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The economic-financial analysis that enlightens your investments

The difficult task for monetary policy and the call for a fiscal adjustment

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Inflation in the US and other economies continues to climb. I discuss reasons why a monetary contraction will not be enough to bring inflation back to target levels without causing a recession, and that a fiscal adjustment may be necessary as additional measure. The main obstacle for monetary policy to contain the gallop of prices is the resulting highly negative real interest rates and the high debt levels observed, which make the call for a fiscal adjustment. Otherwise, an even higher inflationary spiral may occur, as debtors may wish to take advantage of the highly negative real interest rates and engage in even more debt and spending. One of those debtors is the government, which constant deficits and increasing debt may trigger a loss of faith in the currency, keeping inflation on the rise. A fiscal adjustment is pertinent. I also discuss policy scenarios and implications for investments.

1. Introduction

After decades lurking in the shadows, inflation is back. What was a painful but distant memory is now a new reality, and it is global. In the eurozone, inflation hit 7.5% in April this year, the highest level since records began in 1997. In Britain, prices rose by 7%. Annual CPI inflation rate in Sweden increased to 6% in March 2022 and 6.4% in April, the highest since the early 1990's. In the US, the annual CPI inflation rate reached 8.5% in March and 8.3% in April, levels not seen since 1981. Supply chain issues coupled with elevated aggregate demand resulted from the strong monetary and fiscal stimulus after Covid-19 continue to inflate prices at very high pace. Although most central banks have started tightening monetary condition to restrain the gallop of prices, the question that poses now is whether monetary policy will suffice, or additional measures will be necessary.

The central issue is the already high and increasing levels of public and private debt observed globally. As monetary policy contracts and interest rates rise, the burden of debt repayments over governments, households and companies increase, which may impose constraints on the ability of monetary policy to contain inflation without causing a deep recession. Adds to that the fact that high inflation and relatively low nominal interest rates are translated into negative real interest rates. These are beneficial to debtors, who may want to take even more debt, aggravating the problem.

In this report, I discuss the reasons why monetary policy will not be enough to bring inflation back to target levels, and that a strong fiscal adjustment may be necessary as additional measure. My main point is that the highly negative real interest rates resulted from high inflation and a monetary policy that is impeded to contract enough due to high debt levels will make the call for a fiscal contraction, or an even higher inflationary spiral may occur. Although increases in wages and disposable income may give some room for interest rate rises, the fiscal contraction is likely to be needed. Another argument for it is that recurrent fiscal deficits coupled with an increasing trajectory of public debt commonly put fire on inflation as currency holders may prefer to hold goods and other assets instead of the currency itself.

To develop my argument, I use US data on several indicators to describe the reasons for the high inflation numbers seen recently, the resulting low and negative real interest rates, the high and increasing debt levels in US and other economies, as well as the projections of fiscal deficits and rising public debt in the US. I also discuss different scenarios on how monetary and fiscal policy in the US may react to the current economic environment and the implications for investments.

This report is organized as follows. The following section describes the recent developments in inflation and interest rates. The third section described how debt has risen across economies. The fourth section develops the argument for a fiscal contraction, and the fifth section concludes and discusses some implications for investments.

2. Inflation and interest rates

The Covid-19 pandemic and the consequent closing of the economies around the world has led to strong disruptions to production and distribution. At the same time, as economic activity plummet and unemployment spiked, governments responded with strong monetary and fiscal stimuluses. Although the process of reopening of the economies have helped to reactivate production and supply, the increasing demand resulted from the economic recovery and the financial support provided by governments has kept supply chain pressures at historically high levels.

