WASATCH GLOBAL INVESTORS

Quarterly Commentary

Investor
WHOSX

Wasatch-Hoisington U.S. Treasury Fund

JUNE 30 2023

Moving Further Down the Financial Cycle Curve

The views expressed in this commentary are those of Hoisington Investment Management Company (HIMCo), the sub-advisor to the Fund, and may differ from the views of Wasatch Global Investors.

DETAILS OF THE QUARTER

In a very volatile and erratic pattern, 30-year Treasury bond yields rose from 3.69% at the end of March to 3.85% on June 30. This level, however, was still below the yield of 3.95% at the end of 2022. The Wasatch-Hoisington U.S. Treasury Fund, which is invested in long-dated U.S. Treasury securities (bonds with maturities longer than 20 years), declined -2.43% in the second quarter, while the Bloomberg US Aggregate Bond Index fell -0.84%. In the first six months of 2023, the Fund gained 3.61% and outpaced the 2.09% return of the Index.

The main positive factor in the first half of the year was a substantially lower rate of inflation. In the 12 months ended June, the consumer-price index (CPI) increased 3.0%, down from 6.5% for calendar year 2022. Excluding the shelter component, which is over a third of the CPI and contains many prices that are calculated with long lags, consumer inflation was just 2% in the 12 months ended June. Inflation is the main fundamental determinant of long-term Treasury bond yields. While the headline CPI has moderated substantially, the core personal-consumption expenditures (PCE) deflator has continued to advance much more rapidly than the federal-funds target rate. In addition, policy

FUND MANAGERS

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Lead Portfolio Manager
26
YEARS ON FUND

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YEARS ON FUND

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Portfolio Manager
7
YEARS ON FUND

statements by key Federal Reserve (Fed) officials and others have been a major source of the bond market's erratic trading. The upper band of the federal-funds rate advanced from 4.50% at the end of 2022 to 5.25% at the end of June. This led to a further inversion of the Treasury yield curve. Such inversions have historically preceded recessions and significant rallies in the Treasury bond market.

OVERVIEW

Based on money growth, real interest rates, credit creation and central bank forward guidance, financial cycle conditions continued to tighten significantly in the second quarter. These major monetary indicators are exhibiting conditions similar to previous ones that could be described by the term "credit crunch." Compared with fiscal year (FY) 2022, the deficits this year and next year will be substantially larger.

Part of the deteriorating deficit outlook reflects 2022's legislation of the $740 billion Inflation Reduction (IR) Act and the $280 billion Creating Helpful Incentives to Produce Semiconductors (CHIPS) Act. While these measures may presume to be a major boost for the economy, impressive scholarly research indicates that the enlarged deficits will be a serious drag on economic conditions for years to come. In addition, we will present evidence pertaining to two of these econometric findings that is confirmed by what has actually transpired in more than a decade since the results were published. The bottom line is that extreme fiscal policy action alone is very ineffectual when not supported by direct monetary intervention such as that used in the Covid-19 pandemic. In the case of the unique situation in 2020–21, fiscal policy was stimulative and highly inflationary. But that is not the situation now. Significant monetary variables are pointing toward economic deterioration and disinflation.

Credit Crunch at Hand

MONEY AND VELOCITY

After adjustment for inflation, other deposit liabilities (ODL), which in our opinion is a superior measure of money (ODL does not include currency and money-market mutual funds), turned negative for the latest 36 months, while the 12- and 24-month rates of contraction accelerated. The money mountain created in 2020–21, which supported spending and inflation, has been eliminated. Historically, this measure of real money balances has increased at 3% per year. Although velocity (V) rose in 2022 and in the first half of 2023, the gain has been insufficient to offset the record contraction in real ODL over the past three years. Real ODL fell at a 1.2% annual rate over the past three years, compared to a 2.3% rate of increase in late 2019, just before the pandemic, and a 3.2% rate of increase since the early 1950s. Over the past three years, ODL V averaged 1.7, down from 1.9 when the pandemic hit and from the 2.5 mean of the past seven decades.

