Bradley, Foster & Sargent, Inc.
Quarterly Market Commentary

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Have We All Now Embraced Modern Monetary Theory (MMT)?

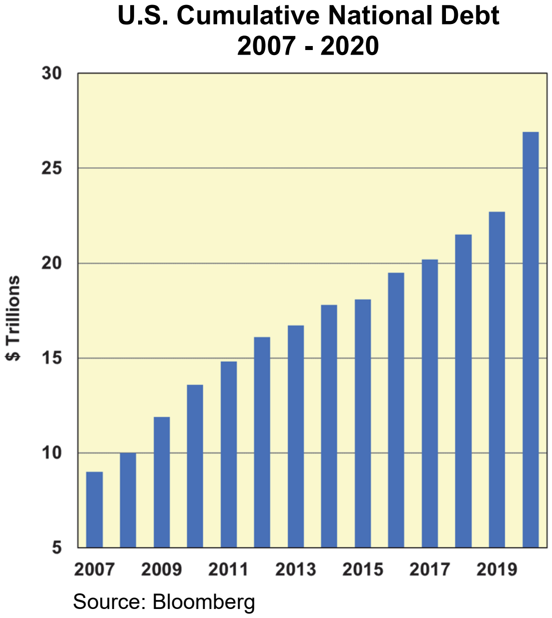
> Federal government spending is in no case operationally constrained by revenues, meaning that there is no "solvency risk." In other words, the federal government can always make any and all payments in its own currency, no matter how large the deficit is, or how few taxes it collects.
>
> Warren Mosler, *The 7 Deadly Innocent Frauds of Economic Policy,* 2010

> Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output.
>
> Milton Friedman, *The Counter-Revolution in Monetary Theory,* 1970

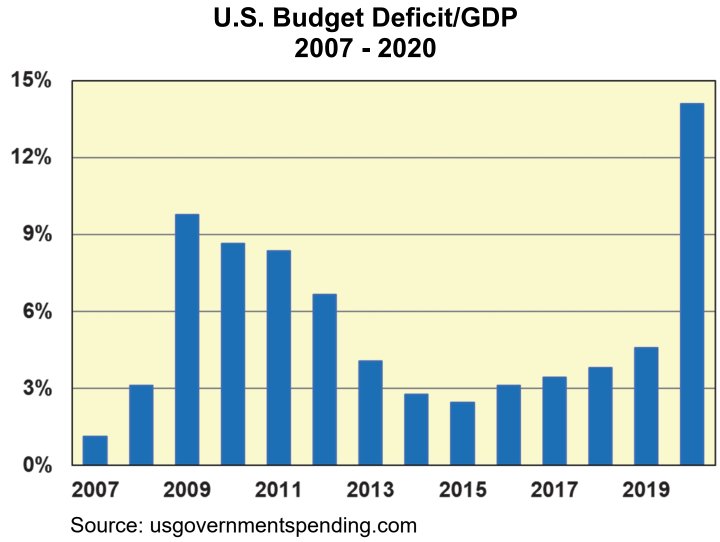
One of our company's founders spent five formative years of his life in West Germany during the 1970s. During that time, he learned about the German citizens' dread of inflation. And for good reason. The experience of hyperinflation in 1922-1924 is seared into the collective German soul. On a prominent wall in his office in our headquarters in Hartford is a framed German Reichsbanknote in the amount of 10,000 Marks. The reason for the display in his office is to remind us at Bradley, Foster & Sargent what can happen when a wealthy, developed country like Germany runs the printing presses day and night in order to fund its deficit. Many have heard about the hyperinflation that occurred there following World War I, but it bears repeating here. At the start of World War I, Germany suspended the gold standard (the convertibility of its currency to gold at a fixed rate). Thus, German currency (called the Papiermark) became purely fiat money. Furthermore, the German government decided to pay for the war by borrowing rather than through increased taxes, thereby saddling the post-war Weimar government with huge debts. Added to this massive debt load were the crushing reparation payments demanded by the Allies in the Versailles Treaty of 1919. The Papiermark dropped in value from 4.2 Marks to the dollar in 1914 to 90 Marks in the first half of 1921 — a huge devaluation of the Mark. The reparation payments to the Allies had to be made in hard currency. In order to make the payments in 1922, the German government simply printed larger and larger amounts of Papiermark. The result was a hyperinflation in Germany of unimaginable proportions that remains infamous in political and economic circles. Inflation was so rampant that in 1923 workers were often paid several times a day as the value of the Mark depreciated so much during the day that the bread they could afford at the start of the day would be unaffordable eight hours later. By November, 1923, *one U.S. dollar was worth 4.2 trillion Marks*. In 1924, a new currency was introduced — first backed by mortgages on real property and, shortly thereafter, by gold. The new Reichsmark stabilized the value of the currency, but most political commentators attribute the rise of the Nazi party largely to the social and economic instability resulting from the hyperinflation. To this day, Germans are still greatly alarmed by the specter of inflation.

