 3.1%     | 2.36%                     |
| 1987 | 1,215        | 3,322    | 243        | 5,004        | 13,682   | 1.7%              | 3.3%     | 2.81%                     |
| 1988 | 1,247        | 3,463    | 245        | 5,089        | 14,133   | 1.7%              | 2.1%     | 1.97%                     |
| 1989 | 1,281        | 3,568    | 247        | 5,177        | 14,425   | 0.0%              | 1.8%     | 1.29%                     |
| 1990 | 1,296        | 3,674    | 250        | 5,179        | 14,687   | -1.6%             | 0.1%     | -0.38%                    |
| 1991 | 1,292        | 3,729    | 253        | 5,096        | 14,709   | 0.6%              | 2.2%     | 1.73%                     |
| 1992 | 1,317        | 3,862    | 257        | 5,126        | 15,032   | 1.2%              | 1.9%     | 1.68%                     |
| 1993 | 1,350        | 3,985    | 260        | 5,188        | 15,313   | 2.6%              | 1.7%     | 1.99%                     |
| 1994 | 1,403        | 4,104    | 263        | 5,326        | 15,579   | 1.3%              | 1.3%     | 1.32%                     |
| 1995 | 1,438        | 4,209    | 267        | 5,394        | 15,788   | 1.7%              | 1.7%     | 1.73%                     |
| 1996 | 1,479        | 4,332    | 270        | 5,485        | 16,063   | 1.7%              | 1.9%     | 1.82%                     |
| 1997 | 1,523        | 4,465    | 273        | 5,580        | 16,362   | 2.6%              | 3.2%     | 3.03%                     |
| 1998 | 1,580        | 4,662    | 276        | 5,723        | 16,885   | 3.9%              | 2.9%     | 3.17%                     |
| 1999 | 1,661        | 4,853    | 279        | 5,946        | 17,376   | 2.1%              | 3.8%     | 3.38%                     |
| 2000 | 1,715        | 5,094    | 282        | 6,073        | 18,041   | 0.8%              | 1.5%     | 1.31%                     |
| 2001 | 1,745        | 5,219    | 285        | 6,123        | 18,307   | 1.0%              | 0.9%     | 0.96%                     |
| 2002 | 1,780        | 5,318    | 288        | 6,185        | 18,480   | 2.5%              | 1.0%     | 1.37%                     |
| 2003 | 1,841        | 5,418    | 290        | 6,340        | 18,662   | 1.9%              | 1.7%     | 1.75%                     |
| 2004 | 1,893        | 5,563    | 293        | 6,459        | 18,982   | 2.3%              | 2.0%     | 2.07%                     |
| 2005 | 1,953        | 5,727    | 296        | 6,605        | 19,363   | 1.7%              | 1.6%     | 1.63%                     |
| 2006 | 2,005        | 5,876    | 299        | 6,715        | 19,678   | 0.9%              | 0.9%     | 0.93%                     |
| 2007 | 2,043        | 5,990    | 302        | 6,774        | 19,863   | -2.1%             | -0.5%    | -0.88%                    |
| 2008 | 2,019        | 6,017    | 304        | 6,634        | 19,768   | -2.6%             | -2.3%    | -2.37%                    |
| 2009 | 1,983        | 5,931    | 307        | 6,459        | 19,317   | 1.6%              | 0.2%     | 0.54%                     |
| 2010 | 2,029        | 5,988    | 309        | 6,561        | 19,357   | 1.5%              | 1.2%     | 1.25%                     |
| 2011 | 2,075        | 6,102    | 312        | 6,660        | 19,582   | 0.2%              | 0.5%     | 0.40%                     |
| 2012 | 2,094        | 6,177    | 314        | 6,672        | 19,676   |                   |          |                           |

**Notes to table:**

[A] Billions of 2005 Dollars.

For 1929 – 2012, the new US annual real consumption of non-durable goods equals Personal Consumption Expenditures, Non-Durable Goods, Billions of 2005 Chain Dollars. Personal Consumption Expenditures, Non-Durable Goods, Billions of 2005 Chain Dollars is computed as the Personal Consumption Expenditures, Non-Durable Goods, Billions of Dollars, for the year 2005, multiplied by Personal Consumption Expenditures, Non-Durable Goods, Quantity Index, 2005 = 100, and divided by 100, which can be found in line 5 in NIPA Table 1.1.3 Real Gross Domestic Product, Quantity Index. Personal Consumption Expenditures, Non-Durable Goods, Billions of Dollars, can be found in line 5 in NIPA Table 1.1.5 Gross Domestic Product.

For 1919–1928, the new US annual real consumption of non-durable goods equals the sum of the US annual flow of perishables and semi-durable goods to consumers at cost to them, Variant III, 1929 Prices, multiplied by the 1929 Kuznets Real Non-Durables Ratio. The 1929 Kuznets Real Non-Durables Ratio is the ratio of Personal Consumption Expenditures, Non-Durable Goods, Billions of 2005 Chain Dollars to US annual flow of perishables and semi-durable goods to consumers at cost to them, Variant III, 1929 Prices, for the year 1929. The ratio equals 7.36835. For US annual flow of perishables and semi-durable goods to consumers at cost to them, Variant III, 1929 Prices see columns 5 and 6, Table T-7 in Kuznets (1961b).

