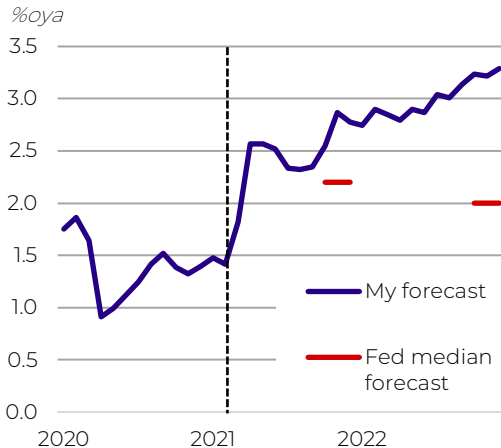


THE US INFLATION OUTLOOK: MORE THAN A BULGE

Suttle Economics Notes #159

- US inflation recovery from a C-19 slump is widely expected to continue in coming months
- The consensus (and Fed view) is for a return to 2% in 2022; I think 3% is more likely
- Key factors: higher global goods prices; sharply reduced slack; and higher expectations
- Business price expectations are central and are already moving up amid bottlenecks

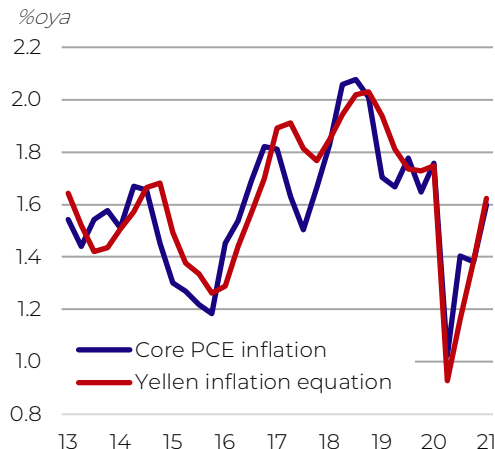
Chart 1
Core PCE deflator



It is now widely accepted that commonly-measured rates of US consumer price inflation will move higher in the months ahead. The Fed's targeted measure—the personal consumption expenditure (PCE) deflator—has already moved from a low of 0.5%oya in April and May 2020 to 1.6%oya in February. The core measure (which excludes food and energy) has moved up from a low of 0.9%oya in April 2020 to 1.4%oya in February. I project that it will jump further in the next 3 months, to 2.6%oya in May, and average 2.8%oya in 21Q4 (Chart 1). The FOMC median forecast is for core to rise to 2.2%oya (and headline to 2.4%oya).

The major difference in views is not so much about 2021, but what happens in 2022 (and beyond). In my view, conditions have developed that are likely to push inflation higher through 2022 (above 3%oya by year-end). By contrast, the FOMC's forecast is for inflation to fall back to 2%. The backbone of my explanation is provided by a reduced form inflation model developed by now Treasury Secretary Yellen when she was Chair of the Federal Reserve.¹ This model uses slack (unemployment relative to NAIRU) import prices and expectations as its key drivers. Despite a widely held view that inflation relationships have shifted, this model has actually done a very good job of tracking inflation dynamics since 2015, including in the past year (Chart 2). In my forecast, slack disappears rapidly through 2022; import (goods) prices rise more briskly; and inflation expectations move up, partly at the behest of the Fed. As discussed below, when I plug these assumptions into the Yellen model, it projects 3% inflation at the end of 2022.

Chart 2
Yellen model versus actual core PCE



Inflation developments through COVID

Inflation was below the Fed's 2% through the later stages of the last expansion, creating unease that culminated in a shift in Fed strategy to one of average inflation targeting (developed through 19Q4). No

¹ *Inflation dynamics and monetary policy*, speech by Chair Janet Yellen at the University of Massachusetts Amherst, September 24th, 2015

