Should we be worrying about inflation?

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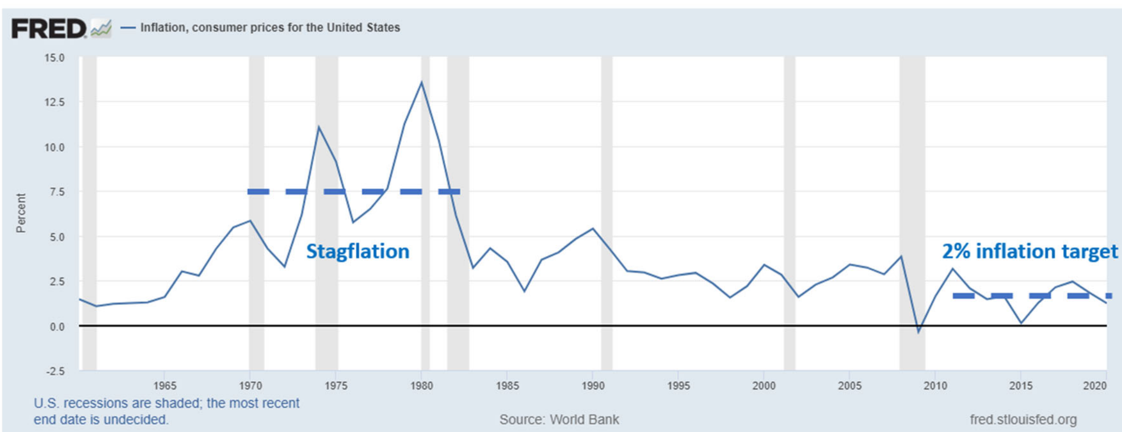
Compared to many of the economists currently dealing with inflation, I have a unique advantage. I am old enough to remember inflation. In May 1983 when I signed the mortgage agreement on my first home purchase, the interest rate was 12.5% and the unemployment rate was over 10%. The inflation rate had fallen to 4.9%, down from 11% a year earlier. Federal Reserve Chairman Paul Volcker demonstrated that monetary policy does matter, at least for choking off inflation and expectations of future inflation by raising interest rates.

The stable prices we have enjoyed since then have lulled us into a sense of security. The inflation has only marginally missed the Federal Reserve's current 2% target since the Fed announced the target in 2012, and it was only marginally higher than that in the 20 years before the announcement (see Figure 1).

Figure 1: U.S. Inflation, 1960 - 2020



So, it is somewhat shocking to have the recent surge in prices that began in March 2021. As we show in Figure 2, we have had four straight months of inflation above the 2% target. This should trigger contractionary monetary policy, but the Fed has not yet started applying the breaks, arguing that the surge is a temporary phenomenon isolated to the pandemic recovery. Their policies are still aggressively expansionary. As shown in Figure 3, the three-month Treasury Bill rate has been effectively zero since March 2020. With rising inflation, the real short-term interest rate (the purchasing power of the return on treasury bills) is negative, meaning that savers are being punished with an historically large loss of purchasing power per dollar saved.

During the pandemic, U.S. consumers have been atypically reluctant to spend. Much of the earnings and stimulus money has been saved, as shown in Figure 4. The savings rate since March 2020 has been unprecedented. We have had 15 straight months of savings rates above 10%. For context, only one of the previous 327 months had a savings rate that high. What that tells us is that the economic recovery thus far has not been driven by increased spending, whether by the federal support payments or from the rising wages paid to workers who remained employed. It also tells us that there is a very large pool of spendable cash that is sitting in bank accounts earning negative returns. That consumer demand is about to be unleashed.

