FINANCIAL FIREWORKS: ACCELERATING AMERICAN INFLATION

© Leo Haviland

July 3, 2021

Leo.Haviland@gmail.com

Prince sings in "Let's Go Crazy": "Dearly beloved, we have gathered here today To get through this thing called life."

CONCLUSION

The Federal Reserve Board and its central banking comrades obviously are not omnipotent. They also are not scientifically objective in their definitions, perspectives, methods, arguments, and conclusions. Neither is the Fed (its policies) the only important variable influencing inflation levels and patterns in America and elsewhere. Many intertwined phenomena in the United States and around the globe, including massive government deficit spending, matter.

Yet given the Federal Reserve's success with its yield repression strategy (and its quantitative easing/money printing scheme), many observers have great confidence in the central bank's insight, foresight, and talent for creating and managing "good" United States (and global) economic outcomes. These desirable results include not only adequate US economic growth and stable prices, but also bullish stock marketplace (use the S+P 500 as the benchmark) and home price moves.

The Fed's long-running marketplace maneuvers, and especially its yield repression policy, have helped to create a culture strongly oriented (married, metaphorically speaking) to the existence and persistence of low Federal Funds and United States Treasury rates. In general, stock owners and securities issuers (corporations and sovereigns), as well as Wall Street enterprises who serve and profit from them, love low interest rates.

"Inflation" (deflation; stable prices) appears in various diverse economic arenas. The Fed itself and the great majority of Fed watchers on Wall Street and Main Street believe the Fed will achieve its praiseworthy goal of stable prices. Thus inflation will not climb "too high" or go "out of control". Similarly, benchmark US Treasury interest rates also will not increase "too much" ("too far"; or "too fast").

Since the coronavirus pandemic emerged during first quarter 2020, as part of its highly accommodative monetary policy, the Federal Reserve has purchased a huge quantity of US Treasury securities (as well as agency mortgage-backed securities). This extraordinary and ongoing net acquisition program has assisted its effort to ensure low marketplace yields. But observers should examine the Fed's UST purchasing process and its consequences in more depth. It has significantly increased the Fed's already sizable percentage share of the outstanding marketable (and held by the public) UST world. This noteworthy jump in the Fed's arithmetic and percentage market share holdings of UST probably therefore has decreased the "free supply" (readily available inventory) of UST. Despite accelerating US inflation in recent months, the large reduction in the free supply of marketable UST probably has helped to keep benchmark UST yields (such as for the 10 year UST note) low.

"American Inflation and Interest Rates: Painting Pictures" (5/4/21) stressed that American "inflation" in the general sense of the term (and even if one excludes the asset price territory of the S+P 500 and homes) is more widespread and less well-anchored than the Federal Reserve Board and armies of its devoted followers (especially investment sects and the financial advisors and media who assist them) believe.

Acceleration in assorted American inflation signposts has occurred in recent months. This probably shows that Fed programs have played, and continue to perform, a critical role in enabling US inflation to rise sharply. Though inflation in measures such as the Consumer Price Index is not yet "out of control", the Fed at present has less control over this upward trend. Recent significant increases in key inflation benchmarks such as the CPI are not "transitory". Despite the Fed's dogmatic adherence to its yield repression approach, the Fed's various current policies and its related rhetoric will find it very challenging to contain the increasing inflationary pressures.

Rising inflation will force the Fed to taper its ravenous US Treasury and mortgage securities buying program, and gradually abandon its longstanding tenacious yield repression strategy, sooner than it currently desires and plans. Despite the Fed's yield repression, money printing, and wordplay (including forward guidance), America's widespread, persistent, and growing inflation severely challenges faith in the Fed's long run power to block significantly higher interest rates. The Federal Funds rate and UST yields (including those on the shorter end of the yield curve) probably will have to increase faster and further than the Fed shepherd currently wants and predicts. UST yields will resume their long run upward path. Sustained ascending American inflation has a strong likelihood of undermining and reversing bullish price trends in various "search for yield" marketplaces such as stocks.

RAISING THE CURTAIN

Pursuant to its legislative mandate, the Federal Reserve Board should "promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates" (Federal Reserve Act, Section 2A). The Fed currently (and subjectively) defines "stable prices" as two percent over the "longer run". At present, to achieve this long run cultural target (since "inflation" had run "persistently below this longer-run goal" for some time), this economic high priest nowadays intends to "achieve inflation moderately above 2 percent for some time". However, the vigilant Fed also wants longer run inflation expectations to "remain well anchored at 2 percent".

Despite its enthusiastic claims of surveying assorted inflation indicators and marketplaces, the beloved Federal Reserve focuses primarily on consumer-level inflation. Although the illuminated Fed claims to take into account "inflation pressures and inflation expectations", personal consumption expenditure ("PCE") remains its favored benchmark for its assessment of "stable prices" ("inflation").

The Federal Reserve Board's respected "Economic Projections" (6/16/21) heralds the central tendency for "longer run" personal consumption expenditure ("PCE") inflation is two percent. However, in its March 2021 Projections, the central tendency was between 2.2 percent and 2.4pc. The central tendency for calendar 2021's overall PCE inflation is between 3.1 percent and 3.5pc. The predicted 2022 range is 1.9 percent to 2.3pc, with 2023's 2.0pc-2.2pc (2022 and 2023 forecasts are about unchanged from 3/17/21's vista).

The International Monetary Fund's outlook for US PCE inflation generally agrees with the Fed's lack of significant concern on that and related fronts. In its "United States of America Concluding Statement of the 2021 Article IV Mission; 7/1/21), the IMF says that "underlying inflation trends

will be obscured in the coming months by significant, transitory movements in relative prices which could lead core personal consumption expenditure (PCE) inflation to temporarily peak at close to 4 percent." The IMF's table for the fourth quarter 2021 versus fourth quarter 2020 average for core PCE is 3.7 percent, with that for overall PCE inflation is 4.3pc. The IMF soothsayer adds: "Inflation expectations are also expected to remain well-anchored."

