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RESEARCH

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Letting The Data Guide Us On Inflation

Federal Reserve Chair Jerome Powell continues to emphasize that incoming data will guide changes in monetary policy. The challenge for the Fed is that the data often have collection issues and lags and sometimes send mixed signals. Such was the case as the Consumer Price Index (CPI) for March suggested inflation was stronger than expected, while the Producer Price Index (PPI) showed modestly weaker than expected inflation for the same period.

The Fed has the capability to look through the vagaries of the data and draw their own conclusion. They also have additional data coming in, including their preferred inflation measure Personal Consumption Expenditures (PCE).

The latest CPI and PPI data created significant volatility in financial markets, bond yields rose, and the probability of a June federal funds rate cut by the Federal Open Market Committee (FOMC) declined.

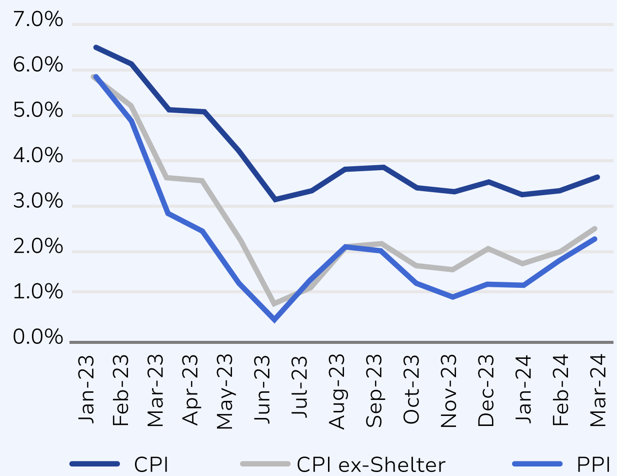
While we understand the desire for market participants to try to handicap Fed policy, we think strong reactions to these data releases give their accuracy a little too much credit. The Fed itself has acknowledged shortcomings in the headline economic data and the potential for revisions. With this in mind, we expect the Fed to be holistic in their assessment of the available data. For inflation specifically, that means understanding trends in broader, market-based measures of prices and not just the limited samples of data that are often used as key components of government price indices.

Given recent data releases, it seems like a good moment to evaluate the data and do a deeper dive into how inflation is trending through our lens, leveraging our data lake, Roofstock Rental Genome. Specifically, we took a closer look at CPI data, which has a very high weighting to shelter of more than 36%.

Shelter is a major driver of high headline CPI over the past year

March 2024 Inflation Data	M/M	Y/Y
CPI	0.4%	3.5%
CPI ex-Shelter	0.4%	2.3%
PPI	0.2%	2.1%

Year-over-Year Change



Source: U.S. Bureau of Labor Statistics

Shelter inflation wasn't the "surprise" in the latest CPI report, but it is the main factor keeping the headline numbers high. CPI growth is much closer to the Fed's 2% target with shelter excluded, as we see in the chart on the previous page. Compounding the impact of shelter's high weighting in the index are the measurements of growth being used. Here's a quick overview of the two primary components of the shelter metric:

Rent of Primary Residence: 7.7% of the overall CPI index, increased 5.7% year-over-year as of March – these data reflect calculated rent growth for renter households occupying all types of rental housing in the U.S. extrapolated from the CPI Housing Survey, which is limited in terms of both home count and geography and tends to be dominated by continuing leases versus new leases.

Owners' Equivalent Rent (OER): 26.8% of the overall CPI index, increased by 5.9% year-over-year as of March – the largest subcomponent of CPI by weight, OER is intended to measure shelter inflation for owner-occupier households; owners are surveyed to help the BLS understand the weightings of the various components of housing costs, but the actual growth in OER is derived from rent changes in comparable rental units from the CPI Housing Survey.

The BLS methodology to calculate rent growth for these two components is clearly resulting in stronger price gains than broad-based market measures of rent growth on new leases would suggest. To better assess the accuracy of these two shelter components we sought to generate comparable indices using our automated valuation model (AVM) within Rental Genome and other sources. For rent of primary residence we applied rent growth rates to the different types of rental housing using housing stock weights reported by the U.S. Census Bureau's American Community Survey. The growth rates for this component were derived from our rent AVM for single-family rentals (using 3–5-bedroom homes as a proxy), which increased by 2.6% year-over-year, and the growth rate for U.S. multifamily housing asking rents of 0.9% as reported by Yardi Matrix.

Our blended growth rate for rent of primary residence was just 1.4% year-over-year as of March, a far cry from the 5.7% reported by the BLS. The more muted rent growth we calculated comports with residential landlord sentiment, anecdotal and visible concessions offered to prospects, and a more sluggish leasing environment we observe and hear about from industry peers and participants.

For OER, we applied our rent AVM to the owner-occupied housing stock. Similar to our approach with single-family rental above, we focused on rent growth within 3–5-bedroom homes as a proxy for growth in this component. Neighborhood quality is modestly better for these homes on average and the growth rate was slightly stronger than for single-family rental homes, at 2.7% versus 2.6%. While not as dramatically lower versus BLS data as rent of primary residence, 2.7% is still less than half the 5.9% BLS value for OER.

Housing costs for new owner occupiers likely grew close to the reported BLS estimate given rising home prices and mortgage rates, but the increased burden only affects the small number of households who purchased a home over the past year. Most existing owner occupiers either have a fixed-rate mortgage or own their homes free and clear resulting in little to no shelter inflation, although growth in related services can certainly occur.

Rolling these values up into the shelter figures we estimate overall shelter growth of 2.3% and resultant CPI growth similarly at 2.3%, as detailed in the table below. Monetary policy functions with long and variable lags, but the Fed's current stance does seem to be putting inflation more on track to reach the 2.0% target than headline CPI indicates. We submit that the Fed may be, or ought to be, considering a broader set of inputs beyond reported metrics of inflation as it contemplates when to begin and how to pace changes in monetary policy this year. Admittedly their task is not an easy one given the tight labor market, sturdy consumer spending, and an uncertain geopolitical landscape. Market participants should be more circumspect about the headlines, while preparing for the inevitable bumps and twists in the road.

YOY CPI & CPI Component Growth – March 2024

	CPI COMPONENT WEIGHTS	GROWTH - BLS REPORTED	GROWTH - ROOFSTOCK ADJUSTED RENTS
CPI ex-Shelter	63.8%	2.3%	-
Shelter	36.2%	5.7%	2.3%
Rent of Primary Residence	7.7%	5.7%	1.4% *
Lodging Away from Home	1.3%	-1.9%	-1.9%
Owner's Equivalent Rent	26.8%	5.9%	2.7% **
Tenants' & Household Insurance	0.4%	4.6%	4.6%
CPI Overall	100.0%	3.5%	2.3%

Source: U.S. Bureau of Labor Statistics (BLS), U.S. Census Bureau, Yardi Matrix, Roofstock Rental Genome, Roofstock Research
*Rental Genome rent AVM for renter-occupied 3-5 bedroom homes, U.S. Census Bureau, Yardi Matrix, Roofstock Research estimates
** Rental Genome rent AVM for owner-occupied 3-5 bedroom homes

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