Figure 1 shows a measure of supply chain pressures in both the global and the US economies, the Supply Chain Pressure Index proposed by Benigno et. al (2022). As can be seen, two spikes have occurred in the index recently. One following the closing of the economies after the spread of Covid-19, and one after the process of reopening was initiated. There are different explanations for these. The first spike has occurred because of the disruptions to production and distribution resulted from Covid-19, while the second because of the increased demand resulted from the financial aid

provided by the government in connection with the process of economic recovery seen after the reopening. This can be seen in Figure 2, which shows data on personal income as well as personal income without government social benefits. As can be seen, after the breakout of Covid-19 the US government has provided two strong rounds of social benefits in the form of direct transfers to the population. The first round managed to offset the decline in personal income seen with Covid-19. The second round of transfers, which was stronger than the first, happened concurrently with the rise in personal income resulted from the economic recovery. This additional government transfer has induced a disproportional rise in goods demand, fueling the supply chain pressures seen more recently.

The result of these has been the rise of inflation. As can be seen from Figure 3, CPI inflation in the US has reached 8.5% in March 2022, the highest figure since 1981. PCE inflation has reached 6.1%. In connection with these, as the fed funds rate has remained close to zero, the real interest rate has declined abruptly to -8.06%, the lowest figure since I started computing it (see Figure 3). At the same time, the Federal Reserve has communicated its intentions to raise the Fed funds target rate to levels close to 1.9% in 2022, and 2.8% in 2023 and 2024 (see the Fed's Summary of Economic Projections of March 16, 2022[1]). Following that, the 10-year government bond rate has remained relatively low, at 2.94% in April 2022. An even cleaner measure of policy rate expectations, the short-rate expectations component of US forward rates obtained from term structure models that I show in Figure 4, indicate that the Fed is expected to keep its Fed funds target rate relatively low in the mid- (1 to 3-years ahead) and long-term (5 to 10-years ahead) at 3.1% and 3.4%, respectively. As a result, long-term (5 to 10-years ahead) real interest rate expectations measured from inflation-protected securities have also remained low at 0.4% in April 2022.

The implications of these are various. First, it suggests that market participants do not expect the Fed to tighten monetary policy significantly, keeping its policy rate in the range of 2.5%-3.5%. Second, the fact that real interest rates are low at the present and are expected to remain low in the long-term is very beneficial to debtors, who may be willing to continue borrowing, spending, and fueling aggregate demand.

3. Debt

As seen in Figures 3 and 4, interest rates have shown a declining pattern since the early 1980s, a phenomenon that is connected to the expansionary monetary policy seen during the period and the resulting interest rate downtrend. And this is a global phenomenon. For instance, the policy rate in Europe was around 4.5% in 2000 and declined to levels around 0% in 2022. In Britain, it declined from 6% to 0.1% in the same years, and in Sweden from 3.75% to 0%, respectively. 10-year government bond interest rates in these economies have followed a similar pattern, declining from levels around 4.5% in 2000 to around 0% in 2020.

However, it is important to note that the decline in interest rates is intrinsically connected to the consequent rise of debt. The idea is that, as central banks make monetary policy more expansionary and interest rates faced by businesses and households are lowered, making debt service payments more affordable, agents become more willing to borrow, spend and invest. At the same time, banks and financial institutions become more willing to extend credit, while investors become more willing to buy bonds (debt assets). Consequently, the levels of private and public debt in the economy tend to rise. If the funds borrowed are spent in assets that do not generate income to the economy in a proportional or higher rate than debt, debt to income (or debt to GDP) ratio tends to rise, making the economy highly leveraged. As Figure 5 shows, total debt (private and public) as a percentage of GDP has increased steadily in several economies. For instance, total debt in Canada has increased from 179% of GDP in 2000 to 305% of GDP in 2020, while US total debt has

[1] https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20220316.pdf

increased from 193% of GDP to 243% of GDP in the same period. At the same time, debt service payments of households and businesses as a percentage of income have remained relatively stable for most economies, as shown by Figure 6. This is a result of the declining interest rates which have naturally counterbalanced the rise of private debt.

Another important point that is connected to the rise of debt in the US and other economies is the fiscal outlook. For instance, in the US, the Congress of Budget Office Long-Term Budget Projections of March 2021 suggests an increasing profile of the US public debt, starting from 102% of GDP in 2022 and projected to reach 202% of GDP in 2051. Importantly, deficits are expected to rise steadily, from 4.6% of GDP in 2022 to 13.3% of GDP in 2051. According to CBO, an increasing contributor of the deficits are the net interest payments, which are expected to rise from 1.2% of GDP in 2022 to 8.6% of GDP in 2051.

