Economic Analysis

Interpreting April's CPI: no reflation for now

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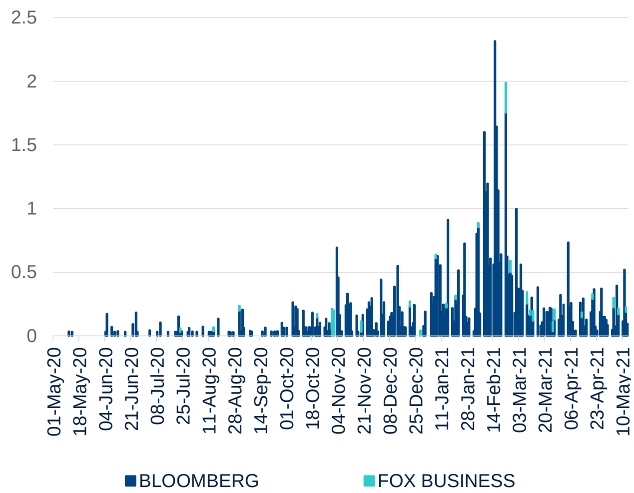
Fears of uncontrollable inflation are a recurrent phenomenon happening almost every time when the government passes a significant stimulus bill. The most recent episode has been focusing on the American Rescue Plan, which is the $1.9 trillion coronavirus relief package signed on March 11, 2021. (Figures 1 &2)

In recent data released by BLS, the CPI inflation for April reads 4.2% year-over-year, the highest since the Great Recession. This sharp rise in the price level adds to people's concern over uncontrollable inflation and seems to support the claim that the current fiscal stimulus may "overheat" the economy. In this brief, we will examine this claim by looking at the sector-level inflation data. Economic overheating will require prices in most sectors to show an upward trend. In other words, if the rapidly rising CPI in April comes from temporary price surges in one or two sectors, we should expect the inflation data to be "back to normal" soon.

Figure 1. **WORDCLOUD ON REFLATION**

Source: GDELT TV Explorer

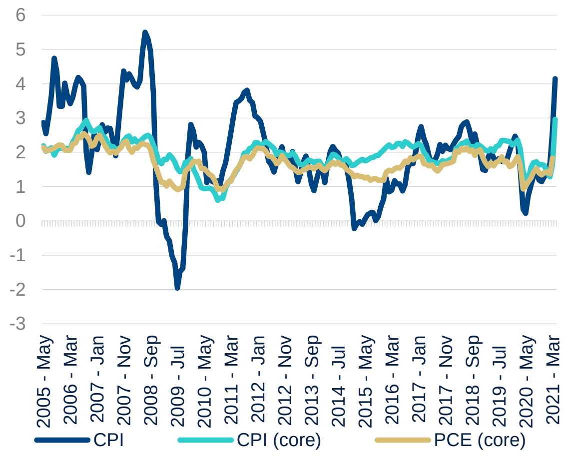
Figure 2. **MEDIA COVERAGE ON REFLATION**



Source: GDELT TV Explorer and BBVA Research

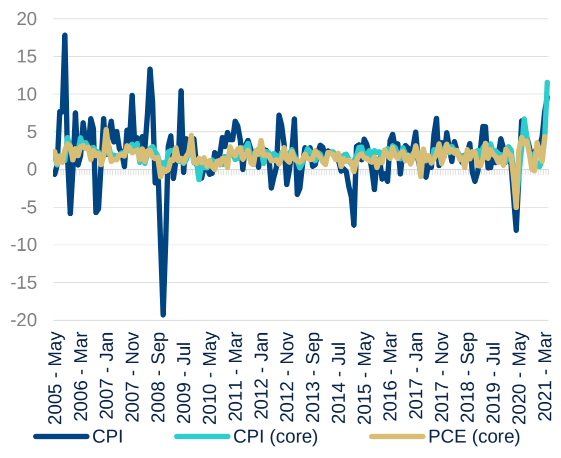
In Figure 3, we plot three indicators of inflation: the CPI inflation, the core-CPI inflation, and the core-PCE inflation. All three measures of inflation are calculated as the 12-month growth rate (year-over-year growth). Among all three, the CPI inflation is the most common and talked-about, and it reads 4.2% for April 2021. However, as we can see from the figure, this CPI inflation is very volatile, because prices of food and energy prices can fluctuate dramatically due to temporary supply and demand imbalances. In other words, overly volatile prices of food and energy products could dominate the change of CPI and mask price changes from other sectors.