Historically, it has been important to examine money and V together as a complete unit. The Volcker Fed broke the inflation spiral that started in the 1960s as V remained stable. In the 1990s, real ODL went negative, but the economy continued to grow as V advanced sharply. From the 1950s to the early 1980s, fluctuations in V were so minor that the relationship between money and nominal gross domestic product (GDP) was extremely tight. While ODL V has increased over the past five quarters, the losses of 2020–21 have not been recovered, and V remains extremely depressed. A stable V will severely limit the Fed's capabilities to stimulate economic growth. Monetary policy would be thwarted even more if V's dominant determinants (the bank loan-to-deposit ratio and the marginal revenue product of debt) turn down.

From its peak, ODL in nominal dollars fell $1.3 trillion in direct response to the liquidation of $792 billion of the Fed's securities portfolio (i.e., U.S. government notes, bonds and mortgage-backed securities) that provided

permanent reserves to depository institutions. Although reserve requirements were eliminated in the early spring of 2020, the deposit multiplier (m), or ODL divided by permanent reserves, averaged about 2.1, meaning that each $1 reduction in permanent reserves has resulted in an average $2.10 decrease in ODL. All the other determinants of m are still operating to influence its direction. This is exactly what happened in the highly indebted economy of 2009–12.

REAL INTEREST RATES

The real federal-funds rate also indicates significant restraint. To construct real interest rates, we subtracted the one-year inflationary expectations, compiled from the University of Michigan's survey of consumer sentiment, from the nominal federal-funds rate (FFR). Inflation expectations were first measured in 1978. The real FFR troughed and turned higher leading into all post-1978 recessions. We consider the two recessions of the early 1980s to be one downturn, not two as determined by the National Bureau of Economic Research, the official dating source for business cycles. The lead times varied considerably, and this was unsurprising since the initial conditions were significantly different and money, velocity, bank credit and a host of different variables showed varying degrees of restraint. Real FFR reached a record low in March 2022 of minus 5.2%. Real FFR rebounded to plus 1.8% in June of this year. That's an increase of seven percentage points in 15 months. This was a larger increase in real FFR since the Global Financial Crisis (GFC) recession of 2008–09 and the mild recessions of 1990–91 and 2000–01. The increases in real FFR were very similar for these two mild recessions, but the lead times were considerably different. This gap suggests that some combination of the other monetary variables and the initial conditions were quite different.

Fed Chairman Jerome Powell, in his press conference announcing the June Federal Open Market Committee (FOMC) decision to leave the policy rate unchanged, said that the speed of increase is of similar importance to the magnitude of the increase in the federal-funds rate in determining the impact on the broader economy. Comparing the mild recessions of 1990–91 and 2000–01 is the only possible case that provides insight into whether this assertion is valid. The initial conditions in these recessions are the closest of any post-1978 recession. This one data point rejects the notion that the speed of increase in the policy rate is important. The closeness of the real FFR changes in the two mild recessions occurred with far different lags between the cyclical trough and the start of the recession. In other words, the available evidence indicates that speed is not a material consideration.

REAL BANK CREDIT

While money and real interest rates reflect a traditional tightening financial cycle, the contraction in bank credit is unprecedented when real GDP is still rising. Money leads bank credit. In previous cycles, real bank credit has not turned negative on a one-year basis until the economy was already in recession. Even in the GFC recession, the 12-month change in real bank credit did not decrease until the end of the recession. In the case of the mild 2000–01 recession, the 12-month change never went negative. There are numerous cases when the 24- and 36-month changes did not go negative. But the latest 12-, 24- and 36-month rates of change in real bank credit were all negative at -2.3%, -0.7% and -0.5%, respectively. Historically, real bank credit has increased an average of 3.4% per year. As the second quarter drew to a close, the contraction in bank credit showed the markings of an old-fashioned credit crunch.

