

Alternative Treatments of Consumer Durables in the National Accounts
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The idea of capitalizing consumer durables in the national income and product accounts (NIPA's) has been discussed for many years.¹ Currently expenditures for consumer durables are treated as consumption expenditures rather than investment expenditures. Capitalizing consumer durables would reallocate expenditures for them from personal consumption expenditures (PCE) to gross private domestic investment (GPDI) and would increase GDP by the amount of services they provide equal to the rental value of the durables. The recent increase in the leasing of motor vehicles (MVs) provides a possible opportunity to use market information to estimate MV services and raises the question of the inconsistency of treating leased and purchased consumer durables differently in the accounts. The three options for the national accounts are: 1. Staying with the current definitions, 2. Capitalizing only some consumer durables, and 3. Capitalizing all consumer durables. Some of the advantages of each alternative are listed in the table following the text.

Estimates of total consumer durable services and MV services from the Christensen-Jorgenson (C-J) U.S. Worksheets provide a basis for broadly gauging the possible impact of capitalizing consumer durables. Actual BEA estimates and growth rates certainly could differ from the corresponding C-J figures depending upon the methodology chosen.

Estimates for MV services are discussed as MV's are the most likely asset to be capitalized if only some consumer durables are capitalized. MV capital services could possibly be developed from information on MV leasing, which has increased from \$8.5 billion to \$40.1 billion between 1992 and 1997. In addition BEA estimates for MV services have been developed for 1992 for the Travel and Tourism Satellite Account (TTSA).²

Two indicators of the impact of capitalizing consumer durables are the potential size of any increase in nominal GDP and the change in rates of growth of real GDP. According to the C-J U.S. Worksheets, between 1955 and 1999 consumer durable services as a share of GDP typically varied between 8.5 and 10.5 percent; MV services typically varied between 3.5 and 4.5 percent. Two charts, both for 1955-99, give a sense of the potential size of the change in rates of growth of real GDP. The first chart shows the rates of growth for real GDP under the current definition

¹ A number of researchers have suggested that BEA capitalize consumer durables. These include Kendrick, Ruggles & Ruggles, Eisner, and Jorgenson. An estimate of the impact of capitalizing consumer durables for 1947-1977 was presented in Katz, Arnold J. and Peskin, Janice, "The Value of Services Provided by the Stock of Consumer Durables, 1947-77: An Opportunity Cost Measure," Survey of Current Business, Vol. 60, July 1980, pp. 22-31.

² Okubo, Sumiye, Barbara Fraumeni, and Mahnaz Fahim-Nader, "Improved U.S. Travel and Tourism Accounts: Extension to Include Imputed Services of Motor Vehicles and Vacation Homes," April 2001.

of GDP. The second chart shows the change in rates of growth of real GDP when consumer durable services are included. If all consumer durable services were capitalized the annual rate of growth of real GDP would be higher than currently by as much as .53 percent and lower by as much as .32 percent. The average change without regard to sign is .19 percent. If just MV consumer durable services were capitalized the annual rate of growth of real GDP would be higher than currently by as much as .24 percent and lower by as much as .15 percent. The average change without regard to sign is .07 percent. Accordingly capitalizing consumer durables could have a significant effect on the size of nominal GDP and the rate of growth of real GDP.

We welcome comments on the three options for the national accounts.

**1. Staying with the current definitions
(Treating consumer durables as consumption expenditures.)**

Definitions of U.S. GDP and other aggregates remain comparable with other countries' definitions, which are based on SNA 1993

Consumer durables are not used to produce other goods or services (as production is defined in the accounts)

GDP is not changed and an imputation is avoided

Little is known about the rate of return (capital service flow) from consumer durables

Even if current information is available, it may not be available over the historical time period

Capitalization might affect quarterly patterns of growth, making GDP less useful as a cyclical measure

Thin rental markets for many consumer durables prevent the estimation of capital service flows for all consumer durables

**2. Capitalizing only some consumer durables
(Treating some consumer durables as investment expenditures.)**

Consumer durables have service lives of greater than one year, or hold value for several years

Specific consumer durables should be capitalized only when and if sufficient information is available for that asset

Changes to GDP will be smaller in total than if all consumer durables are capitalized

Information on some consumer durables, such as motor vehicles, has improved in recent years

Moves towards symmetrical treatment of assets across sectors, e.g., households, nonprofit institutions, business, and general government

GDP remains invariant to whether the asset is leased or purchased

Consistency with the Flow-of-Funds Accounts, which treat consumer durables as assets

Allows for flexibility in the timing of changes and the assignment of resources to the endeavor

