

Wasatch-Hoisington U.S. Treasury Fund

MARCH 31, 2023

Financial Cycles Lead GDP Cycles and Price/Labor Cycles

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

After reaching a high yield of 4.42% in October of 2022, the long-term U.S Treasury bond market continued to rally in the first quarter of 2023. The Wasatch-Hoisington U.S. Treasury Fund, which is invested in long-dated U.S. Treasury securities (bonds with maturities longer than 20 years), gained 6.20% in the three months ended March 31, 2023 versus the 2.96% return of the Bloomberg US Aggregate Bond Index. Thirty-year Treasury bond yields closed at 3.69% at the end of March, down from 3.95% at the end of 2022.

Volatility was high as the Treasury bond market was buffeted by positive and negative considerations. On the favorable side, all key measures of inflation continued to recede, even though the core consumer inflation rate remained above the Federal Reserve's (Fed's) target. Also supportive were signs of recession in both the manufacturing and high-tech sectors, financial problems in the banking and commercial real-estate sectors as well as poor economic conditions in most major foreign economies except for China. But even China's rebound from the end of Covid restrictions appeared to have moderated late in the first

FUND MANAGERS



Van R. Hoisington
Lead Portfolio Manager

26
YEARS ON
FUND



V.R. Hoisington Jr.
Portfolio Manager

7
YEARS ON
FUND



David Hoisington
Portfolio Manager

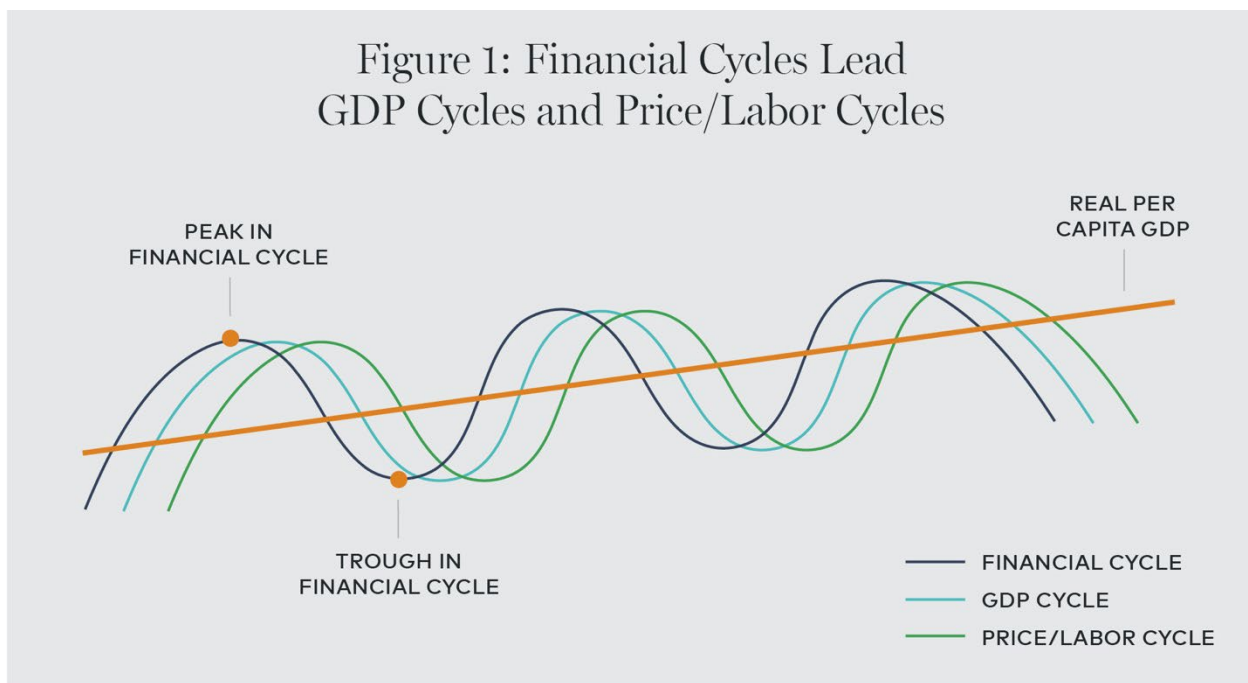
7
YEARS ON
FUND

*Data show past performance and is not indicative of future performance. Current performance may be lower or higher than the data quoted. For the most recent month-end performance data, visit wasatchglobal.com. Investment returns and principal value will fluctuate and shares, when redeemed, may be worth more or less than their original cost. The Advisor may absorb certain expenses, without which total returns would have been lower. Wasatch Funds will deduct a 2% redemption fee on Fund shares held 60 days or less. Performance data does not reflect this redemption fee or taxes. **Total Expense Ratio: 0.67%** The Advisor has contractually agreed to limit certain expenses to 0.75% through at least 1/31/2024.*

quarter. Working against the market were two hikes in the federal-funds rate and continued growth in the service sector.

OVERVIEW

When analyzing the business cycle, there are three cycles to evaluate: the financial cycle, the GDP cycle and the price/labor cycle. Consider *Figure 1* below, which shows three sine waves fluctuating around the economy's trend rate of growth (upward-sloping flat line). The financial cycle (dark blue sine wave) leads the GDP cycle (light blue sine wave) with the price/labor cycle (green sine wave) trailing both.



Source: Hoisington Investment Management Co. The chart is a theoretical example used for informational purposes only to illustrate the fluctuations of three interconnecting cycles around the economy's trend rate of growth over time.

Excessive monetary policies initiate two processes—inflation, a well-established relationship, and excessive risk taking that becomes an integral part of the financial cycle. Together these two influences expose the economy to financial crises, with one monetary policy fiasco leading to a future disaster.

The Pandemic Response

