TRUTH AND CONSEQUENCES: RISING AMERICAN INTEREST RATES

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"The past is never dead. It's not even past." "Requiem for a Nun" (Act 1, Scene 3), by William Faulkner

CONCLUSION

Faith in the appealing proverb "don't underestimate or fight the Federal Reserve Board" has become increasingly deep and widespread in recent years, and especially within stock investment congregations. This dogma underlines that mighty guardian's powers and its willingness to employ them, not only to assist and even rescue the economy, but also to eventually halt substantial stock declines in the S+P 500. The Fed's past successes have built and reinforced reliance by economic players as well as political leaders on it.

The Fed has other central banking allies in its noble efforts. Also, at times efforts by national political leaders in the United States and elsewhere, when dangerous and terrifying situations threaten, enact major assistance packages (such as avalanches of deficit spending).

If underestimation of the Fed is possible, then so is overestimation of it. The Fed of course is not the only performer on the economic and political stage, and marketplace and other cultural conditions can evolve, change significantly, or become extreme. Therefore, the great confidence in the Fed nowadays has an implicit corollary. Fed devotees and marketplace watchers "should not overestimate the Fed and its powers." For example, the revered Fed probably does not have unlimited power to keep Federal Funds rates and United States Treasury yields repressed.

Not only may inflation propel interest rates higher than currently expected or desired. So can massive deficit spending and huge debt, especially if created by the US federal government.

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. A notable target for the UST 10 year is around the 3.26 percent top attained on 10/19/18. Even if over the so-called long run the UST 10 year yield does not eventually ascend to 2007's seemingly ancient high (5.32pc; 6/13/07), attaining such an elevation is considerably more probable than most marketplace preachers proclaim.

Marketplace history of course is not marketplace destiny. Assorted variables in addition to interest rate levels and trends influence stock prices. However, many times over the past century, significantly increasing United States interest rate yields have preceded a noteworthy pinnacle in and the start of bear trends for key stock marketplace signposts such as the Dow Jones Industrial Average and S+P 500. The yield rise in the UST 10 year note since its March 2020 bottom probably signals that the S+P 500 has established a significant top or soon will do so.

PAST UST 10 YEAR NOTE MILESTONE HIGHS

Few observers of American government interest rate trends recall the celestial United States Treasury 10 year note yield summit about 40 years ago at 15.84 percent on 9/30/81. Picture subsequent although still-towering lower yield highs such as 10/15/87's 10.23pc and 11/7/94's 8.03pc plateau. The still-relatively lofty lower interest rate peaks of over two decades ago for the UST 10 year (6.83 percent; 1/21/00) capture little attention nowadays. Similarly, the yield summit over a dozen years past (5.32pc; 6/13/07), attained at the close of the glorious Goldilocks Era preceding 2007-09's global economic disaster, generally rests forgotten, seemingly destined to remain in a "never-again" land when rates were "very high". What about more recent times? Nowadays, even 10/9/18's lower but still important UST 10 year yield top at 3.26 percent attracts at most only modest interest.

These yield pinnacles, whether from October 2018 or venturing back four decades, tend to attract relatively little interest partly because they seem distant and high from the time horizon and current yield level vantage points. In cultural fields such as marketplaces, though perspectives are subjective, most players tend to focus on what's relatively "recent" and "near". After all, the 10 year UST's crash to about .31 percent on 3/9/20 ended only a year ago. And yields of government notes in many advanced nations such as Germany have been negative. That March 2020 UST 10 year yield valley is only about 10 percent of 10/9/18's 3.26pc yield, less than six percent of 6/13/07's top, and merely two percent of September 1981's monumental major high.

However, probably another reason in recent times for the widespread overlooking or minimizing of the historic and current importance of yield summits spanning the September 1981 to October 2018 period derives from the ongoing yield repression schemes of the Federal Reserve Board and its central banking compatriots. These rate reduction programs date back to around mid-year 2008, as the 2007-09's terrible international economic crisis worsened. The coronavirus pandemic era, from around 1Q20 and even up to the present, represents an excellent example of highly accommodative Fed monetary policy.

Admittedly, the Fed over the past thirteen years at times has relaxed its quest to keep the Federal Funds and UST rates depressed. Note the occasional UST yield climbs from end-2008 through October 2018. And the easy money Fed (and foreign central bank) monetary policy frequently has involved massive money printing, which all else equal tends to push rates upward. Yet the trusty Federal Reserve shepherd, trumpeting its unyielding allegiance to its mandate, nevertheless has pushed US Treasury yields lower and kept them there (including via rhetorical flourishes) when necessary to protect (assist) the economy (and to halt and reverse substantial slumps in the US stock marketplace).

MONEY, DEBT, AND CREDIBILITY

"Time present and time past Are both perhaps present in time future, And time future contained in time past." T.S. Eliot's poem, "Burnt Norton"

Once upon a time, regulatory, academic, and marketplace sects emphatically warned of the economic risks of reaching and maintaining for an extended period "too high" government debt levels as a percentage of Gross Domestic Product. Heights of 100 percent or more of GDP made many nervous, though Japan's ability to endure a strikingly high debt burden often calmed fears (and continues to do so).