For 1899 – 1918, the new US annual real consumption of non-durable goods equals the sum of: (1) the US annual flow of semi-durable goods to consumers at cost to them, Variant III, 1929 Prices; (2) the non-food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, 1929 Prices; and (3) the new food component of the flow of perishable goods to consumers at cost to them, 1929 Prices; multiplied by the 1929 Kuznets Real Non-Durables Ratio. For the US annual flow of semi-durable goods to consumers at cost to them, Variant III, 1929 Prices see columns 6, Table T-7 in Kuznets (1961b).

The non-food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, 1929 Prices equals the non-food component of the US annual flow of perishables goods to consumers at cost to producers, Variant III, 1929 Prices after incorporating transportation and distribution costs, and net change in finished inventories. The non-food component of the US annual flow of perishables goods to consumers at cost to producers, Variant III, 1929 Prices equals the sum of the flow of goods to consumers at cost to producers, in current prices, for the minor commodity groups 2, 3, 4, 5a, and 5b in Shaw (1947) after deflating by their respective price indices. For the flow of goods to consumers at cost to producers for minor group and their respective price indices see respectively Table I 1 and Table IV 1 in Shaw (1947). For minor group 5b, an implicit price index was derived from minor commodity group 5b series in Table II-5 and Table II-7 in Kuznets (1938) for 1919 – 1928. For 1899–1918, a price index was constructed using prices and quantities of commodities in the minor group 5b in Table II 10 in Shaw (1947). Transportation and distribution cost, and net change in finished inventories were incorporated using the same methodology in Kuznets (1961a) - see Notes to Table R-28, Columns (1)-(3) and (5)-(7).

For 1899 – 1918, new food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, 1929 Prices equals the exponential of: (1) the trend of the natural logarithm of the food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, 1929 Prices; plus (2) the deviations from trend in the natural logarithm of the Consumption Expenditures for Farm Food, 1929 Prices.

The food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, 1929 Prices equals the food component of the US annual flow of perishables goods to consumers at cost to producers, Variant III, 1929 Prices after incorporating transportation and distribution costs, and net change in finished inventories. Transportation and distribution cost, and net change in finished inventories were incorporated using the same methodology in Kuznets (1961a). See Notes to Table R-28, Columns (1)-(3) and (5)-(7).

For 1913–1918, Consumption Expenditures for Farm Food, 1929 Prices equals Consumption Expenditures for Farm Food, Current Prices after deflating by the Retail Price Index for Food, BLS. For 1899 – 1928, see Table 3, pg. 577, in “Handbook of Labor Statistics”, Edition 1929; the series was normalized to 100 in 1929. For the 1929 figure, see Table 3, pg. 636, “Handbook of Labor Statistics”, Edition 1935. Consumption Expenditures for Farm Food, Current Prices equals farm value plus the marketing bill. For these three series see, respectively, series Da1351, Da1354, and Da1355 in table “Table Da1351-1356: Consumer expenditures on food - by location and by farm value and marketing bill components: 1913-1997” in the “Statistics of the United States Millennial Edition”.

For 1899 – 1912, farm value is derived by assuming the same growth rates as in gross farm income from domestic consumption. Gross farm income from domestic consumption is computed as gross farm income minus export of crude food after deduction for exporter’s expenses. Gross farm income is the value at farm prices of the farm products sold by producers to the non-farm economy and of the products consumed in the producer’s household. It excludes farm income that results from the sales of products to farmers who further processes them for resale. Gross farm income is computed as the sum of the gross income from production of the following groups of farm products: (i) “Wheat, rye, potatoes, sweet potatoes, dry beans, rice”; (ii) “Orchard and Citrus fruits, grapes”; (iii) “Dairy Products, Chicken, Eggs”; (iv) “Cattle, calves, hogs, sheep and lambs”. See page 28, Table 10 “Gross Farm Income from various groups of farm products and from total farm production, excluding ‘omitted products’, calendar years”, in “Gross Farm Income and Indices of Farm Production and Prices in the United States 1869 – 1937”. Export of crude food is series U 215 in table “Value of Merchandise Exports and Imports, by Economic Class: 1820 to 1970” in “Historical Statistics of the United States: Colonial Times to 1970”. Estimates for exporter’s expenses are taken from Shaw (1947) page 271.

For 1899 – 1912, the marketing bill is backcasted using an estimation procedure. The marketing mark-up – the ratio of consumption expenditures for farm food to farm value – is constructed using an estimated linear relation between the annual percentage change in farm value and annual percentage change in the marketing mark-up for 1913 – 1997.

$$yt = 0.023 - 0.362xt + \eta t$$

$$6.493 - 11.914$$

where  $\eta t$  i.i.d.  $N(0, 0.0312)$ ,  $yt$  stands for the percentage change in the marketing mark-up and  $xt$  for the percentage change in farm value. Both estimates were significantly different from zero. The estimated marketing mark-ups were then applied to the farm value series to obtain a consumption expenditures for farm food for 1899 – 1912.

[B] Billions of 2005 Dollars.