The Fed declares in its June 2021 Projections that the central tendency for the Federal Funds level in 2021 is merely .1 percent (unchanged from the March 2021 Projections), with 2022's only .1pc to .4pc (unchanged), with 2023's at .1pc to 1.1pc (March was .1pc to .9pc).

US INFLATION STORIES

In "One More Saturday Night", the Grateful Dead sing: "Looked up into heaven, Lord, I saw a mighty sign Writ in fire across the heaven, plain as black and white Get prepared, there's gonna be a party tonight."

May 2021's United States Personal Consumption Expenditure Price Index ("PCE") rose .4 percent versus the prior month and 3.9 percent year-on-year, significantly above February 2021's 1.6 percent year-on-year gain (Bureau of Economic Analysis; "Personal Income and Outlays", Table 11; 6/25/21). May 2021's elevation stands well above the Fed's longer run PCE target and even calendar 2021's central tendency.

One should scan beyond the PCE to assess America's inflation situation, both at the consumer level and elsewhere, including stocks and housing.

The US Consumer Price Index for all urban consumers (all items; CPI-U) increased .6 percent in May 2021 relative to April 2021 (seasonally adjusted; Bureau of Labor Statistics, 6/10/21). Over the last 12 months, the all items index increased 5.0 percent before seasonal adjustment; compare the 1.7 percent rise for the period ending in February 2021.

The Federal Reserve Bank of New York's "Underlying Inflation Gauge" ("UIG") for May 2021 estimates that America's "trend CPI inflation" stands in the 3.1 percent to 3.2pc range (June 2021 release). Underscore the significant acceleration from January 2021's 1.5 percent to 2.1pc range.

Thus May 2021's PCE, CPI-U, and UIG inflation yardsticks clearly exceed the Fed's two percent long run "inflation" objective. Calendar 2021 of course is not over. The Fed wizard at present does not worry about this rather high inflation. Its 6/16/21 FOMC statement states: "Inflation has risen, largely reflecting transitory factors." Despite the Fed's determined optimism, these May 2021 inflation figures and the rising tendency since early 2021 nevertheless warn of "excessive inflation" ("unstable prices") relative to the Fed's long run target.

Producer prices likewise warn that American inflation rates are growing at a noteworthy speed. US producer prices in May 2021 climbed 6.6 percent over the past 12 months (Bureau of Labor Statistics; 6/15/21). This arguably portends further increases in the PCE, CPI, and similar measures. Compare producer price index year-on-year rises of 2.8pc in February 2021 and 1.6pc in January 2021.

A Financial Times headline asserted: "Global brands prepare to hit customers with higher prices (5/1-2/21, p10). The Fed's May 2021 "Beige Book", which comments on current economic conditions (6/21/21, p1) declared: "On balance, overall price pressures increased further since the last report."

At least for advanced economies, increasing inflation looks like a global phenomenon. According to the OECD, the Consumer Price Index (all items) for the G-20 nations in May 2021 (most recent statistics) rose 4.3 percent year-on-year. Compare December 2020's 2.0 percent, January 2021's 2.2pc, and February 2021's 2.4pc year-on-year increases.

Sustained low interest rates can create a low interest rate culture (belief system), and thereby an expectation for continued low yields. However, growing widespread fears of substantial inflation can create both inflationary ascents and higher yields as players (investors, speculators, traders; hedgers, risk managers; the general public; commercial firms, businesses) scramble (such as by securing supplies now or sooner rather than later) to "get ahead" of the apparently impending inflation and its consequences.

Thus rising inflation expectations can ignite or further encourage price rises for various goods and services. Increasing fears regarding inflation can assist yield jumps in US Treasury instruments, as well as in corporate debt yields.

The St. Louis Fed's five-year, five-year forward inflation expectation rate "measure of expected inflation (on average) over the five year period that begins five years from today" provides additional insight on inflationary trends. Its bottom during the 2007-09 global economic disaster was .43 percent on 12/29/08. Compare 3/19/20's .86 pc trough.

The five-year, five-year forward inflation expectation indicator escalated from an interim low at 1.52 percent on 7/16/20 to 5/11/21's 2.38 percent. This neighbors 2/2/18's 2.35 percent key resistance high. Compare its initial high as the magnificent Goldilocks Era waned, 2.57pc on 9/20/07. Prior to its 1Q2018 crest, history extending back to 2003 unveils assorted highs in the five-year, five year forward measure around three percent. Recall 2013's 2.98 percent (1/14/13 and 2/12/13), 2011's 3.02pc (4/19/11), and 3.05pc on 11/12/08. The expectations weathervane slipped to 2.09pc on 6/21/21. However, its 7/2/21 height at 2.17 percent remains above the Fed's long run overall PCE target as well as the 7/2/21 close in the UST 10 year note at 1.42pc.

According to the New York Fed, median one-year-ahead national inflation expectations increased by .6 percent in May 2021 versus the prior month to 4.0 percent, with median expectations at the three year horizon up from 3.1 percent to 3.6 percent. See the Survey of Consumer Expectations (6/14/21).

Economic wizards debate the extent to which and circumstances under which inflation is a monetary phenomenon. All else equal, as a rough guideline, the more "money" around, the more nominal price levels in general (including the price for labor) tend to rise. Some Federal Reserve statistics ("Money Stock Measures", H.6; 6/22/21) indicate that monetary considerations currently are helping to propel consumer level prices (such as the Consumer Price Index, Personal Consumption Expenditure Price Index, and Underlying Inflation Gauge) prices upward. Those money supply statistics arguably signal more inflation in the CPI, PCE, and similar measures on the horizon than most expect.