Figure 2: U.S. inflation rate, 2007 - 2021

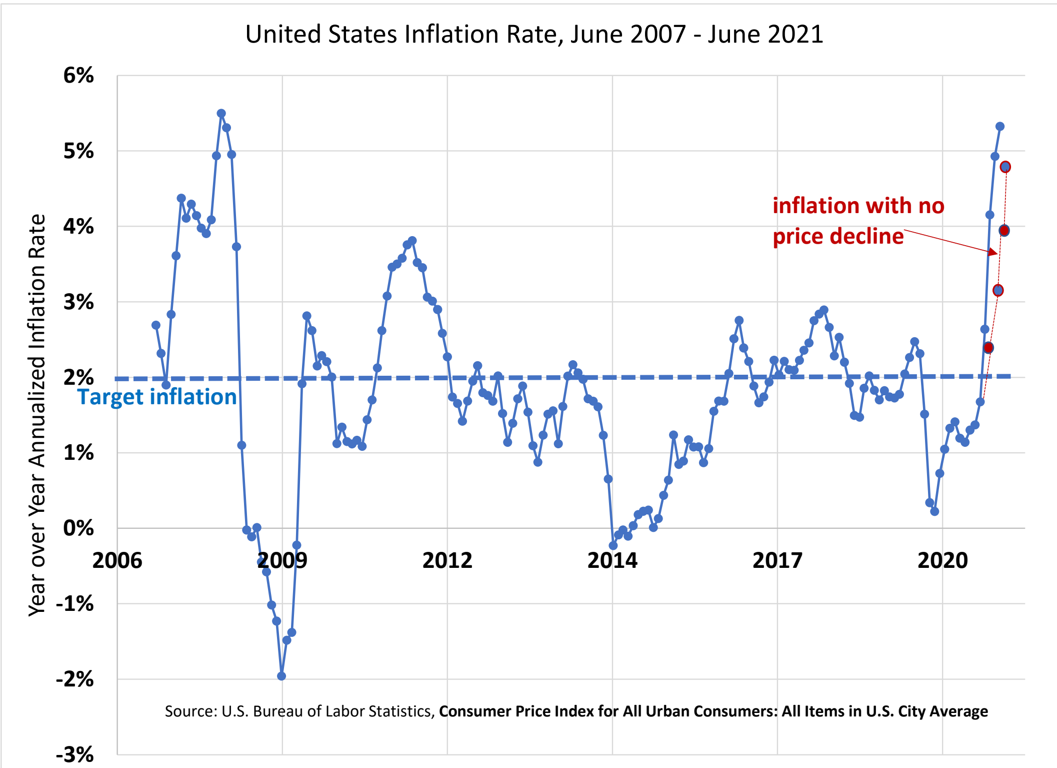


Figure 3: Short-term interest rates on U.S. government bonds, 2007-2021.