For 1929–2012, the new US annual real consumption of services equals Personal Consumption Expenditures, Services, Billions of 2005 Chain Dollars. Personal Consumption Expenditures, Services, Billions of 2005 Chain Dollars is computed as the Personal Consumption Expenditures, Services, Billions of Dollars, for the year 2005, multiplied by Personal Consumption Expenditures, Services, Quantity Index, 2005 = 100, and divided by 100, which can be found in line 6 in NIPA Table 1.1.3 Real Gross Domestic Product, Quantity Index. Personal Consumption Expenditures, Services, Billions of Dollars, can be found in line 6 in NIPA Table 1.1.5 Gross Domestic Product.

For 1899 – 1928, the new US annual real consumption of services, equals the ratio of the new US annual nominal consumption of services to the new price index for services, 2005 = 100 multiplied by 100.

[C] Millions. For 1899 - 2000, taken from series Aa6 in Haines, Michael R., and Richard Sutch , “ Population: 1790–2000 [Annual estimates] .” Table Aa6-8 in Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition, edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright. New York: Cambridge University Press, 2006. For 2001-2009, taken from Table 1. Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2009 (NST-EST2009-01), U.S. Census Bureau, Population Division (Release Date: December 2009). For 2010 - 2012, taken from Table 1. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2012 (NST-EST2012-01), U.S. Census Bureau, Population Division (Release Date: December 2012).

[D] Equals series in column [A] divided by series in column [C] multiplied by 1000.

[E] Equals series in column [B] divided by series in column [C] multiplied by 1000.

[F]  $[F](t)$  equals  $[D](t+1)/[D](t) - 1$ .

[G]  $[G](t)$  equals  $[E](t+1)/[E](t) - 1$ .

[H] For 1899 - 1928,  $[H](t)$  equals  $\{[D](t+1) + [E](t+1)\} / \{[D](t) + [E](t)\} - 1$ . For 1929 - 2011,  $[H](t)$  equals a weighted average of  $[F](t)$  and  $[G](t)$ , where the weights are respectively the ratio of nominal non-durables to nominal non-durables and services and nominal services to nominal non-durables and services.