According to the Fed, monetary base equals currency in circulation plus reserve balances (balances held by depository institutions in master accounts and excess balance accounts at Federal Reserve Banks). The monetary base (not seasonally adjusted) in May 2021 (following massive Fed money printing and major league federal deficit spending over many preceding months) leaped 17.3 percent since May 2020. Even more impressively, May 2021's monetary base skyrocketed 55.6pc since March 2020 (recall when the coronavirus situation and related economic problems began to significantly worsen). In May 2021, currency in circulation jumped 12.3 percent relative to May 2020. The definition of M2 changed in May 2020. May 2021's M2 (seasonally adjusted) raced up 13.8pc year-on-year. Compare these figures with the Fed's two percent "stable prices" concept.

Consumer price inflation of course depends partly on economic growth (demand for goods and services) rate levels and trends. According to the Fed's Economic Projections (6/16/21), the central tendency for real GDP in calendar 2021 is 6.8 percent to 7.3pc (1Q21 actual GDP rose 6.4pc; Bureau of Economic Analysis, 6/24/21), with 2022's climbing 2.8pc-3.3pc. However, the longer run tendency is only 1.8pc-2.0pc.

According to the Financial Times (4/20/21, p2), global consumers have several trillion dollars of additional savings compared with the 2019 spending pattern. See also the NYTimes (4/30/21, pp A1, 14), which reported that United States consumers had \$4.1 trillion in savings at the end of first quarter 2021. Thus US consumers in general apparently have substantial extra money to spend, which if they do will tend to bid up prices for goods and services.

US CPI: RAISING QUESTIONS

Much of the marketplace focus on the upward march in the US Consumer Price Index (CPI-U, all items; Table 1) has pointed to the remarkable year-on-year gains in energy commodities and used cars and trucks. The energy commodities category comprises 3.8 percent of the index (as of April 2021) and leaped 54.5 percent for May 2021 versus May 2020. Used cars/ trucks constitute 3.0pc of the index and in May 2021 soared 29.7pc year-on-year. Some gurus minimize the importance of energy prices, perhaps because many viewpoints exclude them from so-called core inflation. Some observers dismiss the significance of these sharp percentage climbs in the energy commodity and used vehicle groups as being temporary, likely to consolidate or even reverse. It will be interesting to see if this occurs.

In any case, do recent releases of the US Consumer Price Index underestimate actual food price inflation? Might significant past price boosts for many agricultural commodities eventually result in higher percentage gains in that CPI-U arena, and thus in the overall CPI-U, than many expect?

Within the CPI-U (all items), "food" (food at home; food away from home) represented about 13.9 percent. The May 2021 level for food rose 2.2 percent year-on-year.

Retail food prices partly reflect farm-level commodity prices. Packaging, processing, transportation, and other marketing costs, as well as competitive factors, according to the US Department of Agriculture, nevertheless have a greater role in determining prices on supermarket shelves and restaurant menus.

Yet review the Food and Agriculture Organization ("FAO") of the United Nations "Food Price Index" (6/3/21), which measures monthly change in international prices for a basket of food commodities. In May 2021, the FAO's Food Price Index rose 39.7 percent over May 2020. Admittedly this index only involves food commodities and is international, but it soars above the US CPI's 2.2pc estimate. The FAO index sits only 7.6 percent beneath its February 2011 peak.

4444

"Shelter" is a huge percentage of the US CPI-U, totaling about 32.9 percent of the index. The "rent of primary residence" sector is 7.7 percent, with that of "owners' equivalent rent of residences" 23.8pc (31.5pc combined). In May 2021, the rent of primary residence rose 1.8 percent year-on-year. The owners' equivalent rent domain ascended a modest 2.1pc versus May 2020. For the entire "shelter" category, May 2021's year-on-year climb was only 2.2 percent.

Shelter measures the cost of service that housing provides its occupant, rather than changes in the asset price. However, US home prices have rocketed higher over the past several months. Big and sustained boosts changes in asset value eventually could significantly influence rental trends and translate into attitudes regarding how owners will value their home as a rental unit.

Large climbs in "shelter" inflation probably are on the horizon. So given the substantial role of shelter in the CPI-U, large increases in the entire CPI-U probably loom. Listen to Fannie Mae, a leading source of US mortgage financing: "Housing Poised to Become Strong Driver of Inflation" (6/9/21). Fannie Mae says that higher inflation has yet to include the house price surge. It adds: "The CPI's measures of rent and OER [Owners' Equivalent Rent] meaningfully lag movements in home prices." These inflation indices capture current rents paid rather than vacant unit asking rents, so they adjust slowly.

Let's dig into the US Census Department's "Quarterly Residential Vacancies and Homeownership" report for first quarter 2021, the most recent statistics available (4/27/21 release; see Figure 2 and Table 11A). For the United States as a whole, the monthly median asking rent for vacant for rent units in 1Q21 leaped up 17.8 percent year-on-year in current dollar terms. Though this vacant for rent data is not in real (inflation-adjusted) dollar terms, given the very large year-on-year current dollar increase, the real dollar increase for this variable probably was substantial.

ASSET PRICE INFLATION

In the 1966 movie "Fantastic Voyage", Cora declares: "We're going to see things no one has ever seen before. Just think about it." (Richard Fleischer, director)

What does the price history scoreboard for the S+P 500, American home prices, and commodities "in general" reveal?

The record high in the S+P 500 to date is 7/2/21's 4355. This spikes 98.7 percent from 3/23/20's dismal 2192 bottom. It blasts 34.7 percent above 10/30/20's important interim trough at 3234 (3209 on 9/24/20). Moreover, 7/2/21's elevation surpasses the pre-coronavirus pinnacle, 2/19/20's 3394, by 28.3 percent. Compare the CPI's recent year-on-year percentage increase.

As for America's home front, according to the National Association of Realtors (6/22/21), the median existing-home sales price in May 2021 rose by a record-breaking annual (year-on-year)

pace of 23.6 percent to a historic high. The S&P CoreLogic Case-Shiller US National Home Price Index in April2021 had an annual gain of 14.6 percent (6/29/21). April 2021's Index exceeds the 2006 price peak by 34.9 percent and flies up 85.9 percent from 2012's trough. US home prices probably increased through June 2021 as well.