Figure 3. **INFLATION (YEAR OVER YEAR)**
%



Source: BLS, BEA, Haver, and BBVA Research

Figure 4. **INFLATION (MONTH OVER MONTH)**
%, SAAR



Source: BLS, BEA, Haver, and BBVA Research

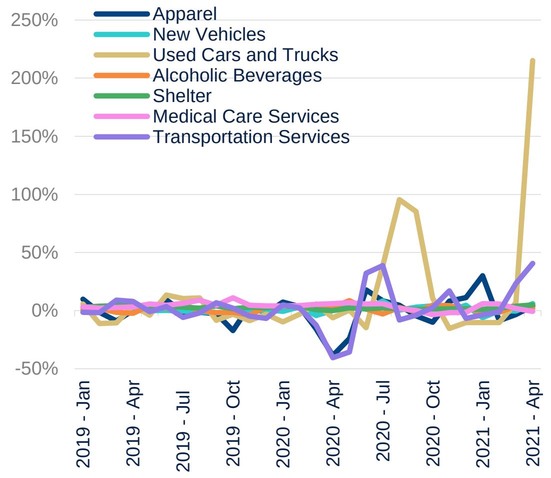
Therefore, a more commonly used inflation indicator by investors and policymakers is the change in prices of all items, excluding those from the food and energy sectors. When we look at Consumer Price Indexes from the BLS, this indicator is called core-CPI. As we can see from Figure 3, the core-CPI inflation is significantly less volatile than the CPI inflation. While staying under 2 percent since the Pandemic, it reached 3 percent in April 2021 – also a record high since the Great Recession. It is worth mentioning that the most important price indicator is the core-PCE price index published by the BEA. It is defined as personal consumption expenditures (PCE) prices excluding food and energy prices. When the Federal Reserve talks about the 2 percent inflation target, it refers to the inflation rate measured by the core-PCE price index.

The year-over-year indicator has another caveat. As goods and services prices collapsed in April 2020 due to the first wave of the Pandemic, the low base could potentially introduce a bias to year-over-year price changes in April 2021. We can have a much different picture from the annualized month-over-month numbers. As Figure 4 shows, prices moved dramatically since the beginning of the Pandemic, as disruptions in both supply and demand sides created significant market imbalances. Moreover, the monthly growth rate (annualized) of core-CPI surged to 11.6% in April 2021, another record high after the Great Recession. As recent inflation numbers before March 2021 are within the “normal” range, the high reading for April implies that some prices must have extraordinary growth.

Therefore, we look at the core-CPI inflation at the sector level. In Figure 5, we plot the month-over-month price inflation by sector. As we can see, in April, at an annualized rate, the price index for the used cars and trucks sectors increased more than 200%. Meanwhile, the price index for the transportation services sector increased 46%. Besides outliers in those two sectors, price increases in other sectors all seem “normal” for April.

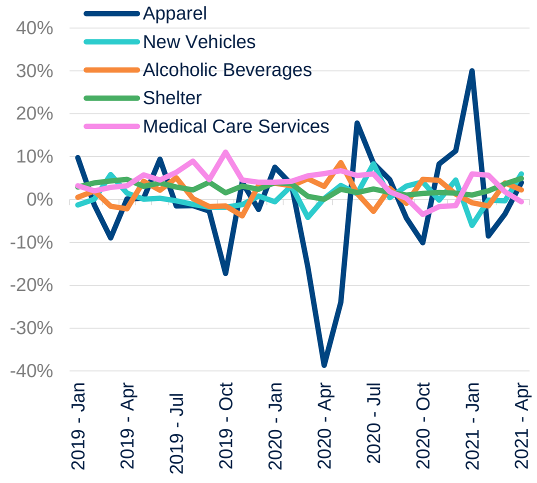
The price hikes in the used vehicles and transportation services sectors are expected to be temporary. Businesses and individuals are switching back to their pre-pandemic lifestyles, creating a temporary under-supply of goods and services for transportation. Since we do not have any reason for an extended period of shortage in either used cars or transportation services, upward price pressure will gradually disappear.

Figure 5. **INFLATION BY SECTOR**
%, SAAR MoM



Source: BLS, Haver, and BBVA Research

Figure 6. **INFLATION BY SECTOR**
%, SAAR MoM



Source: BLS, Haver, and BBVA Research

In a nutshell, the high reading of April's CPI inflation results from a temporary imbalance in the markets of goods and services for transportation. Prices in other sectors are still within their "normal" range. At least for now, we do not have enough evidence to support the reflation claim.

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