## U.S. Annual Nominal Consumption and Population 1899 - 2012

| Year | Level        |          |            | Per Capita   |          | Per Capita Growth |          |                           |
|------|--------------|----------|------------|--------------|----------|-------------------|----------|---------------------------|
|      | Non-Durables | Services | Population | Non-Durables | Services | Non-Durables      | Services | Non-Durables and Services |
|      | [A]          | [B]      | [C]        | [D]          | [E]      | [F]               | [G]      | [H]                       |
| 1899 | 7            | 5        | 75         | 91           | 60       | 5.4%              | 8.8%     | 6.8%                      |
| 1900 | 7            | 5        | 76         | 96           | 66       | 4.9%              | 8.8%     | 6.5%                      |
| 1901 | 8            | 6        | 78         | 101          | 71       | 4.6%              | 8.8%     | 6.4%                      |
| 1902 | 8            | 6        | 79         | 106          | 78       | 2.3%              | 7.9%     | 4.7%                      |
| 1903 | 9            | 7        | 81         | 108          | 84       | -0.1%             | 6.4%     | 2.7%                      |
| 1904 | 9            | 7        | 82         | 108          | 89       | 4.6%              | 7.6%     | 6.0%                      |
| 1905 | 9            | 8        | 84         | 113          | 96       | 6.3%              | 8.8%     | 7.5%                      |
| 1906 | 10           | 9        | 85         | 120          | 105      | 3.2%              | 8.4%     | 5.6%                      |
| 1907 | 11           | 10       | 87         | 124          | 113      | -2.2%             | 5.5%     | 1.5%                      |
| 1908 | 11           | 11       | 89         | 121          | 120      | 9.2%              | 9.0%     | 9.1%                      |
| 1909 | 12           | 12       | 90         | 132          | 130      | 3.2%              | 1.5%     | 2.3%                      |
| 1910 | 13           | 12       | 92         | 137          | 132      | -2.3%             | -0.1%    | -1.2%                     |
| 1911 | 13           | 12       | 94         | 133          | 132      | 7.1%              | 1.8%     | 4.5%                      |
| 1912 | 14           | 13       | 95         | 143          | 135      | 3.6%              | 0.4%     | 2.1%                      |
| 1913 | 14           | 13       | 97         | 148          | 135      | 0.2%              | -0.6%    | -0.2%                     |
| 1914 | 15           | 13       | 99         | 148          | 134      | -1.3%             | -1.2%    | -1.3%                     |
| 1915 | 15           | 13       | 101        | 146          | 133      | 21.7%             | 6.9%     | 14.7%                     |
| 1916 | 18           | 14       | 102        | 178          | 142      | 29.0%             | 12.8%    | 21.8%                     |
| 1917 | 24           | 17       | 103        | 230          | 160      | 12.5%             | 11.0%    | 11.9%                     |
| 1918 | 27           | 19       | 105        | 259          | 178      | 8.1%              | 8.5%     | 8.3%                      |
| 1919 | 29           | 20       | 105        | 280          | 193      | 10.3%             | 9.6%     | 10.0%                     |
| 1920 | 33           | 22       | 106        | 309          | 211      | -20.7%            | -4.3%    | -14.0%                    |
| 1921 | 27           | 22       | 109        | 245          | 202      | -2.8%             | 3.2%     | -0.1%                     |
| 1922 | 26           | 23       | 110        | 238          | 209      | 7.4%              | 7.0%     | 7.2%                      |
| 1923 | 29           | 25       | 112        | 256          | 223      | -1.3%             | 1.8%     | 0.2%                      |
| 1924 | 29           | 26       | 114        | 252          | 227      | 4.6%              | 5.3%     | 5.0%                      |
| 1925 | 31           | 28       | 116        | 264          | 239      | 4.5%              | 2.4%     | 3.5%                      |
| 1926 | 32           | 29       | 117        | 276          | 245      | -1.9%             | 1.0%     | -0.5%                     |
| 1927 | 32           | 29       | 119        | 271          | 248      | 0.8%              | 5.2%     | 2.9%                      |
| 1928 | 33           | 31       | 121        | 273          | 260      | 2.1%              | 5.9%     | 4.0%                      |
| 1929 | 34           | 34       | 122        | 278          | 276      | -11.1%            | -5.9%    | -8.5%                     |
| 1930 | 31           | 32       | 123        | 248          | 260      | -16.1%            | -10.1%   | -13.0%                    |
| 1931 | 26           | 29       | 124        | 208          | 234      | -22.2%            | -15.7%   | -18.8%                    |
| 1932 | 20           | 25       | 125        | 162          | 197      | -1.6%             | -10.3%   | -6.4%                     |
| 1933 | 20           | 22       | 126        | 159          | 177      | 18.7%             | 3.0%     | 10.4%                     |
| 1934 | 24           | 23       | 126        | 189          | 182      | 8.5%              | 4.9%     | 6.7%                      |
| 1935 | 26           | 24       | 127        | 205          | 191      | 11.2%             | 7.1%     | 9.2%                      |
| 1936 | 29           | 26       | 128        | 228          | 204      | 5.5%              | 8.1%     | 6.8%                      |
| 1937 | 31           | 29       | 129        | 240          | 221      | -4.3%             | -1.5%    | -2.9%                     |
| 1938 | 30           | 28       | 130        | 230          | 218      | 2.2%              | 2.7%     | 2.4%                      |
| 1939 | 31           | 29       | 131        | 235          | 224      | 4.0%              | 3.9%     | 4.0%                      |
| 1940 | 32           | 31       | 132        | 244          | 232      | 14.1%             | 8.4%     | 11.3%                     |
| 1941 | 37           | 34       | 133        | 279          | 252      | 15.4%             | 11.9%    | 13.7%                     |
| 1942 | 43           | 38       | 135        | 322          | 282      | 11.1%             | 13.2%    | 12.1%                     |
| 1943 | 49           | 44       | 137        | 358          | 319      | 6.7%              | 9.0%     | 7.8%                      |
| 1944 | 53           | 48       | 138        | 382          | 348      | 9.6%              | 7.7%     | 8.7%                      |
| 1945 | 59           | 52       | 140        | 418          | 374      | 16.9%             | 9.7%     | 13.5%                     |
| 1946 | 69           | 58       | 141        | 489          | 411      | 10.2%             | 5.7%     | 8.1%                      |
| 1947 | 78           | 63       | 144        | 538          | 434      | 5.1%              | 6.1%     | 5.6%                      |
| 1948 | 83           | 68       | 147        | 566          | 461      | -3.5%             | 2.4%     | -0.9%                     |
| 1949 | 82           | 70       | 149        | 546          | 472      | 1.5%              | 4.9%     | 3.1%                      |
| 1950 | 84           | 75       | 152        | 554          | 495      | 8.3%              | 9.3%     | 8.8%                      |
| 1951 | 93           | 84       | 155        | 600          | 541      | 3.1%              | 6.4%     | 4.6%                      |
| 1952 | 98           | 91       | 158        | 619          | 576      | 1.1%              | 6.5%     | 3.7%                      |
| 1953 | 100          | 98       | 160        | 626          | 613      | 0.1%              | 4.3%     | 2.2%                      |
| 1954 | 102          | 104      | 163        | 626          | 639      | 2.7%              | 5.0%     | 3.9%                      |
| 1955 | 107          | 111      | 166        | 643          | 671      | 3.1%              | 5.4%     | 4.3%                      |
| 1956 | 112          | 120      | 169        | 663          | 708      | 3.1%              | 4.6%     | 3.9%                      |
| 1957 | 118          | 127      | 172        | 684          | 740      | 2.0%              | 4.0%     | 3.0%                      |
| 1958 | 122          | 135      | 175        | 698          | 770      | 2.9%              | 6.0%     | 4.6%                      |
| 1959 | 128          | 145      | 178        | 718          | 816      | 1.3%              | 5.0%     | 3.3%                      |
| 1960 | 131          | 155      | 181        | 727          | 857      | 0.8%              | 3.8%     | 2.4%                      |
| 1961 | 135          | 163      | 184        | 733          | 890      | 2.1%              | 5.1%     | 3.7%                      |
| 1962 | 140          | 174      | 187        | 748          | 935      | 1.7%              | 4.3%     | 3.2%                      |
| 1963 | 144          | 185      | 189        | 760          | 975      | 4.7%              | 6.4%     | 5.6%                      |
| 1964 | 153          | 199      | 192        | 796          | 1,038    | 5.6%              | 6.1%     | 5.9%                      |
| 1965 | 163          | 214      | 194        | 840          | 1,102    | 7.7%              | 6.8%     | 7.2%                      |
| 1966 | 178          | 231      | 197        | 905          | 1,177    | 2.9%              | 6.4%     | 4.9%                      |
| 1967 | 185          | 249      | 199        | 931          | 1,252    | 6.9%              | 8.8%     | 8.0%                      |
| 1968 | 200          | 273      | 201        | 995          | 1,362    | 6.2%              | 8.8%     | 7.7%                      |
| 1969 | 214          | 300      | 203        | 1,057        | 1,482    | 5.6%              | 8.4%     | 7.2%                      |
| 1970 | 229          | 330      | 205        | 1,116        | 1,607    | 3.4%              | 7.7%     | 6.0%                      |
| 1971 | 240          | 360      | 208        | 1,154        | 1,731    | 6.2%              | 9.1%     | 8.0%                      |
| 1972 | 257          | 396      | 210        | 1,226        | 1,889    | 10.1%             | 8.8%     | 9.3%                      |
| 1973 | 286          | 435      | 212        | 1,350        | 2,055    | 11.3%             | 9.6%     | 10.3%                     |
| 1974 | 321          | 481      | 214        | 1,503        | 2,251    | 7.6%              | 11.6%    | 10.0%                     |