This historical pattern is evident in the Fed's response to the pandemic, a process that has thus far not fully unfolded. In 2020 and 2021, the Fed engineered a monetary acceleration that is unprecedented in modern times. Then in 2021 and 2022, the U.S. economy suffered its worst cost-of-living crisis in 42 years, heavily damaging the standard of living of modest- and moderate-income households. The median real weekly earnings of approximately 120 million full-time hourly and salaried workers suffered a 2.5% decrease in the past two years, the steepest loss in four decades. To subdue inflation running far above its target, Fed actions caused an unprecedented monetary contraction, which has, in turn, begun to increase the potential for significant failures among the reckless ventures

originated from 2020 to early 2022. As the research to be discussed will demonstrate, destabilizing Fed actions have tied one financial cycle to the next many times over the Fed's 110-year history. To describe this pattern, some key concepts need to be defined.

Terminology

Loose money implies five different situations, which may occur both in combination and/or separately. First, money growth is too fast for too long. Second, credit is far too readily available for an extended time. The second point may be expressed in terms of debt, which of course is the opposite of credit on the balance sheet. Third, interest rates are held to extremely low levels for a prolonged time. Fourth, monetary looseness is also synonymous with credit (debt) being available to those least likely to repay principal and interest and with heightened risk taking. A fifth consideration—forward guidance by the Fed—was added in the early 2000s. This tool was heavily used in the pandemic and may ultimately prove to be very costly to businesses and consumers and to the economy as a whole. As of late 2021, the Fed was unequivocally advising that monetary policy would be loose for longer, a tactic that undoubtedly led to overly aggressive risk taking by the banking, shadow banking, corporate and household sectors. The Fed's forward guidance of late 2021 proved to be highly inaccurate.

The financial cycle is comprised of money, credit, debt, interest rates, the shape of the yield curve and the availability of credit to the riskiest borrowers. The peak in the financial cycle, marked by the first (highest) orange dot in *Figure 1*, is the point at which monetary variables in combination, are at their most stimulative or loosest point. The financial-cycle trough, marked by the second (lowest) dot in *Figure 1*, falls at the most constrictive or tightest combination. Historical and contemporary economists have contributed substantial backing for the rationale of *Figure 1*, even though they generally have not used the term financial cycle.

Signposts of the Financial Cycle

FROM THE 1700s TO THE LATE 1970s

The late economist Ingrid H. Rima said that "The Enlightenment was not possible without David Hume." In 1752, Hume wrote two important essays—"Of Money" and "Of Public Credit." In the former, he described how inflows of gold (which was money then and referred to as specie) from an international trade surplus resulted in higher inflation that in turn laid the foundation for a loss of the original trade surplus and a reversal of the cycle. In the public credit essay, he summarized the debilitating effects of inordinately high levels of government debt with the phrase "tranquility, languor and impotence." Hume's analysis has been confirmed by substantial research in the past 15 years.