With the advent and persistence of the coronavirus era since around March 2020, much of Main Street in America and elsewhere and the global economy in general have required substantial economic assistance. Apostles of easy money policies and colossal government deficit spending (stimulus packages) have included leading central banks, the International Monetary Fund,

OECD, influential financial media (such as the Financial Times and New York Times), as well as the great majority of politicians and Wall Street banks, investment banks, and money managers. Not only the Fed, but also the Democratic Administration (and debtors in general) probably want higher American inflation (including higher wages). To ensure the achievement of worthy causes such as adequate economic recovery and sustainable growth and reductions in high unemployment, these rescue measures seem virtuous, not just reasonable. The increasing popularity in recent times of theories (rhetoric) telling eager audiences that diligent and powerful central banks and governments can manage to control the risks of "too high" inflation and potentially alarming debt heights reflects this shift toward a wider embrace of what historically had been deemed as lax monetary and fiscal policies.

Yet, all else equal, a massive amount of money printing (and this quantitative easing existed well before the coronavirus pandemic), tends to increase inflation and thus interest rates. Although the Fed's gargantuan UST acquisition scheme helps to depress UST yields, the money printing result tends to increase the chance of eventual higher interest rates. And at some point, all else equal, extremely large credit demands (or a relative shortage of credit available at a given price), also can push yields higher. At present, for the United States, these factors encouraging yield climbs exist. Of course, total credit demand involves not only government borrowing, but also that in the corporate and household sectors.

Thus meritorious action to strengthen the American economy and reduce widespread suffering and fear on Main Street and in the corporate realm (including the small business domain), such as that taken by the Federal Reserve and the United States national government (Congress and the President), nevertheless probably has created and will continue to encourage a long run trend of significantly higher US Treasury yields. Other leading nations also probably will display rising government yields over the long run. So will the corporate arena. Yield repression measures by the Fed or others can slow the yield climb, and at times "flights to quality" may propel yields of safe haven government instruments (such as the UST 10 year or German Bund) downhill. However, looking forward, the major trend toward higher US government (and related) interest rates probably will continue.

Although the beloved Federal Reserve still remains married to its yield repression strategy, its enthralling sermons also herald its pursuit of higher inflation. These inspiring orations assert the Fed will allow inflation to exceed (overshoot) its venerated two percent target for a while. Such wordplay shows that this beloved economic manager supports rising UST rates (via/in response to sustained higher inflation), at least if the economy does not threaten to become overly weak. If there is not a contradiction between the Fed's competing policy agendas of yield repression and higher inflation, at minimum the agendas stand in significant tension.

There also remains a key question of the Fed's ability to suppress the Fed Funds rate (and UST yields, especially for UST sitting at longer durations further out in time on the yield curve such as the UST 10 year note) substantially when the US federal debt as a percentage of GDP is massive by historical standards, and when the current economic (and political) horizon probably indicates further increases in that debt variable.

The Federal Reserve Bank of New York's "Underlying Inflation Gauge" ("UIG") for January 2021 estimates that America's "trend CPI inflation" stands in the 1.5 percent to 2.1pc range (February 2021 release). Compare UST yields across the yield curve. The 10 year UST nowadays offers a negative real return relative to January 2021's 1.8 percent midpoint of the UIG. The UST

30 year bond's yield at around 2.30 percent as of 3/5/21 offers only a modest return relative to the UIG yardstick.

The UST 10 year note's high to date since its March 2020 low is 1.62 percent (3/5/21). This is beneath the Fed's two percent inflation equilibrium objective. To provide a real return to savers of half a percentage point, the UST 10 year yield at that inflation level should climb to 2.50 percent. A one percent return carries the UST yield up to three percent. Though the Fed's view as to what constitutes acceptable inflationary overshooting of the two percent inflation goal is unclear, 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 current elevation.

According to the Fed's latest Economic Projections (12/16/20; Table 1), the "longer run" central tendency for the Federal Funds rate is between 2.3 percent and 2.5pc. Let's put yield curve shape and steepness issues aside. As a guideline, if the UST 10 year note offers a return of 50 basis points relative to a 2.5 percent Fed Funds level, its yield reaches 3.0pc.

America's dovish central bank (like many other establishment leaders) probably also fears strong and widespread US (and global) populism. Although this inclines them to tenaciously slow yield increases, it does not abolish their inclination to let yields gradually move upward.

"High" stock marketplace prices nowadays for indicators such as the S+P 500 can reflect "inflation", but the Federal Reserve in recent times has shown little worry regarding "overvaluation" in the S+P 500 arena (or in regard to real estate prices). Neither does this sentinel display fear regarding the potential substantial long run inflationary consequences of huge money supply growth.

The Fed meets 3/16-17/21, 4/27-28/21, and 6/15-16/21.

In an era of rising rates, keep an eye on inflation expectations. For example, analyze 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." Its bottom during the 2007-09 global economic disaster was .43 percent on 12/29/08. Compare 3/19/20's trough at .86pc. The 1Q20 collapse toward the 2008 level probably sparked Fed memories of the global economic disaster and deflationary dangers, and hence the Fed savior's extraordinary 2020 responses.