## U.S. Annual Nominal Consumption and Population 1899 - 2012

| Year | Level        |          |            | Per Capita   |          | Per Capita Growth |          |                           |
|------|--------------|----------|------------|--------------|----------|-------------------|----------|---------------------------|
|      | Non-Durables | Services | Population | Non-Durables | Services | Non-Durables      | Services | Non-Durables and Services |
|      | [A]          | [B]      | [C]        | [D]          | [E]      | [F]               | [G]      | [H]                       |
| 1975 | 349          | 543      | 216        | 1,617        | 2,512    | 7.1%              | 10.4%    | 9.2%                      |
| 1976 | 378          | 605      | 218        | 1,732        | 2,774    | 7.0%              | 10.9%    | 9.4%                      |
| 1977 | 408          | 677      | 220        | 1,854        | 3,076    | 9.1%              | 11.6%    | 10.7%                     |
| 1978 | 450          | 764      | 223        | 2,023        | 3,433    | 12.4%             | 10.4%    | 11.2%                     |
| 1979 | 512          | 853      | 225        | 2,273        | 3,791    | 10.8%             | 10.7%    | 10.7%                     |
| 1980 | 573          | 956      | 228        | 2,518        | 4,198    | 8.0%              | 10.8%    | 9.8%                      |
| 1981 | 625          | 1,070    | 230        | 2,720        | 4,653    | 2.4%              | 8.9%     | 6.5%                      |
| 1982 | 646          | 1,176    | 232        | 2,784        | 5,066    | 4.1%              | 10.8%    | 8.4%                      |
| 1983 | 679          | 1,315    | 234        | 2,897        | 5,611    | 5.4%              | 8.4%     | 7.4%                      |
| 1984 | 722          | 1,437    | 236        | 3,053        | 6,082    | 4.0%              | 8.9%     | 7.3%                      |
| 1985 | 757          | 1,580    | 238        | 3,175        | 6,626    | 1.3%              | 6.7%     | 4.9%                      |
| 1986 | 774          | 1,701    | 241        | 3,217        | 7,069    | 4.2%              | 7.2%     | 6.3%                      |
| 1987 | 814          | 1,841    | 243        | 3,354        | 7,581    | 4.9%              | 8.4%     | 7.3%                      |
| 1988 | 862          | 2,013    | 245        | 3,519        | 8,214    | 6.8%              | 6.8%     | 6.8%                      |
| 1989 | 930          | 2,171    | 247        | 3,758        | 8,776    | 5.8%              | 6.8%     | 6.5%                      |
| 1990 | 994          | 2,344    | 250        | 3,975        | 9,372    | 1.3%              | 4.5%     | 3.5%                      |
| 1991 | 1,020        | 2,483    | 253        | 4,025        | 9,794    | 2.1%              | 6.3%     | 5.0%                      |
| 1992 | 1,055        | 2,674    | 257        | 4,108        | 10,407   | 2.0%              | 4.9%     | 4.1%                      |
| 1993 | 1,091        | 2,841    | 260        | 4,191        | 10,917   | 3.2%              | 4.5%     | 4.1%                      |
| 1994 | 1,139        | 3,004    | 263        | 4,325        | 11,404   | 2.3%              | 4.3%     | 3.8%                      |
| 1995 | 1,180        | 3,172    | 267        | 4,426        | 11,899   | 4.0%              | 4.6%     | 4.4%                      |
| 1996 | 1,241        | 3,356    | 270        | 4,603        | 12,445   | 2.8%              | 4.9%     | 4.4%                      |
| 1997 | 1,291        | 3,564    | 273        | 4,731        | 13,059   | 1.8%              | 5.6%     | 4.6%                      |
| 1998 | 1,330        | 3,809    | 276        | 4,817        | 13,793   | 6.5%              | 5.2%     | 5.5%                      |
| 1999 | 1,433        | 4,053    | 279        | 5,129        | 14,511   | 6.6%              | 6.7%     | 6.7%                      |
| 2000 | 1,543        | 4,371    | 282        | 5,466        | 15,482   | 1.9%              | 4.6%     | 3.9%                      |
| 2001 | 1,588        | 4,615    | 285        | 5,569        | 16,188   | 0.9%              | 3.7%     | 3.0%                      |
| 2002 | 1,618        | 4,829    | 288        | 5,622        | 16,779   | 4.7%              | 4.2%     | 4.3%                      |
| 2003 | 1,708        | 5,076    | 290        | 5,883        | 17,484   | 5.5%              | 5.0%     | 5.1%                      |
| 2004 | 1,819        | 5,379    | 293        | 6,208        | 18,354   | 6.4%              | 5.5%     | 5.7%                      |
| 2005 | 1,953        | 5,727    | 296        | 6,605        | 19,363   | 5.0%              | 5.1%     | 5.1%                      |
| 2006 | 2,070        | 6,076    | 299        | 6,932        | 20,350   | 4.1%              | 4.4%     | 4.3%                      |
| 2007 | 2,176        | 6,408    | 302        | 7,214        | 21,249   | 3.5%              | 2.9%     | 3.0%                      |
| 2008 | 2,273        | 6,654    | 304        | 7,467        | 21,861   | -5.6%             | -0.9%    | -2.1%                     |
| 2009 | 2,165        | 6,652    | 307        | 7,051        | 21,666   | 4.8%              | 2.2%     | 2.9%                      |
| 2010 | 2,286        | 6,851    | 309        | 7,389        | 22,148   | 7.7%              | 2.9%     | 4.1%                      |
| 2011 | 2,478        | 7,104    | 312        | 7,954        | 22,800   | 2.7%              | 2.5%     | 2.6%                      |
| 2012 | 2,564        | 7,337    | 314        | 8,168        | 23,371   |                   |          |                           |

