

Credit Suisse Economics

US Economy Notes: Don't be alarmed by rising inflation in 2021

Core PCE inflation is likely to reach the Fed's 2.0% target next spring. We expect the pickup will take place just as growth is beginning to rebound. Widespread vaccination will likely be underway, leading to expectations of an even greater acceleration in spending.

On the surface, this will look like an overheating economy and a growth-inflation spiral, raising concerns that the Fed may need to pull back from their easy policy stance.

The pickup in inflation will be a misleading signal though, and the Fed is unlikely to react by tightening policy. Base effects from the collapse in prices last spring and a number of temporary factors will push YoY inflation higher. Meanwhile though, there are growing signs of disinflationary pressure.

Growth and inflation are connected, but the relationship is complicated and many components of inflation follow their own cyclical patterns. The pandemic has led to incredible volatility in macro indicators, but it has also unleashed idiosyncratic shocks which have affected specific sectors.

These bottom-up drivers of inflation are often predictable and in this case, they tell a clear story. Core inflation is on the rise, but the pickup will be short-lived.

CONTRIBUTORS

James Sweeney

212 538 4648

james.sweeney@credit-suisse.com

Jeremy Schwartz

212 538 6419

jeremy.schwartz@credit-suisse.com

Xiao Cui

212 538 2511

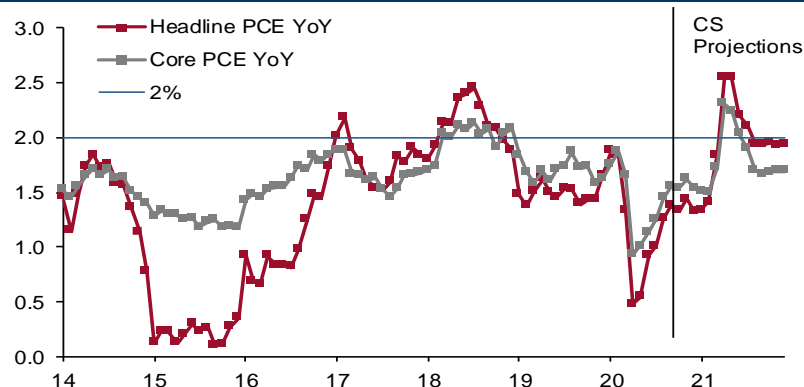
xiao.cui@credit-suisse.com

Justin Guo

212 325 2787

justin.guo@credit-suisse.com

Figure 1: Core PCE inflation has recovered towards its pre-COVID run rate, but we expect more volatility ahead



Source: Credit Suisse, Bureau of Economic Analysis

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Core inflation – Focus on the details

Macro indicators typically associated with inflation have seen incredible volatility due to the pandemic. GDP has seen its [largest quarterly postwar contraction](#) followed immediately by its [largest quarterly postwar expansion](#). [More stress](#) is likely in the near term, followed by an impressive rebound once vaccination becomes widespread next year.

Meanwhile, [monetary aggregates and federal deficits have surged higher](#) as policymakers acted aggressively to support households and small businesses through the public health crisis. The fiscal outlook remains highly uncertain. Negotiations for a near-term stimulus are ongoing and the prospects for a longer-term infrastructure package largely depend on two Senate run-off elections in Georgia.

In past notes, we have made the case that short-term moves in inflation are driven by idiosyncratic factors more than top-down macro forces.¹ Central banks have been responsive enough to prevent significant accelerations or slowdowns in inflation, and inflation expectations have remained well-anchored through cyclical fluctuations. Money supply, output gaps, and credit growth all matter, but in the current regime it is important to look at detailed bottom-up forces as well to predict shifts in inflation.

Beyond the macro volatility, the pandemic has led to a number of idiosyncratic shocks to specific prices. Some sectors have seen a collapse in spending, while others have had surging demand. Supply chains have been stressed but the labor market is still signaling substantial slack in the broader economy.

In theory, these idiosyncratic factors should only impact relative prices, not overall inflation. However, this requires strong assumptions which likely aren't true in practice.

A simple example shows the number of things which need to be true for 'relative price shifts' not to affect the overall price level. Assume there are only two goods, apples and oranges. A positive supply shock leads to a fall in the price of apples. This leaves some extra disposable income which *could* put upward pressure on orange prices. But it's hardly one-for-one. For starters, households could just use the freed up income to increase their savings or buy more apples. Even if total spending on oranges rises, the spending will only pass through to higher prices if orange supply is sufficiently inelastic.

