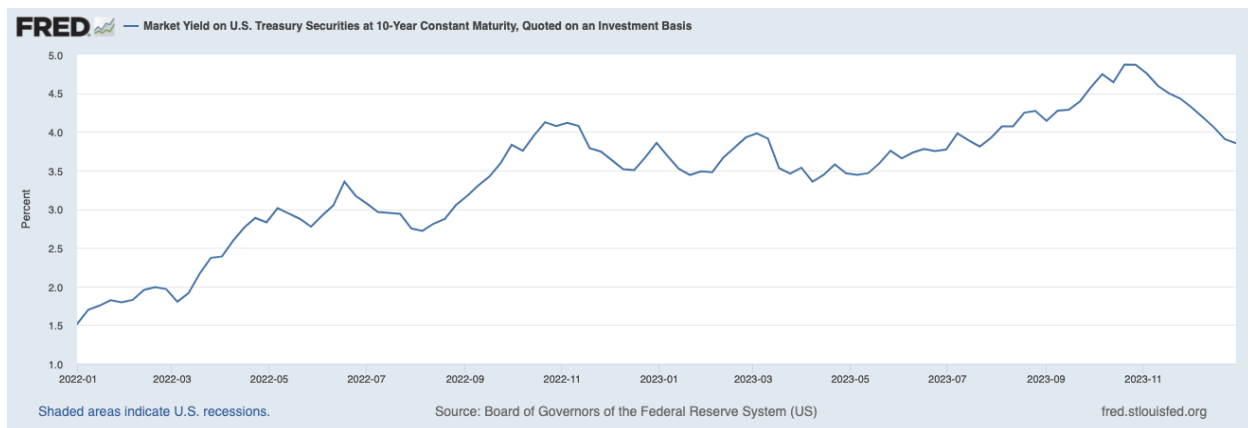


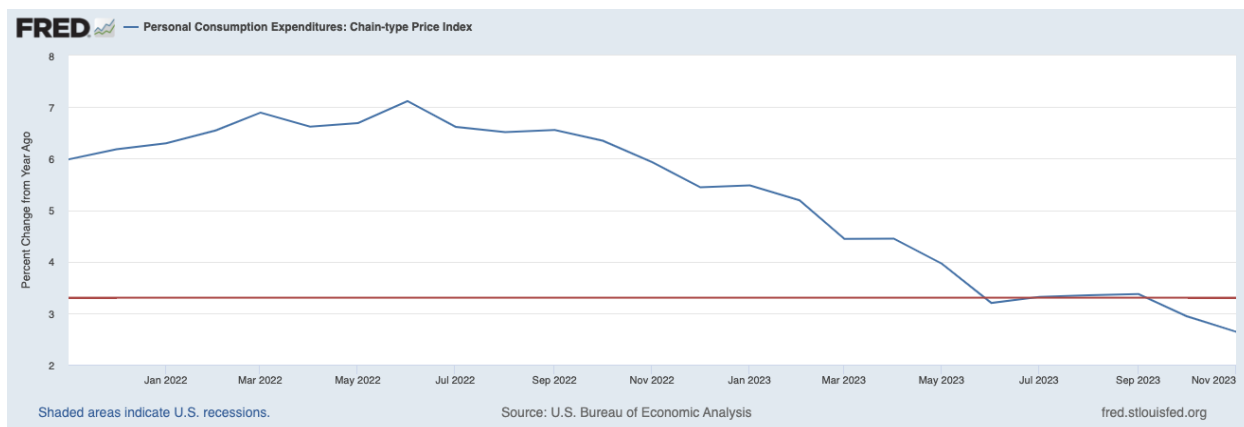
## Ding, dong, inflation's dead ... or is it?

Inflation in America is no longer a problem. That's the story line that dominated financial markets during the final two months of 2023. Bond yields tumbled as their prices rose (see chart), and stocks enjoyed a powerful nine-week rally – an equal weighted S&P 500 index rose 18 percent in just nine weeks. The markets' price action was stunning to watch. All it took was a couple of months of surprisingly sedate inflation data, and maybe the fact that (a) the financial media is plagued by recency bias and (b) much of the current citizenry of the investment industry believes that two percent inflation is the norm in America (it is after all, the only environment they have worked in) to get the bells on Wall Street loudly clanging ding, dong, inflation's dead!