4. The call for a fiscal adjustment

The figures above show an alarming scenario. They suggest increasing inflation, increasing debt levels followed from a downtrend in interest rates, as well as a low and negative real interest rates. The result of that is that monetary policy may be constrained to contain inflation without causing a deep recession. In case that happened, and interest rates rose close to inflation, debt repayments would take a large part of disposable income of agents, forcing aggregate demand to contract through lower consumption, investments, and spending. So, if monetary policy is impeded to contract enough to contain inflation, real interest rates remain at low negative levels. This is beneficial to debtors, who may want to take even more debt to spend in the economy, aggravating the inflationary problem.

Adds to the above the fact that the problematic fiscal conjecture could lead to a debt crisis characterized by a loss of confidence in the government’s ability to manage its budget, and in the currency itself. The consequences would be the rise in interest rates and inflation, as investors would demand additional compensation to hold US bonds and currency holders would prefer to hold goods and other assets instead of the currency itself. As even the Congressional Budget Office warned earlier this year:

> *. . . a growing level of federal debt would also increase the probability of a sudden fiscal crisis, during which investors would lose confidence in the government's ability to manage its budget, and the government would thereby lose its ability to borrow at affordable rates. It is possible that interest rates would rise gradually as investors' confidence declined, giving legislators advance warning of the worsening situation and sufficient time to make policy choices that could avert a crisis. But as other countries' experiences show, it is also possible that investors would lose confidence abruptly and interest rates on government debt would rise sharply. The exact point at which such a crisis might occur for the United States is unknown, in part because the ratio of federal debt to GDP is climbing into unfamiliar territory and in part because the risk of a crisis is influenced by a number of other factors, including the government's long-term budget outlook, its near-term borrowing needs, and the health of the economy. When fiscal crises do occur, they often happen during an economic downturn, which amplifies the difficulties of adjusting fiscal policy in response.*

To see why the scenario described above is a possibility, we can start by asking the question of why paper money (currency) has value. The answer is twofold. First, it is the fact that the US government accepts only dollars in payment of taxes, and everyone else in the economy accepts dollars because of the need to pay taxes using dollars. Second, it is the faith that agents have in the government due to the government’s ability to print dollars to repay its debt. Inflation escalates when there are a lot more dollars in the economy than what is needed for transactions, or when people

lose faith in the currency. If that happens, people try to get rid of the extra cash as soon as possible by buying goods, or other assets that are safer than the cash itself. Interest rates, on the other hand, rise when the central bank contracts monetary policy and indicates its future intentions to do so, but also when investors lose faith that the government will be able to honor its debt through fiscal surpluses, or at least to keep its debt sustainable. In the current environment, interest rates have not gone up much yet as shown in Figure 3 and 4. However, because inflation is high and real interest rates are low, debtors become more willing to take more debt to spend, increasing aggregate demand and inflation. One of those debtors is the government, which constant deficits and increasing debt may trigger a loss of faith in the currency. In a situation like this inflation keeps rising. Thus, the reason I am in favor of a fiscal adjustment as soon as possible, or the problem may aggravate even further.

The scenario described above has not happened yet but is a real possibility. At the present, 3-years mean inflation expectations measured by the Consumer Expectations Survey of the New York Fed are around 4%. 5-years CPI inflation expectations measured by the Survey of Professional Forecasters provided by the Philadelphia Fed are at 2.8%, while 10-years CPI inflation expectations are at 2.5%. As these figures are below 8.5%, the CPI inflation of March 2022, they suggest that agents still see inflation as transitory. However, as negative real interest rates may continue triggering the rise of aggregate demand, inflation may turn to be more permanent than is currently expected. Adds to that the problematic fiscal conjecture and the rising risk of a debt crisis that could trigger a loss of faith in the currency. As a final remark, to lower any risks that an inflation spiral occurs, I recommend a fiscal adjustment that shall help monetary policy to bring inflation back to its long-run level of around 2%.