Unsurprisingly, the situation is even more complicated in the real world. In particular, inflation measures include large categories of consumption which don't necessarily correspond to actual cash-flows. In some cases, this is imputed consumption – where no actual transaction takes place (e.g. the 'rent' you pay for owner-occupied housing). In other instances, the payment is made by a third party (e.g. medical expenses which are covered by insurance). If hospital prices fall, Medicare and insurance companies save some money, but there's no boost to household cashflows and no chance for the savings to get recycled into other types of spending and inflationary pressure.

¹ For a more detailed discussion on top-down macro vs. bottom-up idiosyncratic drivers of inflation, please see our US Economy Notes <https://plus.credit-suisse.com/r/V7k5362AF-XYZ9> and <https://plus.credit-suisse.com/r/V7hecv2AF-XYZ9>

There's no natural tendency for the price level to stay on course after an idiosyncratic shock. What makes inflation stable in macro models is that policymakers respond to these shocks. If the price of apples declines without any offset, then an inflation-targeting central bank is supposed to ease policy until inflation is back on track. In reality, policy has its limits.

Central banks can (and mostly do) prevent inflation from spiraling higher or lower. But interest rates and balance sheet operations are clumsy tools and we shouldn't expect these to guide policy so effectively to offset every shock. These days, interest rates are at or near the zero lower bound, limiting central banks even further.

From a forecasting perspective, monetary and fiscal policy can be treated like any other bottom-up driver of inflation. Nothing magical happens to raise inflation when a central bank cuts interest rates or Congress passes fiscal stimulus. If macro policy has any impact on inflation, it's because it raises or lowers demand for specific goods and services. Housing is most sensitive to interest rates, tradeable goods respond to exchange rates, and if the labor market is allowed to run hot it can impact service prices. In each case, the pass-through from policy will be sensitive to the background conditions in those markets. Rate cuts couldn't do much to boost housing inflation in 2008, but they had a noticeable impact in 2019.

We tend to group core inflation into five main categories, which each have their unique cycles and drivers. These are core goods, shelter, health care services, financial services, and other core services, shown in Figure 2.

The COVID shock is affecting nearly every subcomponent of core inflation. Compared to other macro indicators, volatility in core PCE has been subdued, but this is partly because there are both positive and negative shocks which are cancelling each other out. Figure 3 shows the z-score of each of our five subcomponents – in each case, the current inflation rate is at an extreme level compared to recent trends.

In the remainder of the note, we go through each main inflation component, describing the impact of the pandemic so far, and what we expect in the recovery next year. More volatility is ahead, and in many cases the impact from the initial pandemic shock is still playing out. Long lags and predictable shocks make it relatively straightforward to forecast subcomponents of inflation.

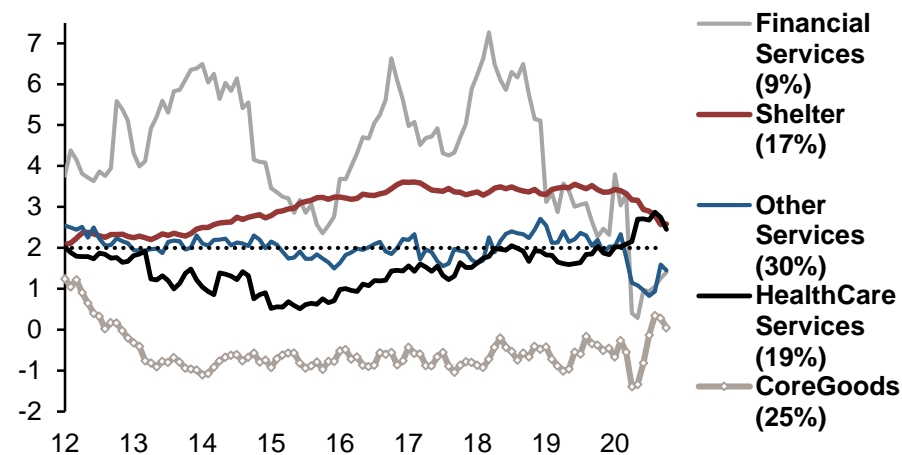
Overall, the recent rebound in inflation is mainly driven by core goods and health care service prices. In each case, the strength is driven by one-off factors and we expect a reversal next year. Shelter prices have slowed and tend to exhibit significant inertia, suggesting the weakness is likely to be persistent.

