

Ten Macro Drivers of US Inflation¹

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August 14, 2022

We list ten major macro drivers of inflation in America, both short- and long-term, and our goal is to discuss how they are likely to affect future inflation. However, they cannot be switched on and off at will, so there are very few active cures for inflation and even fewer in the hands of the government.

We conclude that if inflation subsides near term, it will primarily be due to the fading of the Covid stimulus, commodity prices declining, and supply chain bottlenecks easing. It's unlikely to subside because the Fed tightens too much, at least directly. But the Fed could affect markets indirectly by triggering sharply higher rates or a stock market crash in response to perceived inaction or overreaction. In the long term, the key drivers of inflation are demographics, which are inflationary, versus automation and globalization, which continue to be powerful disinflationary forces. We argue that the net effects could result in higher long-term inflation and bond yields.

Here are the ten factors, both governmental and otherwise, along with an [Inflation Fighting Score](#) for our prediction of how effective they are likely to be in reducing inflation ([+3](#) is highly disinflationary, [0](#) is neutral, and [-3](#) is highly inflationary).

Governmental Tools: Feeble

Voters hold the government responsible for inflation and it's widely expected to hurt the Democrats in the November 2022 elections, for example, holding President Biden accountable for higher gas prices. For the most part, this ire is misplaced. Yet the government is culpable because it wields the two powerful tools it has, monetary and fiscal, quite feebly, for lack of political will. The best thing the government has already done to lower inflation was the delayed and unintended side effect of stopping the Covid stimulus in 2021, as discussed below.

1. [Fading of prior Stimulus](#): The most important effect of the government on inflation will result from something they do not do – or rather something they have stopped doing:

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Covid stimulus. Between 2020 and 2021, the government injected \$5.1 Trillion of stimulus into the economy in three waves, the last of which was in March 2021. Collectively, this represents about a quarter of annual GDP, the largest such injection of liquidity in the history of the country. It was paid for by Treasury debt issuance. The corresponding rise in personal income more than canceled the effects of the pandemic (of course, there were many individual cases of hardship). Much of this went into savings given the low activity levels during the pandemic and was spent after the economy returned toward normalcy over the past year, explaining the boom in demand. It brought GSDP back to the pre-covid track and GDP per capita post-Stimulus was higher than pre-Covid levels. When paired with the supply shortages and commodity price rise described below, this led to the perfect storm of high inflation. As jobs have come back, wages have largely supplanted these stimulus checks by now. As no further stimulus is planned, it is likely that the one-off effect will fade rather than result in galloping inflation. Score: +3

2. Interest rates: Short-term rates are controlled by the Fed. If the Fed keeps raising rates quickly, that will kill inflation. With inflation now at 6-8%, this would mean raising interest rates well above 5%. However, it's impossible to do this without also killing the economy. The Fed, although independent, is always influenced to some degree by optics and politics. So although the Fed will hike for some time, it is unlikely that they would have the guts to carry this policy through to its logical conclusion, that is, until it kills the economy. This is because the pain inflicted on the same constituents the Fed is trying to protect from inflation could be quite severe, as it was when Volcker did it in the last major inflationary episode of the late '70s and '80s. The denial of inflation by calling it transitory in 2021 was just an early sign of this lack of political will. Score: +1
3. Government spending: One of the critical components of inflation is fiscal deficit spending (the gap between government revenues and expenditures). Over the past 10 years, since the great financial crisis, the US and other governments have become increasingly cavalier about running up large fiscal deficits. Basking in the low inflation environment created by the last 30 years, the government was able to get away with it. Deficit spending accelerated after the Great Financial Crisis of 2008-2009 and the Covid crisis of 2020. However, in the current inflationary environment, deficit spending is not only a luxury that is unnecessary given the tight labor market, but also very dangerous because it contributes to inflation. Sadly, both parties seem to have abdicated any fiscal responsibility restraint that they may have observed in the past. This needs to change, given that the inflation picture is no longer benign. But the political will to rein in spending is nonexistent and there is every reason to be pessimistic about the future. The only reason we will not give this factor a -3 is that political gridlock has limited the scope for spending. Score: -1

Near-Term Non-Governmental Drivers of Inflation

The most important drivers of inflation are non-governmental.

4. Supply chain disruption: Perhaps the most temporary source of inflation in the current environment is the supply chain disruptions that have resulted from Covid. These disruptions have lasted longer than most thought they would. Nevertheless, there are already signs that these disruptions are easing. Post-covid pent-up demand will also ease. Allowed enough time, say 12-18 months, the global market will sort out most of those disruptions through the forces of competition. Thus, we can expect most supply chain problems to be transitory. **Score: +3**

5. Commodity prices: Inflation beyond one's borders primarily affect domestic inflation due to the cost of goods imported. The biggest effect of this imported inflation is felt in commodities' prices. Russia's invasion of Ukraine has resulted in a sharp increase in the price of energy. Although the war is not likely to come to a quick close, market forces will probably push down commodity prices by encouraging production elsewhere, and governmental policies will encourage investment and energy production and alternatives as well as traditional sources. But even if they stay the same, price inflation will drop to 0. As a result, we can expect the spike in inflation and energy prices to subside and even reverse in the coming years. However, if China were to invade Taiwan, the disruptions from this could be very severe and last much longer. Let's hope they don't. **Score: +3**

6. Stock and Bond Markets: While markets reflect the long-term health of the economy, there is also feedback from the markets back to the economy – and hence to inflation. Unlike in previous decades, stocks and bonds are moving more in lockstep in the 2020s. Both the stock and bond markets reacted badly in 2022 to persistently high inflation and the early phase of Fed inaction. This shocked the economy along with the drop in stocks in 2022 and explains the slowdown we are seeing now. Now bonds have calmed down, expecting inflation to subside naturally as the economy cools. But unless actual inflation slows fast, both markets will fall again, hurting the economy.

