LONG RUN HISTORICAL ENTANGLEMENT: US INTEREST RATE AND STOCK TRENDS

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Leo.Haviland@gmail.com

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

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CONCLUSION AND OVERVIEW

Many times over the past century, significantly increasing United States interest rates have preceded a major peak, or at least a noteworthy top, 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. The arithmetical (basis point) change has not always been large. Sometimes the yield advance has extended past the time of the stock pinnacle.

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The US Treasury 10 year note yield established a major bottom at .31 percent on 3/9/20. Its sustained yield increase thereafter, and especially from 8/4/21's 1.13 percent, helped lead to the major high in the S+P 500 on 1/4/22 at 4819. After an extended span of engaging in yield repression (and money printing), the Federal Reserve finally recognized that inflation was not a temporary or transitory phenomenon and began raising rates. The timing of a critical interim UST 10 year note yield high, 6/14/22's 3.50 percent, extended well the stock marketplace peak, as did the UST's second summit at 4.34 percent on 10/21/22. Arguably, an only gradual reduction of yield repression while immersed in an inflationary environment was one factor for the extensive duration of the yield increase after the S+P 500's January 2022 crest. In any event, the S+P 500 tumbled sharply in its bear trend, reaching a major bottom on 10/13/22 at 3492, close in time the UST's high (as well as the autumn 2022 peak in the US dollar). For a bear trend from the long run historical perspective, that nine and one-half months and 27.5 percent decline in the S+P 500 was modest in time and distance terms.

The S+P 500's rally since October 2022's valley has carried it to within about 7.5 percent of its glorious January 2022 summit. Given the historic pattern in which UST yield increases "lead" to peaks in key American stock benchmarks such as the S+P 500, do signs of a noteworthy rising yield trend exist on the interest rate front? Yes.

First, the UST 10 year note made several interim lows around 3.30 percent in first half 2023, with yields escalating moderately from 4/6/23's 3.25 percent. The subsequent UST 10 year high since then is 7/6/23's 4.08 percent (as of 1200 noon EST on 7/6/23). In addition, the existence of only a modest yield decline from October 2022's 4.34pc high indicates that the pattern of rising UST 10 year note (and other UST) yields which emerged in March 2020 and accelerated thereafter probably remains intact. Also, core inflation remains persistently above the targets of the Fed and other central bankers. US unemployment remains low. The Fed and other leading central bank luminaries have hinted strongly at further increases in policy rates, and they appear determined (in the absence of an economic crisis) to maintain their tightening schemes for an extended time period. Such boosts in the Federal Funds level (and thus in short term UST instruments) probably will push the UST 10 year yield higher. Moreover, monumental long run federal debt problems confront America; all else equal, huge credit demand tends to boost interest rates.

In addition, the UST 10 year note's major yield bottom in March 2020 began from a peak around fifteen percent almost 40 years before, in 1981. That seemingly ancient UST yield history does not mandate the development of a substantial yield increase over a very long time span for the ensuing vista commencing in 2020. However, by comparison, a yield increase of about four percent in about two and one-half years, from March 2020 to October 2022, is moderate but not extraordinary, especially given the Fed's yield repression history (and related money printing) and the developing (and current) inflationary situation. From this perspective, an eventual climb in the UST 10 year note yield above October 2022's 4.34 percent high is probable.

Therefore, the pattern of rising UST 10 year note yields likely is leading to another peak in the S+P 500. This stock marketplace peak probably will occur relatively soon, probably within the next few weeks or months. However, even if the S+P 500 continues to climb, it probably will not exceed its January 2022 peak by much if at all.

Why might the S+P 500 remain fairly strong in the near term? First, the UST 10 year yield increase since April 2023 has been only moderate. Moreover, in America, and in general for other advanced nations, government yields relative to consumer price inflation remain low or negative. Also, US corporate earnings optimism for 4Q2023 and thereafter is strong. In addition, we live in a nominal world, and quoted stock prices obviously belong in that realm. Real GDP growth can be disappointing. However, all else equal, rising nominal GDP, increasing money supply, and higher nominal prices for goods and services in general will tend to be reflected in higher nominal corporate earnings and stock prices. Stock share buybacks have been substantial. US consumer confidence is fairly high (June 2023 at 109.7, 1985=100; Conference Board). Sales prices of existing single-family homes, after peaking in June 2022, have rallied since January 2023 (National Association of Realtors).

The UST 10 year yield currently is challenging 3/2/23's 4.09 percent interim high. That perhaps will be sufficient to notably weaken the S+P 500. However, the UST 10 year note yield probably will need to approach or exceed 10/21/22's 4.34 percent top to induce a very substantial fall in the S+P 500.

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What other variables indicate that the S+P 500 probably will establish a notable top and commence a significant retreat within the next few months? The Fed and its allies probably will show further proof of their inflation-fighting ability and resolution, with yields continuing to ascend from current levels. Also, some recessionary (or at least very weak GDP growth) warning signs currently exist. Not only is there a trend of rising interest rates, but also the UST yield curve slope is sharply negative. Leading economic forecasters such as the Fed, International Monetary Fund, and World Bank express sluggish growth concerns. Despite US corporate earnings optimism for horizons fairly far forward, earnings for the first three quarters of 2023 appear mediocre.

Other price relationships, when interpreted alongside the rising UST yield trend and recessionary concerns, warn that the S+P 500's rally will end in the near term. Over the long run, prices of emerging marketplace stocks in general tend to converge with the S+P 500, moving "together" upward (or downward) around the same time. "EEM", the iShares MSCI (BlackRock) emerging stock market ETF, made a key bottom on 10/24/22 at 33.49, close in time to the S+P 500's. Its subsequent high was 1/26/23 at 42.53, many months ago. The EEM's climb from its October 2022 trough was about 27.0 percent, about the same as the S+P 500's 27.7 percent bull charge from autumn 2022 to 6/30/23's 4458. However, the failure of emerging marketplace equities to rally after January 2023 and achieve a new high around end June 2023 (divergence from the S+P 500 patterns) signals potential feebleness for the S+P 500.

Price and time trends for commodities "in general" sometimes have diverged from that of the S+P 500 (and other global stock arenas) for extended periods. However, over the long run, prices of commodities in general tend to converge with the S+P 500. Often major highs (major bottoms) for commodities in general and the S+P 500 occur around the same time. All else equal, sustained "high" interest rates tend to put downward pressure on both commodities and stocks. Whereas the S+P 500 has rallied substantially since October 2022, commodities made new lows in their bear trend since March 2022's peak. Using the broad S+P GSCI as a yardstick for the overall commodities playground, the GSCI cratered from 3/8/22's 853.3 to 5/31/23's 521.6, with the current level bordering the end May 2023 trough.

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For additional analysis of key interest rate, currency, stock, and commodity marketplaces and their relationships, as well as the economic and political scenes, see other essays such as: "US Treasury Yields, Fed Maneuvers, and Fiscal Games" (6/5/23); "On the Road: Marketplace Traffic" (5/1/23); "Home on the Range: Financial Battlegrounds" (4/1/23); "Balancing Acts: Financial Marketplace Trends" (3/5/23); "US Dollar and Other Marketplace Adventures" (2/5/23); "Wall Street Marketplaces: Fasten Your Seat Belts" (12/5/22); "Critical Conditions in Financial Marketplaces" (11/13/22); "Hunting for Yield: the Thrill Is Gone" (10/4/22); "Marketplace Expectations and Outcomes" (9/5/22); "Summertime Blues, Marketplace Views" (8/6/22); "We Can't Get No Satisfaction: Cultural Trends and Financial Marketplaces" (7/13/22).

