Uneven Consumption Growth in the COVID-19 Economic Recovery

Juan M. Sánchez, Senior Economic Policy Advisor
Masataka Mori, Research Associate

This essay examines consumption growth during the COVID-19 economic recovery, with particular attention on how spending patterns vary across income distribution in the U.S. We use monthly personal consumption expenditures data from the Bureau of Economic Analysis and income elasticity of demand estimations for different goods and services from Aguiar and Bils (2015).1

Income elasticity of demand, or income elasticity, measures how a consumer’s spending on a good or service changes as that consumer’s income changes: It is the ratio of the percentage increase in consumption spending following an increase in income relative to the percentage increase in income. When the income elasticity of a given good is equal to one, consumption spending of that good grows at the same rate as income, meaning that an average consumer spends a constant proportion of their income on that good as they make more or less money.

Luxury items (e.g., jewelry or boats) have an income elasticity greater than one, which means that people spend a larger share of their income on luxury goods as their

Figure 1

Income Elasticity and Real Consumption Growth, 2021-24

Annualized real expenditure growth from April 2021 to April 2024 (%)

NOTE: The index for income elasticity is computed by Aguiar and Bils (2015) using Consumer Expenditure Surveys. Real expenditure growth is annualized three-year consumption growth (April 2021 to April 2024) for each good and service.

income increases. On the other hand, necessities (e.g., utilities and food at home) have an income elasticity between zero and one, which means that people spend a smaller share of their income on basic needs as their income increases. That is, spending on necessities tends to decline as a proportion of income as consumers get richer. We use this concept to infer consumption growth for individuals with different incomes by examining consumption spending for goods and services with different income elasticity.

Figure 1 illustrates a significant positive relationship between the income elasticity of goods and services and the annualized growth of real (inflation-adjusted) consumption expenditures over three years (April 2021 to April 2024). It shows that goods and services with higher income elasticity experienced higher consumption growth in the post-pandemic period. For instance, the annualized growth rate for spending on goods like “utilities” and “food at home” was 1.14% and –1.23%, respectively. That is, spending on these necessities either fell or did not grow much. In contrast, “food away from home” and “entertainment equipment and subscription television,” which have significantly higher income elasticity, saw much higher growth (5.04% and 4.30%, respectively). On average, for each 0.1 increase in an item’s income elasticity (e.g., from 1 to 1.1), its consumption growth rate increased by 0.6 percentage points during the recovery period.

Long-term consumption trends may help explain the correlation between income elasticity and real consumption growth. As an economy prospers and consumers become richer, we expect consumption to shift toward goods and services with higher income elasticity. To account for these trends, we adjust annualized real expenditure growth by subtracting the sample mean from real consumption growth for each good and service during periods of economic expansion since 1959.

Figure 2 illustrates that the relationship between income elasticity and real consumption growth is still positive but not as strong as when we don’t account for long-term consumption trends. On average, for each 0.1 increase in an item’s income elasticity, its consumption growth rate increased by 0.45 percentage points during the recovery period. This suggests that long-term consumption trends explain part, but not all, of the correlation between income elasticity and real consumption growth.
Overall, our data indicate that items with higher income elasticity, which are more significant in the consumption baskets of wealthier families, experienced a larger rise in consumption than items with lower income elasticity during the COVID-19 economic recovery. These findings suggest that increased consumption by wealthy families may be important in understanding the post-pandemic spending surge.

Note

1 We use the elasticities they estimated from the 1994-96 Consumer Expenditure Survey. However, the authors showed that these elasticities are similar to estimations for the 1980-82 and 2008-10 surveys.