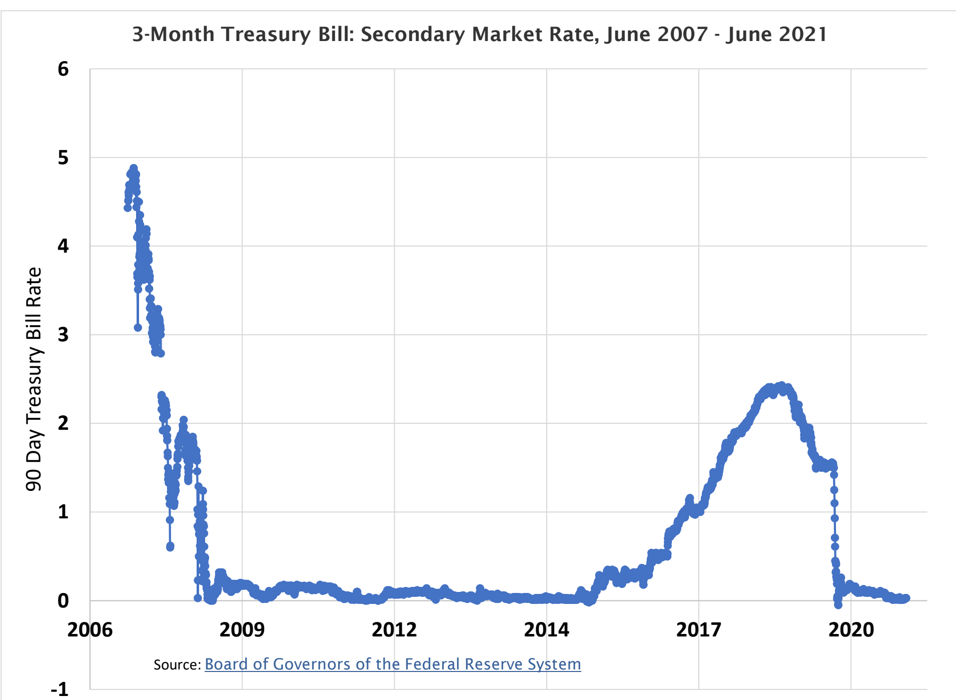


Figure 4: Personal savings rates in the U.S., June 2006 – May 2021.

Milton Friedman claimed that all inflation is a monetary phenomenon. However, there are many other factors at work that are affecting the recent surge in inflation. Some are short term and less troublesome. Others are of greater consequence. I will review the short-term factors first, and then explain my longer-term concerns.

1) **Short-term problem 1: The supply chain problems**

The pandemic slowed international trade that had already been disrupted by trade disruptions. U.S. tariff policies led to tit-for-tat tariff escalations from our trading partners that have increased the cost of international supply chains. For example, the surge in construction costs for housing has been exacerbated by the tariff on Canadian lumber. The Trump administration eased off the tariff from its initial 20% to 9% as lumber prices soared, but the Biden administration has proposed to raise it to 18%.

The pandemic disrupted other international supply chains as well. The current shortage of semiconductors in automobile manufacturing is due in part to the automobile manufacturers cancelling orders when they suspended production early in the pandemic. That led their chip suppliers to switch to other customers. Production disruptions in one market spillover to others. The lack of new cars has increased the price of used cars. Absence of new housing stock has led to a 15% increase nationally in home prices.

Supply chain problems have also resulted from domestic sources. The Texas freeze disrupted manufacturing and firms are still trying to rebuild inventories. More generally, slow response of labor supply to rising openings and wages are a drag on production. In May 2021, there were 9.2 million job openings and only 5.9 million hires, meaning that we are only filling two-thirds of the openings in a month. Typically, we fill 80% or more.

These supply chain problems are short-term sources of inflation. Eventually, inventories will catch up, workers will get hired, international trade will expand, and this source of inflationary pressure will abate.

2) Short-term problem 2: Commodity price increases

A variety of commodity prices have surged in the last year, including metals, grains, and carbon fuels. The U.S. Bureau of Labor Statistics 'All Commodities' Index is up 16% since the start of the pandemic. Most of these trends are only partially related to the pandemic. For example, gold prices surged 32% from February to August 2020, a common response to rising uncertainty. As vaccine trials and distribution played out, uncertainty eased, and half the gold price surge has reversed. Corn and soybean prices have also surged, but this is related to poor weather conditions in several countries including the U.S. and on surging world demand. Gasoline and natural gas prices have risen, but this is from rising demand following the decrease in transportation and industrial fuel demands as governments imposed shutdowns or stay-at-home orders. These sources of price increases are either unrelated to the pandemic or will revert to their long run means as supply recovers.