**3. Capitalizing all consumer durables
(Treating all consumer durables as investment expenditures.)**

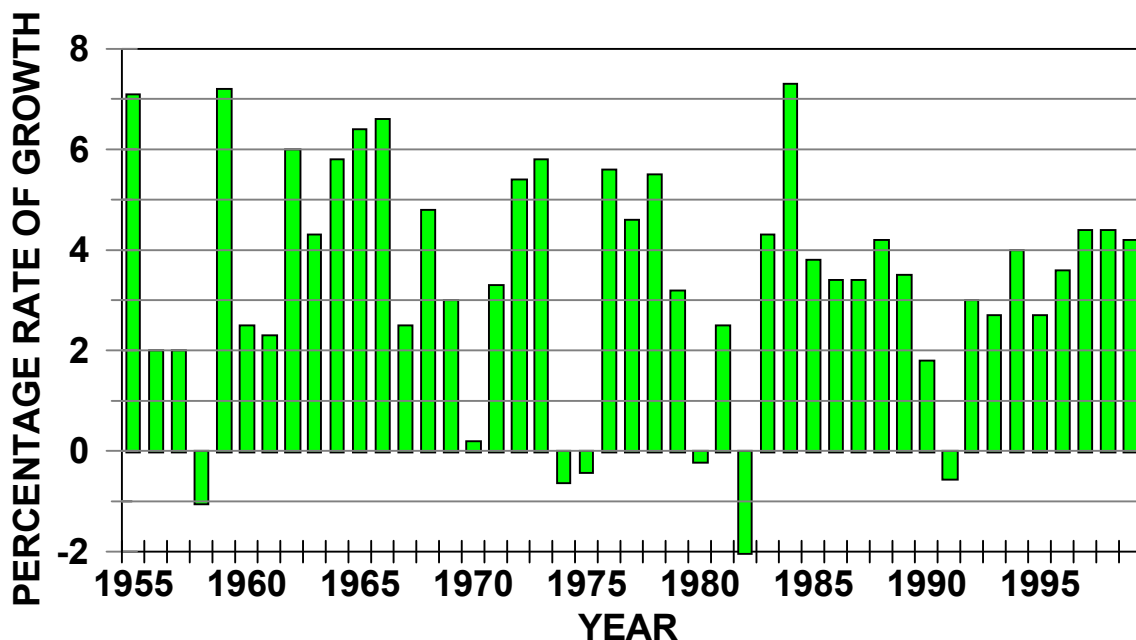
The service life rationale for capitalizing consumer durables applies to all consumer durables

Results in symmetrical treatment of more assets across sectors, e.g., households, nonprofit institutions, business, and general government

GDP remains invariant to whether the asset is leased or purchased

Consistency with the Flow-of-Funds Accounts, which treat consumer durables as assets

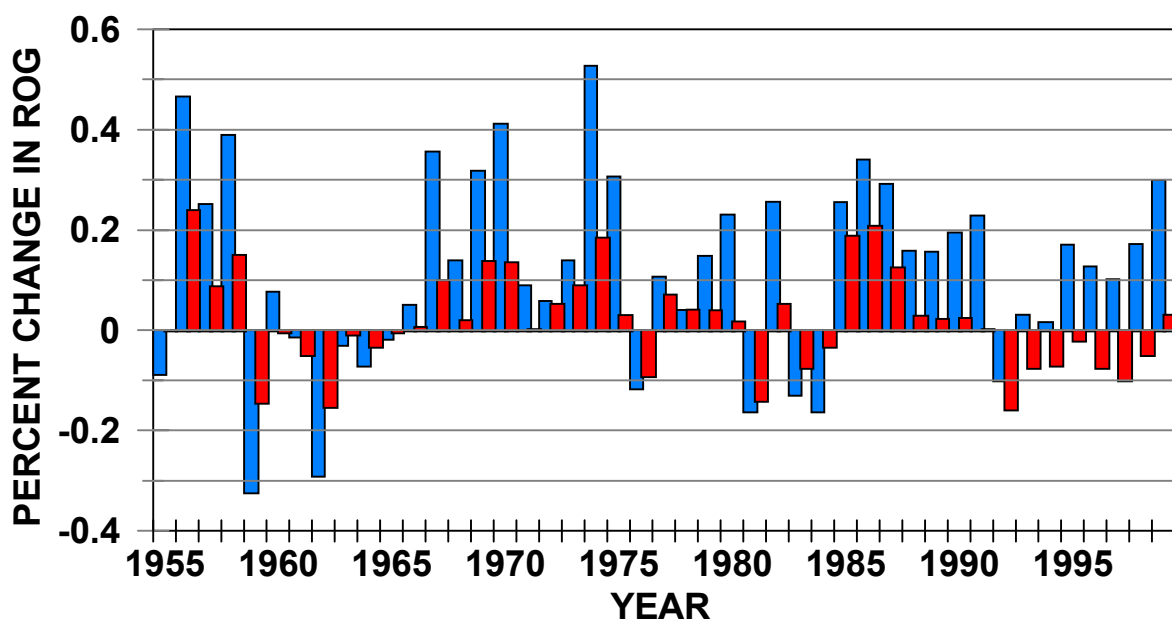
RATE OF GROWTH REAL GDP 1955-1999



■ ROG OF REAL GDP (CURRENT DEFINITION)

NOTE: Y-axis scale differs substantially in the graphs.

CHANGE IN RATE OF GROWTH REAL GDP INCLUDING SERVICES 1955-1999



■ CHANGE IN ROG INCL. CD SERVICES IN GDP

■ CHANGE IN ROG INCL. MV SERVICES IN GDP