Many pundits label commodities as an asset class. In the hunt for adequate return era of the past few years (as well as previously), price and time trends for commodities in general often have interrelated closely with those in stocks and low-quality debt elsewhere. For commodities "in general", enlist the S&P broad GSCI index, although it is heavily petroleum-weighted.

The broad GSCI's high in its bull move since 4/21/20's major bottom at 218.0 is 7/1/21's 548.1, a stratospheric 151.4 percent flight. Even if one adjusts the start date to 7/1/20's 324.7 (to mitigate the consequences of the petroleum price collapse ending in late April 2021, and particularly the negative prices for front month NYMEX crude oil around then), the bull move runs about 68.8 pc. Underline as well the dramatic rally of 64.6 percent from 11/2/20's (compare the timing of the S+P 500's autumn 2020 upward charge) 333.1 take-off point. The broad GSCI's recent high surpasses 1/8/20's 453.2 summit preceding the coronavirus disaster by 20.9 percent. As a sign of inflationary attitudes within the commodities world and therefore to some extent viewpoints within the consumer landscape, underline the Financial Times headline (5/4/21, p8): "Rising prices fuel talk of raw materials 'supercycle'".

As a general rule regarding the stable prices parameter of the Fed's mandate, history reveals that inflation in "asset" ("investment")-type realms such as stocks and housing in general worries the Fed watchdog considerably less than inflation in consumer-oriented goods and services variables such as the Personal Consumption Expenditure Price Index and the Consumer Price Index. Stocks and housing of course have their "own" supply/demand and inventory considerations which stand somewhat apart from inflationary indicators "elsewhere". Although the PCE and CPI indeed differ from asset price realms such as the S+P 500 and homes, these inflation domains and phenomena influencing them in various ways are not entirely separate.

For example, all else equal, massive money printing by the nation's bank central bank can mitigate or remove deflation fears and encourage "across the board" price increases (and raise inflationary expectations). Gigantic federal government deficit expenditures may help to strengthen the overall economy, at least for the near term, thus helping to entice consumers to spend more as well as boosting corporate earnings. Climbing and "high" stock and home prices can help generate and sustain notable ascents in household (individual) net worth. This consumer balance sheet prosperity, all else equal, tends to increase demand for goods and services, and thereby higher real (not merely nominal) prices for goods and services.

Stock investors and home owners praise the gigantic price rallies in and "high" prices for these assets as excellent news. But do the bull moves necessarily (and currently) represent signs of "stable prices"? The enormous bull advances in stocks and homes, not only since autumn 2020 but more recently, warn that the Fed has lost a substantial amount of control (power) over "inflation in general", including the PCE, CPI, and UIG measures.

Keep in mind the increasingly high year-on-year inflation emerging during 2021 for the PCE, CPI-U, and UIG inflation measures. The leap in the S+P 500 (not only the move to new highs lately and the overall rally since its March 2020 bottom, but particularly the jump since the early autumn 2020 trough) and the enthusiastic ascent in American home prices arguably hint at

growing inflationary pressures in the "overall" economy, and thus for further boosts in the PCE, CPI-U, and UIG inflation rates. The sharp price rally in the commodities sector "in general" also is an omen for rises in the PCE and similar indicators.

The Fed probably deliberately promoted the "search for yield (return)" in stocks, homes, and corporate debt securities via its yield repression and money printing programs. Moreover, the Fed likely wishes to bolster and applaud signs of economic recovery represented by and encouraged via price gains in these arenas, especially following the horrible coronavirus pandemic (and the related economic downturn and stock marketplace crash) which emerged during first quarter 2020.

Prices for commodities "in general" likewise have rallied substantially since spring 2020 (as part of the global search for yield enthusiasm), partly due to highly accommodative central banking monetary policy and enormous deficit spending. The Fed probably welcomes at least some of the climb in commodities prices since that has assisted an upward move from "too low" (insufficient) inflation in measures such as the PCE and the CPI-U.

In any case, substantially rising United States stock marketplace and home prices in recent months thus far have not troubled the Federal Reserve much, even though some US central bankers have started to worry a bit about an overheated housing marketplace.

WAGE INFLATION AND US UNEMPLOYMENT LEVELS

On the wage front, inflationary indicators remain relatively subdued. Real earnings for all employees on private nonfarm payrolls slumped 2.8 percent year-on-year in May 2021 (Bureau of Labor Statistics, "Real Earnings", Table A-1; 6/10/21). Another measure, the Employment Cost Index for civilian workers rose 2.6 percent (in real terms) over the twelve month period ending March 2021 (Bureau of Labor Statistics, 4/30/21 is the most recent statistical release).

Do recent nominal earnings data for June 2021 hint of a notable inflationary pickup in real American wages? Probably not. In June 2021, US nominal average hourly earnings of all employees on private nonfarm payrolls increased 3.6 percent year-on-year. June 2021's earnings expanded only 1.6pc versus those of January 2021 (Bureau of Labor Statistics, "The Employment Situation", Table B-3; 7/2/21). Although the government has not released June 2021's CPI, recall that May 2021's CPI-U expanded 5.0 percent year-on-year, higher than June 2021's 3.6pc nominal hourly earnings yearly gain.

However, June 2021's nominal hourly earnings year-on-year increase exceeds the year-on-year gains for April 2021 (less than one percent) and May 2021 (1.9pc). In addition, nominal wage gains from the hourly earnings perspective were fairly strong prior to the coronavirus disaster. Nominal earnings rose (BLS, 7/2/21) 5.2 percent year-on year in both January and February 2021. On a year-on-year basis, the CPI-U increased only 1.4pc in January 2021 and 1.7pc in February 2021.