3) Short-term problem 3: Price recovery to past levels

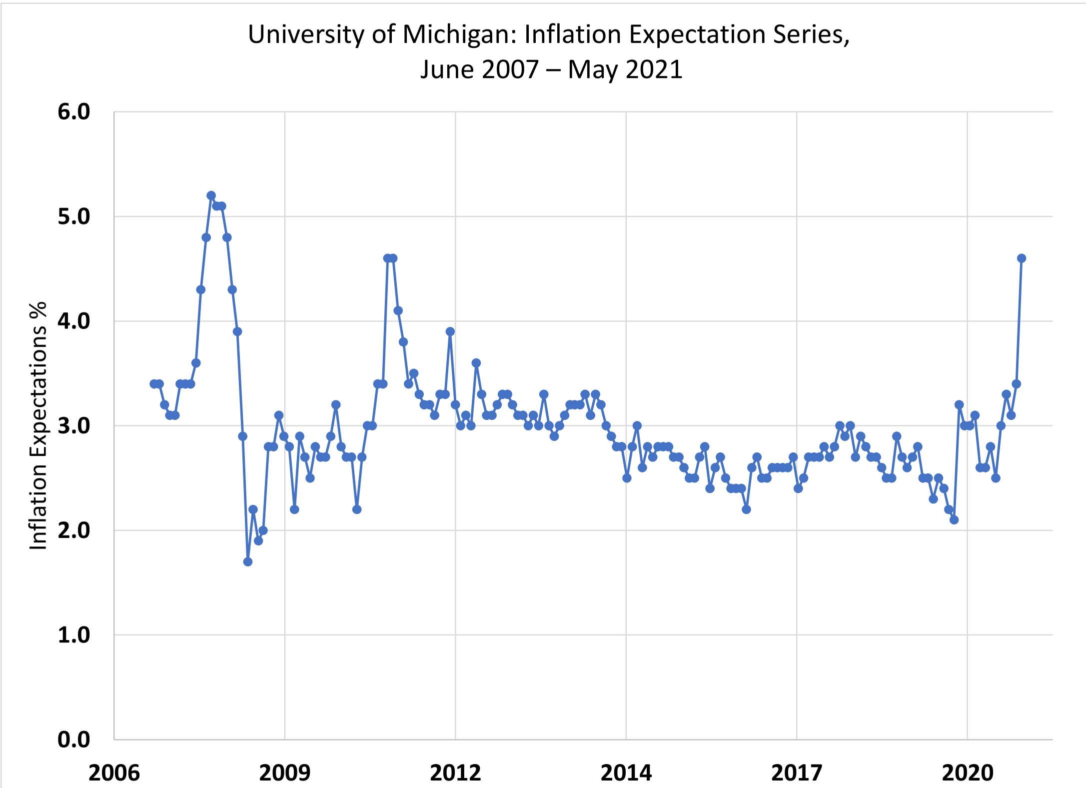
One of the least credible claims by some economists is that the recent price surges are due to price declines early in the recession. This did occur during the recovery from the Great Recession, as can be seen in Figure 2. Some of the price increases in 2010-11 were just a return to previous prices after the deflation (inflation rates below 0) in 2008-9. However, the price declines in the pandemic recession were much smaller and short lived. By July 2020, prices were back to pre-pandemic levels. In Figure 2, I also present what the inflation rates would have been in March-June 2020 had there been no price declines. Even when the effect of price declines is removed, all four recent monthly inflation rates are above the Fed's 2% target.

4) Medium Term Inflationary Factors: Pent-up demand and expectations

As shown in Figure 4, the U.S. has experienced 15 months of unusually high savings. Some of these savings were due to there being fewer ways to spend. Expenditures declined by a third or more in restaurants, travel, hospitality, entertainment, and small brick-and-mortar retail. It is a virtual certainty that this high rate of savings is temporary and that we will be experiencing sharply increased consumer demand, even as the slow response of hires to job openings will limit supply. Given the volume of excess savings, this surge in demand will be fueling inflation for many months. The demand surge will be larger if the Fed maintains negative real interest rates, encouraging borrowing and discouraging savings.

The inflation of the 1970s was particularly persistent because past price increases were factored into wage increases. Those inflationary expectations have become dormant with the long period of stable prices since the mid-1990s. But, as shown in Figure 5, inflationary expectations have surged in the last four months, even as the labor market has experienced the fastest wage growth in many years. If the recent surge in inflation is being factored into wage increases, inflationary pressures will persist.