Chart 3
Components of core PCE inflation
%o/a, both scales

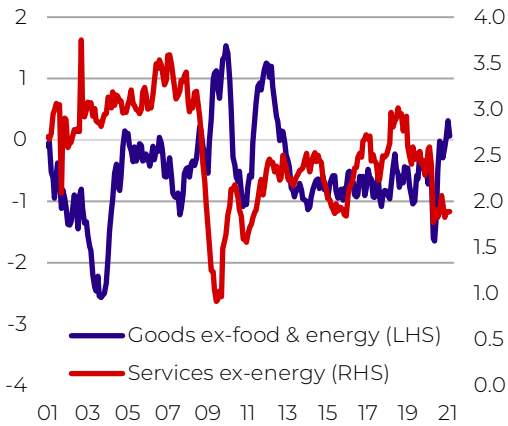


Chart 4
Basket of pandemic affected items*
%m/m, sa, both scales

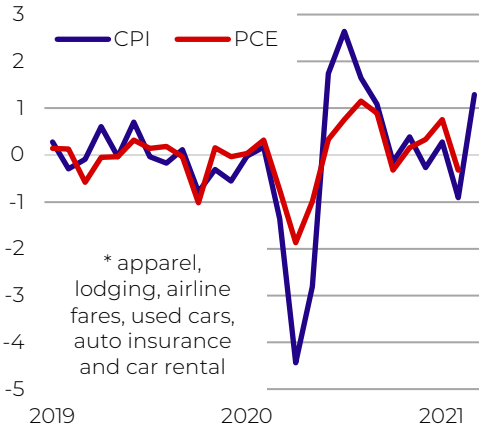
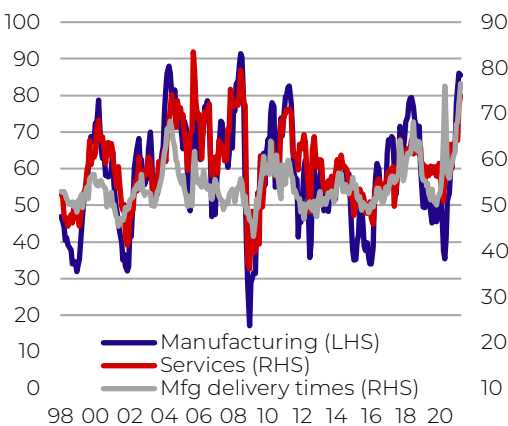


Chart 5
ISM indices: prices paid & delivery lags
index, 50 = stable, both scales



sooner had the Fed committed to pushing inflation higher, than the shock of COVID (C-19) pushed it sharply lower. Core PCE deflator goods prices in January and February 2020 were down an average 0.5% on a year ago, which is exactly the same average rate that prevailed throughout the 2001-19 period (Chart 3). Similarly, core PCE deflator services prices in January and February 2020 were up 2.6%o/a, exactly in line with their 2001-19 average. Between February and May, core goods prices fell by 5.7%, saar, as the pandemic caused a slump in economic activity; core services prices rose at an anemic clip of just ¼%, saar. In the subsequent 9 months of recovery (May 2020 through February 2021), core goods prices have risen by 2.1%, saar, while core services prices have rebounded 2.4%, saar. The year ago inflation rate for core goods prices has moved back to modestly positive, while that for services remains below 2%.

Another way of analyzing inflation dynamics through the pandemic is to isolate those categories (sectors) most affected by the interruption and restart of economic activity (Chart 4). The CPI (available through March 2021) has been more affected by these direct pandemic effects than the PCE deflator. This reflects a mix of different weights and different ways to measure component prices: the weight of this pandemic basket in the CPI is higher (8.4%) than for the PCE deflator (5.5%). The March price level for this basket in the CPI was down 1% relative to January 2020, suggesting more scope for catch-up in pandemic affected prices (most notably hotel price and airfares); the equivalent PCE basket was up 0.4% over the same time frame.

The core PCE deflator rose more steeply than the core CPI in recent months (the core CPI normally exceeds the core PCE deflator by an annual rate of about 0.4%-points). Between November and February, the core CPI was up just 0.7%, saar; the core PCE deflator was up 2.5%, saar. The main difference was the steep rise in medical services inflation in the PCE deflator.