HISTORICAL ROMANCE: US DEBT SECURITIES AND STOCKS

In "Suddenly, Last Summer" (a 1959 movie based on the Tennessee Williams play; Joseph Mankiewicz, director); a character says: "Truth is the one thing I've never resisted."

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Cultural history, which includes "economic" (financial, commercial, business) history, need not repeat itself, either entirely or even partly. Perspectives on and arguments and conclusions regarding "history itself" (whether "the past", a so-called current situation, or various potential futures) and its variables are subjective. For historical phenomena, apparent similarities and differences likewise are matters of opinion, not objective. The identification and selection of relevant variables for economic, political, social, and other cultural fields, as well as assessments of their importance and interrelations, likewise reflect personal outlooks. Economics is not (and never will be) even partly scientific (objective); compare Natural (real; genuine) sciences such as biology, chemistry, physics, mechanical engineering, and mathematics.

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Therefore marketplace history need not repeat itself, either entirely or even partly. 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.

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Not all US government interest rate increases result in a notable slump in the S+P 500 and Dow Jones Industrial Average. The following survey covering the past 100 years nevertheless shows that many sustained significant yield ascents in the US 10 year Treasury note apparently link to eventual peaks in broad US stock marketplace benchmarks such as the S+P 500 and Dow Jones Industrial Average. Sometimes a yield climb, after preceding a stock marketplace top, then retreated; yet in some cases yields marched even higher after the equity peak.

What is "sustained" or "significant" apparently varies according to the historical context. After all, longer term interest rates are not the only phenomena interrelated with the stock marketplace. And the array and relative importance of chosen indicators can and do vary according to "circumstances" (situations) and opinions regarding them.

In addition, America's short-term interest rates and inflation trends as well as US dollar levels and patterns matter. So do global government and corporate interest rates. Observers should gaze at real estate, key commodities such as petroleum and base and precious metals, and numerous other statistics and indicators. The US of course is not the whole picture. Financial marketplaces and economic situations elsewhere are relevant. In recent decades, as globalization and international trade have increased, emerging/developing nations increasingly have become important.

Also, for interest rates (and other intertwined marketplaces), key yield levels and the consequences of rate moves can vary according to the situation (environment; era). Eight percent yield in the UST 10 year note can be a key threshold in one situation, three pc in another. The extents of the arithmetical (basis point) yield climbs displayed in the historical review differ. At times, yield jumps over a prior high can have important consequences for US stocks.

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In the past few decades, the S+P 500 to some extent has replaced the Dow Jones Industrial Average as the favorite benchmark for the "overall" US stock marketplace. Yet the DJIA remains popular, especially in the financial media and on Main Street. And over the earlier decades of the past century, the Dow Jones indicator was the overall stock audience's preferred weathervane. The table below therefore enlists the DJIA by itself for various of the early moves of the distant past. Usually, but not always, important marketplace turns (trend changes) in the DJIA and S+P 500 occur close in time.

The UST 10 year note yield statistics are for the given calendar day if indicated (as they are for the past several decades); otherwise they are a monthly average. All references to yield in the table, unless otherwise specified, are for the 10 year UST.

In the early decades of the 20th century, US Treasury note marketplaces, even if data was available (or derivable), were not the best indicator for interest rate trends. The table in a couple of cases therefore includes and specifically identifies other rate yardsticks. One measure is Moody's Baa corporate industrial yield (average maturity 30 years, minimum 20 years; all industries; monthly average). The Baa index represents a medium-grade (minimum investment grade) obligation; Baa securities lack outstanding investment characteristics. The Federal Reserve Bank of New York's discount rate (monthly average; St. Louis Fed data) is another guidepost. The discount rate is the rate charged commercial banks and other depository institutions on loans they receive from their regional Federal Reserve Bank's lending facility (discount window).

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In the following table, the interest rate column (on the left) gives the starting and ending levels and dates for America's upward yield move. The stock column provides the date and height of the associated peak in the US stock marketplace. That column also gives the subsequent related stock down move's major (or other significant) bottom level (for either or both the DJIA and the

S+P 500), the date it was achieved, and the percentage distance it traveled. The years for the important stock marketplace peaks associated with the rising interest rate yield trend are given in bold type at the far left.

Most of the stock marketplace price tumbles for the Dow Jones Industrial Average (S+P 500) listed below satisfied the conventional definition of a bear trend, a decline of twenty percent or more. However, the downward stock moves of less than 20 percent in the summary can represent a noteworthy retracement for other reasons. The equity retreat (a "correction") may link to a very large upward shift in bond yields or tie to major news-capturing economic events such as a financial crisis. Alternatively, picture a bull stock campaign of a long duration, but without an intervening 20 percent or more price decline ("bear trend"); a "substantial" stock price tumble may stand out as a key retracement ("correction") within that bull move.

UST 10 Year Note Yield Climb From Low to High	DJIA (S+P 500) High; Subsequent Low (and PC Fall)
1919 Baa: 7.12 percent (Jan 1919; start of Baa stats); rose to 7.77pc (Dec 1919), climbed further to 8.56pc (Dec 1920+ June 1921)	DJIA 11/3/19 high at 119.6; 63.9 on 8/24/21 (46.6 percent fall)

[The NY Fed's discount rate: low 3.75pc (November 1917); rose to 4.75pc (Dec 1919), 6.00pc (Feb 1920; 7.00pc June 1920).]

1929 3.17 percent (Dec 1927+March 1928); 3.74pc (Mar 1929)/3.71pc (August 1929)	DJIA 9/3/29 peak at 386.1; Bottom 40.6 on 7/8/32 (89.5pc crash)

[Baa: low 5.32pc (December 1927+March 1928); 6.12pc (Sept 1929); after a dip, rose to 6.25pc in Nov 1930, eventually reaching 11.0pc in May 1932. The UST's yield bottom occurred in June 1931 at 3.13pc, before the Baa's peak.

The NY Fed's discount rate: low 3.50pc (January 1928); expanded to 6.00pc September 1929. Fell to 1.5pc in June 1931.

In the midst of the Great Depression, the DJIA had a significant bull episode; it rallied substantially from 7/8/32's 40.6 abyss.]

1937 In 1937-38, the UST 10 year rate did not travel far. From 2.54pc in February 1937, it inched up to 2.83pc in April 1937. The UST remained in a 2.78 to 2.82pc range through November 1937. It edged down to 2.56pc in May 1938.	DJIA 3/10/37 at 195.6; 92.7 on 4/28/42 (52.6pc fall)

[However, the Baa's yield rise from its early 1937 low was fairly sharp. From January 1937 at 4.49 pc, it leaped to 6.47pc in April 1938.]

1956 UST 2.29 percent (April 1954); exceeded 3.00 pc with April 1956's 3.18pc. Dip back to 3.00pc June 1956; climbed to 3.97pc October 1957.	DJIA 4/9/56 at 524.4 (523.3 on 8/2/56; 523.1 on 7/16/57) [S+P 500 top 8/1/56 at 49.6] DJIA low 416.2 on 10/22/57 (20.6pc fall)

	UST 10 Year Note Yield Climb **From Low to High**	**DJIA (S+P 500) High; Subsequent Low (and PC Fall)**
1966	3.78pc (4/4/62) to 5.51pc (8/29/66)	DJIA high 1001.1 on 2/9/66 [S+P 500 top 95.6 on 12/21/65] DJIA low 735.7 on 10/10/66 (26.5pc drop; the lower low at 627.5 on 5/26/70 also links to the 1973 stage (a) yield increase)
1973	Stages: (a) 4.45pc (3/16/67); 8.22pc (5/26/70) (b) 5.38pc (3/23/71); 8.15pc (8/26/74)	DJIA high 1/11/73 at 1067.2 [S+P 500 1/11/73 at 121.7] DJIA low 570.0 on 12/9/74 (46.6pc fall)

[Although the UST 10 year note yield fell to 7.25 percent (12/18/74) around the time of the DJIA's major bottom at 570.0 on 12/9/74, the UST thereafter recommenced its flight, reaching 8.59pc (9/16/75). Interest rates can remain on a rising trend even after a notable stock marketplace bottom.