Core service prices should accelerate as the virus comes under control and demand recovers, but the scope for upside is limited. Prices in this category tend to be sticky and in many cases never fell as activity collapsed – leaving less room for a rebound when spending normalizes next year. Labor market slack, rent reductions, and easy financial conditions will limit cost pressures for many businesses.

Base effects become more difficult in the summer, and by then we expect core PCE inflation to drop back down below 2.0%.

Figure 2: We break core PCE inflation into five main components, each with its own unique drivers

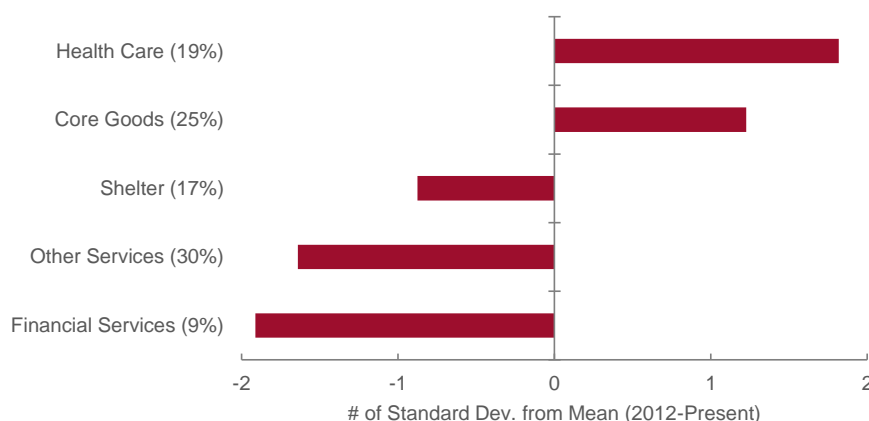
Subcomponents of core PCE inflation (%YoY)



Source: Credit Suisse, Bureau of Economic Analysis

Figure 3: The COVID shock is affecting every subcomponent of core inflation

Z-scores of core PCE subcomponents (Oct 2020 YoY value)



Source: Credit Suisse, Bureau of Economic Analysis

Core Services

Health care, shelter, and financial services tend to have their own unique drivers. We group together other core services, which includes travel, recreation, restaurants, and personal care consumption.

Spending in this sector has been hit hard by the pandemic and social distancing. We expect a strong recovery next year, beginning once the current wave of COVID is under control, and then another leg of acceleration once vaccination is widespread.

The surge in demand next year will boost services inflation some, but the impact will likely be small relative to the dramatic swings in spending.

It's helpful to break down services further into two components. Some categories have flexible prices and are highly sensitive to swings in demand, while others have stickier prices. Travel and transportation, in particular, tend to use dynamic pricing to match supply and demand. Shopping for airline tickets or hotel rooms, the price can fluctuate by the day. On the other hand, it's not unusual to eat at the same restaurant or visit the same hair salon for months or years without seeing prices change.

This distinction has played out clearly during the pandemic. Demand for services collapsed broadly, but only travel and transportation sectors saw sharp drops in prices (Figure 4). Meanwhile, restaurants, recreation services, and personal care services have all seen flat or even increasing price inflation (Figure 5).

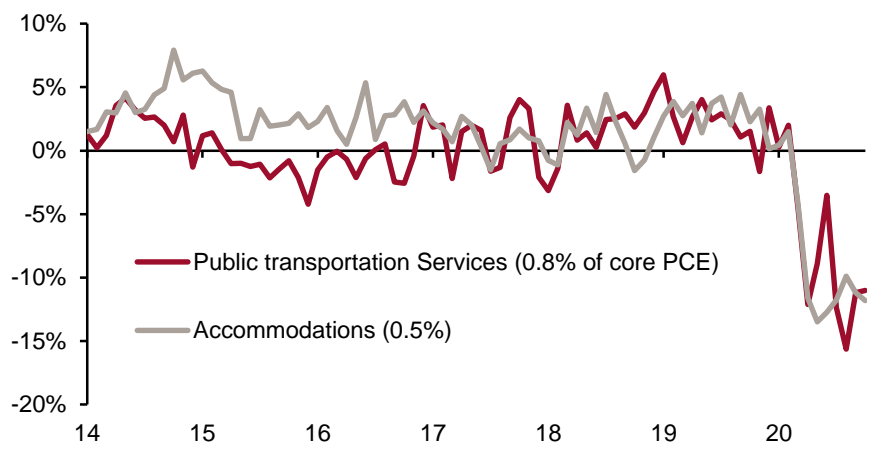
Travel prices are likely to rebound sharply along with demand next year. However, for most services, there is far less scope for a rebound, since prices never fell (or even slowed) in the first place. This latter category is far larger as a share of overall services, making up 14.9% of core PCE versus just 1.3% for travel and public transportation.