**Notes to table:**

[A] Billions of Dollars.

For 1929 – 2012, the new US annual nominal consumption of non-durable goods equals Personal Consumption Expenditures, Non-Durables, Billions of Dollars, which can be found in line 5 in NIPA Table 1.1.5 Gross Domestic Product.

For 1919 – 1928, the new US annual nominal consumption of non-durable goods equals US annual flow of perishables and semidurable goods to consumers at cost to them, Variant III, Current Prices multiplied by the “1929 Kuznets Nominal Non-Durables Ratio”. The 1929 Kuznets Nominal Non-Durables Ratio is the ratio of Personal Consumption Expenditures, Non-Durable Goods, Billions of Dollars to US annual flow of perishables and semi-durable goods to consumers at cost to them, Variant III, Current Prices, for the year 1929. The ratio is 0.89975. For US annual flow of perishables and semi-durable goods to consumers at cost to them, Variant III, Current Prices, see columns 5 and 6, Table T-6 in Kuznets (1961b).

For 1899 – 1918, the new US annual nominal consumption of non-durable goods equals the sum of: (1) the US annual flow of semi-durable goods to consumers at cost to them, Variant III, Current Prices; (2) the non-food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, Current Prices; and (3) the new food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, Current Prices; multiplied by the 1929 Kuznets Nominal Non-Durables Ratio. For the US annual flow of perishables goods to consumers at cost to them, Variant III, Current Prices and US annual flow of semi-durable goods to consumers at cost to them, Variant III, Current Prices, see respectively columns 5 and 6, Table T-6 in Kuznets (1961b). The non-food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, Current Prices equals the non-food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, 1929 Prices multiplied by the corresponding implicit price deflator.

For 1899 – 1918, new food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, Current Prices equals the exponential of: (1) the trend of the natural logarithm of the food component of the US annual flow of perishables goods to consumers at cost to them, Variant III, Current Prices; plus (2) the deviations from trend in the natural logarithm of the Consumption Expenditures for Farm Food, Current Prices.

[B] Billions of Dollars.

For 1929 – 2012, the new US annual nominal consumption of services equals Personal Consumption Expenditures, Services, Billions of Dollars, which can be found in line 6 in NIPA Table 1.1.5 Gross Domestic Product.

For 1909, 1914, 1919, 1921, 1923, 1925, and 1927, the new US annual nominal consumption of services equals the sum of the service components of the consumption expenditures by type of product or services, multiplied by the ratio of the new US annual nominal consumption of services to the service components of the consumption expenditures by type of product or services, for the year of 1929 – henceforth, “1929 Dewhurst Service Ratio”. See table “Appendix 4-4 Consumption Expenditures by Type of Product and Services, 1909 – 1952 (Millions of Dollars)” in Dewhurst (1947, 1955). The ratio equals 1.07263.

For 1899, the new US annual nominal consumption of services equals the US annual flow of services to consumers, Variant III, Current Prices, after incorporation of Kendrick’s adjustments, multiplied by the ratio of the new US annual real consumption of services to the US annual flow of services to consumers, Variant III, 1929 Prices, after incorporation of Kendrick’s adjustments, for the year of 1929 – henceforth, “1929 Kuznets Nominal Service Ratio”. See column 8 in Table T 6 in Kuznets (1961b) and columns 2, 3, and 4 in Table A-11b in Kendrick (1961), respectively. The ratio equals 1.04794.