Seven of the nineteen member FOMC – the elite decision-making body of the Federal Reserve – joined the year-end stampede and changed their views on what it would take, interest rate wise, to get inflation down and have it stay down. Back in September, ten of the nineteen FOMC members expected the Fed's policy rate to be above the 5 percent level at the end of 2024, in line with the "higher for longer" mantra many FOMC members had been reciting for most of the year. But by mid-December, the number of members that expected rates to be above 5.0 percent a year from now had dwindled to just three.

The primary data catalyst for the surge in inflation optimism – both inside and outside the Federal Reserve – was a leveling-off of the personal consumption expenditure (PCE) price index. This measure showed virtually no change in the overall price level between September and November,



and the flat line lowered the 12-month rate of change to 2.6 percent, comfortably below its 3.2 percent long-run average (red line in the chart above).

Maybe the folks on the FOMC and the many hopeful market participants are right – maybe PCE inflation continues to grind lower over the next 24 months even as real growth stays comfortably positive and the unemployment rate edges gently higher. But our understanding of the inflation process now underway in America makes us highly skeptical that we will see consumer price inflation “stabilize” in the 2.0 -to- 2.5 percent range this year and the years that follow.

We believe America is facing supply shortages in three critical areas – labor, housing and energy -- and expect it to take many years to mitigate these shortages given our country’s market-based approach to economic policy. We think labor shortages will require steadily higher real wages to increase the supply of labor as the domestically born working age population stagnates. Higher rents are likely given how expensive house prices are now relative to household incomes in America. This poor affordability – driven by a decade of weak supply growth following the “great financial crisis” makes renting the only real alternative for most people entering the housing market for the first time. And progressively higher fossil fuel prices appear necessary to increase the share of renewable energy in the overall electric power mix in the U.S. from the current 40 percent. Significant nuclear and offshore wind projects were cancelled in 2023 because at current price and cost levels they were not economically viable. Higher fossil fuel prices appear necessary to provide a “price umbrella” for these types of projects to move ahead.

Bottom line: We expect the higher wages, higher fossil fuel prices and higher rents will keep overall consumer price inflation above its long-term average during the next several years. We think the sharp disinflation we are experiencing now will prove short-lived unless growth weakens dramatically. But even then, forcing demand down below trend does not “cure” structural supply shortages, it simply kicks the can down the road.

## **The prices that matter most for price stability**

In a groundbreaking 2022 paper titled **Inflation in Times of Overlapping Emergencies: Systemically Significant Prices from an Input-output Perspective (a)**, Isabella M. Weber and her co-authors identified the prices that matter most for price stability in America. They used a 71-industry input-output model of the U.S. economy to analyze how price changes in a single industry ripples through the whole economic system and influences the overall price level in our society. Their research method takes account of the direct effects of a price change in an industry on consumer prices as well as the indirect effects that industries price changes have by changing input costs in other sectors of the economy.

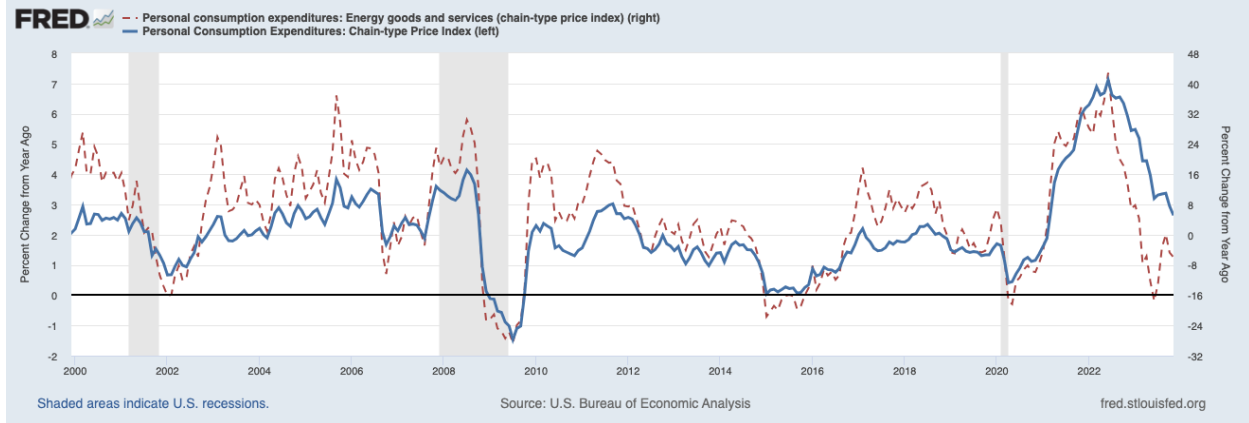
The authors identified eight industries with outsized importance for consumer prices during the time-period 2000 to 2022. In order of relative importance, they are: (1) Petroleum and coal products, (2) Oil and gas extraction, (3) Farms, (4) Food and beverage and tobacco products, (5) Chemical products, (6) Housing, (7) Utilities, and (8) Wholesale trade.