There is also likely to be less cost pressure than usual for many services. So far through the pandemic wage growth has been solid, but a high unemployment rate will likely lead to some slowdown with a few quarters lag. Service industries are much more labor intensive than other components of PCE and wage growth has a loose but consistent correlation with inflation in this sector (Figure 6). Many businesses that are remaining open are likely to receive some relief on rent and debt service costs as well.

We expect services prices to rebound next year, and possibly overshoot some as demand surges higher. Business failures during the pandemic can also lead to some supply constraints in the early stages of reopening. However, for many businesses that have held prices steady (or even raised them) through a collapse in demand there is less scope for upside once spending normalizes.

Figure 4: Travel and transportation prices fell sharply

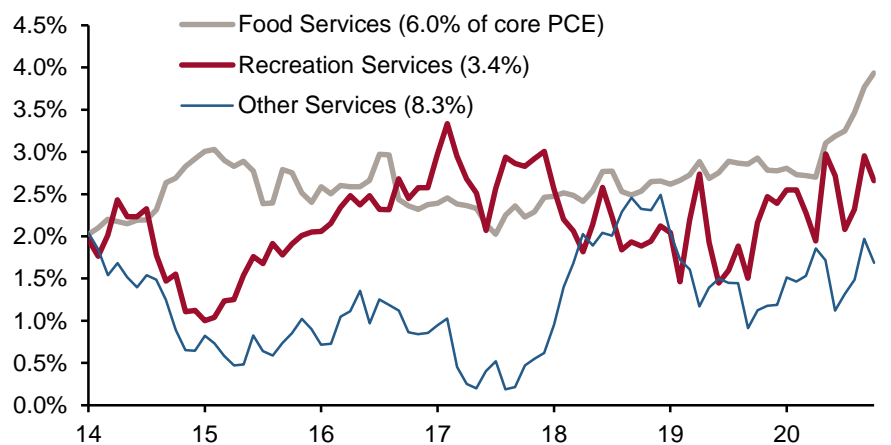
PCE inflation, YoY%



Source: Credit Suisse, Bureau of Economic Analysis

Figure 5: But other discretionary service prices are surprisingly strong

PCE inflation, YoY%



Source: Credit Suisse, Bureau of Economic Analysis

Figure 6: Service prices tend to loosely follow wage growth

YoY%



Source: Credit Suisse, Bureau of Economic Analysis, Bureau of Labor Statistics

Core Goods

After collapsing early in the pandemic, core goods prices rebounded strongly in the summer. YoY inflation is close to zero, which is unusual for a category which has seen trend deflation for most of the past two decades.

Goods prices tend to be noisy, and large one-off moves frequently reverse in subsequent data. Since the pandemic, the rapid rebound in core goods inflation has been driven by durable goods, which just saw its inflation rate rising to the highest level since 1995 (Figure 7).

In particular, used vehicle prices have surged higher due to supply chain issues and increased demand as people avoid public transportation (Figure 8). One-off stimulus checks in April and May also likely added to the temporary surge in auto demand. Used vehicles make up just 5.3% of core goods spending, but have contributed 0.25% MoM to core goods inflation on average from May to September.

This strength has already started to reverse in October and we expect the weakness to continue. Auto production has already returned to pre-pandemic levels, and fiscal support for households is fading. Demand will remain supported as people avoid crowded public transportation in the pandemic, but price declines look likely. Industry data on wholesale prices for used vehicles have already shown prices stabilizing after earlier gains (Figure 9).