Swedish economist Knut Wicksell, in 1898, originated the definition of the natural rate of interest. This occurs when an interest-rate level neither slows nor accelerates economic activity. To achieve stability this interest rate should approximate the growth rate of nominal gross domestic product (GDP). Interest rates higher than the topline growth rate of the economy would mean that resources from the income stream of the economy would be required to pay for the higher rate of interest, thus slowing the economy. Interest rates below the natural rate would stimulate economic activity, but Wicksell also argued that interest rates below the natural rate, especially when existing for lengthy episodes, would lead to higher prices, which in turn would cause even higher prices as businesses and consumers extrapolate even further price increases. This would result in rampant speculation and eventually a boom/bust cycle.

In 1933, American economist Irving Fisher listed several factors that are present in business cycle fluctuations. These include (a) capital items such as homes, factories, ships, productive capacity generally, inventories, gold, money, credits and debts; (b) income items such as real income, volume of trade and shares traded; (c) price items such as prices of securities, commodities and interest. He goes on to say that these factors are subordinate to “two bad actors”—over-indebtedness and the deflation that follows. Fisher’s analysis clearly means that debt accumulation leads and inflation lags in the business cycle.

Even more explicitly than Fisher, economic historian Charles P. Kindleberger wrote that, “Speculative manias gather speed through expansion of money and credit or perhaps, in some cases, get started because of an initial expansion of money and credit.” To paraphrase Kindleberger, money and credit excesses lead to “manias, panics, and crashes,” which is the title of his famous 1978 book in which the above quote is found.

The late Hyman Minsky, who was a professor of economics at Washington University, argued, in 1977, that excessive debt accumulation leads to financial instability, but did not identify the Fed as starting this process. Additional information to be cited from the four decades since Minsky’s research reveals that when the Fed tries to achieve business cycle stability with excessive monetary policy, financial instability ensues. Minsky’s instability hypothesis should be reworded to say that monetary excess leads to Ponzi finance and financial instability (i.e., a Minsky Moment).

The earliest book to utilize large-scale econometric techniques to measure the dynamics of forecasting financial cycles was *Dynamics of Forecasting Financial Cycles: Theory, Techniques, and Implementation* (Lacy H. Hunt, JAI Press, 1976). This model—estimated from the early 1950s to the early 1970s contained 60 stochastic equations estimated with monthly data—found that reserve and monetary aggregate fluctuations act as a powerful influence on many key financial variables. Through these equations, lead times were measured and thus a financial cycle was documented.

STUDIES FROM 2005 TO 2022

Since the early part of this century, contemporary scholars have identified additional causal chains of monetary excess leading to financial instability.

In a 2005 paper, Raghuram Rajan, holder of an endowed chair at the University of Chicago Booth School of Business, and the 23rd Governor of the Reserve Bank of India, presented a particularly important paper. To summarize Rajan’s remarks, when interest rates are relatively loose, financial intermediaries have incentives—or are even required—to search for yield and thus risk. This incentive to “search for yield,” in turn, serves as a source of financial risk. We would add that the greater the risk, the greater the potential instability. To attest to the high regard for Rajan’s research, this paper was presented in 2005 at the Fed’s Jackson Hole Economic Policy Symposium.

Professors Robert J. Barro and José F. Ursúa of Harvard University vigorously examined macroeconomic crises since 1870 for a broad and diverse group of countries including the U.S., other major economic powers, and many others in terms of both real per capita GDP and real per capita consumption. In these disasters, they found that crises are precipitated not by a single event but by a series of events. In other words, crisis is a process.

In 2017, Atif Mian, Amir Sufi and Emil Verner found that household debt booms are accompanied by a temporary boost in real economic activity. This boost, though, is short-lived and eventually reverses. Very lax financial conditions boost the potential for real GDP growth over the short term at the expense of strong negative effects in

the medium term, without affecting the economy's expected growth path. In terms of the three interconnecting cycles fluctuating around the trend, the slope of the trend rate of growth in real per capita GDP does not, at the end of the day, change. This should be the case since the trend in real per capita GDP is determined by technology interacting with the three factors of production—capital, natural resources and labor.