## **Fossil fuel prices matter a lot**

What we find striking in this list is the importance of fossil fuel prices to the overall price level in the U.S. Big changes in the PCE price index (blue line, chart below), both up and down, regularly coincide with big changes of energy goods and services prices, as measured directly in the PCE price

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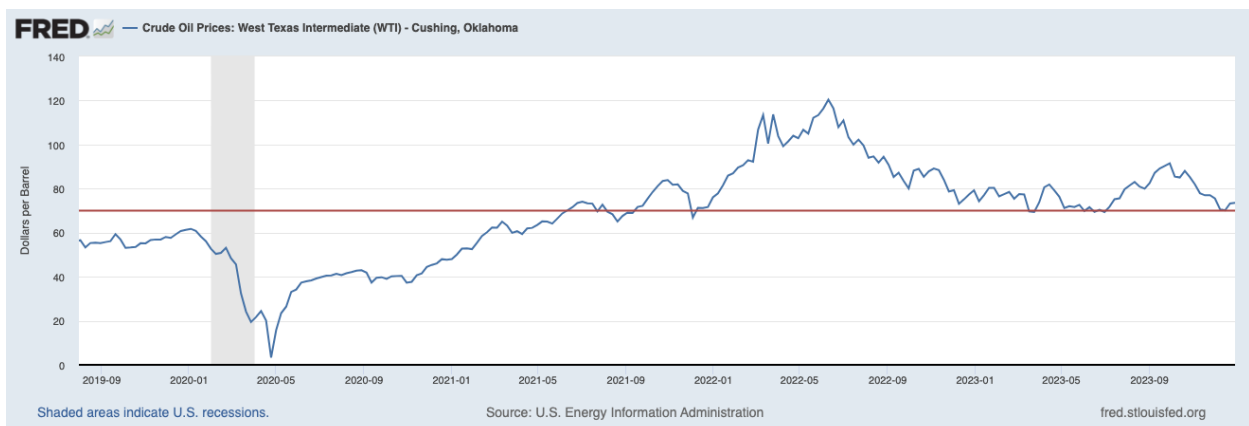
(a) [https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1344&context=econ\\_workingpaper](https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1344&context=econ_workingpaper)



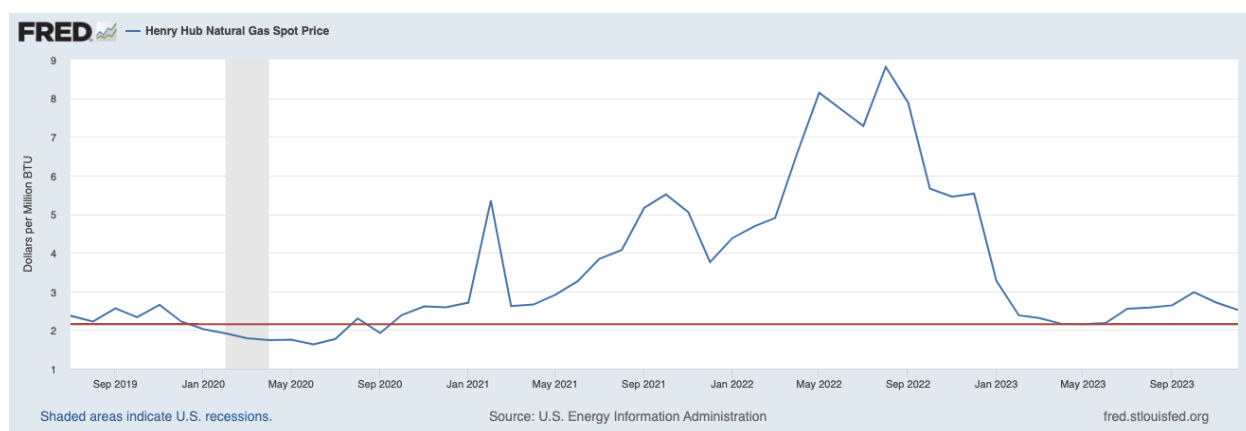
index (red line). A big reason is the significant indirect effects oil, coal and natural gas prices have on consumer prices through their influence on cost structures in a wide array of other industries.