Other durable goods are seeing some inflationary pressure, but this is unlikely to be enough to offset a normalization down in used auto prices. A weaker dollar, production bottlenecks, rising input costs, and persistent tariffs on Chinese imports have driven rising inflation for household and recreational goods in recent months (Figure 10).

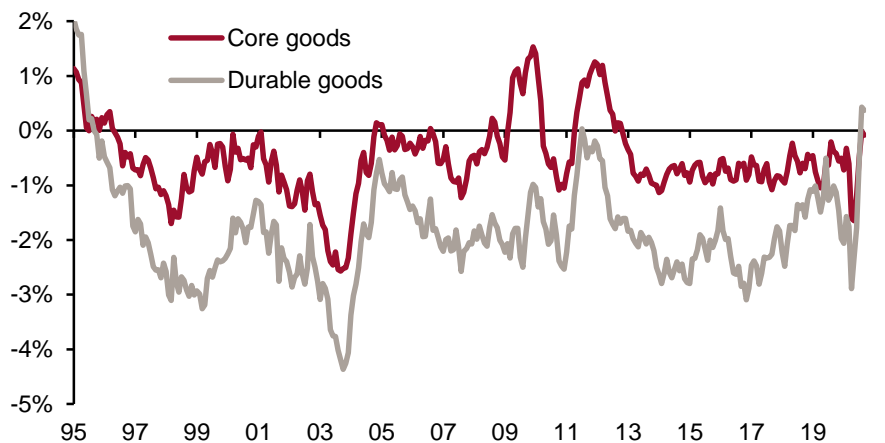
The real trade weighted dollar has depreciated almost 7% since its local peak in April, and the effect has shown through on rising import prices. However, [the pass-through from import prices into final consumer prices is weak and tends to only appear after a considerable lag](#). Currently we have a large demand shock occurring alongside supply disruptions earlier. When we look at new vehicles and apparel, two categories of goods consumption that have high import content (more than 40% for new vehicles), import prices for auto and parts have risen in recent months while domestic prices remain range bound. The same is true for apparel, where rising import prices have been met with steep domestic discounts due to depressed demand.

Overall, we expect a decline in used vehicle prices to drive core goods inflation lower in coming months. A depreciating dollar and rising input costs should continue to support inflation in other durable goods.

Further into next year, there are downside risks to goods demand. Through the pandemic there has been a clear substitution away from services which has boosted goods spending. This is likely to reverse as the services sector reopens next year.

Figure 7: Core goods inflation has rebounded rapidly, driven by durable goods

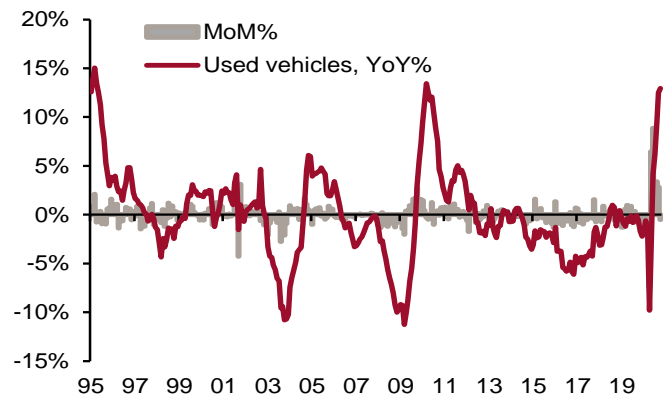
PCE inflation, YoY%



Source: Credit Suisse, Bureau of Economic Analysis

Figure 8: Used vehicle inflation has risen substantially

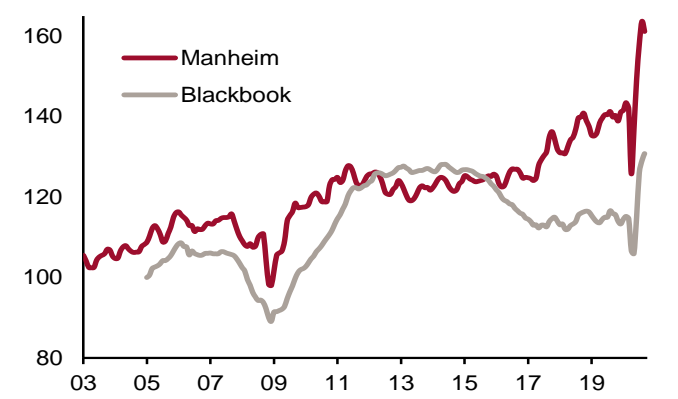
PCE inflation



Source: Credit Suisse, Bureau of Economic Analysis

Figure 9: Industry data on wholesale prices for used vehicles have already showed prices stabilizing after earlier gains

