



Macro

# What’s driving higher inflation and what to expect in 2022

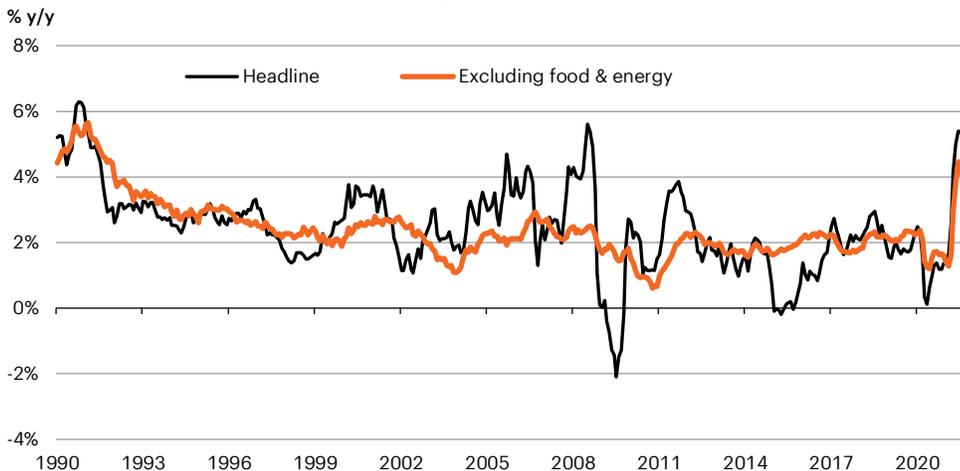
As inflation accelerates to 6.8% year/year, the highest rate since 1982, the outlook for what’s next warrants a close look. We build a bottom-up scenario based on the various drivers of inflation on seven key categories. We expect inflation to ease to around 3% by the end of 2022, but the current elevated pace could remain through Q1 of next year. Markets may need to get comfortable with uncomfortably high inflation in 2022.

The consumer price index rose 0.8% in November, putting inflation at 6.8% year-over-year, the highest since 1982. Inflation’s acceleration this year has been disquieting—at the start of 2021, inflation was just 1.4% y/y. In November, energy prices rose 3.5% month/month, while food prices posted a gain of 0.7%, continuing the upward price pressure on the two sectors that impact virtually every household. Core inflation—which excludes food and energy—rose 0.5% in the month and is now up 4.9% y/y, also a fresh 30-year high. In November, most categories continued to show inflation far above pre-pandemic trends. New and used vehicles posted 1.1% and 2.5% monthly gains (respectively), and used car & truck inflation is now at 31.4% y/y. Even sectors known for driving deflation are showing rising prices; apparel prices rose 1.3% in November, up 5.0% y/y. On the services side, owners equivalent rent (OER), rose 0.4% for the third month in a row. Households are facing rising inflation bubbling up from almost every corner of the economy.

### Key takeaways

- CPI hit 6.8% y/y in November, the highest since 1982.
- We develop a bottom-up scenario based on 7 broad categories in CPI.
- Headline inflation could stay near multi-decade highs into Q1 2022.
- We expect inflation to ease to 3% y/y by end-2022, enough to erode nominal returns and remain a challenge for traditional investments.

### Consumer price inflation continues to surge



Source: Bureau of Economic Analysis, as of December 10, 2021.

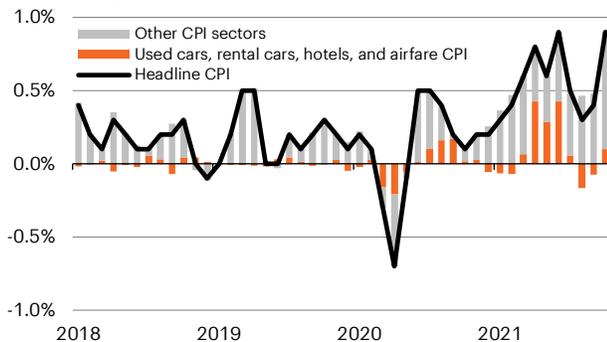
## How we got here

To understand how rising prices seeped into nearly every sector of CPI we consider three broad categories driving inflation: reopening recovery, durables demand boom, and rising wages.