RISING BUDGET DEFICITS

The U.S. government budget deficit has taken a serious turn for the worse this year. The IR and CHIPS acts of 2022, as enacted, add over $1 trillion to the deficit in this and future years. The Penn Wharton Budget Model, however, indicates that due to the way the Administration wrote the instructions, the cost of the IR Act is running

three times greater than the amount appropriated by Congress. Interest expense has risen dramatically higher. Part of this surge reflects the fact that the Fed suffered an operating loss, which adds to the deficit, compared to a surplus in FY 2022 that reduced the deficit. Federal tax revenues fell considerably compared to a year ago. This is consistent with real gross domestic income (GDI), which fell in three of the last four quarters. Even after excluding Fed losses, real GDI was negative in three quarters and flat in another. Consequently, the deficit for 2023 is likely to be much worse than the 5.5% registered in 2022 and the 4.6% deficit in pre-pandemic 2019. The actual problem is even greater as gross federal debt could increase by $200 billion more, which is a significant sum since investment banking firm Piper Sandler estimates that the FY 2023 deficit will jump by $600 to $800 billion.

After taking into consideration the non-economic growth benefits of the deficit's composition, lagged negative multiplier effects and the way in which debt is being financed, the upcoming deficits are likely to have a minimal, if not contractionary, impact on economic growth this year and next.

Increased interest payments and the deficit caused by a shortfall in tax receipts are unproductive outlays. Neither produces new jobs, roads, or new dollars of research and development. More importantly, however, the lagging effects of the huge budget deficits of FY 2021 are likely to be negative due to the government expenditure multiplier.

The multiplier is positive for the first four to six quarters after deficit spending by the government. Estimates from econometric studies of highly indebted industrialized economies indicate the multiplier is negative after three years. This means a dollar of debt-financed federal expenditures will reduce private GDP by more than enough to offset each dollar of debt-financed activity. In their article "How big (small?) are fiscal multipliers?" in the *Journal of Monetary Economics* (March 2013), Ethan Ilsetzki from the London School of Economics, Enrique G. Mendoza from the University of Pennsylvania, and Carlos A. Végh from the University of Maryland found that the multiplier is "sharply negative" in highly indebted industrialized countries. The article does an excellent job of explaining the requirements for correctly estimating multipliers and then develops estimates that meet those challenges.

The initial benefit from the deficits of 14.9% in FY 2020 and 12.3% in FY 2021 was greater than normal because the combined purchases of government securities by the Fed, the commercial banks and the foreign sector directly funded approximately 70% of the deficits in 2020 and 100% in 2021. But the 2020–21 process began reversing when the Fed began decreasing its holdings of government and agency securities by $96 billion a month in 2022, which in June 2023 the FOMC affirmed would continue. When the domestic nonbank sector funds previously or currently issued U.S. debt, resources are drained from the private sector and shifted from high to negative multiplier usage.

Successfully Time-Tested

Two different rigorous studies, one completed in 2010 and the other in 2011 using different methodologies, concluded that government fiscal policy actions have significantly weakened the trend rate of economic growth, based on studies conducted since 1870. The results from the decade-plus period since this research was published confirm the findings that the government expenditure multiplier is becoming increasingly negative.

The passage of time is a spectacular vindication that the methodology of these studies was sound, and that the direct effect of fiscal policy action was properly isolated from the shifting initial conditions, feedback effects (known as endogeneity or the influence of economic activity upon government size/debt) and movements induced by monetary and other nonfiscal policy actions.