U.S. Deficit Spending

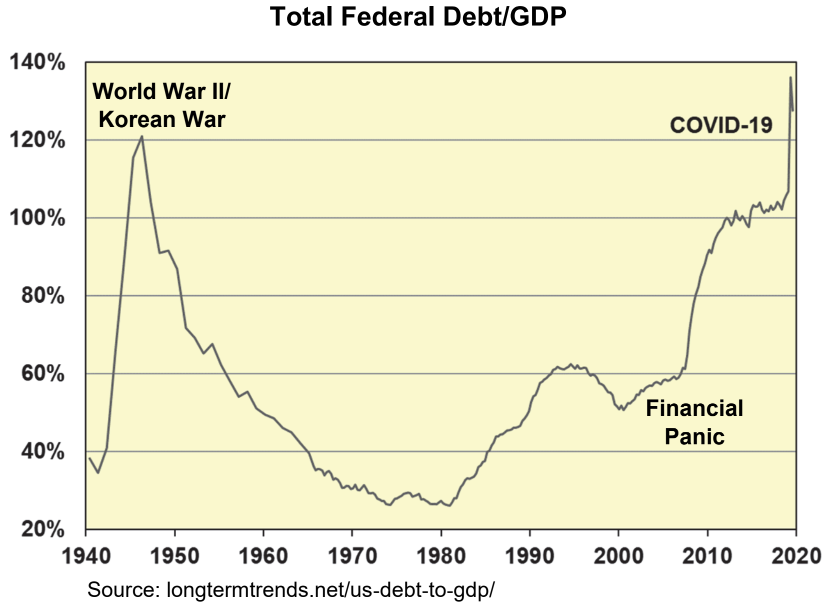
What does this German experience have to do with the U.S. and with Modern Monetary Theory (MMT)? While there is no direct applicability to the U.S. yet, there are certain parallels which need to be explored, namely, the enormous increase in federal deficit spending over the past two decades and the Fed's huge expansion of the money supply. In 2000, total U.S. federal debt was $5.7 trillion. Currently it exceeds $27 trillion. The chart below chronicles the growth in the U.S. federal debt since 2007:



The total national debt (including the debt owed to government agencies like Social Security) roughly doubled from $5 trillion to $10 trillion during the George W. Bush administration, and it doubled again during the eight years of the Barack Obama administration. And in fiscal 2020, the stimulus spending stemming from the lockdown of the economy due to COVID-19 resulted in the largest deficit in U.S. history — $3.1 trillion. The chart below shows the deficit as a percentage of GDP going back to the first year of the Financial Panic of 2007-2009:



The U.S. has followed the path of most other developed nations over the past several decades, financing the budget deficit through the issuance of government bonds. As the chart on the next page shows, total federal debt as a percentage of GDP is now at an all-time high — even higher than after financing the enormous cost of World War II and the Korean War:



Rapid Growth in the Money Supply but Negligible Inflation

Those of us who lived through the 1970s remember when the U.S. inflation rate went into double digits in late 1979 and 1980. To crush inflationary expectations, Federal Reserve President Paul Volcker brought the Fed Funds rate to almost 20%. Interest rates for residential mortgages reached 14%. Most investors sat at the feet of Milton Friedman and learned the lesson quoted at the beginning of this commentary: *"Inflation is always and everywhere a monetary phenomenon."* Thus, the medicine applied by Volcker was to restrict the growth of the money supply, which caused the highest rate of unemployment in the U.S. since the Great Depression, but ultimately was successful in lowering the inflation rate to the historical level in the U.S. of approximately 3%.