The first phase of elevated inflation was both technical and demand driven. The initial reopening of businesses in Q3 after the initial shutdowns enabled a rapid recovery in industries particularly hard-hit by the onset of COVID-19. Airplane tickets, hotels, and rental cars (all travel-related services that account for only 1.8% of CPI) experienced acute double-digit price drops from March through May 2020. As the economy reopened, prices in these sectors began a choppy recovery. However, the year-over-year calculation in Q2 2021 (compared with a year earlier), showed a dramatic base-effect causing inflation in airline ticket prices to rise 24.6% y/y and rental car prices to hit 87.7% y/y in June.

We can also bucket in new and used car prices to this early wave of inflation in Q2 2021. While used and new car prices dipped only slightly at the beginning of the pandemic, fiscal stimulus to households plus reopening activity caused a large demand for cars, as many sought an alternative to public transportation. The semi-conductor shortage also began to limit auto production, causing a rotation from new to used car purchases. When bucketed together, the four categories of airfare, hotels, rental cars, and used cars prices account for a mere 5% of total consumer price inflation, but in the months from April–June 2021, they contributed to about half of the rise in inflation.

### Reopening sectors initially drove inflation



Source: Bureau of Labor Statistics, as of December 6, 2021.

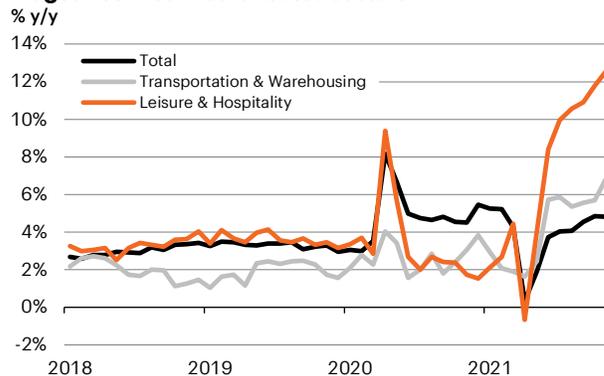
A second source of inflation has increasingly been price pressures caused by supply-chain bottlenecks which crashed headlong into the pivot of consumer spending from services to goods—namely durable

goods. The magnitude of this shift should not be understated: approximately \$1 trillion dollars has been redistributed from services to durables. Durable goods now account for 16.3% of household spend, vs a share of 13% before the pandemic.

Supply-chain shortages, which have received so much attention, directly impacted the supply of goods at the same time that demand jumped. Durable goods prices have been falling for decades and have contributed to the multi-decade trend of lower and decelerating household inflation. This makes the recent surge in prices all the more glaring, with durable goods inflation averaging 0.2%y/y over the past 10 years compared to 13%y/y over the last three months.

A third driver of household inflation is wages. In particular, wages for lower-skilled services jobs which have risen sharply, and are feeding through to the prices faced by households. The cost of food away from home (i.e., restaurants) has risen to 5.3% y/y, and accounts for 6.4% of CPI. Transportation services prices have surged to 4.5% y/y, adding to the trend of rising services prices. This feedback loop has caught the attention of policymakers and is one reason the Fed has made a significant pivot towards hawkishness over the past three months.

### Wages rise in service-oriented sectors



Source: U.S. Bureau of Labor Statistics, as of December 6, 2021.

Finally, rising energy prices have added to the perfect storm of factors driving consumer price inflation. Oil prices more than doubled from October 2020 to 2021. Household energy costs are more reflective of natural gas prices, propane and gasoline prices at the pump. All of these have pushed energy CPI up to 33.3% y/y in November.

Put it all together and inflation that once was described as “transitory” is now feeling significantly more entrenched. Higher food and energy costs,

which disproportionately impact lower income households have started to be a drag on consumer confidence. And while wages are rising at a historically high rate, the increase is less than inflation, meaning that real wages are falling. The direction that inflation will take looms as one of the most important economic questions facing households, policymakers and investors in 2022.

**Inflation from the bottom up**

Macro economists often build inflation forecasts from the top down, using an approach based on the output gap. In theory, a non-inflationary rate of GDP growth (also called equilibrium growth) and a corresponding non-inflationary equilibrium unemployment rate exist, and do not cause real wages to rise and thus not spark broader inflation. However, this approach has proven problematic. In much of the 2010s, a low and falling unemployment rate caused less wage pressure than expected and did not feed through to headline inflation.

Currently, higher wages are a part of inflation dynamics, but broad inflation is also being driven by factors beyond the traditional Phillips Curve output gap framework. We take a bottom-up approach to our inflation outlook over the next year. To simplify, we focus in on seven broad categories of CPI: Food, energy, durables, non-durables, OER, transportation and other services. It is clear from the column graph how broad-based inflation has become.