The channels through which the bond markets affect inflation include financing costs (higher rates cool down the economy and hence prices), savings/investment rates (higher real rates hurt growth and inflation), and implied inflation expectations (higher inflation can become entrenched). The stock market affects inflation primarily by driving consumer sentiment (a crash means lower demand for goods and services) and the wealth effect (lower stocks imply less money to spend).

The Fed can hurt stock and bond prices, either by inaction or overzealousness, and they know it, so they are trying to thread the needle. The risk is that whether they hike too much or too little, stock and bond markets can sell off (in the latter case because the market would perceive that inflation will not be under control). This in turn can bring down inflation through the channels mentioned (ironically in the latter case).

Regardless of how well we understand these mechanisms, the direction of markets is impossible to predict (at least we can't!). We think both markets will be lackluster but range bound, so we give this factor a mediocre inflation fighting score. Score: 0 (but if you are bearish, you can make it a +2)

7. Currency: A depreciating currency leads to higher prices. If the US dollar gets stronger, that will help keep inflation of prices for imported goods under control. But if the dollar goes into a weakening mode, it will contribute to inflation. The outlook for the dollar is neutral relative to other global currencies. Therefore there is no a priori reason to expect the dollar to be a major factor in US inflation over the next decade. So we expect the dollar to be inflation-neutral, though experience has taught us not to try to predict currency markets. Score: 0

Long-term Drivers of Inflation

8. Demographics: The aging of the huge group of retiring baby boomers, along with the shrinking cohorts of the population behind them has created fewer workers – causing rising pressures in the labor market. This tightness has been temporarily exacerbated by the pent-up demand created during the post- Covid recovery. While this pent-up demand will ease, the baby boom generation is going to require more services in areas like healthcare, and the low rate of workforce growth (0.5%) will stay with us, putting inflationary pressure on wages and prices. On the other hand, population growth is low at under 1%, in contrast to the 1970s, when population growth exceeded 2%. Still, the overall effect will be modest inflationary pressure. There is a cure for demographics, but it is not popular; it is more immigration. Increasing immigration can help ease tight labor markets for the next twenty years. But this is not on either political party's agenda. Score: -3
9. Automation: In addition to globalization, automation has been a major contributor to the disinflationary environment that we have enjoyed over the past 30 years. Long term, it may be the most powerful reason for inflation staying low. There is no sign of slowing in this phase of automation. However, in an environment of uncertain inflation, companies hesitate to invest the long-term capital required by automation. Automation requires large capital outlays, with uncertain benefits in the future. Uncertain inflation is toxic to this endeavor. Still, the benefits of automation do increase during a period of sharply rising wages. Nevertheless, automation will continue to ease tight labor markets, especially in services, over the next 10 years. But automation has a long

maturity cycle and low and stable long-term financing costs are critical. Since the latter are driven by bond markets, which reflect inflation expectations, we have a circular problem. Score: +2

10. Globalization: Over the past 30 years one of the major disinflationary forces has been the ability of countries with high labor rates to import goods services and parts from countries with lower labor costs. Companies were able to hire an international workforce at a cheaper cost, and deliver services remotely across international borders, while labor demand in the domestic market was eased. In the past decade, however, the forces of protectionism and nationalism have become stronger and rivalry between China and the United States may slow globalization. Nevertheless, it remains an important disinflationary force in the US economy, especially in the 70% devoted to services, because automation in manufacturing is already quite advanced. But, likely, globalization forces in the US will increasingly shift away from China towards countries that are geo-strategically and politically more aligned with the US, such as India. Score: +1

The Bottom Line

These are complex factors, hard to quantify and hard to combine. Still we have tried, with the caveat that the result reflects our financial intuition and experience more than it does any sort of scientific process. Our conclusion is that the inflation should fall quite sharply later this year, but long-term, may settle at higher levels than we have become accustomed to. Here is how we score the three categories and the outlook overall.

Government Factors: +3

The \$5.1 T of the Covid stimulus was an unintended source of the savings that are being spent now; inflation should fall sharply as its one-off effects fade. As for more conventional tools, the Fed is hobbled by being torn between acting to control inflation and taking the economy, while both political parties are fiscally irresponsible. So, the US government is not a particularly effective inflation fighter now, nor has it been for a while (since 1981). The Fed's actions are helping, but other short-term factors are more important.

Short-term Factors: +3

Supply chains should ease and imported inflation through high energy prices will decline sharply unless another geopolitical shoe (like Taiwan) drops. The market is expected to have a neutral effect but there is a risk of a sell-off which would slow down the economy and lower inflation.

In combination, we expect these powerful short-term factors to push CPI inflation from August 2022 onwards to well under 4% by year-end 2022. This is also the Fed's and market's view. But where we differ is in the long-term forecast.

Long-term Factors: -1

The demographics of a large retiring population are inflationary for the coming decade, and this effect will dominate. The countervailing forces of automation and globalization can be expected to mitigate its effects but not cancel them out. Slow global growth is also likely, so there will not be huge demand pressures, unlike in the 1970s. Still, it is unlikely that we will enjoy a return to the 1-2% a year inflation we had become used to in the 2010s. Inflation of the order of 3% or so long-term is a more likely outcome. Bond markets are at risk because at under 3%, the 10-year Treasury would offer negative real yields and returns under this scenario. An eventual adjustment of 10-year government yields to the vicinity of 4% appears likely, with risks on both sides of that number. Stocks and real estate markets too would have to adjust to the higher discount rates implied by the rise in yields.