Directly and in-directly these prices play a powerful role in what American households pay for gasoline and the electricity to charge our cars, for heating and cooling their homes, for the chemicals and plastics that we consume, for the packaging of many products we buy, for the delivery of our goods, for the fertilizer our farmers buy, and on and on. Fossil fuels are ubiquitous in America.

The Biden Administration knows this, hence the release of 222 million barrels of oil during 2022 from the Strategic Petroleum Reserve (SPR). But with the SPR inventories down to about 350 million barrels, another sizeable release to boost supply isn't likely. And the corporate consolidation now underway in the U.S. oil & gas sector points to greater capital discipline and a more cautious approach to expanding productive capacity.



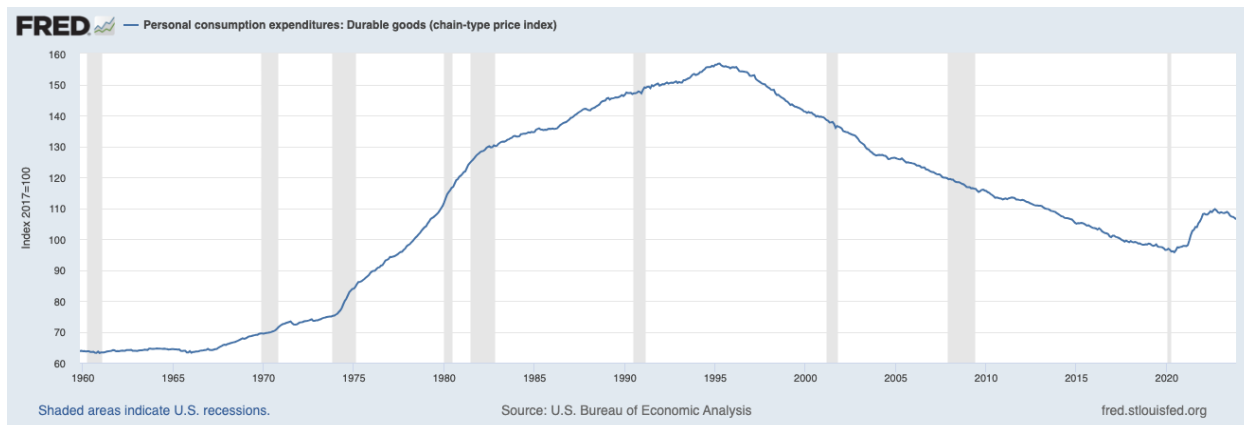
The consumer price inflation rate in the U.S. peaked in the summer of 2022, right when crude oil prices (above) and natural gas prices (below) hit their recent price peaks. The \$70 level on WTI (red line above) that was hit during the first quarter of the year, was a price floor in 2023. Similarly with Henry Hub natural gas prices – monthly prices bottomed at \$2.15 pr million BTUs (red line) during the first quarter of 2023.



American families that heat with natural gas should be paying a lot less to heat their houses and apartments this winter than they did last year. But for now, it looks like the deflation in oil and gas prices may be over. It is not clear that Europe will reduce its natural gas consumption further, and with shooting wars happening in Ukraine and the eastern Mediterranean the risk of higher prices is very real. We see the risks around fossil fuel prices to be skewed to the upside in the medium-term.

## Higher interest rates slowed demand for some durable goods

Durable goods price deflation has also played a role in the sharp decline in overall inflation in 2023, as supply chain “bottle necks” were cleared and growth in demand for durable slowed. The PCE durable goods price index peaked in September 2022 and has declined 3 percent since then.



Weaker demand for housing-related durable goods, like furniture, are showing a contraction of dollar sales now, as are sales at home improvement retailers. The sharp move higher in mortgage rates froze much of the U.S. housing market. Sales of existing homes were running at a low 3.8 million annual rate in October and November 2023. If house sales pick up, demand and pricing for housing related durable goods will likely strengthen, as well.