Global demand boom and goods pricing

In coming months, the most eye-catching gains in the inflation data are likely to be for goods pricing. This often happens early in an expansion: the last strong run in goods prices occurred through 2011 (Chart 3). There are a multitude of signals of higher goods pricing. Global goods markets are booming and there are increasing signs of (global) excess demand. Leading indicators of goods pricing are showing strong gains—the PPI and the prices paid components of the ISM purchasing managers' indices (Chart 5). The manufacturing prices paid index in March topped that of April 2011. Most notably, the index that measures rising delivery times to manufacturers hit its highest level since April 1974. It is unclear how manufacturers and distributors of

Chart 6
Manufactured import prices by source

June 2012 = 100, NAICS 33

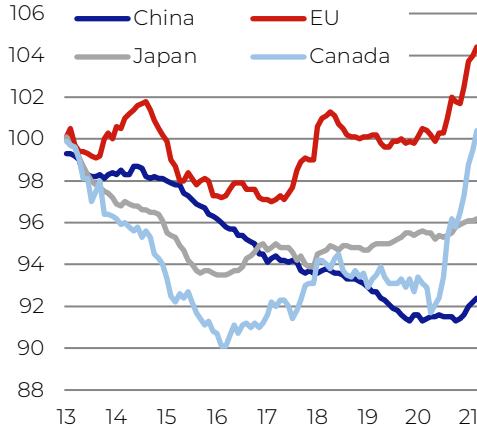


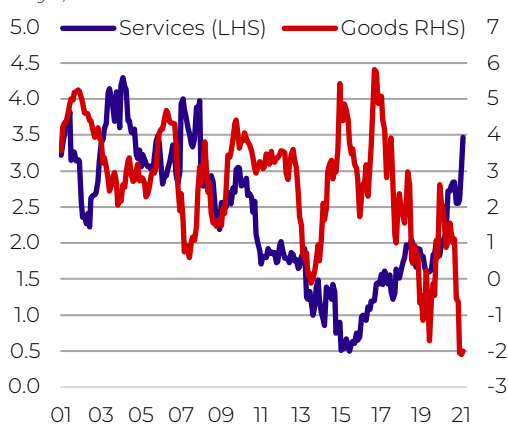
Chart 7
Food and energy PCE inflation

%oya



Chart 8
Medical sector PCE inflation

%oya, both scales



goods in increasingly short supply will respond to shortages. Higher prices seem an obvious response.

Beyond the near-term bulge in goods prices ahead, there is the more fundamental question of whether we can count on the return of steady goods price deflation heading into 2022. I am skeptical that this will be the case, persistent and powerful hedonic pricing effects notwithstanding. First, the current state of excess demand seems likely to persist for quarters (or years), not months. In 2012, goods prices rolled over as Europe plunged into recession. Now DM policy (especially monetary policy) remains geared to sustaining the demand expansion into 2022 (and beyond). Second, we are in a phase where the net supply of cheap goods to the United States is likely to diminish—most notably from China (Chart 6). In the Yellen model framework, this means that the contribution of import prices to core PCE inflation is likely to shift from a drag of 0.1%-point in 2019, to a boost of 0.2%-points in 2022 (this swing alone would be enough to bring the core PCE back to target). The role of the dollar in choking off these price effects will be diminished by a dovish Fed even if the Fed is less dovish than the market currently expects in 2022.

Given buoyant global demand conditions, it would not be surprising to see overall goods pricing add even more significantly to inflation in coming quarters. One channel through which this could occur is higher food and energy inflation (Chart 7). The latter would be boosted by measures to internalize the social cost of carbon.

COVID service sector catch-up and beyond

Goods have a 33% weight in the PCE deflator; services account for 67%. As noted, there are some important leisure and hospitality prices likely to rebound through 2021 as economic activity normalizes. Beyond that payback boost, pricing pressure in the service sector seem most likely to be affected by prevailing conditions of economic slack. In my forecast, I expect growth to be rapid in 2021 and 2022 (8%oya in 21Q4 and 4%oya in 22Q4). I also expect the unemployment rate to fall to 4.5% in 21Q4 and 3.5% in 22Q4. Importantly, I also project the NAIRU to be 4.8% in 2022, up from 4.1% (as given by the latest Fed estimate). This is the way that I have integrated supply-side damage from C-19 into the Yellen model.