For all the other years, the new US annual nominal consumption of services, equals the exponential of: (1) the trend of the natural logarithm of the new US annual nominal consumption of services; plus (2) the backcasted percentage deviations from trend in Personal Consumption Expenditures, Services, Billions of Dollars.

For 1899, 1909, 1914, 1919, 1921, 1923, 1925, and 1927, the trend of the natural logarithm of the new US annual nominal consumption of services, is set equal to the natural logarithm of the new US annual nominal consumption of services, minus the backcasted percentage deviations from trend in Personal Consumption Expenditures, Services, Billions of Dollars. For the other years, a linear trend is constructed.

For 1899 – 1928, a regression procedure estimates a linear relationship between the first difference in percentage deviations from trend in Personal Consumption Expenditures, Services, Billions of Dollars,  $yt$ , and first difference in percentage deviations from trend in Personal Consumption Expenditures, Non-Durable Goods, Billions of Dollars,  $xt$ , and its first and second lags. The regression uses data for 1929 – 2012. Here is the linear relation:

$$yt = -0.001 + 0.422xt + 0.156xt-1 + 0.132xt-2 + \eta t$$

$$\begin{matrix} & -0.701 & 12.31 & 4.356 & 3.862 \end{matrix}$$

where  $\eta t$  i.i.d.  $N(0, 0.0122)$ .

[C] Millions. For 1899 - 2000, taken from series Aa6 in Haines, Michael R., and Richard Sutch, “Population: 1790–2000 [Annual estimates].” Table Aa6-8 in Historical Statistics of the United States, Earliest Times to the Present: Millennial Edition, edited by Susan B. Carter, Scott Sigmund Gartner, Michael R. Haines, Alan L. Olmstead, Richard Sutch, and Gavin Wright. New York: Cambridge University Press, 2006. For 2001-2009, taken from Table 1. Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2000 to July 1, 2009 (NST-EST2009-01), U.S. Census Bureau, Population Division (Release Date: December 2009). For 2010 - 2012, taken from Table 1. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2012 (NST-EST2012-01), U.S. Census Bureau, Population Division (Release Date: December 2012).

[D] Equals series in column [A] divided by series in column [C] multiplied by 1000.

[E] Equals series in column [B] divided by series in column [C] multiplied by 1000.

[F](t) equals [D](t+1)/[D](t) - 1.

[G](t) equals [E](t+1)/[E](t) - 1.

[H](t) equals {[D](t+1) + [E](t+1)} / {[D](t) + [E](t)} - 1.

**U.S. Annual Consumption Implicit Price Index (2005=100)**  
**1899 - 2012**

Level

| Year | Non-Durables | Services |
|------|--------------|----------|
|      | [A]          | [B]      |
| 1899 | 5.83         | 3.78     |
| 1900 | 6.03         | 3.85     |
| 1901 | 6.07         | 3.90     |
| 1902 | 6.35         | 3.99     |
| 1903 | 6.39         | 4.04     |
| 1904 | 6.42         | 4.08     |
| 1905 | 6.51         | 4.12     |
| 1906 | 6.77         | 4.19     |
| 1907 | 7.03         | 4.29     |
| 1908 | 7.03         | 4.35     |
| 1909 | 7.30         | 4.45     |
| 1910 | 7.56         | 4.54     |
| 1911 | 7.42         | 4.58     |
| 1912 | 7.75         | 4.67     |
| 1913 | 7.92         | 4.74     |
| 1914 | 8.00         | 4.82     |
| 1915 | 7.98         | 4.85     |
| 1916 | 9.21         | 5.09     |
| 1917 | 12.05        | 5.65     |
| 1918 | 14.39        | 6.33     |
| 1919 | 15.24        | 6.89     |
| 1920 | 16.91        | 7.42     |
| 1921 | 12.69        | 7.06     |
| 1922 | 11.84        | 6.88     |
| 1923 | 12.25        | 6.77     |
| 1924 | 11.90        | 6.83     |
| 1925 | 12.41        | 7.07     |
| 1926 | 12.69        | 7.29     |
| 1927 | 12.07        | 7.41     |
| 1928 | 12.35        | 7.63     |
| 1929 | 12.21        | 7.78     |
| 1930 | 11.59        | 7.56     |
| 1931 | 9.91         | 7.03     |
| 1932 | 8.52         | 6.35     |
| 1933 | 8.46         | 5.95     |
| 1934 | 9.35         | 5.88     |
| 1935 | 9.65         | 6.00     |
| 1936 | 9.69         | 6.10     |
| 1937 | 10.04        | 6.33     |
| 1938 | 9.55         | 6.34     |
| 1939 | 9.41         | 6.32     |
| 1940 | 9.46         | 6.37     |
| 1941 | 10.27        | 6.59     |
| 1942 | 11.95        | 7.06     |
| 1943 | 13.38        | 7.50     |
| 1944 | 14.15        | 7.84     |
| 1945 | 14.76        | 8.10     |
| 1946 | 16.00        | 8.59     |
| 1947 | 18.07        | 9.22     |
| 1948 | 19.19        | 9.70     |
| 1949 | 18.57        | 9.86     |
| 1950 | 18.61        | 10.12    |
| 1951 | 20.20        | 10.62    |
| 1952 | 20.41        | 11.00    |
| 1953 | 20.34        | 11.43    |
| 1954 | 20.41        | 11.72    |
| 1955 | 20.27        | 11.93    |
| 1956 | 20.56        | 12.21    |
| 1957 | 21.16        | 12.57    |
| 1958 | 21.67        | 12.87    |
| 1959 | 21.70        | 13.22    |
| 1960 | 21.97        | 13.57    |
| 1961 | 22.06        | 13.82    |
| 1962 | 22.18        | 14.08    |
| 1963 | 22.39        | 14.30    |
| 1964 | 22.70        | 14.56    |
| 1965 | 23.11        | 14.83    |
| 1966 | 23.85        | 15.27    |
| 1967 | 24.28        | 15.77    |
| 1968 | 25.16        | 16.46    |
| 1969 | 26.25        | 17.31    |
| 1970 | 27.42        | 18.27    |
| 1971 | 28.20        | 19.27    |
| 1972 | 29.11        | 20.09    |
| 1973 | 31.45        | 21.07    |
| 1974 | 36.21        | 22.85    |