The DJIA remained under its January 1973 height for a long time, although 9/22/76's 1026.3 attacked it. The period from end 1976 through late 1981 showed sustained "high" and rising (even soaring) UST yields. This probably not only eventually helped to reduce inflation, but also tended to discourage or limit the scope of American stock marketplace rallies.]

1980/81	UST low 6.80 percent (12/30/76); 13.65pc (2/26/80 interim top). Yields soared from 9.47pc (6/16/80) to 15.59pc (9/8/81)	[DJIA high 4/27/81 at 1031.0] S+P 500 top 11/26/80 at 142.0 S+P 500 low 102.2 8/9/82 (28.0pc drop)

[Highlight three DJIA lows: 3/1/78's 736.8, 3/27/80's 730.0, and 8/9/82's major bottom around 770.0. All rested well beneath the 1973 plateau. The DJIA never settled over 1/11/73's pinnacle until 12/27/82's 1070.6.]

1987	Various UST yield troughs near 7.00pc: 6.98pc (4/16/86), 6.96pc (8/21/86), 7.01pc (1/9/87). Yield rose to 8.92pc (5/20/87); fell to 8.23pc (6/23/87) Mounted over 8.92pc with 8/28/87's 9.02pc; stock crash/ panic yield top 10.23pc (10/16/87)	[DJIA high 8/25/87 at 2746.7] S+P 500 top 8/25/87 at 337.9 S+P 500 bottom 216.5 on 10/20/87 (35.9 percent decline)

[The UST's 8/28/87 break over a prior important high, 5/20/17's 8.92pc, apparently helped to spark the monumental stock marketplace fall.]

1994	5.17pc (10/15/93); 8.03 (11/7/94)	DJIA 1/31/94 high at 4002.8 (fell 12.1 pc to low 3520.5 on 4/4/94) DJIA second top 9/19/94 at 3972.7 (drop 9.1pc to 11/23/94 low at 3612.1) S+P 500 high 1/31/94 at 482.9 S+P 500 low 435.9 on 4/4/94 (9.7pc)

[Only modest stock marketplace price falls despite the notable rate leap.]

UST 10 Year Note Yield Climb From Low to High		DJIA (S+P 500) High; Subsequent Low (and PC Fall)
1997/1998	5.52pc (1/18/96); 7.06pc (7/5/96) (UST monthly average 6.91pc June 1996 + 6.89pc Apr 1997)	[DJIA high 8/7/97 at 8340.1] S+P 500 top 10/7/97 at 983.1 S+P 500 low 855.3 on 10/28/97 (13.0pc) [DJIA high 9412.6 on 7/17/98] S+P 500 top 7/20/98 at 1190.6 S+P 500 low 923.1 10/8/98 (22.5pc fall)

[UST yields fell from their June 1996/April 1997 monthly average highs (eventually breaking under November 1996's 6.20 percent interim low), finally establishing a significant bottom in October 1998 (4.53pc monthly average; 10/5/98 low at 4.16pc).

The "Asian" financial crisis began around July 1997. The "Russian" financial crisis commenced in August 1998. These crises were not merely national or regional, but also had global economic implications.

The rising UST yield pattern from January 1996 to the June 1996/April 1997 tops fits the pattern of higher yields encouraging a notable US stock marketplace top (see the DJIA high in August 1997 and the S+P 500's in October 1997. The S+P 500 fell sharply, about 13.0 percent (but less than a bear market distance), in the brief period of time from 10/7/97's top at 983.1 to its 10/28/97 low around 855.

However, UST rates drifted lower after April 1997, reaching 5.34pc in August 1998. This yield decline continued into October 1998. The April 1997-August (October) 1998 period therefore did not manifest a US yield rise portending (leading to) a noteworthy US equity peak. Obviously, the US was not an island unconnected to the rest of the world, so rate and stock marketplace moves and economic conditions elsewhere mattered.

Yet storytellers should focus on the upward trend in the US dollar in relation to the (interrelated) 1997 and 1998 stock marketplace peaks. The H.10's current real broad dollar index ("BDI") including both goods and services reaches only back to 2006 (2006=100). So to capture major moves in the "overall" dollar in earlier times, see the Federal Reserve Board's goods-only real broad dollar index (H.10; March 1973=100; monthly average; data series ends December 2019).

The goods-only real broad US dollar index rallied substantially, from 84.0 in July 1995 to 104.6 in August 1998. In regard to the 1998 crisis and stock marketplace top, also underline the goods-only real broad dollar index's jump from 96.0 in November 1997 to 99.4 in December 1997. Thus sustained significant dollar appreciation probably helped to encourage (lead to; confirmed the creation of) the 1997 and 1998 US stock marketplace peaks.

And let's push the July 1998 equity plateau further into the limelight, particularly given the downward slide in rates after April 1997. The massive US dollar appreciation in the context of the 1998 stock marketplace top underlines that yield increases in US government securities are not always ("necessarily") a precursor or close partner in time to a US equity peak.

(The dollar attained its bull adventure ceiling with February 2002's 112.8.)]

	UST 10 Year Note Yield Climb **<u>From Low to High</u>**	**DJIA (S+P 500) High;** **<u>Subsequent Low (and PC Fall)</u>**
2000	4.16 percent (10/5/98); 6.83pc (1/21/00)	[DJIA high 1/14/00 at 11908] S+P 500 top 3/24/00 at 1553 S+P 500 low 768.7 on 10/10/02 (50.5pc fall; second low 789.0 3/12/03)
2007	3.89pc (6/2/05; even earlier major low 3.07pc 6/16/03); rose to 5.25pc (6/28/06). Slipped to 4.43pc (12/4/06); second peak 5.32pc (6/13/07)	[DJIA first top 7/19/07 at 14121; peak 14280 on 10/11/07] S+P 500's 1st top: 7/16/07 1556; major high 10/11/07 at 1576 S+P 500 major bottom 666.8 on 3/6/09 (57.7 percent crash)

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The worldwide economic disaster of 2007-09 and its aftermath inspired numerous governments around the globe to boost deficit spending and thereby substantially increase debt burdens. Key central banks around the world also vigorously responded to the 2007-09 crisis and its actual and potential consequences. Over the following years, in various fashions, the Federal Reserve Board, European Central Bank, Bank of England, Bank of Japan, and others scripted, launched, and sustained assorted creative rescue measures to bolster the financial system, ignite and preserve economic recovery, reduce unemployment, and avoid deflation (create "sufficient" inflation). Extraordinary monetary accommodation lasted for several years.

What relationship did the UST 10 year note and American stocks often display after the demise of the Goldilocks Era? The S+P 500 and Dow Jones Industrial Average obviously embarked upon a long-running major bull trend (with several interim tops on the way). And for many years after the UST 10 year note's 5.32 percent yield peak, the overall pattern regarding the UST's various interim yield highs was a falling one. The 4/5/10 top at 4.01 percent exceeded 2/9/11's 3.77pc top, which surpassed 1/2/14's 3.05pc one.

Yet as in the preceding decades, UST yield climbs often preceded notable S+P 500 highs.