The coronavirus pandemic had little if any depressing effect on American employment in January 2020 (headline unemployment 3.5 percent) and February 2020 (3.5pc unemployment; 4.4pc unemployment in March 2020, but 14.8pc in April 2020 and 13.3pc in May 2020).

Whether notable real inflationary wage rises in America will appear of course depends on numerous intertwined factors. One is whether workers in general will fight successfully for wage and benefit increases. Another is whether the civilian labor force total will return to pre-pandemic levels. Such considerations intertwine with the Fed's notion of "maximum employment" and its devoted quest to achieve it. The civilian labor force in June 2021 is about 3.4 million less than December 2019/January 2020's pre-pandemic peak.

According to the Bureau of Labor Statistics (Table A-1; 7/2/21), US headline unemployment in June 2021 stood at 5.9 percent, about unchanged from May 2021's 5.8pc.

On the employment front, the Fed's June 2021 Economic Projections allege that the longer run central tendency for the "unemployment rate" stands at 3.8 percent to 4.3pc. That for 2021 is 4.4pc-4.8pc, with 2022's at 3.5pc-4.0pc. Thus relative to the June 2021's 5.9 percent unemployment, the Fed has more work to do to achieve its interpretation of its legislative mandate regarding employment. Note also the Fed Chairman's claim that the Fed views maximum employment as a "broad and inclusive goal" and "There's a growing realization, really across the political spectrum, that we need to achieve more inclusive prosperity" (testimony before the House of Representatives; cited in the NYTimes, 6/23/21, pB4).

If the Fed is fairly close to being accurate in its forecasts (opinion) regarding maximum employment (the unemployment rate central tendency), perhaps its extremely accommodative policy will not provoke significant wage inflation, either at all or at least "anytime soon". The IMF's Article IV Consultation (7/1/21) declares: "Indicators suggest significant labor market slack remains which should serve as a safety valve to dampen underlying wage and price pressures."

However, suppose the civilian labor force will remain substantially reduced. This may result partly from ongoing federal benefits (some additional unemployment ones plus some others provided to mitigate financial consequences from the coronavirus disaster), which make it less attractive for many to rejoin the labor force (at least at current wage rates). The Institute for Supply Management's June 2021 manufacturing report mentions "worker absenteeism" and "difficulties in filling open positions" as factors (in addition to parts shortages) limiting manufacturing growth potential. Also, the coronavirus situation (and the related internet and remote work responses) arguably reduced for the long run the availability (existence) of the number of job positions in certain work categories. Thus some persons formerly employed in such fields will find it difficult to secure jobs in them again. Moreover, an increased rate of retirements since the coronavirus outbreak perhaps has permanently reduced the size of the American labor force.

If so, the maximum employment levels predicted by the Fed in its Economic Projections probably are too high. Suppose the "true" central tendency for the maximum employment rate is around 5.5 percent rather than 3.8pc-4.3pc. Then (and also assuming at least a fairly strong near term economy), the longer the Fed sustains its current very easy money regime of yield repression and money printing, the greater the likelihood of notable real wage (and other) inflation.

Ongoing increases in the CPI and PCE indices probably also will encourage pressure for real wage gains. Don't forget widespread national pressures to increase the minimum wage to \$15 per hour.

INFLATION AND US DOLLAR DEPRECIATION

The Federal Reserve (H.10) releases a real as well as a nominal "Broad Dollar Index" (including both goods and services). The US real "Broad Dollar Index" is a monthly average (January 2006=100; 7/1/21 latest release). The Fed's nominal Broad Dollar Index release provides daily data (6/28/21 latest release, 6/25/21 most recent statistic).

US dollar depreciation, all else equal, tends to raise nominal prices for dollar-denominated goods and services. Thus sustained dollar weakness can help to boost not only nominal American inflation measures, but also real American inflation. "Dollar Depreciation and the American Dream" (8/11/20) warned of and analyzed various reasons for a significant depreciation in the real Broad Dollar Index (Federal Reserve Board, H.10) from its lofty April 2020 high at 113.7.

January 2021's real Broad Dollar Index ("BDI") at 103.4 declined 9.1 percent from April 2020's peak, thus tending to increase inflationary pressures. That height borders a critical support level, March 2009's 101.6 peak, achieved during the 2007-09 worldwide economic disaster. The BDI inched up to 105.5 in March 2021, but June 2021's 104.8 (which is still a "fairly high" level) remains 7.8pc beneath April 2020's pinnacle. (May 2021's was 104.1).

Let's review the nominal Broad Dollar Index. The nominal BDI peaked at 126.5 on 3/23/20, close in time to the major price bottoms in "search for yield" type assets such as the S+P 500 (3/23/20 at 2192), emerging marketplace stocks, lower-grade US corporate debt and dollar-denominated sovereign debt securities, and commodities in general. It thereafter retreated 12.4 percent to 6/7/21's 110.8. It was 112.2 on 6/25/21.

CREDIT DEMAND AND INFLATION: US FEDERAL DEBT

Demand for credit relative to its supply of course affects US Treasury and other interest rate levels and trends. America's federal debt situation of colossal budget deficits (massive spending) probably also will continue to propel both inflation and UST yields higher. All else equal, noteworthy shifts in demand (economic stimulus packages) tend to raise the prices of goods and services.

America's recent federal budget deficits and debt as a percentage of GDP are gigantic. So are the prospective ones. Federal Reserve Board money printing (consider its current \$80 billion per month of UST purchases) assists the financing of (monetizes) such borrowing. Given government spending on goods and services, the Fed's quantitative easing (and as does central bank money printing in Europe, Japan, and elsewhere) tends to support rising inflation rates.

America's federal deficit spending has lifted the national debt to arguably dangerous levels. In recent times, think not only of the enormous coronavirus stimulus (rescue measures). Recall the tax "reform" legislation enacted in December 2017. Underlying long run financing difficulties facing the country (picture obligations to an aging population) preceded these monumental budget deficits.