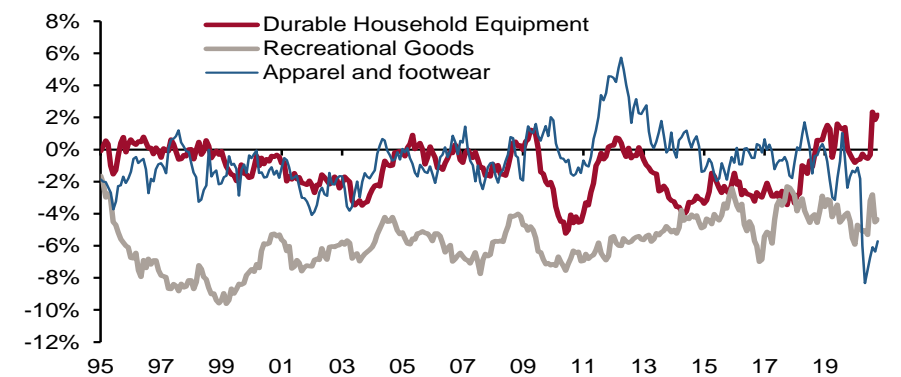
Price level, index



Source: Credit Suisse, Manheim, Blackbook

Figure 10: Other durable goods are seeing some inflationary pressure, while apparel suffers from depressed consumption

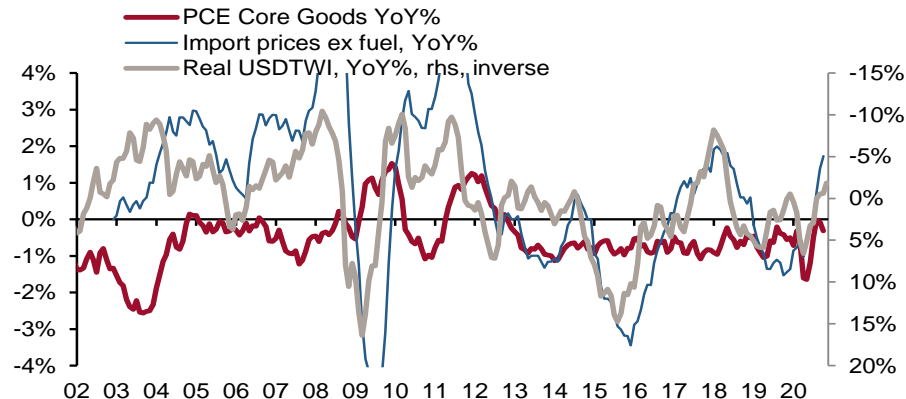
PCE inflation, YoY%



Source: Credit Suisse, Bureau of Economic Analysis

Figure 11: The pass-through from import prices into final consumer prices is weak and tends to only appear after a considerable lag

PCE inflation, YoY%



Source: Credit Suisse, Bureau of Economic Analysis

Health Care Services

Health care prices are heavily influenced by government legislation and regulation. Medicare and Medicaid account for around half of total health expenditures, and there is evidence that [private insurance payment rates closely follow Medicare](#).

Health care inflation was steadily increasing at the start of the year, and then accelerated when the pandemic struck in the spring (Figure 12).

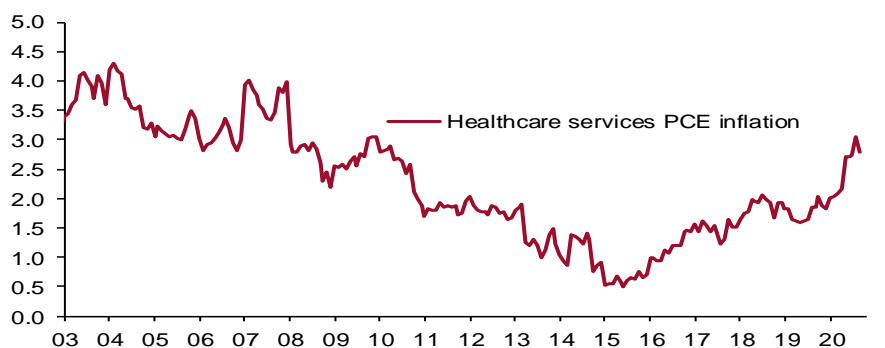
Prices were boosted by temporary measures in the pandemic, and some mean reversion is likely going into next year. In particular, [the CARES act temporarily increased some Medicare reimbursement rates](#) for the duration of the public health crisis. At the very least, these one-off increases won't repeat themselves, causing inflation to slow. If payment rates are allowed to return to their original levels, there could be some additional disinflation next year.