The five-year, five-year forward indicator thereafter escalated. From an interim low at 1.52 percent on 7/6/20, it ambled to a high at 2.14pc on 2/5/21; 3/8/21's 2.00pc rests close to this. A key resistance high is 2/2/18's 2.35 percent. An advance above that might alarm marketplace gunslingers and the Fed sheriff about inflation prospects. Prior to that 1Q2018 crest, history extending back to 2003 unveils assorted highs in the five-year, five year forward measure around three percent.

In regard to rising UST (and other) yields, focus not only on inflation measures such as the consumer price index, personal consumption expenditures, and wages. The credit demand and supply (willingness to provide funds) picture and prospects has a significant influence on UST interest rate levels and trends.

For American federal debt, see the Congressional Budget Office's "Additional Information About the Budget Outlook: 2021 to 2031" (3/5/21) and "The 2021 Long-Term Budget Outlook"

(3/4/21). Federal fiscal years run October 1 through September 30 and are designated by the calendar year in which they end. The CBO forecasts that fiscal year 2021's deficit of \$2.3 trillion will be 10.3 percent of Gross Domestic Product, the second largest since 1945, exceeded only by 2020's mammoth 14.9 percent shortfall. Debt held by the public in 2021 reaches about \$22.5 trillion; compare GDP that year of nearly \$22.0 trillion. The CBO predicts annual deficits average \$1.2 trillion a year from 2022 to 2031. That prophet thus expects deficits to remain high over that period relative to historical standards (the 50 year average deficit is 3.3pc of GDP).

Significantly, note the continuing climb in the country's federal debt held by the public as a percent of GDP. It touches 102.3 percent by end 2021 (compare around 79 percent at end 2019). Though debt as a percent of GDP dips slightly in subsequent years (2026 at 100.9pc of GDP, it then expands. By 2031, debt as a percent of GDP grows to 107.2pc of GDP, the highest in US history. The previous peak, in 1946, followed sizable World War II deficits. The CBO warns in "The 2021 Long-Term Budget Outlook" (3/4/21; Table 1) that by 2051 federal debt as a percent of GDP will reach a celestial 202 percent.

The US government stimulus/rescue programs unleashed around end-March 2020 in response to the economic consequences of the coronavirus disaster totaled about \$2.2 trillion dollars. The generous end-December 2020 one was \$900 billion. And the enactment of another US government stimulus package for \$1.9 trillion is imminent.

Compare the size of these individual programs (and the sum of them) since March 2020 with the \$787 billion rescue (recovery) package enacted in February 2009 during the 2007-09 global economic disaster. During the 2007-09 international economic crisis, the UST 10 year established its yield bottom at 2.04 percent on 12/18/08. The UST 10 year yield thereafter climbed rather quickly and substantially, peaking at 4.00 percent on 6/11/09 (4.01pc on 4/5/10).

The CBO offers opinions on interest rates and fiscal risks in its Long-Term Budget Outlook (p12). This guru "expects the interest rate on 10-year Treasury notes to average 1.6 percent over the 2021-2025 period and 3.0 percent over the 2026-31 period." Yet, all else equal, given the Fed's desire for higher inflation and the US government's enormous sustained demand for credit, the UST 10 year yield probably will be higher than the CBO estimates for 2021-25. The actual yield probably some times will exceed the forecast 2026-31 average. Higher than expected interest rates themselves, all else equal, can worsen the US budget situation. The CBO declares: "The risk of a fiscal crisis appears to be low in the short run despite the higher deficits and debt stemming from the pandemic." However, underscore the reference to "the short run". Also, the soothsayer states: "High and rising federal debt increases the likelihood of a fiscal crisis."

The CBO's recent budget projections include the effects of federal legislation enacted through 1/12/21. These CBO prophecies therefore do not include the impending federal stimulus/rescue package (deficit spending) of around \$1.9 trillion. The Senate and House of Representatives must reconcile their versions, but some deal of that magnitude likely will become law very soon. Thus the budget deficit and debt held by the public likely will increase quite a bit relative to the CBO's current forecast, even though incremental economic expansion also will result. This increased credit demand will help to assist UST yield increases.

Moreover, the CBO's current baseline budget projections do not include the cost of much-desired but not yet legislated government infrastructure projects. If substantial ones became law, they probably will stretch the deficits and debt burdens even further.

Not only is US federal government debt noteworthy. Monitor state and local indebtedness. Corporate and household debt levels also are substantial. In America, consumers represent about two-thirds of GDP. The Federal Reserve Bank of New York (2/17/21) shows US household debt totals and trends. In 4Q2020, it was \$14.56 trillion (up about \$414 billion from end 2019), and vaulting14.8 percent above the end of the Goldilocks Era peak around \$12.68tr. American consumer balance sheets in general strengthened since the 2007-09 global economic disaster, so household debt levels currently may not trouble the majority of households. However, if the country's economy weakens, the current arithmetic level will burden many more American consumers.

The International Monetary Fund's "Fiscal Monitor" (10/14/20) displays the soaring global government borrowing and debt levels as a percent of GDP in recent years.