Combine the headline numbers for America's various rescue (stimulus) spending schemes enacted during the coronavirus pandemic era. March 2020's CARES legislation totaled about \$2.2 trillion). The end December 2020 program equaled \$900 billion. March 2021's American Rescue Plan added \$1.9 trillion. Though the ultimate US federal budget deficit total arising from

these various measures may vary somewhat from these figures, they add up to \$5.0 trillion dollars. The tremendous spending (borrowing) total of \$5.0 trillion represents a massive 22.6 percent of America's calendar 2021 nominal GDP (1Q21 annualized) of about \$22.1 trillion (GDP from the Bureau of Economic Analysis, Table 3; 6/24/21).

Survey the continuing climb in the US federal debt held by the public as a percentage of nominal GDP. According to the Congressional Budget Office, it touches 102.7 percent by end 2021 (compare around 79 percent at end 2019). Though federal debt as a percent of GDP dips slightly in subsequent years (2024 is 99.1pc of GDP, it then expands. By 2031, debt as a percent of GDP grows to 106.4 percent of GDP, the highest in US history. See "An Update to the Budget and Economic Outlooks 2021 to 2031" (7/1/21; note Table 1). The previous peak, in 1946, followed sizable World War II deficits. The CBO warns in "The 2021 Long-Term Budget Outlook" (Table 1; 3/4/21) that by 2051 federal debt as a percent of GDP will reach a celestial 202 percent.

The CBO gives the federal budget deficit for fiscal year 2021 as \$3.0 trillion, equal to 13.4 percent of GDP (2020's was \$3.1 trillion, or 14.9pc of GDP). Under current law they average \$1.2 trillion from 2022 to 2031. The deficits average 4.2 percent of GDP through 2031, "well above their 50-year average of 3.3 percent." According to the Congressional Budget Office, debt held by the public at end fiscal year 2020 was about \$21.0 trillion, with that for fiscal 2021 predicted at \$23.0tr and 2022 at \$24.4tr (Table 1; 7/1/21).

The CBO's current baseline budget projections do not incorporate the cost of not yet legislated government infrastructure projects suggested by the Biden Administration. These include traditional infrastructure (such as bridges) as well as so-called "human infrastructure". Whether one of more of these schemes will become law is unclear, but the potential range likely is between \$1.0 trillion and \$4.0 trillion (some progressive Democrats with ambitious spending ideas have mentioned even higher numbers). And probably these plans will rely in part on net new borrowing, and perhaps on continuing Fed money printing.

US TREASURY YIELDS AND FREE SUPPLY

"Show me the money!" shouts Tom Cruise, a sports agent in the movie, "Jerry Maguire" (Cameron Crowe, director)

In its 6/16/21 monetary policy statement, the Federal Reserve announced not only that it will keep the target range for the Federal Funds rate at the ground floor level of zero to one-quarter of one percent, but also that it will continue to increase its holdings of Treasury securities by at least \$80 billion per month and agency mortgage-backed securities by at least \$40 billion/month "until substantial further progress has been made toward the Committee's maximum employment and price stability goals." The next Fed meetings are 7/27-28/21 and 9/21-22/21.

The Fed's generous money printing (quantitative easing) surely has played a major part in substantial monetary expansion in recent times, and thus (assisted by the related yield suppression program) has probably created notable inflation risks. The Fed has been acquiring UST by at least \$80 billion per month, and buying at least \$40bb per month of agency mortgage-backed securities, for a grand total of \$120 billion per month. Net purchases of \$120 billion per month equal \$1.44 trillion per year. Assuming America's calendar 2021 nominal GDP (1Q21 annualized) of about \$22.1 trillion, \$1.44 trillion equals 6.5 percent of nominal GDP. The 6.5pc acquisition rate clearly surpasses recent year-on-year inflation in the PCE, CPI-U, and UIG.

The \$80 billion in Treasuries bought per month equals \$960 billion per year. Therefore the Fed's quantitative easing (money printing) has significantly assisted the financing of monumental American federal budget deficits.

Keeping real returns from Treasury securities very low or negative (beneath inflation rates) not only tends to "cheat the savers", but also encourages consumption (spending) and thereby helps GDP growth (economic recovery). History shows that low UST yields have encouraged enthusiastic searches for yield (return) in stock marketplaces, corporate debt, and elsewhere.

The major yield increase trend in the United States Treasury marketplace (enlist the UST 10 year note as a benchmark) which commenced with 3/9/20's .31 percent low probably will continue. The UST 10 note yield has jumped over the major bottoms in yield at 1.32pc on 7/6/16 and 1.38 pc on 7/25/12. The UST 10 year note's high to date since its March 2020 low is 1.77 percent (3/30/21).

The Fed's fierce yield repression effort, keeping the Federal Funds rate and short-term UST instruments at very low levels, has helped to keep the UST 10 year note at low levels relative to current indicators of consumer inflation such as the PCE, CPI-U, and UIG.

As of 7/2/21, the two year UST note's yield is around a paltry .23 percent, the 10 year UST is roughly 1.42pc, with the 30 year UST bond 2.04pc. Over the so-called long run, interest rate investors generally want to receive a real (positive) return relative to inflationary signposts such as these. So the US government yield curve offers a negative real return relative to the most recent (May 2021) year-on-year PCE, CPI-U, and UIG inflation measures. US government interest rates probably need to increase substantially to motivate substantial new net buying from the private sector within the UST playground.

The Fed's June 2021 Economic Projections indicate that the longer run central tendency for the Federal Funds rate is 2.3pc-2.5pc. Let's concentrate further on the UST 10 year note in relation to Fed policies. Its current yield, as well as 3/30/21's 1.77 percent high to date in the yield ascent which commenced in March 2020, remain beneath the Fed's two percent longer run inflation equilibrium goal. To provide a real return to savers of half a percentage point relative to two percent, the UST 10 year yield at that inflation level should climb to 2.50 percent. A one percent return carries the UST 10 year yield up to three percent. Though the Fed's view as to what constitutes acceptable inflationary overshooting of the two percent inflation goal is misty, suppose it is only 50 basis points. Giving creditors a 50 basis point return relative to 2.50pc portends a UST 10 year yield of 3.0 percent, a fair amount above the present-day elevation.