Meanwhile, there could also be some weakness in the underlying trend for Medicare payment rates. Prices for hospital services are likely to be steady, increasing around 3.0% in 2021. However, outpatient physician services could see some downward pressure thanks to cost control measures passed in the 2015 Medicare Access and CHIP Reauthorization Act (MACRA).

Overall, health care prices helped to offset the collapse in inflation in March and April, and supported the rebound in recent months. Inflation should slow going into next year though, and there are risks of more substantial disinflationary pressure.

Figure 12: Health care inflation picked up at the start of the pandemic

YoY%



Source: Credit Suisse, Bureau of Economic Analysis

Shelter

Shelter is one of the largest and steadiest categories in core PCE. Housing inflation covers both rental and owner-occupied housing, but the inputs into the inflation measures are largely based off of rental transactions, which tend to adjust slowly.

Anecdotally, the pandemic has led to a rapid shift in demand for housing away from dense urban areas. Existing home sales data show that the supply of single family homes is unusually tight, while the multifamily market is seeing less demand (Figure 13).

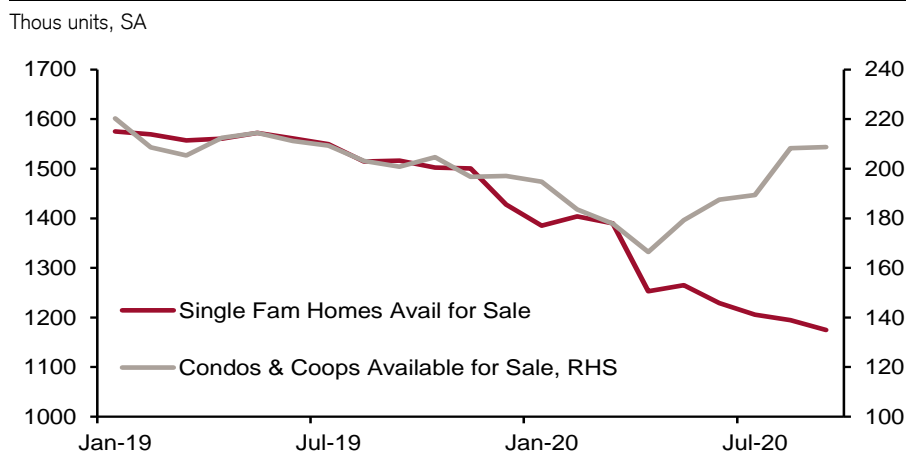
In theory, this could push inflation in either direction. Single-family owner-occupied housing is much more common, so this has a larger weight in the inflation basket. At the same time though, housing supply is less elastic in high-cost cities, meaning a shift in demand will translate more-directly into price declines.

Meanwhile, there has been a bifurcation in household financial health. For workers with steady employment and income, record-low mortgage rates are likely boosting housing demand. On the other hand, unemployed workers are currently seeing sharp declines in income. [If a stimulus deal is not reached soon, forbearance programs and eviction moratoriums are set to expire at the end of the year](#), leading to additional financial stress.

So far though, the net effect has clearly been disinflationary. Overall shelter inflation has slid from 3.5% down to 2.6%.