But now the traditional rules don't seem to apply. The remarkable monetary expansion effected by central banks in the developed world over the past decade has not caused an increase in inflation. Milton Friedman's dictum about inflation always being caused by excessive growth in the money supply seems totally irrelevant in the recent past. The Federal Reserve Bank's reaction to the COVID-19 pandemic has been twofold: First, it has increased the money supply (M2) more than 20% year-over-year — the fastest growth since 1980 when this metric began to be tracked. Second, the Federal Reserve Bank has increased its balance sheet from $4 trillion to $7 trillion by a vast bond-buying program, purchasing primarily U.S. government debt and mortgage-backed securities. Yet U.S. inflation as measured by the CPI is anemic — approximately 1.5%. The same is true in Europe and Japan. In fact, their central banks have been seeking without success to increase the inflation rate in their countries to 2% — a level at which economies allegedly function best. Yet inflation remains stubbornly stuck between .5% and 1.5%. Even more noteworthy, $18 trillion in sovereign debt issued by Japan and European countries is currently trading at negative yields. At present, the 10-year U.S. Treasury note yields approximately 1%, and with inflation in the U.S. running at around 1.2%, this translates into a -.2% negative real yield in this instrument.

Clearly we do not understand inflation in the modern era. Economists rightly point to the remarkable drop in the velocity of money in the U.S. in 2020, which explains to some extent the absence of inflation.

In simple terms, the velocity of money measures the number of times a dollar is spent to buy domestically-produced goods and services per unit of time. An example of the dramatic increase in the velocity of money was the hyperinflation in Germany, when money was spent the same day it was received because the value of the Mark dropped during the day. Additionally, the savings rate in the U.S. has increased significantly, doubling to 12.9% in November 2020 compared with a year ago. These trends help explain the absence of inflation, but they do not solve the conundrum of why huge deficit spending and massive increases in the money supply have not caused an increase in inflation. Instead, the global economy seems caught in a deflationary spiral, leading to trillions of dollars of negative-yielding sovereign debt.

Enter Modern Monetary Theory

Modern Monetary Theory (MMT) was developed by an American economist named Warren Mosler, who worked as a trader and later formed his own hedge fund. He and his clients made $100 million in profits in the early 1990s by buying lira-denominated bonds, betting that Italy would not default on its lira-denominated sovereign debt. Mosler believed that, as the lira was a fiat currency (not backed by gold or other assets), a default by Italy was a political decision, not an economic decision, and that Italy would not default. This turned out to be the right call.

Over the past two decades, Mosler shared his theory with other economists, and MMT has been embraced by a number of them, including Stephanie Kelton, an economics professor at Stony Brook University and economic advisor to Bernie Sanders' presidential campaign in 2016. At Bradley, Foster & Sargent there are no economic professors in residence, and in this commentary, we want to be clear that after studying MMT for some time, we are still not experts at how MMT works. But we will attempt to describe the major takeaways and policies which MMTers prescribe:

- President Nixon in August, 1971 declared that the U.S. dollar was no longer convertible into gold. Since then, the U.S. dollar, although still the world's major reserve currency, has been a fiat currency. This means that the currency is not backed by any kind of asset — only by faith in the government. Accordingly, the government can print as many dollars as it deems fit.

- MMT proposes that a country with its own fiat currency such as the U.S. does not need to pay attention to the total amount of its debt, as it can always pay the interest on the debt and refinance maturing debt by printing more money.

- The only constraint on deficit financing is inflation, which can occur when the private and public sectors spend too much at the same time.

- Inflation will generally only occur when there is too much money in relation to adequate resources — workers, products, services, commodities, etc.

- MMT rejects the approach of guiding economies by raising and lowering interest rates. Economic decisions should largely be made around government spending and taxation. A central bank should do the bidding of its treasury. Thus, when the treasury needs more money, the central bank should simply create it by crediting the treasury's account.

Potential Problems with MMT

MMTers opine that governments should not be treated like households, which have to match revenues and expenses. MMTers maintain that governments control their own fiat currencies and therefore can pay their liabilities in their own currency, which they can print as they wish. Accordingly, governments do not need to budget as households or companies do, because they can meet all their obligations by simply printing money. And this, of course, is true. Problems, however, occur when government spending decisions lead printing presses to get out of control, as has happened in Weimar Germany, Argentina and many other Latin American countries, and the Zimbabwes of the world. So if the government simply instructs the central bank to print money whenever it needs it and in quantities beyond what the economy can absorb, one would expect inflation to rear its ugly head — often with catastrophic political and social consequences as in the Weimar Republic, which ushered in the Nazis.