Major foreign holders of United States Treasury securities as of December 2020 owned a grand total of about \$7.07 trillion, with foreign official institutions grasping about \$4.19 trillion (59.3 percent) of these (US Department of the Treasury, 2/26/21). These amounts only slightly surpass December 2020's levels (\$6.84 trillion and \$4.08tr, respectively) and fall from the highest calendar 2020 elevation, February 2020's (at the dawn of the global coronavirus spread; \$7.23tr and \$4.26tr).

Consequently foreigners in general for quite some time have shown little desire to boost their ownership of America's highly-rated UST array. Thanks to the Good Samaritan Federal Reserve, especially over the past many months, for stepping forward with its titanic UST purchasing, right?

This evident reluctance by foreign holders of UST to add more of them to their portfolio probably portends eventually rising American UST yields, particularly given growing federal indebtedness. Suppose foreigners start an exodus and become net sellers of UST. Also, the Fed's plan to overshoot its two percent inflation target to make up for an extended period of very low yields may make overseas UST holders unwilling to purchase additional UST securities anytime soon. How much capital loss will current UST (and other dollar-denominated debt) owners (whether the holders are foreign or American) endure if UST interest rates increase significantly? Conceivably, American domestic appetite for UST may devour substantial portions of new and growing US debt, although this scenario currently looks unlikely. Will the Fed buy even more? How pleased are overseas holders of UST by the US dollar's roughly ten percent depreciation since late March 2020?

ONWARD AND UPWARD: THE RECENT MARCH OF UST AND OTHER YIELDS

"People think of history in the long term, but history, in fact, is a very sudden thing." Philip Roth's novel, "American Pastoral"

The UST 10 year yield probably started a major long run climb from 3/9/20's .31 percent major bottom. ("Games People Play: Financial Arenas (12/1/20) concluded: "Despite strenuous yield repression by the Federal Reserve Board and its central bank teammates, United States Treasury yields, using the UST 10 year note as a signpost, probably have commenced a long run increase.")

The UST 10 year yield briefly spiked to 1.27 percent on 3/19/20. Its yield subsided rapidly, reaching .54pc on 4/21/20. It established a second and neighboring yield trough at .50pc on 8/6/20.

The UST 10 year yield high since then is 3/5/21's 1.62 percent. Not only does 1.62pc decisively exceed 3/19/20's interim top and 9/3/19's 1.43 percent low, but it also jumps over the major bottoms in yield at 1.32pc on 7/6/16 and 1.38 pc on 7/25/12. Marching above these various key yield levels is an omen (confirmation) of a long run upward shift in UST yields.

What are near term targets for the UST 10 year note yield? Recall the Fed's two percent inflation target. No real return versus that inflation rate gives a UST 10 year yield of two percent. Recall the UST's 2.04pc 12/18/08 worldwide financial crisis low.

Measuring levels derived from current Fed inflation and long run Federal Reserve Fed Funds targets portends UST 10 year yields of around 2.5 percent to 3.0pc. Half the 5.32 percent major high on 6/13/07 is 2.66pc. Ten times 3/9/21's .31 percent yield major low equals 3.10 percent. Keep 10/9/18's yield peak at 3.26pc in view. Remember the interim lows around 3.25 percent as 2007-09's economic crisis developed (such as 1/23/08 and 3/27/08 at 3.28pc and 9/16/08 at 3.24pc).

A secular substantial yield rise in the UST 10 year may include intermittent "flights to quality" and thereby falls in UST interest rates. These flights of course can occur at various times for diverse reasons. After about a one year upward interest rate move, such as a yield rise dating from the UST 10 year note's 3/9/20 major low at .31 percent to sometime "around" now, one should watch out for a "flight to quality". However, since the long run major trend for UST yields probably is up, such buying rushes into the UST safe haven probably will be temporary and yields will resume climbing.

What constitutes major bull and bear moves in the US Treasury marketplace from the duration vantage point depends on subjective perspective. However, regardless of whether one views the secular down trend in yields from four decades ago, 2000, 2007, or only October 2018, the upward one year climb to date since March 2020 has not lasted a comparably long time. Therefore, the current UST yield advance probably has considerably more time to run. The Fed's current inflation stance and America's enormous current federal debt and prospects for its increase also indicate the likelihood of the yield rise continuing.

Note also the timing of recent minor yield lows in the UST 10 year note in the American political context. First, see .72 percent on 11/5/20, shortly after Election Day on 11/3/20. Recall 1/4/21's .90pc. The Democrats harvested the two Georgia Senate seats in the 1/5/21 runoff elections, giving them control of the Senate (via the Vice-Presidential tie-breaker vote). Thus the Democrats, who controlled only the House of Representatives prior to the 2020 election campaign, gained control of the Presidency and Senate as well.

Certainly prior to the 2020 election, both Democrats and Republicans joined hands to enact huge deficit spending around end-March 2020. After the 2020 election, in late December 2020, bipartisan agreement produced another hefty rescue (stimulus package). And Republican-led tax "reform" enacted at end-2017 helped the US federal deficit to balloon.