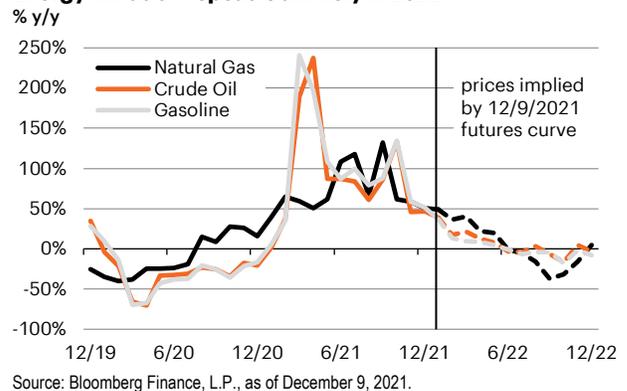
Looking ahead, constructing an outlook by category may give more insight into 2022 than relying on more traditional macro models driven by the unemployment rate.

**Energy in 2022**

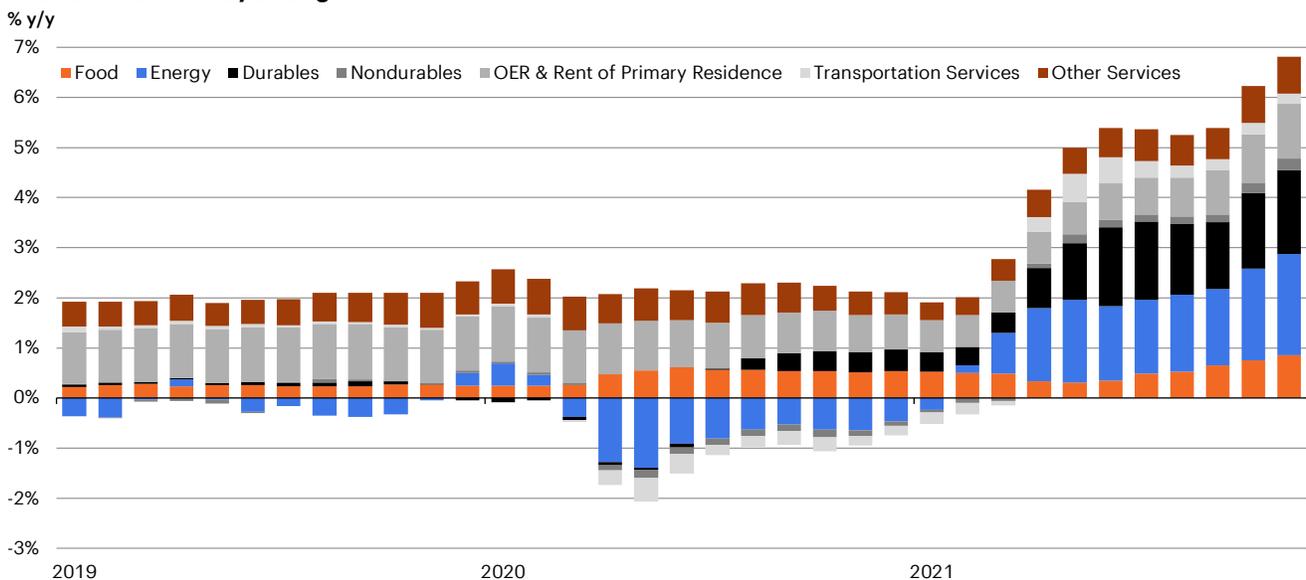
Energy accounts for 7.3% of the total consumer price index, but over the past year, has contributed to almost a third of inflation. Energy prices are notoriously volatile, so for energy to have such an outsized impact on headline inflation is not atypical. As recently as 2008, oil prices hit almost \$150/bbl, causing CPI to rise above 6.0% y/y.

From October 2020 to 2021, oil prices doubled from \$35.79/bbl to \$83.57/bbl. Supply disruptions impacted natural gas, which hit a 7-year high in October, as well. Gasoline prices followed, and all together drove the energy CPI index up 33.3% y/y in November 2021.

**Energy inflation repeat is unlikely in 2022**



**Contributions to CPI by 7 categories**



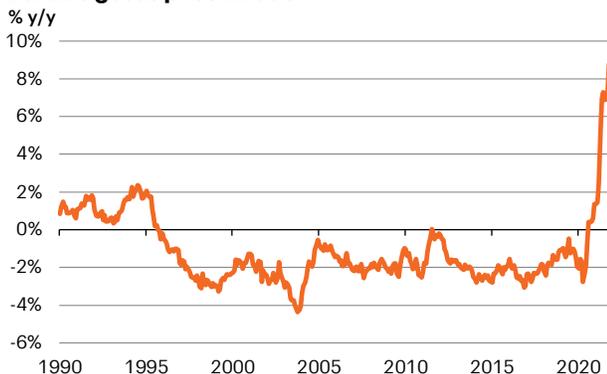
Source: Bureau of Labor Statistics, FS Investments, as of December 10, 2021. See explanatory note at end of article for definition of categories.