2010	2.04pc (12/18/08; also 2.47pc 3/18/09); 4.01pc (4/5/10; note 4.00pc 6/11/09)	S+P 500 top 4/26/10 at 1220 S+P 500 low 1011 on 7/1/10 (down 17.1pc)
2011	2.33pc (10/8/10); 3.77pc (2/9/11)	S+P 500 top 5/2/11 at 1371 S+P 500 low 1075 on 10/4/11 (21.9pc fall)

[The 2010 and 2011 stock marketplace highs associate with two intertwined UST yield increase patterns. Note that the UST 10 year note yield highs around four percent associated with the April 2010 top in the S+P 500 stand above the 3.77 percent summit linked to the May 2011 S+P 500 plateau, which was higher than the S+P 500's April 2010 top.]

2013	1.38pc (7/25/12; see also 1.61pc 5/1/13); 3.01pc (9/6/13; 3.05pc 1/2/14)	S+P 500 high 5/22/13 at 1687 S+P 500 low 1560 on 6/24/13 (only 7.5pc fall)

[In late May and June 2013, America's Fed Chairman suggested the central bank would start slowing the quantity of its interest rate securities purchases (money printing/quantitative easing). See his 5/22/13 and 6/19/13 statements. Note the rate ascent after 5/1/13 in this context. The US 10 year government note yield closed at 1.93 percent on 5/21/13. It spiked to 2.67pc on 6/24/13. Subsequent mournful dives in United States (and other) stock and debt securities prices encouraged the blossoming of the fascinating "taper tantrum" term.

Troubled by the stock slump, the Federal Reserve orchestra and others sought to calm worries regarding the timing and scope of an actual tapering regime. The virtuoso Fed did not announce actual tapering until mid-December 2013. Quantitative easing ended in October 2014. Yet as US tapering wound down, the S+P 500 eventually suffered a brief yet sharp fall of 9.8pc from 2019 on 9/9/14 to 1821 on 10/15/14.]

	UST 10 Year Note Yield Climb From Low to High	**DJIA (S+P 500) High; Subsequent Low (and PC Fall)**
2015	1.64 percent (1/30/15); 2.50pc (6/11/15)	S+P 500 high 5/20/15 at 2135 S+P 500 low 1810 on 2/11/16 (15.2pc fall)

[The UST yield touched a low at 1.90pc on 8/24/15, hopping up to 2.38pc on 11/9/15. The S+P 500 crested on 11/3/15 at 2116, just under its important May 2015 high. The S+P 500 cratered after 12/29/15's 2082.]

2018	1.32pc major bottom (7/6/16); 3.26pc (10/9/18)	S+P 500 top 9/21/18 at 2941 (10/3/18 at 2940) Low 2347 on 12/26/18 (20.2pc fall)
2020	1.43pc (9/3/19); 1.97pc (11/7/19)/ 1.95pc (12/19/19)	S+P 500 peak 2/19/20 at 3394 S+P 500 low 2192 3/23/20 (35.4pc fall)

[Although this UST yield increase during autumn 2019 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. However, 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).]

2022	.31 percent (3/9/20); also 1.13pc (8/4/21) 4.34pc (10/21/22; also note 3.50pc 6/14/22)	S+P 500 high 4819 on 1/4/22 S+P 500 low 3492 on 10/13/22 (27.5 percent fall)

US TREASURY YIELDS AND THE S+P 500: TRAVELS SINCE 2020

"I don't know what it is, but I got a kind of feel for the big money…I know I got it. I can travel on a hunch, see. Those bastards all had money to begin with." Charley Anderson, in John Dos Passos's novel, "The Big Money"

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Since around mid-year 2022, the UST 10 year note has traveled in a range of about 2.50 percent to 4.35 percent.

	1Q20 Yield Bottom	Mid-2020 Yield Lows	1Q21 Yield High	Aug 2021 Yield Low	Following Yield Highs	Lows
UST 10 Year	.31 pc (3/9/20)	.54pc (4/21/20) .50 (8/6/20)	1.77pc (3/30/21)	1.13pc (8/4/21) **Aug 2022 Yield Low** 2.51 (8/2/22)	3.50pc (6/14/22) 4.01 (9/28/22) 4.34 (10/21/22) 4.09 (3/2/23)	3.32pc (1/19/23) 3.33 (2/2/23) 3.28 (3/24/23) 3.25 (4/6/23) 3.29 (5/4/23)

The UST 10 year note yield ascended dramatically from 8/4/21's 1.13 percent interim bottom to 10/21/22's 4.34pc high. The UST's holding above 2018's 3.26 percent summit during first half 2023 at around 3.25 percent (and especially since 4/6/23), and thereafter climbing (yield high since 4/623 is 7/6/23's 4.08pc) is a bearish warning sign for the S+P 500 and Dow Jones Industrial Average.

Monitor US corporate yield trends alongside those of the UST 10 year note. The Baa's autumn 2022 yield pinnacle, 10/24/22's 6.59 percent, occurred alongside the UST 10 year's crest. After making a yield low on 2/2/23 at 5.28pc, the Baa yield has climbed significantly, reaching 5.93 percent on 5/25/23. The Baa closed at 5.71pc on 7/6/23.

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 interest rates were "very high".

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.

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Scan the S+P 500's bullish and bearish travels over the past three years.

Sustained rising US (and global) interest rate yields led to the S+P 500's majestic and joyful pinnacle at 4819 on 1/4/22. UST 10 year yields began rising in early March 2020, accelerating aggressively upward following 8/4/21's 1.13 percent trough as American (and worldwide) consumer price inflation became very significant. Following the S+P 500's victorious bull parade to its January 2022 summit, it collapsed 27.5 percent to 10/13/22's gloomy 3492 low. This valley rested merely 2.9 percent above 2/19/20's 3394 pre-coronavirus pandemic peak.

	1Q 2020 High (date)	1Q 2020 Low (date)	Interim High	Take-Off Low (date)	Peak and Other Highs (date)
S+P 500	3394 (2/19/20)	2192 (3/23/20)	3588 (9/2/20)	3209 (9/24/20)	4819 (1/4/22)
	3137 (3/3/20)			3234 (10/30/20)	4637 (3/29/22)
				Key 2022 +2023 Lows	4513 (4/21/22)
				4115 (2/24/22)	4308 (4/28/22)
				3637 (6/17/22)	
				3722 (7/14/22)	4325 (8/16/22)
				3492 (10/13/22)	4195 (2/2/23)
				3765 (12/22/22)	
				3809 (3/13/23)	

Underline that the UST 10 year note yield high at 4.34 percent on 10/21/22 neighbored the time of the S+P 500's major bottom on 10/13/22 at 3492. The UST 10 year note yield reached an interim top at 4.09 percent on 3/2/23. Note its closeness in time to the S+P 500's 3/13/23 interim low at 3809. The recent yield increase in the UST near 3/2/23's 4.09pc height is a bearish sign for the S+P 500 (and other key global stock marketplaces).

Record levels of share buybacks probably have assisted the apparent economic bullishness reflected by the S+P 500's rally of recent months. According to the NYTimes (5/18/23, website; citing research by Janus Henderson): "The world's 1,200 biggest public companies collectively bought back a record $1.3tn [trillion] of their own shares last year, triple the level of a decade ago and almost as much as they paid out to shareholders in dividends…The trend has continued this year."

The shocking banking collapses a few months ago in America and Europe seem largely forgotten. However, they warn of dangerous fragilities facing banking systems and diverse marketplace arenas, especially if US rates resume their ascent or price feebleness in commercial real estate assets becomes even more worrisome.