However, a significant number of marketplace participants probably believed that increasing chances for (and then the actual reality of) Democratic control of the Presidency, Senate, and House boosted the probability for further rounds of substantial deficit spending in addition to the

end-December 2020 \$900 billion legislation. Interpreting the November 2020 and January 2021 UST yield lows from this perspective hints that rising federal deficits (especially if they coincide with some economic recovery) increasingly have contributed to the creation of a major upward trend in UST yields. Note the continuing rapid ascent in UST yields as the enactment of a proposed roughly \$1.9 trillion stimulus measure has become increasingly likely. This in turn suggests that the heroic Fed's ability to repress UST yields has been weakening.

The shocking storming of the US Capitol on 1/6/21 probably has diminished foreign willingness to hold and finance America's debt.

The increase in UST 10 year yields over the past year has been paralleled by other leading nations. This bolsters the likelihood that a significant long run uptrend in yields has emerged. For example, despite yield repression by the European Central Bank, the German Bund established its yield low on 3/9/20 (compare the time of the UST bottom) at -.91 percent (negative). It spiked to a high of -.14pc on 3/19/20. Though the Bund yield retreated to -.67pc on 11/4/20, it resumed its ascent, reaching -.23pc on 2/25/21. Japan's JGB yield low occurred on 3/9/20 at -.19 percent. Its yield crawled into positive territory on 6/15/20; 2/26/21's .18pc is its recent high.

China's 10 year government note also attained an initial yield low at 2.51 percent on 3/9/20, with a final yield low at 2.47pc on 4/24/20. Yields thereafter generally has ventured higher. Although 11/20/20's 3.37 percent remains the high since the April 2020 trough, recent levels hover close to November 2020's high.

Yield repression tends to cheat savers, especially when yields provide no real return relative to inflation rates. In the past several years, yield repression of the Federal Funds rate (and thus UST yields) by the Fed (with related policy moves by its central banking allies) has encouraged avid searches for "yield" (return) in the S+P 500 and other benchmark United States and global stock indices, lower-grade interest rate instruments within corporate fields (and low-quality foreign dollar-denominated sovereign debt), and commodities "in general". In any case, prices in the S+P 500 and these other domains ("asset classes") often have risen (or declined) at roughly the same time. They generally have climbed in significant bull ascents (and fallen in noteworthy bear retreats) "together". These intertwined territories therefore have alternatively reflected joyous bullish enthusiasm as "investors" and other traders hunted for adequate return (yield), and terrifying bearish scenes as they scrambled fearfully for safety.

In the past several weeks, various lower-grade interest rate marketplaces probably have unveiled a trend to higher yields. In the current environment, that shift to higher interest rates connects with the preceding and ongoing climb in the UST 10 year and other high-quality sovereign yields. The rising interest rates in both high and low quality debt realms indicates that a long run major increase in global interest rates probably is underway.

"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. The Baa yield slumped after 3/20/20's 5.15 percent yield high (compare the timing of the yield high with the S+P 500's major bottom on 3/23/20 at 2192). The Baa's recent yield low is 12/31/20's 3.11pc. Since then, it has walked up to 3.69pc (3/5/21).

HYG is the iShares US Dollar High Yield Corporate Bond ETF. EMB is the iShares J.P. Morgan US Dollar Emerging Markets Sovereign Bond ETF. Rising prices for these two ETFs indicate falling yields for the underlying debt instruments, retreating ETF prices reflect rising yields. The HYG price bottom (yield high) occurred about a year ago, at 67.52 on 3/23/20. Prices ascended thereafter, reaching a top at 87.79 on 2/12/21 (close in time to the S+P 500's 3950 on 2/16/21). The EMB attained its price trough at 85.00 on 3/18/20. Its recent price top is 1/4/21's 116.09.

US STOCK MARKETPLACE GOSPELS

Since the hellish price crashes during first quarter 2020, actions by and preaching from the Federal Reserve Board and other leaders in the central banking (and finance ministry) fraternity around the globe restored investor (buying) confidence and generated price rallies in the S+P 500 and related marketplace parishes. In response to the economic (and political) challenges of the ravaging coronavirus era, gargantuan deficit spending by the United States and its foreign comrades also assisted these bullish price moves. So despite occasional worries, significant complacency gradually developed in assorted stock marketplaces and "asset classes" tied to them.

Based on this as well as past experience (especially in regard to the merciful Fed), marketplace wizards and fortune-hunting pilgrims dealing in the S+P 500 and intertwined provinces once again have great faith that these marketplaces will not fall "too far", or for "very long". Bullish apostles in the financial media especially and persistently promote and justify stock marketplace investment and price rallies. "Where should I put my money when Treasury yields are so low?" In regard to equities in particular, enthusiastic propaganda speaking of "buy and hold for the long run" and "buy the dip" inspired entrenched investors and often sparked new buying. Legions of new Main Street stock players, the majority of them buy-oriented, have ventured into the US stock marketplace since the coronavirus outbreak.

Significant economic stimulus actions (deficit spending), a still-accommodative Fed, and the development of coronavirus vaccines have incited widespread US stock marketplace optimism. Easygoing stock bulls have had happy visions of recovering corporate earnings for calendar 2021 and strong ones thereafter. Numerous S+P 500 bull advocates do not worry much about or downplay risks of historically "high" valuations. "This time is different", right?