Looking forward, given these Fed policy aims and recent (and probable future) US inflation trends, even if there are occasional fearful "flights to quality" into UST instruments (and thus lower yields in them for a while), the major yield increase trend in the UST 10 year note probably will persist.

The long run trend for rising US Treasury yields since the UST 10 year note rate's yield bottom on 3/9/20 evidences a trend of sustained and increasing US inflation.

Ongoing Federal Reserve yield repression via substantial UST purchasing and forward guidance rhetoric (such as apparent plans to keep the Federal Funds rate at very low levels for many months more) explains why the yield for the UST 10 year and other spans of the UST yield curve still remains "low".

Yet given the Fed's declared policy aims relating to inflation targets, and especially given the recent acceleration in PCE, CPI-U, and UIG (consumer level) inflation in the past few months, why has the UST 10 year yield dropped from its 1.77 percent late March 2021 high? The 10 year UST note is at 1.42pc, with its recent yield low 6/21/21's 1.35pc. Also, strong 1Q21 GDP, massive deficit spending, ongoing significant American money supply growth, and high (bullish trends in) stock and commodity prices probably argue for higher UST yields.

There very probably has not been a fearful "flight to quality" during which marketplace warriors rushed to buy UST. No major deflationary shocks have assaulted investment congregations in recent months. After all, the S+P 500 and other "related" stock marketplaces display strength (optimism). See also relatively strong US corporate bond prices (lower yields due to hunting for yield/return) and the bull moves in home prices and commodities in general (petroleum, for example).

Admittedly, some people prefer to own sovereign debt with a nominal positive yield rather than debt instruments with negative yield. But that situation for the US Treasury marketplace relative to some other high-quality sovereign debt venues probably does not adequately explain the yield drop in the UST 10 year note since 3/30/21's yield high. The German Bund currently has a negative yield of -.24 percent. However, the Bund's yield has been consistently negative since mid-May 2019, and thus long before late March 2021.

Also, a search for yield in the US corporate marketplace might have boosted inclination by some financial pilgrims to buy longer dated UST instruments, even though instruments such as the UST 10 year note have not offered a real return relative to inflation in recent months. "Baa" designates Moody's seasoned corporate bond index (in yield terms) for that credit rating (see St. Louis Fed; all industries, but not only industrial bonds). Baa bonds are of minimum investment grade. The average maturity in that index is 30 years, the minimum maturity 20 years. Recall the Baa's 12/31/20 yield trough at 3.11 percent. It thereafter climbed up to 3.88pc on 3/18/21, but fell to 3.30pc on 6/18/21. It floats around 3.35pc now.

To some extent, higher and higher prices for stocks and other "search for yield" instruments may require more and more collateral (such as cash or government securities such as UST) on hand to satisfy increasing margin (collateral) requirements. The S+P 500 increased about 9.9 percent from its 3/30/21 close at 3959 to 7/2/21's close at 4352. Perhaps the quantity of UST acquired and used for such purposes has increased recently.

Investigation of marketplace territories outside of the interest rate realm offers some analogical guidance as to reasons for the low UST 10 year note yield in relation to recent inflation levels (and despite the recent accelerating inflation trend) in yardsticks such as the PCE and CPI-U, as well as for the 10 year note's yield decline since late March 2021. Consider stock, housing, and commodity playgrounds.

In the S+P 500 and many other stock marketplaces, the buy-and-hold "investment" attitude (especially for some version of the long run) and share buybacks probably have reduced the

availability ("free supply"; readily available inventory) of stocks. By reducing the free supply of stocks, these factors thus have helped to rally the S+P 500 higher (despite many stock valuation measures appearing "high" or "overvalued" from some historical perspective). Since the outbreak of the pandemic, more Main Street dwellers probably have traveled into stock pastures. These retail participants, even if involved in short term trading, tend to initiate their transactions from the buy side. This too probably has tended to reduce the free supply of American stocks. And the continuation of the major bull marketplace trend itself probably has made many stock owners ("investors") relatively unwilling to liquidate much (if any) of their total equity holdings.

Free supply factors of course also influence other price trends in other arenas. Thus low inventories of American homes (currently available for sale) have encouraged sharp price rallies.

In commodities such as petroleum, all else equal, substantial net noncommercial long positions (including in futures and forward marketplaces) cuts the amount of free supply. Some of these noncommercials buy and hold for the long run. Not all the entities who sell to the petroleum noncommercial players are producers. Some of the sellers to the noncommercial longs (owners) therefore are Wall Street institutions. Such Wall Street firms, as part of their risk management, generally seek to maintain a fairly balanced position, so they generally buy something (typically actual oil or an oil-derived or related financial instrument) to balance (offset) their sale to the noncommercial. This complex process, all else equal, tends to reduce the free supply (easily available inventory) of actual oil.

The massive purchasing by the Federal Reserve Board has reduced the free supply of marketable US Treasury securities substantially. This Fed marketplace maneuvering (manipulation) probably has played a key role not only in keeping UST yields low (particularly relative to recent overall PCE and CPI-U type inflation), but also helps to explain the yield decline in the UST 10 year note yield from its March 2021 high. Though "squeeze" probably is too strong a term to apply to such a mammoth marketplace as the UST one, available inventory for many UST instruments probably is in relatively (increasingly) tight supply.

See the Federal Reserve's H.4.1 report (Table 1, "Factors Affecting Reserve Balances of Depository Institutions" and the US Bureau of the Fiscal Service's "Monthly Statement of the Public Debt of the United States" (the most recent report is for 5/31/21) and "Treasury Bulletin" (June 2021).