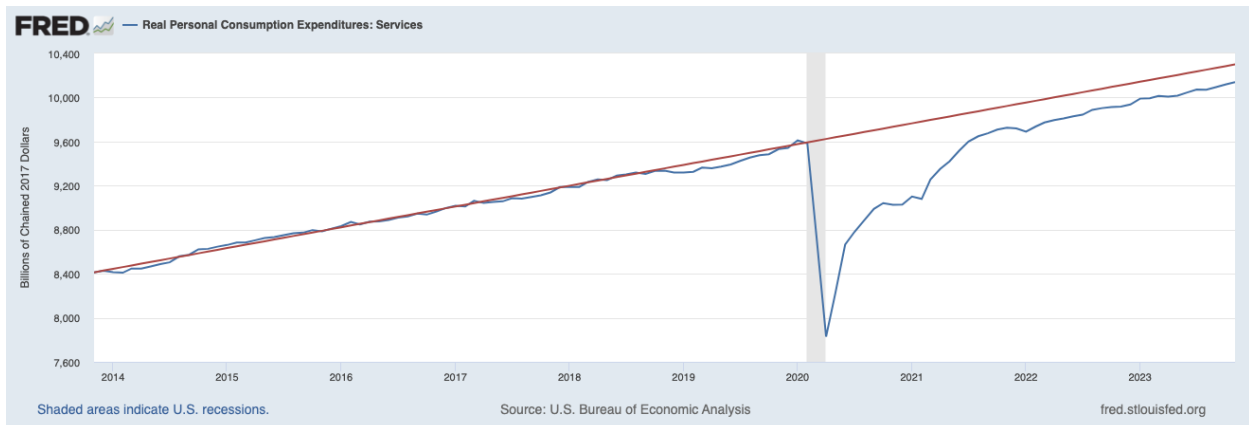
But the \$64,000 question related to durable goods pricing is less what happens in the next six or twelve months and more what happens in the next several years as U.S.-based manufacturers migrate more of their production to, or closer to, the United States. Is the steady decline in durable goods prices that Americans experienced from the mid-1990s to the beginning of the 2020s still the norm, or is a flat-to-higher trend the new normal in a world where the interests of Chinese and American economic policy makers seem less aligned that has been the case for most of the past 20 years? We don't know the answer, and we don't think anyone else does either.

### **Prices of services are still rising**

Prices of consumer services (ex-energy) are up 5.3 percent over the past 12 months, more than double the 2.5 percent average rate of increase in the 2010s. We see two forces at play here. One is strong wage growth. Average hourly earnings are growing at a 4.1 percent pace and median hourly wages – as calculated by the Atlanta Fed - are growing at a 5.2 percent pace (red line below).



The second is strong demand. American went overboard buying durable goods during the Covid lockdowns, but by necessity, consumption of services – as measured by volume – plunged. Despite strong recent growth, services consumption remains below the pre-2020 trend line – this consumer segment represents 67 percent of total consumption.



As long as employment keeps expanding and wages keep growing at a good clip, we don't see demand for services softening much. And raising productivity growth in most services sectors is notoriously difficult.

If the period of fossil fuel deflation is close to over (our base case) and services (ex-energy) inflation continues to run at a 4 -to- 5 percent pace, it's hard to get the math to work for a sustained 2.0 -to- 2.5 percent inflation rate.

But it isn't impossible – what can make it work is a sustained, strong productivity growth driven by innovation (total factor productivity) that allows unit labor costs to grow much more slowly than labor compensation. That was a feature of the 1950s and 1960s economy in America (see table below), but not in the past 10 -to- 15 years. Innovation and productivity are what we need to keep inflation down as we work our way through the structural shortages of labor, housing and renewable energy.

**Table 1 Productivity, wages and inflation**

Average annual % changes

	1950s	1960s	1970s	1980s	1990s	2000s	2010s	2020s*
<b>Labor productivity</b>	2.9%	2.9%	1.9%	1.5%	2.1%	2.7%	1.1%	1.6%
<b>Total factor productivity</b>	1.9%	1.9%	1.1%	0.3%	0.8%	0.9%	0.6%	0.5%
<b>Capital inputs</b>	3.5%	4.3%	4.6%	4.7%	4.5%	3.4%	2.5%	2.6%
<b>Hourly compensation</b>	5.4%	5.1%	8.3%	5.7%	4.0%	3.8%	2.5%	5.8%
<b>Unit labor costs</b>	2.5%	2.1%	6.3%	4.2%	1.8%	1.1%	1.4%	4.1%
<b>Consumer price inflation</b>	2.2%	2.5%	7.5%	5.1%	2.9%	2.6%	1.7%	4.9%

Sources: BLS, Office of Productivity and Technology

\*Data through 2022 – calendar 2023 data is n.a.

Douglas Cliggott | Real Asset News | 11 January 2024

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