US TREASURY YIELD TRENDS AND THE S+P 500

Marketplace connections and patterns, including convergence and divergence (lead/lag) relationships between financial dominions, are complex and not necessarily precise. They can shift or even transform sometimes dramatically.

"History on Stage: Marketplace Scenes" (8/9/17) emphasized: "Marketplace history need not repeat itself, either entirely or even partly. Yet many times over the past century, significantly increasing United States interest rates have preceded a noteworthy peak in key stock marketplace benchmarks such as the Dow Jones Industrial Average and S+P 500. The yield climb sometimes has occurred over a rather extended time span, and the arithmetical (basis point) change has not always been large." The US Treasury marketplace has been an important yield indicator for this analysis.

Significant stock marketplace price declines are not necessarily (inevitably) accompanied by a substantial "flight to quality" (into a nation's government securities sufficient to drive the yields in those debt instruments lower). "History on Stage: Marketplace Scenes" notes: "Sometimes the yield advance has extended past the time of the stock pinnacle." Also, recall troubles in emerging marketplaces. In any case, a falling S+P 500 alongside rising UST yields is not impossible.

Recollect a couple of UST 10 year note yield peaks and S+P 500 stock summits from many years ago, in 2000 and 2007. The UST 10 year yield high was at 6.83 percent on 1/21/00; the S+P 500 reached its plateau on 3/24/00 at 1553. Recall the worldwide global financial crisis era of 2007. The UST 10 year yield attained its 5.32 percent top on 6/13/07; the S+P 500's pinnacle occurred on 10/11/07 at 1576.

From today's perspective, those yield peaks may seem "unbelievably high". And relative to nowadays, in which the S+P price more than doubles those 2000 and 2007 pinnacles and is not far from 4000, some may label the 2000 and 2007 S+P 500 pinnacles "low". In both the 200 and 2007 situations, a notable yield increase in the UST 10 year preceded (led to) a major peak in the S+P 500.

Let's excavate a couple of relatively recent linkages (patterns) between UST rates and the S+P 500. The UST 10 year note yield rise trend started with 7/6/16's major low at 1.32 percent. See the notable higher lows at 2.01pc (9/8/17) and 2.80pc (7/6/18 and 8/22/18) on the way up to 10/9/18's yield peak at 3.26pc. The S+P 500 peaked on 9/21/18 (at 2941)/10/3/18 (at 2940).

The UST 10 year note yield paraded upwards from 9/3/19's 1.43 percent to a high at 1.97 percent (12/19/19 at 1.95pc). Although this UST yield increase was modest, it occurred not long before the S+P 500's major peak on 2/19/20 at 3394. Admittedly, the coronavirus pandemic accelerated the S+P 500's collapse, but the S+P 500 arguably was vulnerable to a decline even if the coronavirus problem had not emerged. See "Global Economic Troubles and Marketplace Turns: Being There" (3/2/20) and "Critical Conditions and Economic Turning Points" (2/5/20).

STOCKS SINCE MARCH 2020: THE HEAVENLY BULL CHARGE

In the following table, "EEM" is the iShares MSCI Emerging Stock Markets ETF.

	First Quarter 2020 <u>Low (date)</u>	Late Summer <u>High (date)</u>	Recent Low (date)	Subsequent <u>High (to date)</u>
S+P 500	2192 (3/23/20)	3588 (9/2/20)	3209 (9/24/20) 3234 (10/30/20	3950 (2/16/21))
EEM	30.10 (3/23/20)	45.56 (8/28/20) ****	42.29 (9/25/20 44.41 (10/30/2) 58.29 (2/16/21) 0)

Note the similar timing of notable trend changes in the S+P 500 and emerging marketplace stocks.

The S+P 500 peaked on 2/19/20 at 3394, viciously collapsing 35.4 percent in only one month to its 3/23/20 major bottom at 2192. The EEM's pinnacle occurred 1/13/20 at 46.32, preceding the

S+P 500's by a few weeks; the EEM's 2/12/20 drop-off point at 44.84 was very close in time to the S+P 500's major high. The EEM's rapidly collapsed 35.0 percent to its 3/23/20 trough.

Did S+P 500 and other stock owners pray for a rally? The S+P 500 skyrocketed 80.2 percent from its March 2020 low to the 2/16/21 high to date. The EEM's amazing leap to its February top is 93.6 percent. The EEM's high to date in its bull charge jumped above 10/31/07's 55.83 Goldilocks Era zenith, achieved shortly before the murderous 2007-09 international economic crisis.

The S+P 500's largest slump since its March 2020 trough is the 10.6 percent decline from 9/2/20's 3588 to 9/24/20's 3209. The fall from 2/16/21's 3950 high to 3/4/21's 3723 low is about 5.7 percent. A five percent fall from 3950 is 3753, a ten percent "correction" 3555. In stocks, a retreat of 20 percent or more from a peak is a conventional definition of a bear market. A 20 percent bear move equals 3160, a 25pc one 2963, with a 33pc collapse 2631.

A ten percent correction from in the EEM from 2/16/21's height equals 52.46, a 20 percent plunge 46.63, and a 33pc crash 38.82. The EEM's low since 2/16/21 is 3/8/21's 52.25, a 10.4 percent slump.