BERGH AND HENREKSON

Andreas Bergh and Magnus Henrekson (each hold a Ph.D. in economics from Harvard and referred to in this commentary collectively as BH), writing in the peer-reviewed *Journal of Economic Surveys* in 2011, found a strong inverse relationship between government size and economic performance. Such increases mean that more of the economy is being shifted away from the high positive multiplier sector into the negative multiplier government sector. Specifically, these Swedish econometricians determined that a one-percentage-point increase in government size reduces the annual growth rate in real per capita GDP by 0.05% to 0.10% per year. This finding was first tested and validated by economic analyst Eric Basmajian and then confirmed by us for the past 52 years starting in 1971, when U.S. President Richard Nixon ushered in floating exchange rates and untethered fiscal policy from the discipline of the gold standard. To verify BH's results, data must be purged of distortions caused by cyclicity around recessions and major extraneous one-time events such as the pandemic. Utilizing 20-year moving averages smooths volatility, allowing the long-term trend to prevail.

When President Nixon closed the gold window, the 20-year moving average of the ratio of government size relative to GDP was 25.2% while the real per capita GDP/GDI average real growth rate was 2.2%, which coincided with the average real per capita growth rate since 1870. Based on the comparable numbers in early 2023, government size was a considerably higher 34.3% and growth in the standard of living was a much lower 1.3%. Thus, government size increased 9.1 percentage points and growth lost 0.9% per year. Thus, the actual results, 12 years of which were beyond BH's publication date, were that the negative impact on economic performance was within 0.1% of BH's top of the range.

REINHART, REINHART AND ROGOFF

We were also able to verify the relationship between government size and economic performance through an article by Carmen M. Reinhart, Vincent R. Reinhart and Kenneth S. Rogoff, referred to collectively in this commentary as RRR, that was published in the *American Economic Review* in 2012. The finding of these widely recognized and highly regarded economists was as follows: When gross government debt exceeds 90% of GDP for more than five years, then economies lose one-third of their trend rate of growth. Gross U.S. government debt moved decisively above this 90% threshold 10 years ago. As previously stated, the trend rate of growth has fallen from 2.2% per year to 1.3% over the last 20 years, a loss of slightly more than one-third of yearly growth even though the last 20 years included some years in which the debt ratio was below 90%. If the U.S. economy were on trend, real per capita GDP would be approximately $73,000, almost $13,000 higher than the actual level early this year. RRR also argued that the deleterious effects of high debt levels would build even before reaching the 90% threshold and indeed they did. This finding led us to the causal explanation that the overuse of debt reflects the law of diminishing returns.

Final Thoughts

Major considerations indicate that the U.S. economy is far weaker than recognized. Productivity, or output per hour in the nonfarm sector, declined by a record pace over the past 10 quarters. Neither a rising standard of living nor increasing corporate profitability is achievable over time without higher productivity. For the 11 quarters since the pandemic recession ended, real average hourly earnings (which cover 119 million full-time wage and salaried workers) fell at a 2.9% annual rate. This is the largest decline registered in any economic expansion of comparable length since the earnings series originated. While firms continued to add employees, the rate of increase in wages has lagged inflation. Moreover, as establishments have continued to add employees, they have simultaneously

reduced the number of hours their staffs are working. Since January, payrolls have gained 1.2 million workers, but the average workweek has dropped from 34.6 hours to 34.4 hours, leaving aggregate hours worked virtually unchanged. To restore productivity, firms will need to rationalize their workforce, which will simultaneously reduce labor costs, inflation and household purchasing power.

Financial cycle conditions, the fiscal policy multipliers and productivity all indicate that the possibilities for lower inflation and poorer economic performance are much greater than generally presumed. These considerations support our decision to continue holding long-duration Treasury bonds in the Fund.

Thank you for the opportunity to manage your assets.