5. Concluding remarks and implications for investments

As inflation in the US and other economies continue rising, a monetary contraction has been on the horizon. However, I discuss that monetary policy will not be enough to bring inflation back to target levels without causing a deep recession, and therefore, a fiscal adjustment may be necessary as additional measure. The main point is that the high inflation observed together with a monetary policy that is impeded to contract enough to contain the gallop of prices due to the high debt levels observed have resulted in highly negative real interest rates, which makes the call for a fiscal adjustment. Otherwise, an even higher inflationary spiral may occur. The reasons are that debtors may wish to take advantage of the low/negative real interest rates to take even more debt and increase spending. One of those debtors is the government, which constant deficits and increasing debt may trigger a loss of faith in the currency, keeping inflation high and rising. Thus, the reason I am in favor of a fiscal adjustment as soon as possible.

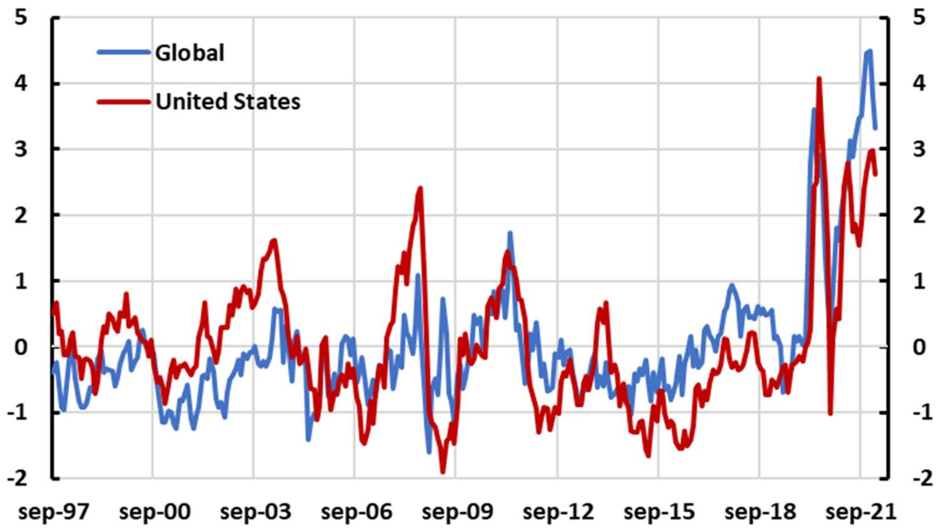
The implications for investments are various. To discuss these, I present four potential scenarios below, depending on how monetary and fiscal policy will manifest in the near future:

- **Scenario 1:** nominal interest rates are NOT raised significantly to attack inflation, and fiscal policy is NOT contracted accordingly
  The risk of recession is very low. In this scenario, as inflation is expected to continue high and rising, the value of currency declines quickly, becoming very expensive to hold cash. Rising inflation and nominal interest rates lower the value of nominal bonds, while the value of real bonds rise. The low real interest rate environment benefits holding assets that gain value in an inflationary environment, and that can produce cashflows. Real estate prices continue rising in this environment. Other hard assets that tend benefit from high inflation such as gold may also continue gaining value. High dividend stocks, and "defensive" stocks such as Wall Mart, Coca-Cola, Pepsi, Johnson & Johnson, Axfood AB etc are also an alternative.

