

## Consumer Morsel

# Prices are up, but who is feeling it the most?

21 June 2022

### Key talking points

- The latest Census Bureau’s Consumer Price Index (CPI) showed that the year-over-year (YoY) growth rate in headline inflation surged to 8.6%, the highest level since 1981. But is inflation impacting income groups and sectors equally? In this piece we take a closer look at inflation impacts on different sectors and income groups.
- Adjusting for inflation, goods spending in May saw broad-based weakness in real %YoY growth. However, the good news is that real service sector spending, which represents over 60% of US consumer spending, remained resilient despite surging prices. In the near term, the strength in services spending should more than offset the relative weakness in goods spending.
- Our analysis suggests inflation was the highest for the middle income consumers (+9.4% YoY) in May due to their higher wallet share on autos and motor fuels. Based on aggregated Bank of America consumer credit and debit card data, we estimate that the 3-month moving average for real total card spending per household slipped into the negative territory on a %YoY basis for the low and middle income groups but remained positive for the higher income group in May.

The Consumer Price Index (CPI) report released by the Bureau of Labor Statistics showed that headline inflation rose to 8.6% YoY in May, the highest since 1981. Meanwhile core CPI inflation, which takes out food and energy, was also highly elevated at 6.0% YoY. The Federal Reserve’s concerns over inflation was the key factor in its decision to hike policy rates by 75 basis point at its June policy meeting.

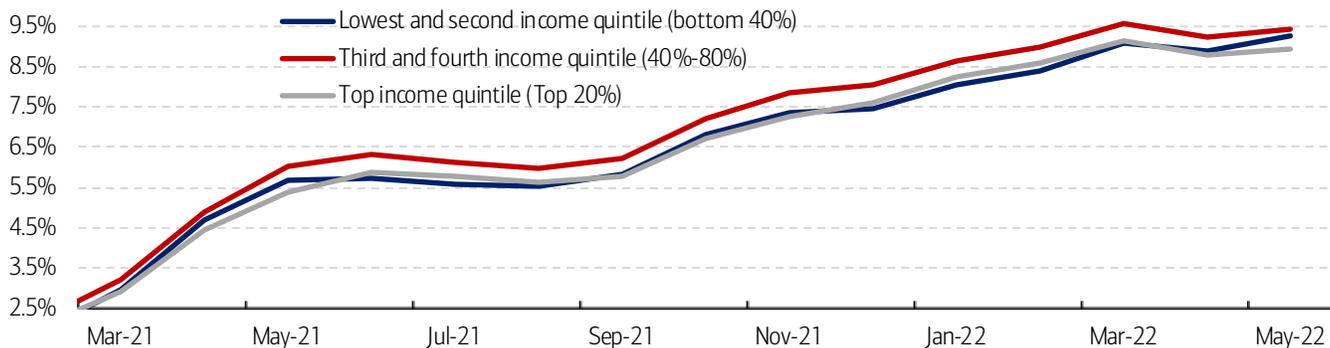
The CPI is based on an estimated basket of consumer goods and services for the ‘average consumer’ but the actual basket might vary across income groups. For example, consumers spend a different share of their total expenditure on grocery, therefore grocery inflation will have different impact on them. In this piece, we attempt to estimate inflation impacts for different income groups by using spending weights from Consumer Expenditure Survey by the Bureau of Labor Statistics. By adjusting for inflation, we also look at real spending growth by income groups, using aggregated Bank of America card spending data. Lastly, we also take a look at nominal and real spending by main goods and services categories.

### The middle-income trap

We estimate that the middle income households are facing the highest inflation impact of around 9.4% YoY in May (Exhibit 1), based on data from the Consumer Expenditure Survey and Consumer Price Index from Bureau of Labor Statistics. Note that the middle income households are those in the third and fourth income quintile which has an average household income of around \$78k as of 2020. Inflation for the middle income group seems to have peaked in March though it still remains elevated. Meanwhile the higher income group (i.e. the top income quintile) seems to face smaller but still meaningful inflationary pressure of around 8.9% YoY in May.

#### Exhibit 1: Estimated % year-over-year inflation growth faced by different income groups

The middle income seems to be feeling the biggest impact from inflation due to higher wallet share of autos and motor fuels



Source: Bank of America Institute, Bureau of Labor Statistics.

What accounts for these differences? According to the CPI report, the biggest inflation was seen in motor fuel with prices up nearly 50% YoY in May. Similarly, prices for new and used vehicles were also up a strong 14% YoY. The middle income households spend the largest wallet share on both of these sectors. According to Consumer Expenditure Survey, middle income households spent 3.8% and 8.8% (12.6% combined) of their total annual expenditure on motor fuel and vehicles, respectively, in 2019. In comparison, these shares were just 2.6% and 8.1% (10.7% combined) for the higher income group and 3.7% and 7.4% (11.1% combined) for the lower income group.