Sincerely,

Van Hoisington, V.R. Hoisington Jr. and David Hoisington

WASATCH GLOBAL INVESTORS

AVERAGE ANNUAL TOTAL RETURNS

FOR PERIODS ENDED MARCH 31, 2023

	Quarter*	1 Year	3 Years	5 Years	10 Years
U.S. Treasury Fund	-2.43%	-10.15%	-14.47%	-1.87%	1.55%
Bloomberg US Aggregate Bond Index**	-0.84%	-0.94%	-3.96%	0.77%	1.52%

**Returns less than one year are not annualized.*

Data show past performance, which is not indicative of future performance. Current performance may be lower or higher than the data quoted. To obtain the most recent month-end performance data available, please visit wasatchglobal.com. The Advisor may absorb certain Fund expenses, without which total returns would have been lower. Investment returns and principal value will fluctuate and shares, when redeemed, may be worth more or less than their original cost. **Total Expense Ratio: 0.67%**

Total Annual Fund Operating Expenses include operating expenses, including the management fee, before any expense reimbursements by the Advisor. **The Advisor has contractually agreed to limit certain expenses to 0.75% through at least 1/31/2024.** See the prospectus for additional information regarding Fund expenses.

Wasatch Funds will deduct a 2.00% redemption fee on Fund shares held 60 days or less. Performance data does not reflect the deduction of fees or taxes, which if reflected, would reduce the performance quoted. For more complete information including charges, risks and expenses, read the prospectus carefully.

Investing in bonds, you are subject, but not limited to, the same interest rate, inflation and credit risk associated with the underlying bonds owned by the Fund. Return of principal is not guaranteed. Interest rate risk is the risk that a debt security's value will decline due to changes in market interest rates. The interest rate is the amount charged, expressed as a percentage of principal, by a lender to a borrower for the use of assets. Even though some interest-bearing securities offer a stable stream of income, their prices will fluctuate with changes in interest rates. Inflation risk is the possibility that inflation will reduce the purchasing power of a currency, and subsequently reduce the value of a security or asset, and may result in rising interest rates. Inflation is the overall upward price movement of goods and services in an economy that causes the value of a dollar to decline. Credit risk is the risk that the issuer of a debt security will fail to repay principal and interest on the security when due. Credit risk is affected by the issuers credit status, and is generally higher for non-investment grade securities.

An investor should consider investment objectives, risks, charges and expenses carefully before investing. To obtain a prospectus, containing this and other information, visit wasatchglobal.com or call 800.551.1700. Please read the prospectus carefully before investing.

The Wasatch-Hoisington U.S. Treasury Fund's investment objective is to provide a rate of return that exceeds the rate of inflation over a business cycle by investing in U.S. Treasury securities with an emphasis on both income and capital appreciation.

***The Bloomberg US Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, U.S. dollar denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, mortgage-backed securities (MBS) (agency fixed-rate and hybrid adjustable-rate mortgage [ARM] pass-throughs), asset-backed securities (ABS) and commercial mortgage-backed securities (CMBS) (agency and non-agency).*

Indexes are unmanaged. Investors cannot invest directly in this or any index.

Sources: Hoisington Investment Management Co.; Federal Reserve Board; Bureau of Economic Analysis; Haver Analytics; Bureau of Labor Statistics; National Bureau of Economic Research; and St. Louis Federal Reserve.

The consumer-price index (CPI), also called the cost-of-living index, is an inflationary indicator that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation. The CPI is published monthly. The headline CPI includes volatile food and energy prices, while the core CPI excludes food and energy.

The deposit multiplier is a ratio between bank reserves and bank deposits. It represents the maximum amount of money a bank can create for each unit of money of reserves. This figure is key to maintaining an economy's basic money supply.

The federal-funds rate is the interest rate at which private depository institutions (mostly banks) lend balances (federal funds) at the Federal Reserve to other depository institutions, usually overnight. It is the interest rate banks charge each other for loans.

The federal-funds target rate (also known as the fed funds target rate) is set by a committee within the Federal Reserve System called the Federal Open Market Committee (FOMC). The FOMC usually meets every six weeks, and it is at these meetings that the FOMC votes on whether or not to make changes to the federal-funds target rate.