About half of the services component of the PCE deflator is driven by two categories: medical care and housing. Given the dominant role for these two categories, it is important to consider them independently. The weight of medical care in the PCE deflator is 21%: 17% services and 4% goods. It is just 8.9% in the CPI. The higher PCE weight reflects the fact that most health care spending by consumers is not out of pocket. Medical care service inflation (as per

Chart 9
Measures of housing inflation
%oya, both scales

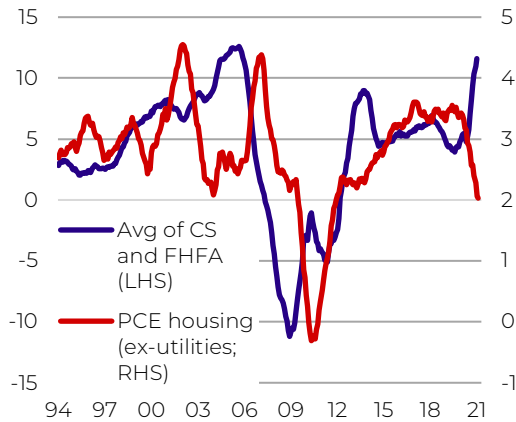


Chart 10
Michigan survey: inflation expectations
percent, annual rate

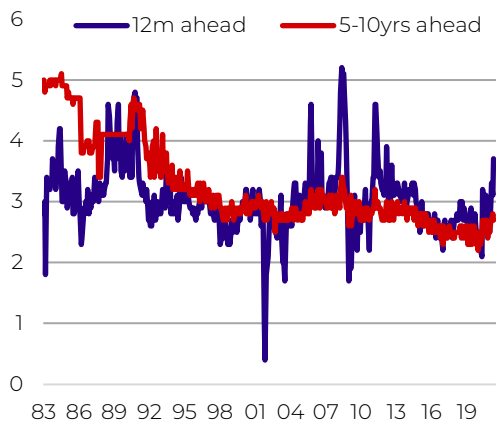
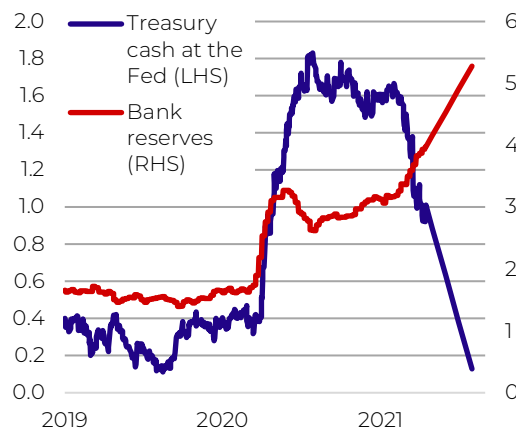


Chart 11
Treasury cash and bank reserves
\$ trillion, both scales



the core PCE deflator, where the data are mainly taken from the PPI) has risen sharply in the past two years (Chart 8). By contrast, drug prices have slumped under considerable political pressure. It is hard to know how the long-run effects of C-19 will boost health care inflation, although my view is up/stable.

I think the outlook for housing inflation is more straightforward. The demand for housing is soaring and there is an evident shortage of inventory. It seems just a matter of time before higher house prices pass into housing costs in the inflation measures. as in 2006-07 (Chart 9).

Inflation persistence and expectations

One very strong US inflation lessons of the past 25 years is its stickiness through the business cycle. As a result, inflation expectations have moderated and been very stable (Chart 10). In my view, the expectations that matter are those of business price setters (less so households and, to the limited extent they still exist, unions). It will be fascinating to see how the C-19 crisis and resulting policy response affects business price setting. I think businesses will come to expect slightly higher inflation and begin to embed it into decisions. The Atlanta Fed survey of business views on year ahead inflation has risen to 2.5%—the highest since the survey began in 2012. In the Yellen model, I have nudged up long-term inflation expectations to 2.4% for 2022.

I think three factors are apt to push business inflation expectations higher. First, higher (global) goods prices will directly feed into costs and perceptions of pricing power. More fragmented global markets could also make fewer firms feel that they are strict price takers. Second, the Fed is telling businesses that it wants to see inflation closer to 2.5% than 2%. Finally, the Fed is backing up this wish to see higher inflation with an extraordinarily easy monetary policy into what may well be the strongest recovery in modern history. Bank reserves—the key component of the monetary base—rose 93% in 2020. In the year through July 2021, they are on course to rise by 101% thanks to on-going QE and the (debt-ceiling related) need to run down Treasury cash balances at the Fed (Chart 11).

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Important Information

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