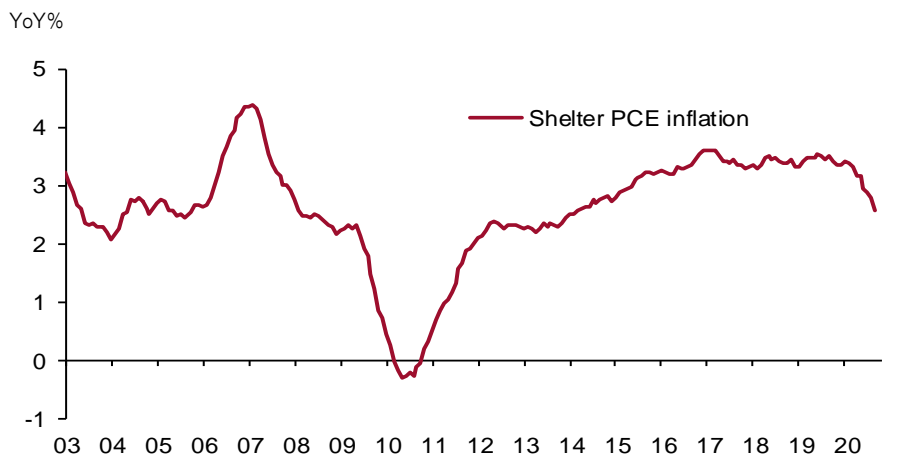
Relative prices for different types of housing are still in flux, and there are two-way risks for overall shelter inflation going forward. But this category tends to show significant inertia, suggesting the recent weakness will persist and remain a headwind for core PCE.

Figure 13: Existing home sales data shows that the supply of single family homes is unusually tight, while the multifamily market is seeing less demand



Source: Credit Suisse, NAR

Figure 14: The net effect of the pandemic has clearly been disinflationary for shelter



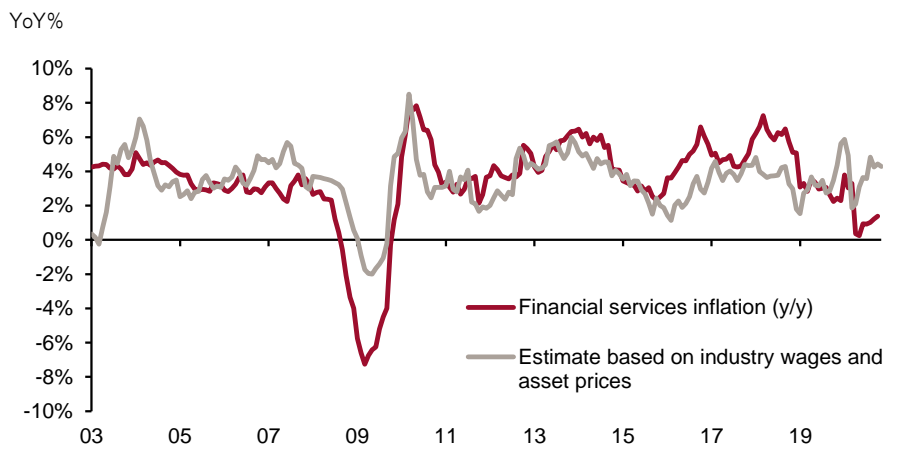
Source: Credit Suisse, Bureau of Economic Analysis

Financial Services

Financial services make up almost 9.0% of core PCE and inflation has fallen substantially in recent months. It captures both explicit charges for services (e.g. ATM fees) as well as implicit charges (e.g. foregone interest or investment income).

Financial services inflation is difficult to forecast, but it has fallen towards the low end of its recent range and lead indicators suggest there is likely some upside going forward. In particular, financial asset appreciation tends to line up well with big swings in financial services inflation. This makes sense, since many portfolio management services are calculated as a percentage of assets under management. Wages in the financial sector have also been strong, which can push price inflation higher.

Figure 15: Financial services prices have some upside, but this is a volatile and difficult-to-forecast category



Source: Credit Suisse, Bureau of Economic Analysis

Bottom Line

The pandemic has been a shock to many of the idiosyncratic factors which tend to drive inflation. In theory, these are relative price shifts, and shouldn't matter for aggregate prices, but in practice, bottom-up forces drive a large share of the volatility in inflation data.

We expect core PCE inflation to overshoot the Fed's 2.0% target next year. However, this will mostly be driven by easy base effects plus temporary strength in idiosyncratic categories like used autos. Discretionary services prices should see some upside, but core goods inflation should decelerate and there are signs of disinflationary pressure for shelter and healthcare.

Rising inflation will coincide with an extreme rebound in growth. On the surface, this will look like an overheating economy. This will be a misleading signal though, and the Fed is unlikely to react to such a temporary overshoot.

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