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Prices for commodities in general climbed substantially after December 2021 (Russia invaded Ukraine 2/24/22), magnifying global inflation concerns and increasing consumer price indices in America and elsewhere, thus helping to move US Treasury yields upward. The higher interest rate pattern encouraged the price peak and subsequent noteworthy decline in global stock marketplaces.

Note the Russian/Ukraine conflict as well as OPEC+'s willingness to support prices. How probable is it that petroleum prices will ascend again and result in higher headline year-on-year consumer price index inflation, and thus in greater than expected interest rate increases?

US CONSUMER PRICE INFLATION, FEDERAL DEBT, AND FED POLICY

"Time present and time past
Are both perhaps present in time future,
And time future contained in time past." T.S. Eliot, "Burnt Norton", one of the "Four Quartets"

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In America and many other key countries around the globe, inflationary and recessionary (deflationary) forces battle for supremacy. Two key factors encouraging American interest rate increases are persistent US consumer price inflation and high and increasing national debt.

Monetary tightening by the Federal Reserve Board and its central banking allies has helped to cut lofty consumer price inflation levels. However, significant inflation persists in America. Both headline and core (excluding food and energy) inflation float well above targets aimed at by these guardians. Price indices for United States personal consumption expenditures services for the past several months have remained high. Yet in comparison with actual consumer price inflation, inflationary expectations for longer run time spans have remained moderate. Unemployment in the US remains low, assisting consumer confidence and thus household spending, thereby tending to keep interest rate yields relatively high.

UST 10 year note yields probably will keep increasing. First, the Federal Reserve emphasizes its loyalty to its monetary tightening scheme in its battle to return inflation to two percent. This illuminated guide has not ruled out further Federal Funds rate increases to achieve its objective. It continues to reduce the size of its mammoth balance sheet. Moreover, this respected leader trumpets its strategy of maintaining policy rates for quite some time at heights sufficient to bring inflation down to its vision of acceptable levels. Unemployment figures remain very low, further suggesting the likelihood that Fed policy will maintain a moderately hawkish stance for at least the near term.

America's recent resolution of the heated battle over raising the debt ceiling avoided default. However, despite celebratory talk by many about how that new legislation displayed fiscal responsibility, the new law accomplished very little in substance toward reducing the towering public debt challenges confronting America. The massive and increasing public (and overall) debt in the United States (and many other leading countries) signal the eventual arrival of even higher interest rates.

Higher interest rates have diminished worldwide GDP growth prospects and boosted recessionary fears. History indicates that a negatively sloped US Treasury yield curve (short term rates higher than long term ones), such as has existed in America for over six months, portends a recession. Though history need not repeat itself, either entirely or even partly, significant disinflations induced by monetary policy tightening connect with recessions. But central bankers, Wall Street, Main Street, and politicians do not want a severe recession or a substantial fall in the S+P 500 and will strive to avoid those eventualities.

Although Republicans and Democrats finally agreed to increase the debt ceiling, the American debt situation for the long run remains very worrisome. The existing public debt burden as a percentage of GDP is very substantial, and experienced observers expect this probably will rise over time under current policies. Interest rates consequently may need to increase quite a bit from current levels.

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Consumer price inflation measures in America and elsewhere continue to point to higher yields for the UST 10 year and related global marketplaces. For the OECD as a whole, consumer price inflation (all items), though continuing to shift down from October 2022's 10.7 percent year-on-year increase summit, grew a still-high 6.5 percent in May 2003 (up 7.4 percent year-on-year April 2023). Moreover, OECD April 2023 CPI excluding food and energy rose a substantial 6.9 percent year-on-year, down only slightly from April 2023's 7.1pc, March 2023's 7.2pc, and February 2023's 7.3pc year-on-year increases (Table 1; 7/4/23). May 2023 OECD services inflation ascended a high amount, 5.7 percent year-on-year.

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Federal Reserve rhetoric promotes its ability as a diligent and vigilant fighter for stable prices and against excessive inflation. Its devotion to its interpretation of its legislative mandate includes a subjective view (opinion) regarding what constitutes stable prices (and maximum employment) over the long run.

The Fed's long-running gargantuan money printing (quantitative easing) program and sustained yield repression scheme (easy money policies) assisted the rise in the CPI-U from a depth of 1.4 percent year-on-year in January 2021 to May 2021's five percent year-on-year jump, as well as the substantial year-on-year increases over the next two years The Fed's orations do not admit its important role in generating the lofty US consumer (and other) price inflation that emerged in mid-2021 and thereafter persisted. The Fed found it easier to blame inflation entirely on factors such as supply and demand imbalances (and supply chain disruptions) related to the pandemic and higher energy prices (Russian invasion of Ukraine) rather than to some extent on itself.

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Unnerving United States year-on-year increases in consumer price inflation, though still far above the Fed's revered two percent inflation objective, have slowed. However, this decline in the overall (headline) inflation rate has approached but still remains fairly distant from the inflation target. More importantly, core inflation (excluding food and energy) has not decelerated much.

Reconnoiter US consumer price statistics (CPI-U, all items; Bureau of Labor Statistics; see Tables 1 and 5; 6/13/23; next release 7/12/23). In June 2022, the CPI-U raced up to a peak of 9.1 percent year-on-year. Inflationary growth gradually descended from this fearsome height. The CPI-U (all items) eroded to 7.1 percent year-on-year in November 2022 and 6.5pc year-on-year in December 2022, retreating to 6.0pc year-on-year in February 2023, 5.0pc year-on-year in March 2023, 4.9 percent in April 2023, and 4.0pc in May 2023. This great improvement in the headline CPI trend not only has helped to keep the UST 10 year note yield relatively modest, but also has assisted the bull move of the S+P 500 in recent months.

Although the US CPI-U all items has braked lately, look under its hood for statistics in May 2023 regarding particular sectors. First, underline May 2023's 11.7 percent year-on-year slide in the energy category (7.0 percent of the index), The used cars and trucks arena constitutes 2.7pc of the CPI-U; it slumped 4.2 pc year-on-year. As was also true in March and April 2023, inflation declines in these two categories accounted for much of the amelioration in the April 2023 CPI-U rate. Consequently, excluding these two fields, CPI-U inflation did not improve much relative to prior months. Significantly, food costs (13.4pc of the index) rose 6.7 percent year-on-year in April 2023.

Petroleum prices kept slipping from their very lofty levels of first half 2022 until around year end 2022/first quarter 2023. The sideways price move of recent months, from a year-on-year comparison basis, if it persists, may enable recent year-on-year falls in the CPI-U's energy category (as in May 2023) to continue for a while longer. All else equal, if petroleum prices do not rally much, this probably will enable headline CPI-U levels, though still above the Fed's objective, to appear relatively unthreatening (as in May 2023's 4.0 percent year-on-year rate). However, note OPEC+'s determination to support prices, and the Russia/Ukraine conflict continues.

Moreover, US CPI-U core inflation (excluding food and energy) remains robust and thus appears rather well entrenched. The CPI-U excluding food and energy grew at a bulky 6.6 percent year-on-year pace in September 2022. It descended modestly in several later months. However, core inflation in May 2023 remained elevated at 5.3 percent year-on-year. This declined little from April 2023's core rate at 5.5 percent year-on-year (and year-on-year climbs in March 2023 of 5.6 percent and 5.5pc in February 2023).

