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## Predicting consumer behavior

20 June 2023

- The CPI showed continued disinflation in May, especially when excluding spending categories with accelerating price growth such as shelter and used cars and trucks. Excluding these outliers, growth has come down to the pre-pandemic rate on a monthly basis and annual growth has fallen to just above 4%. Additionally, both final demand and personal consumption in May's PPI point to consistent disinflation. CPI data in Q2 of this year looks promising, but declaring victory on the inflation war would be premature.
- Growth in real retail sales is continuing along the post-2022 trendline as consumers continue to spend. Households accumulated historically high levels of cash and cash equivalent deposits since the pandemic, but they have been experiencing declines since Q4 of last year. The next few months will be a test on what drives household consumption more, the amount of money in the bank or its rate of change.

### CPI data support Fed's June pause

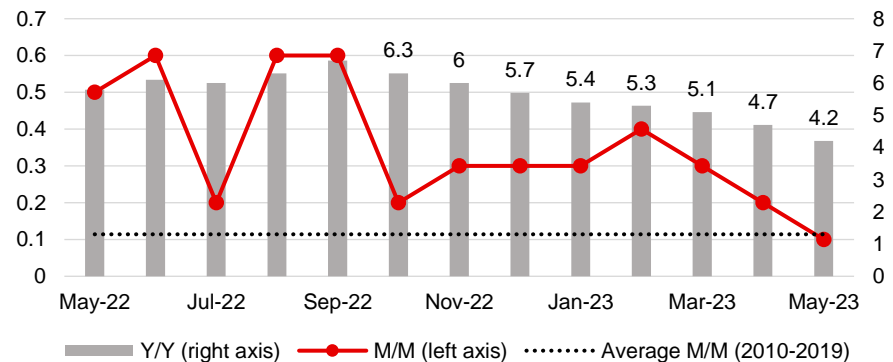
June's FOMC meeting concluded with the first pause in this hiking cycle, but the tone remained hawkish. Comments from the Fed chairman left open the possibility of additional hikes, citing the continued strength of the labor market and elevated PCE inflation as major reasons. The CPI, on the other hand, looks to be more supportive of the Fed pause vs just a June skip, though it is not the Fed's preferred inflation measure.

Annual growth in headline CPI has fallen to 4.1% in May, with food positively contributing 0.89% points and energy negatively contributing 1.0% points. Shelter is the largest component of the CPI and it remains as the largest positive contributor, adding 2.6% points in May.

While this hiking cycle has certainly cooled the US housing market, the impact across the country has not been proportional. Housing demand and prices have fallen the most in regions with declining populations, such as the West Coast and parts of the Northeast. But in the South, demand has been resilient compared to the rest of the country. This, in part, has helped maintain elevated "official" housing inflation from government sources.

### Core inflation looks promising when excluding shelter and used autos

*CPI, all items less food, shelter, energy, and used autos, %*



Source: BLS, MUFG Bank Economic Research

The shelter component of the CPI can be treated as an outlier because it operates with a significant lag, and this lag looks to be longer than anticipated. Private sector measures of new rents and housing prices have shown strong disinflation and even deflation in many parts of the country. This is expected to eventually be reflected in the CPI, which attempts to capture new rents and model inflation for existing rents.

However, as noted, there is significant variation in housing inflation across the country. The CPI is computed as a statistical average across US cities so regions with greater housing shortages and growing populations are going to apply upward pressure on the shelter component. Methodology may be the driving force behind strong shelter inflation in the CPI, which is why treating it as an outlier may be appropriate, but it shouldn't be dismissed entirely given the real impact of housing shortages in parts of the country.

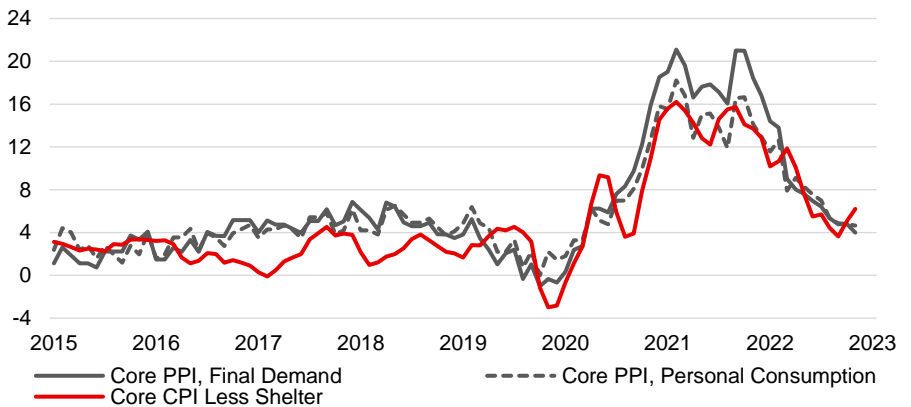
A case for treating used autos as an outlier can also be made. The pandemic severely disrupted supply lines and production of new autos, which in turn, reduced future availability of used autos. Shortages in this market aren't necessarily reflective of the goods industry as a whole, so excluding the latest acceleration in used car prices may be appropriate.

Core CPI with both shelter and used autos treated as outliers paints a rosier picture, with annual growth falling to 4.2% in May compared to 5.3% when looking at just core CPI. Monthly growth has also fallen for the third consecutive month and is now at the average monthly growth rate of the years before the pandemic.

The May PPI also shows continued disinflation, with final demand excluding food and energy dropping to 4% at a 6-month annualized growth rate. Personal consumption in the PPI, which is more comparable by definition to the CPI, is also showing strong disinflation, falling to 4.6% at a 6-month annualized growth rate.