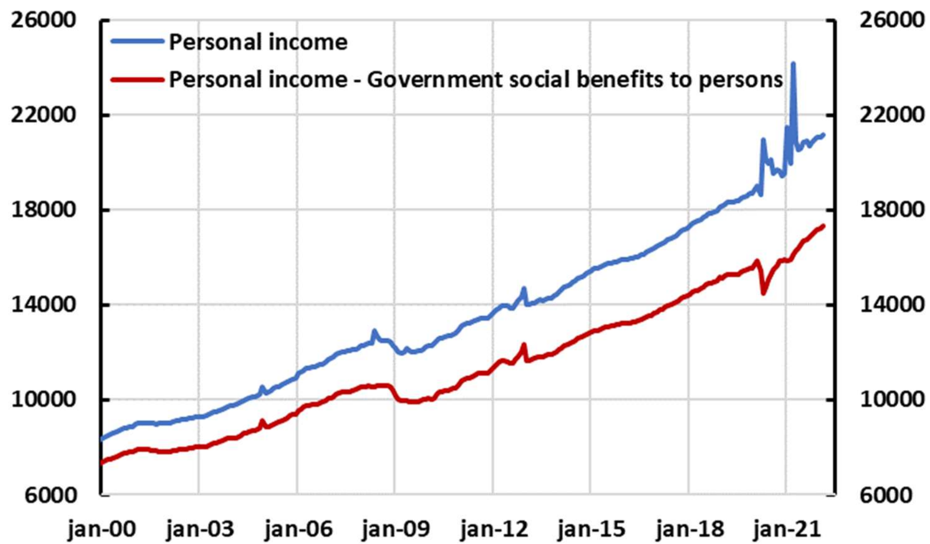
- **Scenario 2:** nominal interest rates are NOT raised significantly to attack inflation, and fiscal policy is contracted accordingly
  The risk of recession is mild. As nominal interest rates are not raised significantly, debt service payments as percentage of disposable income remain at acceptable levels, feeding spending and aggregate demand. This is reinforced by the fiscal adjustment, which helps to contain the increase of long-term interest rates and, therefore, debt service payments. Prices of both nominal and real bonds do not lower significantly. As debt service payments remain at acceptable levels, real estate prices are maintained/keep rising with the scarcity of housing, and stock prices do not fall strongly. Good alternatives are blue-chip stocks such as Accenture, Microsoft, Old Dominium Freight Line, Danaher, etc.

- **Scenario 3:** nominal interest rates are raised significantly to attack inflation, and fiscal policy is NOT contracted accordingly
  The risk of recession is high. As nominal interest rates are raised to attack inflation, debt service payments as percentage of disposable income rises significantly, lowering spending and contracting aggregate demand. Asset prices fall. Prices of both nominal and real bonds lower. As debt service payments rise, real estate prices are likely to fall, in addition to stocks prices.

- **Scenario 4:** nominal interest rates are raised significantly, and fiscal policy is contracted accordingly
  The risk of recession is high. The implications of this scenario are like those in scenario 3, but with a higher risk of recession and larger drops in asset prices. The probability of this scenario happening is considerably lower though.

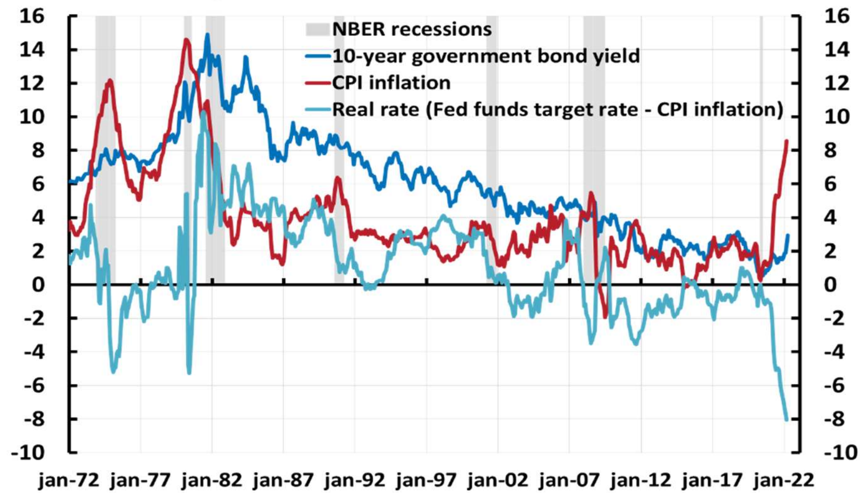


Notes: This figure shows the Supply Chain Pressure Index for the global and the US economies that is proposed by Benigno et. al (2022).