What about US price indices for Personal Consumption Expenditures, a favorite Fed yardstick? The PCE for all items in May 2023 dropped to 3.8 percent year-on-year from April 2023's 4.3pc rate, and it also stood fairly far under February 2023's 5.1pc height and January 2023's 5.4pc increase. (Bureau of Economic Analysis; Table 11; 6/30/23; next release 7/28/23). Yet despite progress relative to "too high" inflation, May 2023's level leaves the PCE indicator clearly above the Fed's two percent target for "stable prices". Very significantly, this monthly improvement has not occurred in the PCE excluding food and energy. In May 2023, that indicator grew 4.6 percent versus May 2022, in line with April 2023's 4.7 percent year-on-year increase and March 2023's 4.6 percent one (January and February 2023's both ascended 4.7pc year-on-year).

Moreover, underscore the significant ongoing increases in the services component of the Personal Consumption Expenditures index: PCE services accelerated 5.3 percent year-on-year in May 2023, far above the two percent policy target and little changed from the 5.5pc year-on-year in both April 2023 and March 2023. Compare 5.8pc year-on-year climbs in February 2023 and 5.7pc in January 2023.

"Inflation" of course has other dimensions such as wages (and financial assets such as stocks and real estate). For example, review the Atlanta Fed's wage tracker (June 2023) for nominal overall unweighted hourly median wage growth. In May 2023, this moved up 6.0 percent (three month moving average), a substantial expansion from May 2021's 3.0pc. Thus wages have fallen little in nominal terms from August 2022's high of 6.7 percent year-on-year. Real wages have been negative (or mediocre) relative to inflation for quite some time. However, persistent high nominal wage increases risks becoming real (inflationary) wage growth, with real inflationary consequences for price index measures and other fields.

To what extent will past inflationary increases become even longer-lasting due to efforts by workers to maintain their earning power? Note strikes in Germany, the United Kingdom, and elsewhere due to the inability of wages to keep pace with inflation.

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The United States unemployment rate trotted up to 3.7 percent in May 2023 from April's 3.4pc (6/2/23; next release 7/7/23). The Fed probably will maintain or raise the Federal Funds rate relative to the current level unless unemployment jumps substantially above 3.7pc. The unemployment rate has stuck in the 3.4 to 3.7 percent since March 2022.

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The Federal Reserve probably will engage in a "meeting by meeting" approach to its monetary policy. In its 6/14/23 meeting, it held the Federal Funds rate unchanged, at 5.00 to 5.25 percent. This refreshing pause in the rate-raising pattern probably helped push the S+P 500 upward (6/13/23 close 4369).

However, the Fed's proclamations from that June 2023 gathering reflect a monetary tightening bias. This is a bearish warning sign for the S+P 500 and other stock marketplaces. Notably, recent wordplay from the Chairman and many other global central bankers indicate an inclination to push policy rates higher. In the Fed's Press Conference, the Chairman emphasized that inflation remains well above target, that the Fed remains strongly committed to that two percent objective, and that there is a widespread view on the FOMC that further rate increases probably will occur. The Fed's June 2023 Economic Projections reflected a slightly higher Federal Funds rate relative to the March 2023 outlook. The Fed also continues to tighten monetary policy by shrinking the size of its monumental balance sheet by up to $60 billion in UST and $35bb in agency mortgage-backed securities each month.

In the "European Central Bank Forum" held in Portugal on 6/28/23, heads of the Fed, European Central Bank, and Bank of England warned that more action may be necessary to bring inflation down toward the two percent targets, even though some economists fear further rate increases might trigger a recession or financial crisis (Financial Times; 6/29/23). The Fed Chairman said: "Although policy is restrictive, it may not be restrictive enough and it has not been restrictive for long enough." Even the Bank of Japan hinted at considering the abandonment of its ultra-loose policy.

The Bank for International Settlements recently stressed: "Central banks are determined to conquer inflation, even if the last mile to price stability may be the most challenging" (Press Release to the "Annual Economic Report 2023"; 6/25/23). According to the BIS's Report, "core inflation proves sticky" (Graph 1). The BIS admits that in previous disinflation episodes, headline inflation typically returned to pre-peak levels (or lower) within one to two years, with core inflation tending to follow a similar path. However, several features distinguish the current situation apart from prior ones, indicating that disinflation may prove difficult. For example, services prices have risen much faster and their rate of change has not peaked. Significantly, the current surge more closely resembles the 1970s. Also, the share of items in the consumer price index whose prices increased fast has not fallen. In addition, price spillovers across consumption categories are slightly larger than they were in the recent past low inflation era; this increases the risk that price increases in one category thereby will permeate others, raising the risk of sustained rather than declining inflation.

According to the World Bank's "Global Economic Prospects" (June 2023), "Global core inflation remains elevated" (Figure 1.5) and "Inflation pressures persist" ("Executive Summary"). "Inflation remains above target in almost all inflation-targeting countries," with median headline global inflation at 7.2 percent year-on-year in April 2023, down only modestly from July 2022's 9.4pc peak.

Given America's still high core inflation (from both the CPI-U and PCE perspectives; and also high services inflation), still strong employment situation, and still robust S+P 500 and home prices, an increasingly restrictive Fed policy (paralleled on their home grounds by the majority of the Fed's central banking allies) probably will result in higher UST 10 year note yields.

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The crisis involving US regional banks, although it substantially has subsided for the time being, probably has tightened credit to some extent. Some banks (and perhaps other financial institutions) have suffered declines in asset values (not only in long-dated debt instruments such as UST, but also in their commercial real estate portfolios) and endured higher funding costs; many expect enhanced regulatory scrutiny.

The Fed next convenes 7/25-26/23 and 9/19-20/23.

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The Fed's June 2023 Economic Projections offer guidance on future near term Fed monetary policy and US interest rate trends. The Fed's outlook for the Federal Funds rate at the end of a given calendar year (Table 1) gave a midpoint (central tendency) of about 5.50pc for 2023 (up from the 5.35pc March 2023 Projection) and 4.70pc for 2024 (compare March 2023's estimate of 4.50pc), with 2025's falling to 3.50pc. The zealous watchdog continues to promote its misty "longer run" PCE inflation level of 2.00 percent, with the Federal Funds rate for that horizon at 2.65pc (2.50pc March 2023 Projection).

In any case, although the US Treasury yield curve is negatively sloped at present, suppose the 10 year US Treasury note at year end 2023 matches the Fed Funds level June 2023 projection. Then the UST will yield 5.50 percent, well above October 2022's 4.34pc crest. Compare the UST 10 year yield top at on 6/13/07 at 5.32 percent. Alternatively, if the United States 10 year note yield at end December 2023 is 100 basis points beneath the 5.35 percent Fed Funds midpoint, the UST's resulting yield of 4.50pc stretches up from its present elevation. What if the UST 10 year note yield provides a real return of 50 basis points relative to the Fed's core PCE measure at year end 2023? Then its yield will be around 4.45 percent (3.95pc plus 50 basis points; March 2023's Projection for core PCE was 3.70pc). Or, looking forward, suppose America's core CPI-U inflation rate dips further on a year-on-year basis, yet remains persistently at four percent or higher. Assume the UST 10 year yield provides a real return of 50 basis points relative to this inflation weathervane. Then the US 10 year yield will hover at 4.50 percent or higher.

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Assume continued fairly high CPI-U inflation for the next several months. Based on the preceding yield analysis derived from the Federal Reserve Economic Projections, the UST 10 year note yield could climb to about 5.50pc. Thus the UST 10 year note arguably has a hypothetical near term trading range between around 2.50 percent and 5.50 percent. If inflation remains intransigent, will an advance toward or above 5.50pc occur? A UST 10 year note slump to 2.50 percent or less probably would warn of (confirm) a "flight to quality" (and likely recession); soaring above five percent likely would interrelate with (reflect) a dangerous inflation trend.