These findings are also consistent with Hume's analysis of gold inflows. Monetary growth boosts real economic activity over the short-run, but over the long-run the effect is nil. Kindleberger's perspective was very similar. He felt that it was not clear whether the response to a financial crisis with heroic efforts were any better than letting the instability "burn itself out." After the financial panic of 1873, no response occurred as the U.S. was on the Gold Standard and federal budgets continued to be balanced. Nevertheless, the problems resolved within two decades. Japan's asset-price bubble—which developed in the 1980s and collapsed in 1991—was addressed by almost too many heroic efforts to count. Unfortunately, the country is still languishing badly more than three decades later.

Itamar Drechsler, Alexi Savov and Phillip Schnabl established empirically a theoretical link between lower interest rates and increasing leverage and thus risk exposure. Their paper, "A Model of Monetary Policy and Risk Premia," carries particularly important weight since it was published in 2018 in *The Journal of Finance*, the official publication of the American Finance Association. Such publications receive very serious peer review.

In "Low Interest Rates and Risk-Taking: Evidence from Individual Investment Decisions," published in 2019 in the highly distinguished *The Review of Financial Studies*, Chen Lian, Yueran Ma and Carmen Wang found that an individual starting to invest in a high interest rate environment will tend to make riskier investment decisions when shifted to a low interest rate environment.

In their paper, "Monetary Policy and Endogenous Financial Crises," Frederic Boissay, Fabrice Collard, Jordi Galí and Cristina Manea show that financial crises are the consequence of a central bank that keeps the policy interest rate too low for too long, which in turn fosters an investment boom and eventually a capital overhang. This paper was published in 2022 by the Bank for International Settlements (BIS) and Deutsche Bundesbank.

THIS YEAR

Another major breakthrough can be found in "Loose Monetary Policy and Financial Instability" (Federal Reserve Bank of San Francisco, February 2023) by Maximilian Grimm, Òscar Jordà, Moritz Schularick and Alan M. Taylor (referred to below as GJST).

The GJST empirical analysis is based on the Jordà-Schularick-Taylor database, which combines macro-financial data with a banking crisis chronology for 18 advanced economies over the period from 1870 until 2020. It excludes the world war periods (1914–18 and 1939–45) as well as the 1922–23 hyperinflation of Germany's economy. GJST's final sample has an extremely robust 2,457 country-year observations. In evaluating this data, GJST used advanced techniques to exclude interferences from extraneous and non-causal factors. This approach was designed "to capture movements in the component of interest rates affected by monetary policymakers."

Building on contemporary work of others, GJST estimated a long-run trend component of interest rates for seven countries (Canada, Germany, France, Italy, Japan, the United Kingdom and the United States) by exploiting the joint dynamics of inflation and the short and long end of the yield curve as well as all 18 countries used in the database.

Here are their key findings: "...a loose stance of monetary policy has potential benefits, as well as costs. Loose financial conditions and increased risk taking may not be a bad thing per se. They might, for example, enhance



consumption smoothing by relaxing financial constraints or raise innovation and efficiency by providing more investment capital.

"However, our historical evidence suggests that running such a high-pressure economy may not be sustainable in general. In the following, we argue that potential short-term gains come at the considerable cost in the form of heightened risk of disasters in real economic activity."

GJST provided strong empirical documentation that the posture of monetary policy affects the stability of the financial system. To quote the authors, "a loose stance over an extended period of time leads to increased financial fragility several years down the line." These findings are consistent with the considerable body of research extending back to the 18th century that shows financial excess to be a harbinger of financial turmoil. Here are GJST's concluding words: "Policymakers should take the dangers imposed by keeping policy rates low for long seriously, and thus weigh the potential short-run gains of loose monetary policy against potentially adverse medium-term consequences. Such policies increase the risk of financial crises and thus the risk of high social, political, and economic costs."