Figure 5: University of Michigan: Inflation Expectation Series, June 2007 – May 2021



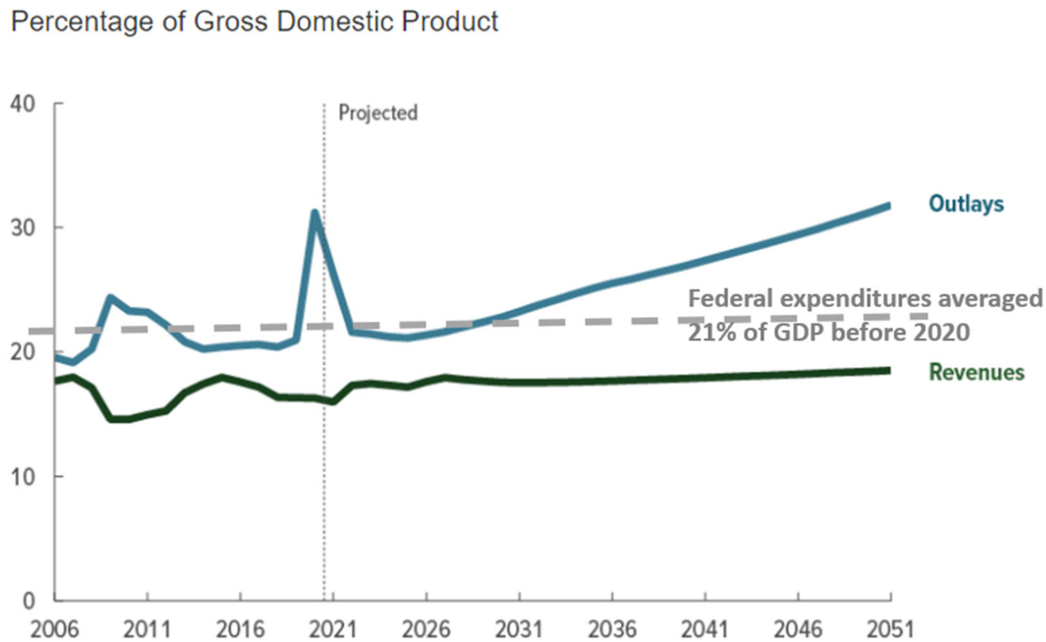
5) The long-run inflationary threat: The growing federal share of the economy

The much greater concern for inflation is the rising share of the federal government in the economy. As the federal government carves out a larger share of the economy, it must take resources away from the private sector. The reallocation of labor and capital from private production to the development of public goods is not inexpensive. What has not been appreciated is that years of profligate government spending have now been factored into future expansion of the federal government at the expense of private production. The long-term share of the federal government in GDP is about 21%. During the pandemic, it rose to 30%. While that is projected to return to 21% at currently passed budgetary allocations, the Congressional Budget Office (CBO) estimates that the current already approved legislation will require that the federal government's expenditures will start rising steadily by 2029. Much of this increase is not paid for, meaning that government interest payments will be a steadily rising share of the federal budget. That federal borrowing will drive up interest rates and choke off private investment.

The CBO estimates have not factored in the trillions of additional expenditures being discussed but not yet passed. If those are added to the already planned expansion of the federal government, the federal government will reach 25% of GDP almost immediately and will reach

30% much more rapidly as well. These rapid shifts from private to public will create bottlenecks in capital, equipment, materials and skilled personnel, and the inflationary pressure will be much more pronounced. It will be much harder for the Fed to moderate these inflationary pressures because they will be due to shifts in production from one sector to another and not a simple monetary phenomenon.

Figure 6: Congressional Budget Office Projections of Federal Expenditures and Receipts as a Percentage of GDP



Congressional Budget Office The 2021 Long-Term Budget Outlook, March 2021
https://www.cbo.gov/publication/57038#_idTextAnchor049