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Republicans and Democrats engaged in a noisy partisan battle this spring over raising the debt ceiling and spending plans. America avoided default on its national debt via the recent enactment of H.R. 3746, the "Fiscal Responsibility Act of 2023" (the President signed the legislation on 6/3/23). The debt limit (ceiling) was suspended through election season 2024, until January 1, 2025; as of 1/2/25, the debt limit will increase by the amount of obligations incurred.

All else equal, very high and rising American federal debt levels as a percentage of GDP, especially if accompanied by substantial ongoing budget deficits (and minimal signs of future fiscal discipline), represent significant demand for credit and probably tend to increase US Treasury yields. Prior to the passage of the "Fiscal Responsibility Act of 2023", the United States federal debt situation warned of a long term trend for higher US Treasury interest rates. Despite its pretentious title, that Act made only a tiny step toward greater fiscal responsibility. The paltry changes in the national budget situation appear by comparing the overall situation prior to the passage of H.R. 3746 with its aftermath.

For the debt estimates prior to the glorious "Fiscal Responsibility Act", see the Congressional Budget Office's "The Budget and Economic Outlook: 2023 to 2033" (5/12/23 and 2/15/23). Note the substantial demand for credit (big budget deficits) and the related large and growing public debt level as a percentage of GDP. For example, federal debt held by the public as a percentage of GDP rises from 98.2 percent in fiscal 2023 (compare the 46.9 percent average for the 1973-2022 average) to about 118.9 pc of GDP in 2033, soaring to 195.0 pc of GDP in 2053 (See Table 1 and Table 1-1; Table 1-8).

Underscore worrisome high budget deficits as a percent of GDP: 5.9 percent of GDP in 2023, 5.8pc in 2024, with the 2024-28 span averaging 5.8pc per year and the 2024-33 period averaging 6.1pc. The actual 2022 budget deficit was about $1.4 trillion, with 2023's estimated at $1.5 trillion. From 2024 through 2033, the forecast deficit remains over $1.5 trillion every year, vaulting over two trillion dollars with 2031's $2.1tr estimate, with 2033's at almost $2.9tr.

Examine "How the Fiscal Responsibility Act of 2023 Affects CBO's Projections of Federal Debt" (6/9/23) and the "CBO's Estimate of the Budgetary Effects of H.R. 3746, the Fiscal Responsibility Act of 2023" (5/30/23, Table 1). The Act changed the CBO's prior baseline projections for the 2023-33 span by reducing the deficit by around $1,528 billion (about $1.5 trillion) dollars. About $1,332 billion of this cut involved statutory caps on future discretionary funding, with most of the balance being lower debt interest costs.

The CBO's 6/9/23 and 5/30/23 H.R. 3746 analyses do not provide the detailed budget projection layout offered in its May 2023 "The Budget and Economic Outlook: 2023 to 2033". The CBO eventually will update its overview in comprehensive fashion. However, let's venture into the fine print. The "Budget and Economic Outlook" had debt held by the public at $46,709 billion in 2033 (ten years from now), with Gross Domestic Product at $39,288 billion that year; thus federal debt as a percentage of GDP reached the 118.9 percent level noted above. Now reduce that 2033 debt of $46,709 billion held by the public total by the $1,528 billion savings in the Fiscal Responsibility Act ("FRA"), making the 2033 debt about $45,182 billion. Suppose 2033 GDP does not change from the Budget and Economic Outlook's estimate. That makes US debt as a percentage of GDP in 2033, pursuant to the FRA, of 115.0 percent. Compared to the massive 118.9 percent of GDP prior to H.R. 3746, this savings (effort at responsibility) looks extremely modest.

Moreover, the savings in practice may turn out to be much less than the $1,528 billion outlined by the CBO and celebrated by the FRA's supporters. Note that the spending caps currently are enforceable for only two years, the same duration as the debt ceiling increase. There are no decade-long binding spending caps. According to the NYTimes ("Biden's Debt-Deal Strategy: Win in the Fine Print"; website, 6/3/23), Congress "agreed to structure the cuts so they appeared to save $1.5 trillion over a decade in the eyes of the nonpartisan Congressional Budget Office. But thanks to the side deals—including some accounting tricks—White House officials estimate the actual cuts could total as little as $136 billion over the two enforceable years of the spending caps that are central to the agreement." The CBO's Table 1 (FRA; 5/30/23) indicates that statutory caps on discretionary spending for 2024 and 2025 combined add up to about $171bb, fairly close to the White House estimate. Another NYTimes article refers to the FRA's 10 year span of discretionary spending, and implicitly to the $1.5 trillion potential in total savings over that decade ("In Pursuit of Consensus, Did Biden Find the Reasonable Middle or Give Away Too Much?"; website, 5/28/23). The newspaper says: " a rough New York Times calculation suggests the agreement reached by Mr. Biden and Mr. McCarthy might cut just $650 billion instead." In any case, the wonderful Fiscal Responsibility Act did nothing significant on either the revenue raising or entitlement spending fronts.

The statistics in the CBO's 6/28/23 release of "The Long-Term Budget Outlook" further manifest the trivial deficit reduction achieved by the June 2023 Fiscal Responsibility Act. Budget deficits as a percent of GDP increase from 5.8pc in 2023 to 6.4pc in 2033, 8.1pc in 2043, and 10.0pc in 2053. "From 2023 to 2053, deficits average 7.3 percent of GDP, more than double their average over the past half-century." Debt held by the public in 2053 reaches 181.0 percent of GDP (144.0pc of GDP in 2043), a modest fall from the pre-FRA prediction of 195.0pc.

Persistent fierce partisan conflicts in America and many other nations range across numerous economic, political, and other cultural dimensions. This makes it difficult for United States politicians to compromise substantially on major issues (despite the passage of the Fiscal Responsibility Act and the debt ceiling resolution). In any case, given the divided Congress (Democratic Senate, Republican House of Representatives), the competitive passions of 2024 election season, and intense and often uncivil national culture wars, no notable progress on reducing America's long run deficit problems will occur anytime soon.

Suppose Republicans capture the Presidency and both houses of Congress in the 2024 election. Will they seek to reduce not only discretionary spending, but also that of entitlement programs such as Social Security? Will they slash military expenditures? Will Republicans decide to raise revenue by increasing individual and corporate taxes, which they refused to consider in the negotiations surrounding the Fiscal Responsibility Act of 2023?

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The CPI-U all items reached 5.0 percent year-on-year in May 2021 and thereafter stayed above that height for a long time. Despite the pattern of sustained troubling inflation, many marketplace observers probably retained faith in the Fed's ability to subdue it eventually. Arguably the Fed's unleashing rhetoric about its determination to vigorously combat inflation, as well as its sharp raising of the Federal Funds rate and shrinking of its balance sheet, have helped to keep inflation expectations and thus longer term UST yields relatively modest despite ongoing high CPI-U and personal consumption expenditure inflation statistics. The five-year, five-year forward inflation expectation rate measures the expected inflation (on average) over the five year period that begins five years from today (St. Louis Fed). The high since January 2021 is 4/21/22's 2.67 percent. On 7/3/23, it stood at 2.29 percent.

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Growing marketplace and political fears about oncoming global economic slowdowns and recessions probably helps to moderate inflation expectations and thus keeps US 10 year note yields modest (despite current core CPI and CPE inflation still being high). Yet US 4Q22 real GDP grew at a 2.6 percent annual rate, and 1Q23 ventured only 2.0 percent higher (up from an earlier estimate of 1.3pc; Bureau of Economic Analysis; Table 1; 6/29/23, next release 7/27/23). Thus the American economy has not slowed substantially yet, which gives US stock bulls hope.