Notes: This figure shows data for Personal income and Personal income minus Government social benefits to persons for the US economy.

Figure 3: Inflation and interest rates

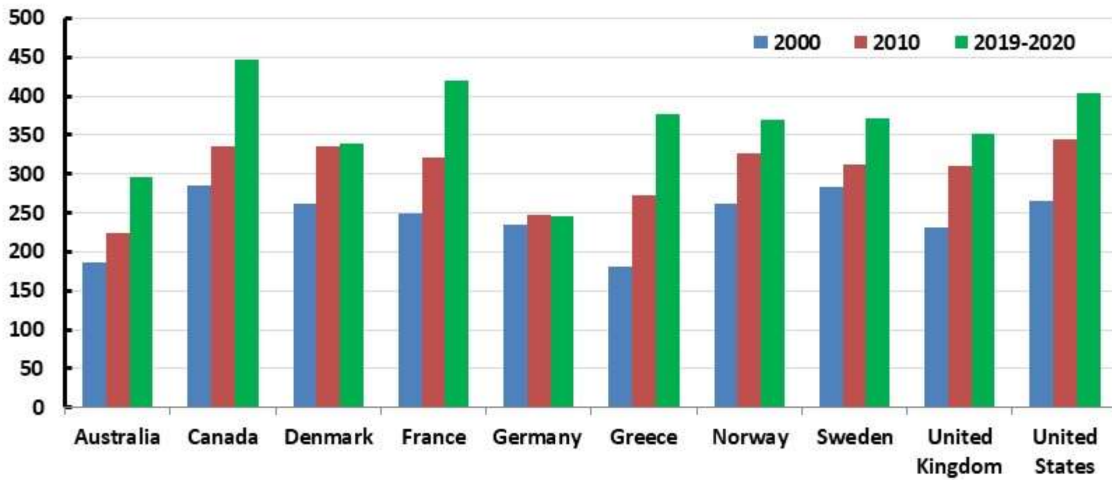


Notes: This figure shows long-term (nominal) and short-term (real) interest rates and inflation data for the US economy

Figure 4: Market-based short-rate expectations and real interest rates

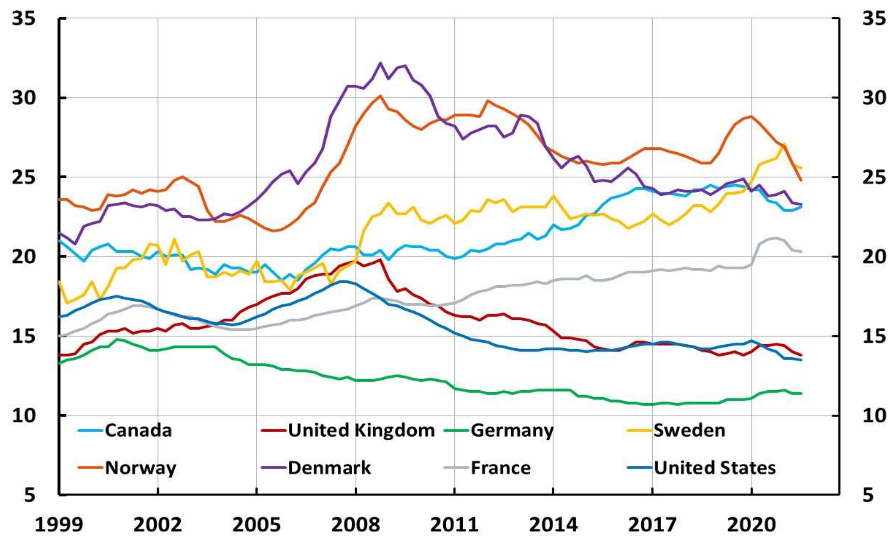
Notes: This figure shows long-term (nominal) and short-term (real) interest rates and inflation data for the US economy