Other areas of strong inflation include public transportation, airfares in particular, and utilities. Although the higher income group spends the biggest share on airlines, their share of total spending on public transportation was just 1.5% in 2019. Meanwhile for utilities, the lower income group spends the biggest wallet share of 8.8%. This explains the narrowing gap between low and middle income inflation in recent months as utility prices have picked up noticeably.

## How real can you get?

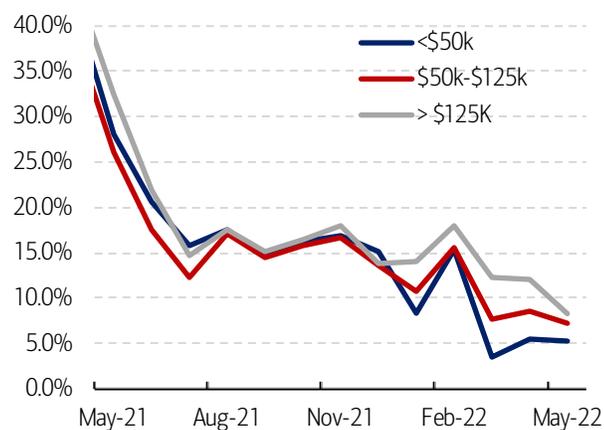
We can use our inflation by income calculations to estimate inflation-adjusted (real) spending by income groups, using aggregated Bank of America consumer credit and debit card spending data. On a nominal basis, total card spending per household grew between 5%-10% YoY across income groups in May (Exhibit 2) with the higher income group showing the strongest growth. %YoY rates for spending for total card spending saw a noticeable slowdown since the beginning of this year due to unfavorable base effects (i.e. a strong pick up in spending levels last year on the back of the reopening) and does not actually indicate a significant weakening in spending this year.

To estimate inflation-adjusted total card spending we took out components such as rent, utilities, autos, education and financial services from our inflation measures as these are usually not paid with cards. Our calculations suggests that inflation adjusted (real) total card spending has slipped into the negative territory for all three income groups in May although it was the first time that real spending for the higher income group (those with annual household income >\$125k) was negative at -1.1% YoY (Exhibit 3)

These numbers paint a less optimistic picture than the nominal growth rates suggest, but how much should we worry? One thing to keep in mind is that spending levels were extremely elevated in May last year due to reopening and some lingering boost from the distribution of stimulus checks. As a result, even with a YoY contraction, spending levels in May 2022 continued to be well above pre-pandemic levels (i.e. spending levels in May 2019). In addition, on a three-month moving average basis, the higher income households continue to see positive total card spending real growth of 1.8% YoY. Given that higher income households take up a large share of total US consumer spending, the resilience in the higher income will mitigate the slowdown in the lower income consumer.

**Exhibit 2: Nominal total card spending by income groups (%yoy, seasonally adjusted, monthly, data as of May 2022)**

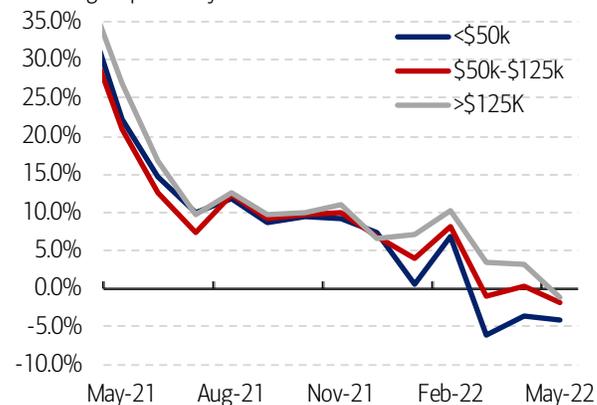
On a nominal basis, total card spending grew between 5%-10% YoY across income groups in May



Source: Bank of America internal data

**Exhibit 3: Inflation-adjusted (“real”) total card spending by income groups (%yoy, seasonally adjusted, monthly, data as of May 2022)**

Our calculation suggests that inflation adjusted (real) total card spending has slipped into the negative territory for all three income groups in May



