Key talking points

- We take a look at how consumers have historically adjust their spending during recessions and compare these findings to what Bank of America high frequency aggregated credit and debit card data is telling us right now. Our analysis suggests the consumer is not displaying the usual recessionary patterns at this time.

- Interestingly, we find that consumers do not necessarily dine out less during downturns, but rather they tend to shift to cheaper restaurants. Aggregated Bank of America card data indicates consumers currently are not shifting to this direction.

- Consumers also tend to cut back spending on durable goods during recessions. While aggregated Bank of America card data points to a slowdown in furniture spending, it is coming down from very high levels seen in the last two years.

- Travel spending also usually drops during recessions. However, aggregated Bank of America card spending data as of June points to the highest travel spending share since the pandemic began.

What is in your shopping cart?

Consumers adjust their spending behaviors notably during different phases of the economic cycle. During economic expansions, unemployment is usually dropping and an average household sees growing disposable income. With consumer confidence also high at this point in the cycle households are more likely to spend on discretionary items. In contrast during economic downturns, consumers will face slowing income growth and potentially rising concerns around the labor market which will lead them to cut back such spending.

In this report, we take a look at consumer spending data from the Bureau Economic Analysis (BEA) to identify how spending historically has changed during recessions. Given that the BEA data is published with a lag and the latest available data point was as of April, we also turn to the high frequency aggregated Bank of America credit and debit card spending data to understand what real-time spending trends suggest about the state of the macro economy. The bottom-line is we don’t see much to worry about at the moment.

Food for thought

Let’s first take a look at the share of total spending on food (including both ‘food at home’ and ‘food away from home’) using the monthly Personal Consumption Expenditure (PCE) data from the BEA. As Exhibit 1 shows, food spending as a share of total consumption has been declining over the last few decades. Food took up over 20% of total consumption in the late 1970s, compared with just 13.5% as of April 2022. As disposable incomes have risen over time consumers have spent more of their ‘wallet’ on other items, meaning the share of total expenditure on food has dropped.

### Exhibit 1: Share of total expenditure on food (monthly, %)
The share of food spending ticked up slightly during the 1990 and 2008 recessions and surged more notably during the 2020 recession

![Graph showing the share of total expenditure on food by month from 1978 to 2020](image)

**Source:** Bureau of Economic Analysis. Shaded areas mean recession.

### Exhibit 2: Share of total PCE on food at home and food away from home prior to and during recessions (%)
The share of food at home actually declined slightly during the 1981 and 2001 recessions

<table>
<thead>
<tr>
<th></th>
<th>Food at home (grocery)</th>
<th>Food away from home (restaurants)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12-mo prior</td>
<td>During recession</td>
</tr>
<tr>
<td>Feb - Jul '80</td>
<td>13.75</td>
<td>13.76</td>
</tr>
<tr>
<td>Aug ’81 - Nov ’82</td>
<td>13.38</td>
<td>12.99</td>
</tr>
<tr>
<td>Aug ’90 - Mar ’91</td>
<td>10.25</td>
<td>10.29</td>
</tr>
<tr>
<td>Apr - Nov ’01</td>
<td>7.99</td>
<td>7.98</td>
</tr>
<tr>
<td>Jan ’08 - Jun ’09</td>
<td>7.57</td>
<td>7.73</td>
</tr>
<tr>
<td>Mar - Apr ’20</td>
<td>7.13</td>
<td>9.36</td>
</tr>
</tbody>
</table>

**Source:** Bureau of Economic Analysis
In addition, the share of food spending did not see meaningful changes during recessions: it ticked up slightly during the 1990 and 2008 recessions and surged more notably during the 2020 recession which was driven by COVID-related lockdowns but was little impacted during the 1980, 1981 and 2001 recessions. Note that spending share is based on nominal spending which can be impacted by both prices and quantities.

Since food spending includes both food at home and food away from home (i.e. restaurants), one hypothesis is that during economic down-turns consumers will cut back dining out and cook more at home. Exhibit 2 lists the share of food at home and food away from home during the last six recessions as well as the 12-month period prior to the recessions. Interestingly, the share of food at home actually declined slightly during the 1981 and 2001 recessions compared with the 12-month period preceding the recession. Meanwhile the share for food away from home increased during three out of the six past recessions.

One possible explanation for the patterns above is that consumers don’t actually shift away from eating out during recessions, they just switch to less expensive options. In our view, a better measure that tracks consumer behavior change during recessions is the ratio of the share for spending at ‘limited services’ restaurants to spending at ‘full service’ restaurants. Limited services restaurants are things such as fast food chains which are usually cheaper than full service restaurants and may be more appealing during economic downturns. As Exhibit 3 shows, the ratio between limited services to full services restaurants tends to rise during recessions although not every notable increase in the ratio coincides with a recession.