The amount of outstanding marketable UST debt securities held by the public (the "public" here includes the Federal Reserve) as of 5/31/21 was about \$21.4 trillion (\$21.396tr). This \$21.4tr total held by the public excludes debt securities held by US intragovernmental accounts such as Social Security. US Treasury securities held outright by the Federal Reserve for the week ending 6/2/21 (daily average) was about \$5.1 trillion (\$5.102tr). Thus the Fed held about 23.8 percent of the outstanding marketable public UST debt at around the end of May 2021 (\$5.1tr/\$21.4tr; these dollar numbers are rounded, but the actual calculation of the percentage derives from using greater precision in the actual figures). Not only is this percentage share held by the Fed very substantial, but it currently is "off the market" (the Fed has no plans to be a net seller of the UST anytime soon). Since the Fed has continued its purchasing into calendar June 2021 (UST holdings for the week ending 6/30/21 averaged almost \$5.2 trillion) its percentage share of the marketable outstanding UST securities held by the public as of end June 2021 likely is similar to that of end May 2021.

The amount of outstanding marketable UST securities held by the public on 3/31/21, around the time of the UST 10 year yield high at 1.77pc, was almost \$21.4 trillion (\$21.366tr). Fed holdings of marketable UST for the week ending 3/31/21 averaged about \$4.9 trillion (\$4.935tr). Thus the percentage share of these UST held by the public was 23.1 percent, less than late May 2021's 23.8pc.

Compare the significantly lower percentage holdings of outstanding marketable UST by the Fed as the coronavirus disaster emerged in America around March 2020. For the week ending 3/18/20, close in time to the major low in the S+P 500, average Fed UST holdings stood slightly beneath \$2.6 trillion. For the week of 4/1/20, they had reached about \$3.2tr. Outstanding marketable American debt securities held by the public on 3/31/20 were about \$17.1 trillion. The Fed's percentage share of this UST category during the mid to late March 2020 period (using the \$17.1tr number for both mid and end March) probably was roughly between 14.9 percent (\$2.6tr/\$17.1tr) and 18.5pc (\$3.2tr/\$17.1tr). Note the explosive percentage point increase in the Fed holdings from these spring 2020 levels up end May 2021's 23.8 percent share.

Given the Fed's current massive arithmetic and percentage share of outstanding marketable public US Treasury holdings, any signs of it becoming a noteworthy net seller in the open market of its UST hoard probably would terrify UST holders as well as owners of (investors in) the S+P 500 and other "search for yield" battlegrounds. This would lead to a sharp rise in UST rates and a vicious decline in stocks and related arenas. Thus the Fed probably will not liquidate its UST holdings anytime soon, and indeed currently shows no inclination to do so.

But alternatively, suppose the Federal Reserve decides to reduce (taper) its net acquisition of about \$80 billion UST per month (or its agency mortgage-backed purchases, or both). Embarking on a tapering program might imply that the Fed believes there is less need to assist the economy via repressed rates (and related money printing), and that therefore the Fed should permit interest rates to rise to "more normal" levels. Starting a tapering program also could suggest that the Fed is becoming increasingly fearful about inflation trends and risks.

In any event, a Fed tapering, whether in the UST marketplace or in the agency mortgage-backed field (or both), probably will spark significant rises in UST and other interest rate yields. Such yield increases in the UST and other debt marketplaces may be substantial in an environment where the UST yield curve offers little or no real return relative to inflation.

All else equal, Fed tapering in the UST territory probably will make it increasingly difficult for America to finance its debt. After all, the Fed has been a big net buyer of UST. Who will make up for reduced net Fed purchasing of UST? UST yields probably would need to rise to attract capital to cover budget deficits.

Note that foreign holders of US Treasury securities have added very little to their holdings over the past year. Major foreign holders UST (6/15/21) in May 2021 owned a grand total of \$7.1 trillion, about unchanged since the recent high in January 2021, and less than February 2020's \$7.2tr (and not much above April 2020's \$6.9tr low). This pattern warns of potential difficulties for America's debt financing.

If US inflation and real returns from holding UST worsen, or if the dollar depreciates substantially from current levels (especially if UST yields remain meager), foreigners may reduce their UST buying or become net sellers of them. All else equal, significant net foreign selling of UST will raise the free supply of UST, thus encouraging increases in UST yields.

For detailed further discussion of stock, interest rate, currency, and commodity marketplaces and the political scene, see essays such as "Marketplace Rolling and Tumbling: US Dollar Depreciation" (6/1/21); "American Inflation and Interest Rates: Painting Pictures" (5/4/21); "Financial Marketplaces: Convergence and Divergence Stories" (4/6/21); "Truth and Consequences: Rising American Interest Rates" (3/9/21); "GameStop and Game Spots: Marketplace and Other Cultural Backgrounds" (2/13/21); "The Fear Factor: Financial Battlefields" (1/5/21); "Games People Play: Financial Arenas" (12/1/20); "Born to Be Wild: American Economic and Political Battlefields" (11/2/20); "Adventures in Marketland: Hunting for Return" (10/6/20); "Marketplace Maneuvers: Searching for Yield, Running for Cover" (9/7/20); "Dollar Depreciation and the American Dream" (8/11/20).

This essay is furnished on an "as is" basis. Leo Haviland does not warrant the accuracy or correctness of this essay or the information contained therein. Leo Haviland makes no warranty, express or implied, as to the use of any information contained in this essay in connection with the trading of equities, interest rates, currencies, or commodities, or for any other use. Leo Haviland makes no express or implied warranties and expressly disclaims all warranties of merchantability or fitness for a particular purpose. In no event shall Leo Haviland be liable for any direct, indirect, special, incidental, or consequential damages (including but not limited to trading losses or lost profits) arising out of or related to the accuracy or correctness of this essay or the information contained therein, whether based on contract, warranty, tort, or any other legal theory.

All content copyright © 2021 Leo Haviland. All Rights Reserved.