The debasement of the currency also has ramifications on the foreign exchange market. If a country's central bank prints too much money, it will lead to the devaluation of the currency on the foreign exchange markets. This, too, has many negative consequences, not the least of which is that if imports of goods and services cost more, prices will rise, causing inflation to accelerate. For the U.S., the devaluation of the U.S. dollar would have much more serious consequences. The U.S. dollar is the world's major reserve currency, and U.S. Treasury obligations are held as reserves in central banks worldwide. A significant dollar devaluation would cause these banks, as well as other foreign institutions and corporations, to dump their U.S. Treasury holdings. The dollar dropped over 6% in 2020, and there is perhaps more to come. Currently, $7 trillion of U.S. government obligations are held by foreigners, and panic-selling to exchange these bonds for other currencies would cause enormous downward pressure on the dollar, debasing it even further. This would have potentially disastrous ramifications in the world's capital markets.

The other major problem with virtually unlimited deficit financing is creditworthiness. If interest rates rise, the burden of paying interest on skyrocketing national debt becomes onerous. If the U.S. had to pay 5% on its current $27 trillion national debt, the interest burden would increase from $522 billion in 2020 to $1.35 trillion. This represents almost 40% of the $3.2 trillion in government receipts in 2020. MMTers counter that the interest can be paid by simply printing more money, but this seems a slippery slope which can lead to inflation or hyperinflation.

2020: The Year of MMT

Regardless of what we make of MMT and its policy implications, the governments of most developed countries have acted, since the onset of COVID-19 and the resulting economic lockdowns, as though they have adopted MMT. The aggregate fiscal deficit of the 19 countries in the Eurozone bloc as a percentage of GDP in 2020 was approximately 9%. In the U.S. it was much higher, reaching more than 14%. Politicians on both sides of the aisle seemed to compete to see who could spend the most money to combat the economic dislocation caused by COVID-19. Republicans, traditionally the party of fiscal restraint, joined their Democratic colleagues in embracing vast stimulus spending, resulting in a 2020 fiscal deficit of $3.1 trillion. And apparently that is just the beginning, as an emergency stimulus package of $900 billion was enacted in December, and the Biden administration is pledging another multi-trillion-dollar package in 2021.

Politicians from both parties seem unconcerned that the total U.S. government debt will likely reach $30 trillion or more by the end of 2021 — 150% of GDP. It was not so long ago that economists and politicians embraced theories in the book *This Time is Different,* by Professors Reinhart and Rogoff, which purported to show that when the debt/GDP ratio in a country exceeds approximately 100%, economic growth slows noticeably. While some economists disputed the thesis, the reality is that in some countries in the EU, like Italy, and in Japan, where the debt/GDP ratio is well above 100%, economic growth above 2% annually has not been achieved in the recent past.

The lack of concern among economists, politicians, and corporate executives about the enormous growth in fiscal deficits and federal debt appears to be attributed to the relatively robust economic growth in the U.S. over the past three years combined with very low inflation. MMT seems to be working out well, as we experience the best of all worlds — huge fiscal deficits, growing debt, robust economic growth, and low inflation. But, as Spanish philosopher George Santayana is reputed to have said, "Those who cannot remember the past are condemned to repeat it."

How Should Investors View MMT and the Current Spending Spree?

As we wrote above, we do not yet entirely understand how MMT will impact our future. Accordingly, readers who are interested can explore this topic further on the internet, as there is currently a great debate about it by economists and politicians of every stripe. But we do understand some of the policy implications, which, in our view, are worrisome. Running the presses to print money has ultimately led to problematic inflation with its attendant economic and social issues in many times and places. With many U.S. politicians committed to large and increasing fiscal deficits and the Federal Reserve dedicated to monetary expansion and rock-bottom interest rates for the foreseeable future, we believe that investors need to be open to owning a protective canopy of hard assets. Fixed income instruments perform poorly in inflationary times. But hard assets have historically provided excellent protection. By hard assets, we mean gold and gold mining stocks, real estate, and various kinds of commodities or commodity-related stocks. In past inflationary cycles, oil and gas stocks also provided good returns, but with the current focus on climate change policies and the attendant ESG considerations, hydrocarbon stocks may not provide the same level of protection as in the past. And, importantly, investors should continue to focus on owning quality companies at reasonable prices. Currently, there are many companies with exceptional revenue growth but negative cash flow. These stocks have attracted momentum investors and speculators, resulting in elevated prices. We counsel avoiding stocks in these companies now, although there will likely be a time when these stocks will sell at reasonable valuations. We continue to recommend that investors focus on companies with great brands, sound business models, wide moats, strong balance sheets, and robust cash flow. These types of quality assets should preserve capital even in inflationary times. MMT may work for a while, but history has not treated nations well that run the printing presses day and night to satisfy unlimited wants.

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