FROM ONE FINANCIAL CYCLE TO THE NEXT

The conditions described by GJST could bring a new array of policy actions but, in so doing, the Fed, could eventually destabilize the economy even more than its actions in the prior financial cycle. To wit, the financial cycle, as illustrated by *Figure 1*, will have gone through a full rotation. The financial cycle started and ended with Fed actions and then will restart again with the Fed trying to correct for the prior failing, with the result that the financial cycle will continue to lead the GDP and price/labor cycles.

OUTLOOK

In 2023, the risk of a recession continues to rise, although the economy grew in the first quarter. The Fed has neutralized the inflationary impact of the fastest modern era money growth in 2020–21. Other deposit liabilities (ODL) in real terms have registered a double-digit decline in the 12 months ended March, with the 24-month change at a negative -5%. Over the past 12 months, real bank credit had declined even before the recent and highly visible bank failures and is now unchanged for the past 24 months. Although monthly data are not available before World War II, the decline in money each of the past 12 months is undoubtedly the sharpest since 1934.

Two considerations suggest that the rise in the velocity of money in 2022 and in the first quarter of this year, which has thus far interfered with the Fed's efforts to contain inflation, will reverse. By formula and statistical estimation, velocity lags the business cycle. Since V equals GDP (a coincident variable) divided by money (a leading variable), V must definitionally lag. Econometrically, velocity is determined by the marginal revenue product of debt and the loan-to-deposit (LD) ratio, both of which are lagging indicators. The econometrics would be highly questionable if V were determined by leading indicators.

With \$10 trillion of total U.S. debt being rolled over this year and an equivalent amount in 2024, the marginal revenue product of debt is set to decline late this year and in 2024. Allocating cash flow from debt-funded projects to interest payments is the least productive use of these resources. While the LD ratio rose in the first quarter and last year as well, it is also a lagging variable with its trough an average of 47 months after its recessionary peak. Under the weight of faltering business conditions, loans will follow and so will the LD ratio. When velocity turns down, monetary policy will have very little capability to stimulate economic activity. The well-known "pushing on a string" predicament will be totally insufficient to describe the situation that lies ahead.



Accordingly, with low or declining economic activity, the inflation rate will most likely continue to recede. Further progress will be made in terms of moving consumer inflation into the Fed's target zone in 2024. Therefore, with the historical pattern of the financial, GDP and price/labor cycles proceeding on its well-documented path, this year's decline in long-term Treasury bond yields is expected to continue.

Thank you for the opportunity to manage your assets.

Sincerely,

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



AVERAGE ANNUAL TOTAL RETURNS

FOR PERIODS ENDED MARCH 31, 2023

	Quarter*	1 Year	3 Years	5 Years	10 Years
U.S. Treasury Fund	6.20%	-20.55%	-14.15%	-1.24%	1.08%
Bloomberg US Aggregate Bond Index**	2.96%	-4.78%	-2.77%	0.91%	1.36%

*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 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.

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.

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.

M2 money supply consists of currency and checking accounts, consumer-type time and savings accounts and equivalent near monies, while M3 money supply consists of M2 plus business-type time deposits and less liquid near monies. Both M2 and M3 exclude monies and near monies owned by the Treasury, depository institutions and foreign banks and official institutions and IRA and Keogh balances owned by consumers.

A Minsky Moment, named after economist Hyman Minsky, refers to the onset of a market collapse brought on by the reckless speculative activity that defines an unsustainable bullish period. It defines the point in time where the sudden decline in market sentiment inevitably leads to a market crash.

A monetary aggregate measures the stock of money outstanding within an economy at a point in time.

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

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

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 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 DECEMBER 31, 2022

Security Name	Percent of Net Assets
U.S. Treasury Bond, 1.875%, 11/15/51	21.3%
U.S. Treasury Bond, 1.250%, 05/15/50	21.3%
U.S. Treasury Bond, 1.375%, 08/15/50	19.9%
U.S. Treasury Bond, 2.250%, 08/15/46	13.5%
U.S. Treasury Bond, 3.000%, 08/15/48	13.0%
U.S. Treasury Bond, 2.500%, 02/15/45	5.8%
U.S. Treasury Bond, 2.250%, 08/15/49	2.3%
Total	97.0%

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.