Source: Bank of America internal data, Bureau of Labor Statistics

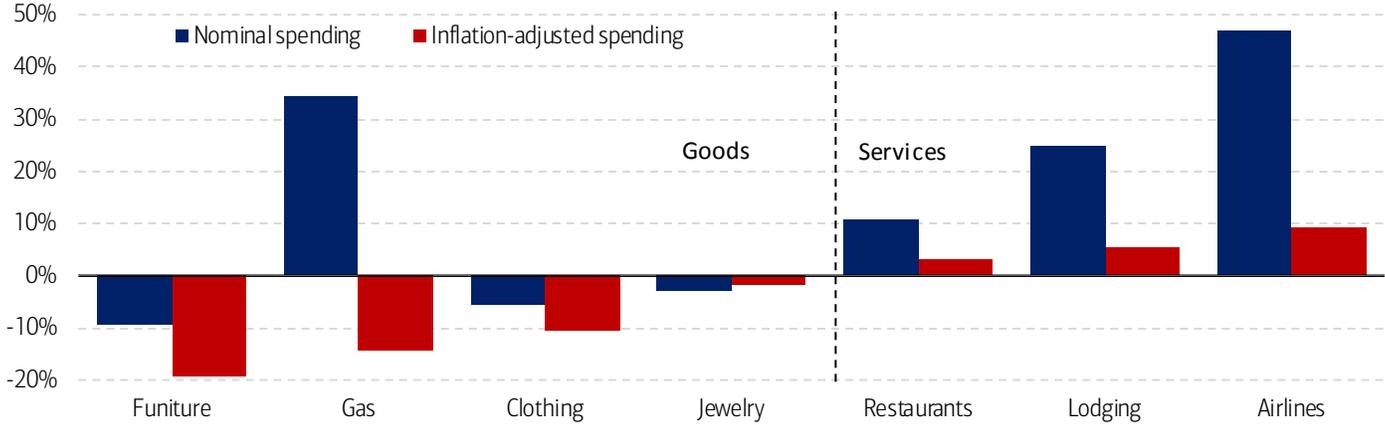
## Consumer at your service

In addition to the income breakdown, we also compare nominal and real spending for major categories based on aggregated Bank of America card spending data. On a nominal basis, services spending is seeing broad-based strength in %YoY growth with airline spending leading the gains. Meanwhile nominal goods spending for major categories, other than gas, actually saw %YoY contraction in May. After adjusting for inflation, we found that the entirety of gains in gas spending was driven by higher prices

as real gas spending actually fell 14% YoY in May. The good news is that the strength in nominal services spending was only partially driven by higher prices and real spending remained positive in May for airlines, lodging and restaurants at 9.3%, 5.6% and 3.3% YoY, respectively (Exhibit 4). These results are not surprising given the ongoing rotation away from goods spending to services spending. Note that a significant amount of services spending, such as rent and utilities, is not usually done on cards but we believe the strength in these card-related services sectors point to resilience in the overall services sector, which we believe should continue to support aggregate consumer spending.

**Exhibit 4: Nominal and inflation-adjusted (“real”) goods and services spending %yoy growth in May 2022, based on aggregated Bank of America consumer credit and debit cards**

Goods spending was down on an inflation-adjusted basis across the board while services spending growth remained positive due to strong pent up demand



Source: Bank of America internal data, Bureau of Labor Statistics

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## Sources

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## Methodology

Selected Bank of America transaction data are used to inform the macroeconomic views expressed in this report and should be considered in the context of other economic indicators and publicly available information. In certain instances, the data may provide directional and/or predictive value. The data used are not comprehensive; they are based on aggregated and anonymized selections of Bank of America data and may reflect a degree of selection bias and limitations on the data available.

Total payments include total credit card, debit card, ACH, wires, billpay, person-to-person, cash and checks. The payments data represents aggregated spend from Retail, Preferred, Small Business and Wealth Management clients with a deposit account or credit card. Data is not adjusted for seasonality, processing days or portfolio changes, and may be subject to periodic revisions. Aggregated card spend is based on processing date while the 'per household' measure is based on transaction date.

The household consumer deposit data based on Bank of America internal data is derived by anonymizing and aggregating data from Bank of America consumer deposit accounts in the US and analyzing that data at a highly aggregated level. Monthly data includes those households that had a consumer deposit account (checking and/or savings account) for all 40 months from January 2019 through April 2022.

Bank of America credit/debit card spending per household include spending from active US households only. Only card holders making a minimum of five transactions a month are included in the dataset. Spending from corporate cards are excluded. Data regarding merchants who receive payments are identified and classified by the Merchant Categorization Code (MCC) defined by financial services companies. The data are mapped using proprietary methods from the MCCs to the North American Industry Classification System (NAICS), which is also used by the Census Bureau, in order to classify spending data by subsector. Spending data may also be classified by other proprietary methods not using MCCs.

We calculate inflation %YoY for income groups by using consumption weights from Bureau of Labor Statistics' Consumer Expenditure Survey and matched with corresponding components from the CPI report.

Additional information about the methodology used to aggregate the data is available upon request.

# Disclosures

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