Figure 5: Total debt as percent of GDP



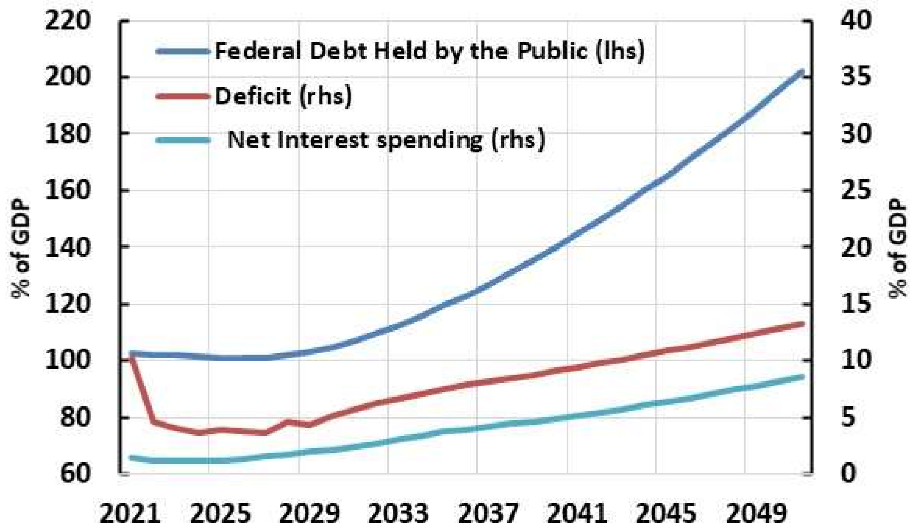
Notes: This figure shows total (private + public) debt as percent of GDP for several economies

Figure 6: Debt service ratio of private non-financial sector (% of income)



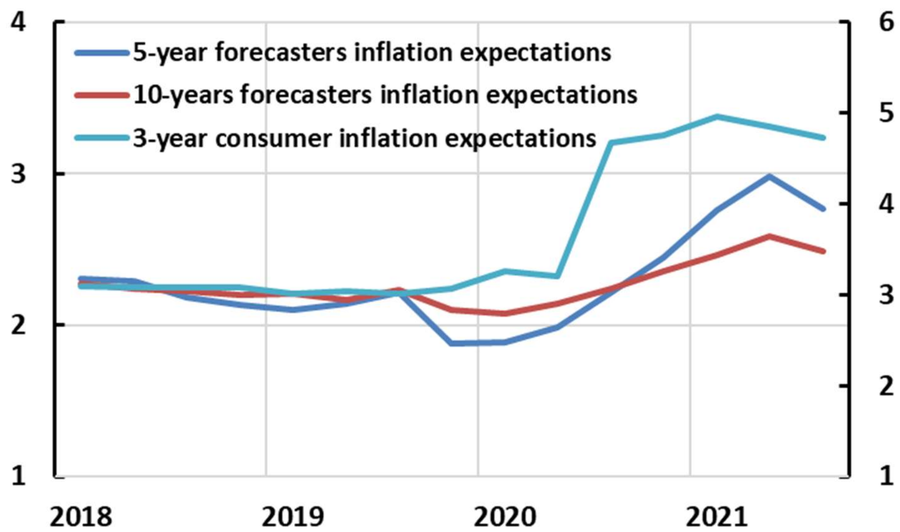
Notes: This figure shows debt service ratio (as % of income) of the private non-financial sector for several economies

Figure 7: CBO projections of US federal debt, fiscal deficits, and net interest payments as % of GDP



Notes: This figure shows the Congress of Budget Office (CBO) projections as of July 2021. Left-hand-side: Federal Debt Held by the Public. Right-hand-side: Deficit, Net Interest Spending.

Figure 8: Inflation expectations from surveys



Notes: This figure shows inflation expectations from surveys. The 5-years and the 10-years expectations are from the Survey of Professional Forecasters of the Philadelphia Fed. The 3-years inflation expectations are from the Survey of Consumer Expectations.

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