What does high frequency Bank of America credit and debit card spending data tell us about the current position? We look at the ratio of spending between quick service (QS) and casual dining (CD) restaurants spending as a proxy for “limited services” and “full services” restaurants defined by the BEA in the PCE data. As Exhibit 4 shows, the ratio between QS and CD spending surged during 2020 when most of the CD restaurants were closed. As of June 18th, this ratio stood at around 4.5, a mild increase from around 4 at the beginning of the year. While there is some rise in the ratio of QS to CD spending this is gradual and not as the sort of rate we would expect if consumers were really anxious about recession.

How durable are durable goods spending?

One area of consumer spending that is more sensitive to economic cycles is durable goods, which includes autos, furniture, and appliances. Economists usually watch durable goods spending closely as it is often a leading indicator for real GDP growth. Durable goods usually have a higher sticker price and are more likely to be postponed by consumers during deteriorating economic conditions – purchases like new cars and sofas can often be delayed.

Looking just at furniture spending as a share of total PCE, the share usually starts dropping months before recessions and continues to decline during recessions. Another factor that makes furniture spending even more sensitive to recessions is that an economic recession also usually correlates with a softening housing market (i.e. a drop in home sales), which in turn dampens demand for furniture (Exhibit 5).

What does aggregated Bank of America credit and debit card spending data tell us? Exhibit 6 shows furniture spending as a share of total card spending has been on a downward trend since December 2020. However furniture spending surged in 2020 due to pandemic related to working from home. And the share of furniture spending has since gradually came down partially because consumers increased spending elsewhere, particularly for services, as the economy reopened. In fact despite the drop in furniture share, it is roughly in line with the levels seen in 2019, which was a period of economic expansion. That said, the risk is that we would see further slowdown in furniture spending going forward as a series of expected rate hikes from the Federal Reserve slows down the economy, particularly the housing market. We will continue to monitor developments here closely.
Travel less when times are bad

Finally we take a look at travel spending, which includes both airlines and hotels spending. As Exhibit 7 shows, travel spending as a share of total PCE usually drops during recession. This makes sense given that travel spending is one of the main components for discretionary services spending and is highly sensitive to economic conditions. The drop in travel share can be due to both consumers cancelling vacations to save money or switching to cheaper travel destinations. Note that the travel share of total PCE plummeted in 2001 following the September 11 attacks and again in 2020 due to COVID-related travel restrictions.

The latest aggregated Bank of America credit and debit card data suggests travel spending (airlines + lodging) as a share of total card spending continue to edge higher, at around 4.9% as of June 18th on a 7-day moving average basis. This is the highest level since the pandemic and is just shy of the 5.2% during the same period in 2019. There remains a considerable amount of pent up demand for travel and despite surging travel costs, we continue to see resilience in travel spending.

Monitoring Dashboard

Overall during economic recessions consumers tend to dine out at cheaper places, purchase less durable goods and go on less vacations. We see these as key areas to monitor going forward as the economic outlook evolves. While the high frequency aggregated Bank of America credit and debit card spending data shows some cooling in furniture spending we do not see warning signs in other areas at this time.

Exhibit 8: Key spending indicators, based on aggregated Bank of America credit and debit card data (7-day moving average)

As discussed in this article, Bank of America credit and debit card spending data shows some cooling in furniture spending but no warning signs in other areas.

<table>
<thead>
<tr>
<th></th>
<th>18-Jun</th>
<th>28-May</th>
<th>7-May</th>
<th>16-Apr</th>
<th>26-Mar</th>
<th>5-Mar</th>
<th>12-Feb</th>
<th>22-Jan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of Quick Service to Casual Dining</td>
<td>4.48%</td>
<td>4.35%</td>
<td>4.23%</td>
<td>4.13%</td>
<td>4.08%</td>
<td>4.09%</td>
<td>4.20%</td>
<td>4.20%</td>
</tr>
<tr>
<td>Furniture spending as a share of total card spending</td>
<td>-12.0%</td>
<td>-11.0%</td>
<td>-11.7%</td>
<td>-13.6%</td>
<td>-20.0%</td>
<td>-4.3%</td>
<td>3.4%</td>
<td>-3.0%</td>
</tr>
<tr>
<td>Furniture spending %yoy</td>
<td>4.9%</td>
<td>4.6%</td>
<td>4.2%</td>
<td>4.3%</td>
<td>4.5%</td>
<td>4.2%</td>
<td>4.1%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Travel spending as a share of total card spending</td>
<td>16.9%</td>
<td>22.4%</td>
<td>35.8%</td>
<td>35.7%</td>
<td>44.8%</td>
<td>74.3%</td>
<td>104.0%</td>
<td>93.8%</td>
</tr>
<tr>
<td>Travel spending %yoy</td>
<td>16.9%</td>
<td>22.4%</td>
<td>35.8%</td>
<td>35.7%</td>
<td>44.8%</td>
<td>74.3%</td>
<td>104.0%</td>
<td>93.8%</td>
</tr>
</tbody>
</table>

Source: Bank of America internal data. Note: red means spending closer to recessions trends.
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Sources
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Senior Vice President, Global Risk Analytics

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 (automated clearing house), 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.

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

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