**U.S. Annual Consumption Implicit Price Index (2005=100)**  
**1899 - 2012**

| Level |              |          |
|-------|--------------|----------|
| Year  | Non-Durables | Services |
|       | [A]          | [B]      |
| 1975  | 39.01        | 24.82    |
| 1976  | 40.28        | 26.54    |
| 1977  | 42.58        | 28.54    |
| 1978  | 45.30        | 30.76    |
| 1979  | 50.19        | 33.33    |
| 1980  | 56.34        | 36.78    |
| 1981  | 60.69        | 40.44    |
| 1982  | 62.08        | 43.60    |
| 1983  | 63.14        | 46.32    |
| 1984  | 64.45        | 48.73    |
| 1985  | 65.65        | 50.93    |
| 1986  | 64.82        | 53.25    |
| 1987  | 67.02        | 55.41    |
| 1988  | 69.16        | 58.12    |
| 1989  | 72.58        | 60.84    |
| 1990  | 76.74        | 63.81    |
| 1991  | 78.99        | 66.58    |
| 1992  | 80.13        | 69.23    |
| 1993  | 80.78        | 71.29    |
| 1994  | 81.22        | 73.20    |
| 1995  | 82.06        | 75.36    |
| 1996  | 83.92        | 77.47    |
| 1997  | 84.79        | 79.81    |
| 1998  | 84.17        | 81.69    |
| 1999  | 86.26        | 83.51    |
| 2000  | 90.02        | 85.82    |
| 2001  | 90.96        | 88.42    |
| 2002  | 90.89        | 90.80    |
| 2003  | 92.79        | 93.69    |
| 2004  | 96.12        | 96.69    |
| 2005  | 100.00       | 100.00   |
| 2006  | 103.23       | 103.42   |
| 2007  | 106.49       | 106.98   |
| 2008  | 112.57       | 110.58   |
| 2009  | 109.18       | 112.16   |
| 2010  | 112.62       | 114.42   |
| 2011  | 119.43       | 116.43   |
| 2012  | 122.43       | 118.78   |



**Notes to table:**

- [A] For all years, the new price index for non-durables, 2005=100, equals the new US annual nominal consumption of non-durable goods divided by the new US annual real consumption of non-durable goods, multiplied by 100.
- [B] For 1929 – 2012, the new price index for services, 2005 = 100, equals the new US annual nominal consumption of services divided by the new US annual real consumption of services, multiplied by 100.

For 1899 – 1928, new price index for services, 2005 = 100, is equal to the exponential of: (1) the trend of the natural logarithm of the implicit price index of the US annual flow of services to consumers, Variant III, after incorporation of Kendrick's adjustments, multiplied by the new price index for services, 2005 = 100 for the 1929 year, and divided by 100; plus (2) the backcasted percentage deviations from trend in the new price index for services, 2005 = 100. The trend of the natural logarithm of the implicit price index of the US annual flow of services to consumers, Variant III, after incorporation of Kendrick's adjustments, multiplied by the new price index for services, 2005 = 100 for the 1929 year, and divided by 100, is constructed by applying the Hodrick-Prescott filter to each series. The smooth parameter of the Hodrick-Prescott filter is set to 100.

For 1899 – 1928, the new price index for services, 2005 = 100, was constructed using backcasted estimates from a regression procedure. The regression procedure estimates a linear relationship between the first difference in percentage deviations from trend in new price index for services, 2005 = 100,  $y_t$ , and first difference in percentage deviations from trend in new price index for non-durables, 2005 = 100,  $x_t$ , and its first and second lags. The regression uses data for 1929 – 2012.

$$y_t = -0.001 + 0.306x_t + 0.133x_{t-1} + 0.131x_{t-2} + \eta_t$$

|        |       |       |       |
|--------|-------|-------|-------|
| -0.801 | 10.78 | 4.616 | 4.627 |
|--------|-------|-------|-------|

where  $\eta_t$  i.i.d.  $N(0, 0.0072^2)$ .