The Federal Open Market Committee (FOMC), a component of the Federal Reserve System, is charged under United States law with overseeing the nation's open market operations. Open market operations are the means of implementing monetary policy by which a central bank controls the short-term interest rate and the supply of base money in an economy, and thus indirectly the total money supply.

The Global Financial Crisis, also known as the 2008–09 financial crisis, is considered by many economists to have been the worst financial crisis since the Great Depression of the 1930s.

The gold window refers to the ability of foreign governments to exchange their U.S. dollars for gold at a fixed rate.

The government expenditure multiplier is a measure of the change in aggregate output (or GDP) induced by an increase in government spending. It's based on the idea that an increase in government spending will increase aggregate demand, leading to an increase in output, income, and consumption.

Gross domestic income (GDI) is the sum of all income earned while producing goods and services within a nation's borders. GDI is a lesser-known calculation statistic used by the Federal Reserve Bank to gauge economic activity based on income.

Gross domestic product (GDP) is a basic measure of a country's economic performance and is the market value of all final goods and services made within the borders of a country in a year.

Gross federal debt is all of the obligations of a country's treasury including debt held by the public and debt held by federal government accounts.

The loan-to-deposit (LD) ratio is used to assess a bank's liquidity by comparing the bank's total loans to its total deposits for the same period. If the ratio is too high, the bank may not have enough liquidity to cover unforeseen fund requirements. If the ratio is too low, the bank may not be earning as much as it could.

The marginal revenue product of debt (MRPD) is the ratio of GDP to debt.

Mortgage-backed securities are debt issues backed by a pool of mortgages. Investors receive payments from the interest and principal payments made on the underlying mortgages.

The National Bureau of Economic Research (NBER) is a research organization dedicated to promoting a greater understanding of how the economy works.

The National Income and Product Accounts are part of the national accounts of the United States. They are produced by the Bureau of Economic Analysis of the Department of Commerce and are one of the main sources of data on general economic activity in the United States.

Other deposit liabilities (ODL) equal M2 minus currency in circulation and money market mutual fund shares.

The Penn Wharton Budget Model (PWBM) is a non-partisan, research-based initiative that provides accurate and transparent economic analysis of public policy.

Per capita GDP is a universal measure for gauging the prosperity of nations. It is calculated by dividing GDP by a country's total population.

The personal-consumption expenditures (PCE) deflator is part of the National Income and Products Accounts developed by the Bureau of Economic Analysis of the U.S. Commerce Department. The PCE deflator is a variable weighted index and is widely considered to be the most reliable of all the price indexes.

Real gross domestic product (GDP) is a macroeconomic measure of the value of economic output adjusted for price changes (i.e., inflation or deflation). This adjustment transforms the money-value measure, nominal GDP, into an index for quantity of total output.

The velocity of money (V) is defined as the rate at which money circulates, changes hands or turns over in an economy.

The yield curve is a line on a graph that plots the interest rates, at a set point in time, of bonds having equal credit quality, but differing maturity dates. The most frequently reported yield curve compares three-month, two-year, five-year and 30-year U.S. Treasury securities. This yield curve is used as a benchmark for other interest rates, such as mortgage rates or bank lending rates. The curve is also used to predict changes in economic output and growth.

U.S. TREASURY FUND—TOP 10 HOLDINGS

AS OF MARCH 31, 2023

Security Name	Percent of Net Assets
U.S. Treasury Bond, 1.250%, 5/15/2050	23.8%
U.S. Treasury Bond, 1.375%, 8/15/2050	22.3%
U.S. Treasury Bond, 1.875%, 11/15/2051	16.7%
U.S. Treasury Bond, 2.250%, 8/15/2046	14.9%
U.S. Treasury Bond, 3.000%, 8/15/2048	14.3%
U.S. Treasury Bond, 2.500%, 2/15/2045	6.4%
Total	98.4%

Portfolio holdings are subject to change at any time. References to specific securities should not be construed as recommendations by the Fund or its Advisor. Current and future holdings are subject to risk.