In general, the S+P 500 (and especially "technology" stocks; see the Nasdaq Composite Index) probably has been the bull leader for the various "search for yield" asset classes "as a whole" since its 3/23/20 low. Note the similar timing of trend changes in the S+P 500 and the Nasdaq Composite. The Nasdaq Composite Index's 2/19/20 peak was 9838. It crashed to 6631 on 3/23/20. The Nasdaq's 2/16/21 high at 14175 soared 113.8 percent from 3/23/20's 6631 major bottom. The Nasdaq Composite Index tumbled 12.5 percent from 2/16/21's high to its recent low on 3/5/21 at 12397. Watch to see if support at 9/2/20's important interim high at 12074 holds. A 20 percent bear move from 2/16/21's high equals 11340, with a 33pc retreat 9440.

Within the church of US stock marketplace bulls, is confidence that US Treasury yields will not shift higher beginning to wane? Is fear emerging that there is a growing chance that UST yields may rise "too high" over the next few years for the S+P 500 to sustain its magnificent February 2021 summit?

Marketplace history does not necessarily repeat itself, either entirely or even partly. However, the trend of rising US Treasury 10 year note yields since March 2020 warns that the S+P 500 probably achieved a major high on 2/16/21 at 3950, or that it will soon do so. Price, time, and distance trends for the S+P 500, when viewed together, also signal that the S+P 500 probably has started, or will commence in the near future, a significant correction and perhaps even a bear trend.

Timing, distance, and level considerations do not mandate that a major marketplace bull or bear move must end at or around a price level or calendar time. However, they can offer tactical guidelines.

For the calendar timing parameter, the S+P 500's 2/16/20 is about a one year anniversary from 2/19/20's major high at 3394. Recall 3/23/20's major bottom at 2192. Keep in view the calendar date of the S+P 500's 2/11/16 major low at 1810. Don't forget the S+P 500's 3/24/00 high at 1553; the Dow Jones Industrial Average's occurred somewhat earlier, on 1/14/00 at 11908, making the midpoint calendar time of the 2000 highs for these two stock benchmarks around

mid-February. The Dow Jones Industrial Average's high to date is 3/8/21's 32148. Note also the S+P 500's 3/6/09 major low at 667.

From the duration perspective, around a one year move is a significant period after which a financial marketplace trend direction often changes, at least for a while. It is nearly one year since 3/23/20's major bottom at 2192. Five years have passed since 2/11/16's major bottom. The S+P 500's glorious bull climb since 3/6/09's major low at 667 has lasted 12 years.

Not only in absolute arithmetic terms, but also given its relatively short time (relative to the misty long run), the S+P 500's 80.2 percent climb from its March 2020 low to 2/16/21's 3950 high is gigantic. The 2/16/21 high more than doubles 2/11/16's major bottom. Six times the 3/6/09 major bottom at 667 is 4002; compare 2/16/21's level.

The upward distance traveled by the S+P 500 over one or more time horizons does not mandate that a notable correction or a bear trend for that benchmark will appear. However, ten percent declines in the Nasdaq Composite Index and EEM warn of a fall in the S+P 500 greater than the 5.7 percent to date; so do the price declines (yield increases) in recent weeks within the "search for yield" category of lower-quality debt securities represented by the Baa, HYG, and ETF.

The dangers of weaker than forecast United States corporate earnings and historically lofty current valuations for American stocks "in general" probably are significantly greater than the "consensus" wisdom promulgated by stock marketplace bulls. Figuratively speaking, US stock prices around current levels probably have "built in" a substantial amount of predicted earnings growth for calendar 2021 and 2022. To what extent in recent months have S+P 500 and other stock marketplace bulls become complacent due to the massive stock rally and their winnings?

Though numerous phenomena were involved in the stock marketplace crashes of 1929 and 2007-09, both occurred in an era of significant debt and leverage. That debt and leverage situation arguably fits the global situation nowadays as well.

Marketplace history over the past few years indicates that the Federal Reserve may sing soothing hymns from its pulpit to support the S+P 500 after around a ten percent S+P 500 price decline. However, the Fed probably will not undertake significant action to save S+P 500 owners unless a 20 percent bear move appears imminent or actually occurs.

FINISH LINES: CREDIT SPREADS, PETROLEUM, AND THE DOLLAR

Watch credit spread relationships, such as that between the UST 10 year note and lower-grade debt obligations such as Moody's Baa seasoned corporate bond index. Significantly widening credit spreads probably will foretell (confirm) notable declines in the S+P 500 and related stock (and other lower-quality interest rate) marketplaces as well as economic weakness.

The Moody's Baa index less the 10 year US Treasury note yield spread achieved important lows at 191 basis points on 1/3/20 and 1/21/20. The key final spread trough was 2/18/20's 201bp; compare the timing of the S+P 500's 2/19/20's 3394 high. As the coronavirus pandemic spread and the S+P 500 and other equities collapsed, the Baa less UST 10 year spread expanded. That credit spread attained its low (widest point) at 427 basis points on 3/24/20, right around the time of the S+P 500's major bottom. The credit spread thereafter narrowed, as economic conditions improved and the S+P 500 and EEM rallied (note also the declining yields in the HYG and EMB

ETFs), reaching its recent high at 211 basis points on 1/19/21. It has not fluctuated far from that level since then.