### Producer and consumer prices are showing continued disinflation

PPI and CPI, 6-month change, % annualized



Source: BLS, MUFG Bank Economic Research

Inflation data from the BLS look promising, but it would be premature to say the inflation battle is won. Picking and choosing which components to exclude, even with logical reasoning, runs the risk of producing false signals. The labor market and consumer spending continue to be strong, and they present ongoing upward inflationary pressures. Risks of re-emerging inflation waves have not dissipated, likely one of the reasons the Fed is maintaining a hawkish tone.

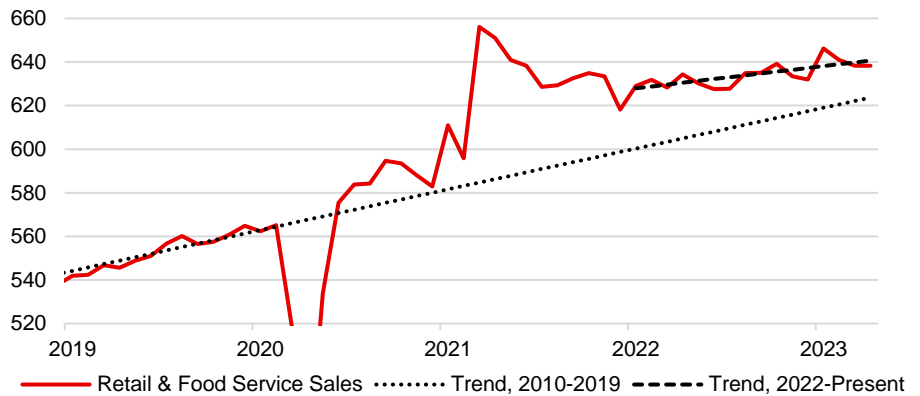
### Forecasting consumer spending has been difficult

Retail and food services sales rose again in May (+0.3%) following a rise in April (+0.4%). Growth was widespread across several different types of retailers including automotive dealers, food service retailers, and non-store retailers. Consumer spending remains resilient in the face of higher lending costs and a looming recession, with growth moving along a new trend that emerged in 2022.

Recessions typically induce a downward level shift in retail sales, followed by a new growth trend. The COVID recession was unique in that the recovery was immediate and strong, with retail sales exceeding the pre-COVID trend in just a matter of months. Waves of infections and shutdowns contributed to severe volatility up until 2022, where monthly growth appears to have stabilized. Monthly changes in retail sales will likely move along this post-2022 trend for another couple of months.

### Retail sales continue along the post-2022 trend

Real retail sales, billions



Source: Census Bureau, MUFG Bank Economic Research

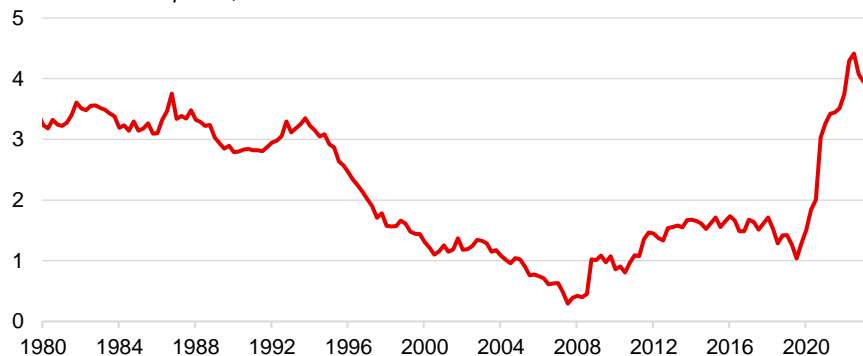
Consumer spending is perhaps the biggest reason the US has avoided a recession so far (both for goods and services) and the strong labor market has certainly enabled continued consumption. But the strength of the labor market can also be viewed as a byproduct of strong consumption where businesses seek to expand employment to meet consumer needs. In today's environment, consumption driving employment demand looks to be the dominant explanation.

But how long can consumption continue for? Since the pandemic, households have accumulated historically large amounts of assets from monetary and fiscal stimulus. Much of this growth has come in the form of liquid assets, or checkable deposits and currency. Since the late 90s, deposits and currency declined as a share of total assets for households and nonprofits up until the 2008 recession where the share grew slightly. It wasn't until 2020 where the liquid share of assets accelerated to levels not seen for over 40 years.

This is one potential reason that quantitative easing post-2008 didn't contribute to accelerating consumer prices. Inflation then came in the form of other assets, whereas cash drives consumer spending. Households have become cash rich post-2020, likely a significant contributor to consumer spending and prices.

### High household liquidity is supporting consumer spending

Checkable deposits and currency as a share of total financial assets, households & nonprofits, %



Source: Federal Reserve, MUFG Bank Economic Research

In Q4 2022 and Q1 2023, this share has started to decline because the level of liquid assets is falling faster than other assets. This is expected to hamper consumer spending in the coming months but it's unclear by how much. The share of checkable deposits and currency to other assets is still historically very high for households and nonprofits.

If households have become accustomed to holding such high levels of liquid assets relative to other assets, this declining share will see consumer spending slow. But if level is more important than the rate of change, then we will need to see much more cash leave household bank accounts before any significant reduction in spending will occur.

Being half-way through 2023 means over 3 years since this household cash expansion began. This may be enough time for households to enter a "new normal" where the rate of change becomes a larger predictor of future spending than the level. If this is the case, we can expect consumer spending to slow markedly in the second half of the year.

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