In 2022, energy prices are unlikely to duplicate this upward trajectory. Energy commodity prices have eased in November. The futures curves show that energy prices are expected to moderate further. Though futures curves can easily be wrong, even if oil prices rise from here to \$100/bbl – which is not the consensus – that would imply a 37% increase over the coming year, far less than we experienced last year. We assume energy CPI decelerates in the first two quarters of next year and remains flat in H2.

### The exceptional case of durable goods

Surging durable goods prices have contributed almost a quarter of inflation year-to-date, as super-charged demand collided with supply-chain disruptions. It is critical to appreciate that for decades, durable goods prices have been falling—a secular deflation caused by the U.S. opting for cheaper manufacturing abroad that has kept downward pressure on CPI since the 1990s. The jump in durable goods inflation to 13.2% y/y in November is truly glaring.

#### Durable goods price inflation



Source: Bureau of Economic Analysis, as of December 10, 2021. PCE deflator is shown, as there is a longer history than CPI durable goods data.

For now, this trend shows little sign of slowing. There are early signs that supply-chain bottlenecks are easing. Anecdotal reports like the Beige book—a Fed survey of regional of regional business leaders—showed that supply-chain was mentioned less as a concern than the prior two surveys. And the number of ships waiting to offload has started to subside, although remains at high levels.

However, demand remains strong. Production of new cars remains hampered by semiconductor shortages, and monthly vehicle sales data shows unit sales are still flagging, which should keep upward pressure on new and used car prices. Import prices are up 10.7% y/y, but the stronger dollar could allow price pressures to ease at the margin.

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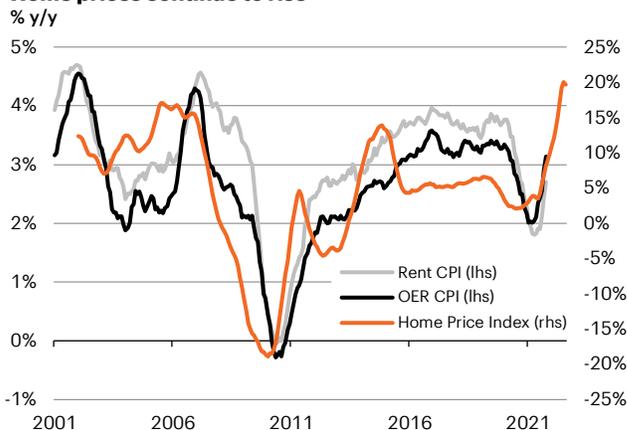
Looking to next year, we assume durable goods inflation continues well above its historic average in the first half of the year, although we allow for some moderation from the 2021 highs. Our expectation is that supply-chain bottlenecks will eventually be worked out by the end of next year but have stopped short of expecting durable goods deflation to return as soon as end-2022.

Nondurable goods, excluding food, is 14% of CPI, and is historically quite volatile. Nondurable goods inflation is up 2.2% y/y in November, even as some categories like apparel have seen recent price gains above historic norms. For our purposes, we have assumed a trend-like gain based on the long-run 2010-2019 average for 2022.

### Here comes OER inflation

So far during the pandemic, services prices have been held partly in check by low inflation in owners' equivalent rent (OER). This measure is meant to be a proxy for the monthly cost of shelter and makes up 23.6% of the entire CPI. As rental vacancies rose during the pandemic and renters initially abandoned higher-rent locales, OER fell to 0%/y/y at the start of 2021. That could change, however, as home prices are a historically reliable leading indicator of rents.

#### Home prices continue to rise



Source: U.S. Bureau of Labor Statistics, S&P Dow Jones Indices, as of December 6, 2021.

We expect OER to rise in the first half of 2022, playing a significant part in keeping CPI elevated. However, housing prices may decelerate from their super-charged 20% y/y increase. There are early signs that the housing market is normalizing, and as the Fed raises rates in 2022, housing may feel the impact given its interest rate sensitivity. We assume owners' equivalent rent will return to its pre-pandemic decade average of 2.7%/y/y by the end of 2022.