Commodities in general, including the petroleum complex, at times have attracted investors and other buyers eager to unearth adequate (sufficient) yield (return) via that asset class. Significant turns in the petroleum price field often (but not always) have occurred around the same time as those in the S+P 500.

ICE Brent/North Sea crude oil (nearest futures continuation) established a major bottom at 1598 on 4/22/20, fairly close in time to the major lows in the S+P 500 and EEM. Brent's high thereafter is 3/8/21's 7138. Will oil begin to decline alongside the S+P 500 in the near future? Or, will petroleum keep going up for a while, as it did for several months (until July 2008) after the S+P 500 peaked in October 2007? A sharp decline in petroleum prices from current heights probably would encourage (confirm) stock marketplace falls. Incidentally, might the recent increases in gasoline and diesel prices help to boost consumer price and similar inflation measures?

The Federal Reserve (H.10) releases a real as well as a nominal "Broad Dollar Index" (including both goods and services). The real "Broad Dollar Index" is a monthly average (January 2006=100; 3/1/21 latest release). The Fed's nominal Broad Dollar Index release provides daily data (3/8/21 latest release, 3/5/21 most recent data point).

	First Quarter 2020	Recent Low	Percentage Fall
	<u>Key High (date)</u>	<u>Level (date)</u>	from 1Q20 High
Nominal Broad Dollar Index	126.5 (3/23/20)	111.1 (1/6/21)	Nominal Dollar Index depreciation 12.2pc

The real Broad Dollar Index peaked in April 2020 around 113.7. A five percent decline in the real Broad Dollar Index from 113.7 is 108.0. The real Broad Dollar Index fell to 103.3 in January 2021, about a 9.1 percent slump (it inched up slightly in February 2021 to 103.8). A ten percent dive equals 102.3. A 15 percent retreat in the Broad Dollar Index gives about 96.7, a punishing 20pc retreat about 91.0.

US dollar levels and trends in relation to those of stocks and other marketplaces are complex and sometimes change dramatically. All else equal, a weaker US dollar tends to boost dollar-denominated asset prices, including US stocks. However, this theoretical rule of thumb is not necessarily or always realized in marketplace practice (history).

"Dollar Depreciation and the American Dream" (8/11/20) and other essays discussed why a persistently and substantially declining United States dollar eventually can help to lead US stocks lower. Ongoing US dollar depreciation finally can become significant enough to inspire a shift away from a "weak dollar equals strong stocks relationship" (which existed during the 3/23/20 to 9/2/20 time span, and probably for some of the time in the following months), and thus encourage eventual weakness in the S+P 500 and related stock and low-quality dollar-denominated debt marketplaces. "The Fear Factor: Financial Battlefields" (1/5/21) stated: "A sustained slump of ten percent or more in the nominal Broad Dollar Index relative to 3/23/20's 126.5 plateau is a danger signal for US stocks."

Of course interest rate levels and patterns (such as increasing UST yields), monetary policy, debt levels and trends, and numerous other variables matter in the analysis of the S+P 500 and US dollar relationship. But suppose the S+P 500 established a major top at or near to its 2/16/21 high at 3950. Then arguably the extensive "overall" preceding decline in the US dollar, from 3/23/20 to around 1/6/21 (using the nominal Broad Dollar Index as the guide) encouraged (interrelated with) the subsequent stock marketplace price decline.

Over the long run, the US nominal and real Broad Dollar Indices perhaps will continue to depreciate further from their recent lows. However, the January 2021 real Broad Index is close to an important support level, March 2009's 101.6 peak achieved during the 2007-09 global economic disaster (recall the S+P 500's major bottom on 3/6/09 at 667 occurred alongside that real Broad Dollar Index high). Although the S+P 500 peaked at 1576 on 10/11/07, its final high occurred on 5/19/08 at 1440, collapsing from the 8/11/08 (at 1313) and 9/19/08 (at 1265) interim tops. The real Broad Dollar Index appreciated substantially (17.1 percent) for about a year from April 2008's 86.8 low (around the time of the S+P 500's final high in May 2008) to its March 2009 summit.

Suppose that in the current marketplace era, the S+P 500 and related stock marketplaces fell substantially more than ten percent from their first quarter 2021 highs (S+P 500's 2/19/21 at 3950). If this sharp and dramatic decline in the S+P 500 and other key global equity benchmarks occurs, the appreciation in the real Broad Dollar Index during the global economic crisis (from April 2008 to March 2009) warns that the real Broad Dollar Index may appreciate (rally) at least a modest amount for a few months or more. Using the nominal Broad Dollar Index as a guideline (since it has daily data), the dollar has appreciated about 2.7 percent from its 1/6/21 trough at 111.1 to its high (and most recent data point) since then, 3/5/21's 114.1. Note that the 2/12/21 low at 111.8 (near to 1/6/21's depth) occurred shortly before the S+P 500's 2/16/21 top.

For detailed further discussion of stock, interest rate, currency, and commodity marketplaces and the political scene, see essays such as "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).

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