## Wages impact food and transportation

Closing out our bottom-up estimate, the impact of higher wages is being felt on food and transportation costs. Food price inflation, which drives a meaningful 14% of total CPI, has been consistently above the pre-pandemic average since early 2020. From the lens of the household, it is hard to imagine inflation that touches more people than high food prices. Food prices away from home—about half of the total food index—have been elevated because wages of restaurant workers are soaring. Food at grocery stores has also been impacted by the higher costs of transporting food.

Transportation services, a smaller share of CPI, have risen to 4.5% y/y, also on the back of higher wages and a worker shortage. There is little sign of this letting up: the JOLTS measure of job openings in this area hit 611,000 in October, just off its all-time high the prior month.

### Transportation job openings



Source: Bureau of Labor Statistics, series shown is JOLTS transportation, warehousing and utilities, as of December 10, 2021.

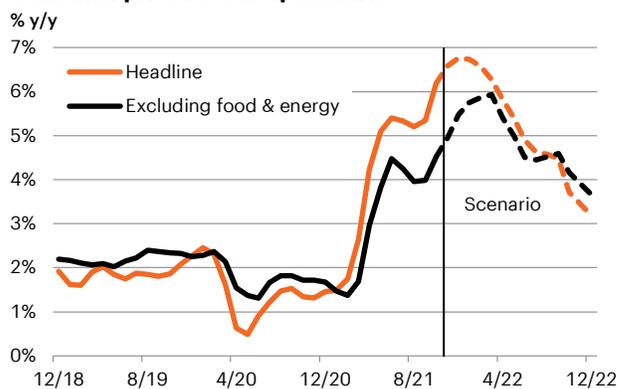
To round out our scenario for 2022, we have assumed inflation in both of these areas will remain at current levels through the first half of 2022, and ease modestly in the second half as the labor market slowly claws back some of the lost workforce. Wage pressure stands out as a significant unknown, however, and could cause inflation to become more entrenched through the feedback loop to household inflation already occurring in these two categories.

## Getting comfortable with higher inflation

The outlook for inflation remains highly uncertain. Many factors have combined to drive inflation to multi-decade highs. Furthermore, inflation has proven more broad-based and entrenched than had been expected at the start of the pandemic, or even at the start of 2021.

The double-digit inflation of the 1970s looms as a significant concern for many investors, even though it is not the consensus estimate or our expectation. What we have presented is but one possible scenario, based on the variety of factors acting upon prices right now. Given base effect calculations, even if inflation in some sectors begins to recede, the year-over-year numbers may move higher in Q1. Investors should brace themselves as inflation could remain in the headlines for some time.

### Consumer price bottom-up scenario



Source: Bureau of Labor Statistics, FS Investments, as of December 10, 2021. Scenario reflects the assumptions discussed in the article, and is not a forecast of inflation.

As we wrote in “Higher inflation has come for the 60/40,” it does not take runaway inflation to have a detrimental impact on traditional investment returns, particularly given historically low interest rates. We expect inflation to ease to around 3% by the end of 2022, enough to erode nominal investment returns and weigh on economic sentiment. Far from transitory, inflation will loom as a challenge for much of next year.

### Explanation of scenario categories

Energy, food, owners’ equivalent rent and transportation services categories are all represented by their CPI-defined subindices.

Other categories combine subindices and apply CPI-designated weights.

**Durable goods:** Household furnishings, recreation, education & communication, transportation.

**Nondurables goods:** Apparel, medical goods, alcoholic beverages, other goods.

**Other Services:** Lodging away from home, tenants’ & household insurance, water & sewer collection, household operations, medical care services, recreation services, Education & communication, other personal services

Categories are meant for illustrative purposes.

## **Lara Rhame**

Chief U.S. Economist, Managing Director

Lara is Chief U.S. Economist and Managing Director on the Investment Research team at FS Investments, where she analyzes developments in the global and U.S. economies and financial markets. Her fresh take on macroeconomic issues helps to inform and develop the firm's long-term views on the economy, investment trends and issues facing investors.

Lara is committed to the Philadelphia community and serves on the boards of the Economy League of Greater Philadelphia, Hyperion Bank and Starr Garden Park.

## **Investment Research**

Robert Hoffman, CFA  
Managing Director

Lara Rhame  
Chief U.S. Economist  
Managing Director

Andrew Korz  
Director

Kara O'Halloran, CFA  
Director

Contact  
[research@fsinvestments.com](mailto:research@fsinvestments.com)

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