However, based on the Fed's Economic Projections (6/14/23) and other benchmark forecasts, the near term road ahead for US GDP expansion appears gloomy. The midpoint of the central tendency for the change in 2023 real GDP is a slim .95 percent increase (about one percent), with 2024 walking merely 1.20pc upward, and 2025 increasing only 1.80pc.

Will the recommencement of US student loan debt repayments in October 2023 slow the economy?

The International Monetary Fund's "World Economic Outlook" (Table 1.1; April 2023) estimated US GDP will increase only 1.6 percent in 2023, with that for 2024 scraping up only 1.1pc. The IMF predicts global growth of only 2.8pc in 2023 (compare 3.4pc in 2022), with 2024's at 3.0pc. World output for "advanced economies", according to the IMF, drives up only 1.3 percent in 2023 and 1.4pc in 2024. Looking out to 2030, the World Bank recently warned of a "lost decade" for the worldwide economy ("Falling Long-Term Growth Prospects"; see the "Foreword"; March 2023). "Today nearly all the economic forces that drove economic progress are in retreat…The result could be a lost decade in the making…for the whole world." The World Bank's "Global Economic Prospects" (6/6/23) prophesies that global growth will slow significantly (to 2.1 percent in 2023 from 2022's 3.2pc) amid high inflation, tight monetary policy, and more restrictive credit conditions.

The 2023 banking crisis involving Silicon Valley Bank (and assorted regional banks), by igniting fears of a related widespread economic downturn, helped reduce UST yields and temporarily soothed fears of a sharp rise in interest rates. The financial emergency plan of the Treasury, Fed, and FDIC aimed to support (rescue) the banking system and thus the economy (recall 2007-09)—and save uninsured depositors at shipwrecked or endangered banks. To the extent fears persist that similar shocks may erupt, these worries can mitigate interest rate increases for the near term.

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As history of course shows that US recessions tend to be bearish for American stocks in general and benchmark indices such as the S+P 500, let's review some other historical variables.

Although the cultural past does not necessarily (inevitably) repeat itself, either entirely or even partly, let's venture back to US Treasury yield patterns. The New York Federal Reserve Bank publishes history and graphs indicating the spread relationship (basis point differential) of the UST 10 year note (they label it a "bond") yield less the three month T-bill rate (bond equivalent basis). A negative number indicates that the yield curve is negatively sloped, with the three month T-bill yield exceeding that of the UST note.

Going back to around 1959, the development of a negatively sloped yield curve (monthly average) often has preceded ("led to") a US recession. The US yield curve has a negative slope, having become negative with November 2022's -36 basis points. The latest NY Fed data (6/3/23 release) gives a differential of 113 basis points for January 2023, 102 basis points for February 2023, 115 basis points in March 2023, 159 bp in April 2023, and 171bp in May 2023..

A 1Q23 study reviewed large disinflations that occurred since 1950 in the United States and several other major economies. The analysis concluded: "there is no post-1950 precedent for a sizable central-bank-induced disinflation that does not entail substantial economic sacrifice or recession." "Significant disinflations induced by monetary policy tightening are associated with recessions." Moreover, "in the current circumstances that already involve significant policy tightening (and a prospect for further restraint), an 'immaculate disinflation' would be unprecedented." "The bad news is that it is highly likely that achieving the Fed's inflation target will lead to a recession." See "Managing Disinflations" (Stephen Cecchetti, Frederic Mishkin, and others; 2/24/23; "US Monetary Policy Forum" of the "Initiative on Global Markets"; The University of Chicago Booth School of Business). See also Mishkin's comments in the Financial Times, "Fed now on right track to restore price stability"; 3/9/23).

AMERICAN STOCK MARKETPLACE PATHS

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

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Views as to whether stock and other marketplace prices are high (very high or too high; overvalued; expensive; in a "bubble"), low (very low or too low; undervalued; cheap), rational, reasonable (fairly valued; normal; average; at a common sense or natural level/range, at an equilibrium), irrational (irrationally exuberant perhaps; incredible; crazy; insane) and so forth are matters of opinion (reflect subjective perspectives). The perspectives and arguments relating to them are not scientifically (objectively) grounded.

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The extent of economic growth in America and elsewhere influences the size and duration of US corporate earnings. Corporate earnings (levels, patterns, and outlook) of course are an important stock price variable for many investors and other trading pilgrims. History shows that equity indices such as the S+P 500 (and individual equities) can and do trade at various price/earnings ratios.

According to FactSet, the forward 12 month P/E ratio for the S+P 500 is 18.9. This P/E ratio stands above the 18.6 five year average, and it is also above the 17.4 ten year average ("Earnings Insight"; 6/30/23). Refinitiv estimates the forward four quarter P/E ratio at 19.6 ("S&P 500 Earnings Scorecard"; I/B/E/S; 6/30/23). At present, analysts express optimism for strong year-on-year earnings for 4Q23 and calendar year 2024. This bullish corporate earnings outlook helps to bolster stock prices. Although FactSet indicates 3Q23 year-on year earnings will increase less than one percent (.9pc), it prophesizes they will jump 7.9pc year on year in 4Q23 and leap 11.7pc in calendar 2024. Refinitiv predicts a 9.5 percent year-on-year spike in 4Q23 (compare an estimate of up only 1.3pc in 3Q23), with a sharp forecast year-on-year gain of 11.7pc for calendar 2024 (and a further big year-on-year climb of 11.5pc for calendar 2025).

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Yet all else equal, mediocre United States real GDP prospects (if realized) indicate that the S+P 500 probably will not rally much in real terms from around current levels.

However, we live in a nominal price world. According to the Bureau of Economic Analysis (Table 1; 6/29/23), 1Q23 current dollar GDP grew at a 6.1 percent annual rate (4Q22's expanded 6.6 percent annualized) . All else equal, nominal price increases throughout the economy resulting from (reflecting) inflation (and of course other factors matter) will tend to rally stock prices. Given a tendency for nominal price increases (and thus in nominal corporate earnings as well), nominal S+P 500 prices (all else equal) will tend to march upward modestly.

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The S+P 500's high since its October 2022 bottom is 6/30/23's 4458, about 7.5 percent distant from the major price resistance of 1/4/22's 4819 peak. A five percent move above 1/4/22's 4819 pinnacle is 5060. A five percent decline from January 2022's pinnacle equals 4578. The 4578 height borders the S+P 500's important interim tops at 4639 (3/29/22) and 4513 (4/21/22) attained amidst the bear move which began in January 2022.

Picture a renewed UST 10 year attack toward or above 10/21/22's 4.34 percent. How far down in reverse might the S+P 500 venture? It probably will be difficult for the S+P 500 to fall beneath its October 2022 bottom by much (if at all) in the absence of a notable and sustained US recession and global GDP slowdown.

Although a recession probably will be bearish for the S+P 500 and many other related stock marketplaces, the dutiful Fed probably will tolerate a brief recession to defeat the evil of excessive inflation (and thus will countenance lower stock prices than current ones). However, it (and of course Wall Street and Main Street and politicians) likely would hate a severe recession. In today's intertwined and globalized economy, substantial price falls in the stock and corporate debt price arenas (and other search for yield interest rate territories), and even greater weakness than has thus far appeared in home prices, plus a "too strong" US dollar, constitute a package for a fairly severe recession.

A widely employed subjective general definition for a bear stock market trend is a retreat of at least twenty percent from a noteworthy high. Views as to the meaning of a bull stock market pattern likewise reflect opinion.

Suppose a badly bloodied S+P 500 collapsed close to (and especially if it fell beneath) 10/13/22's critical support at 3492. That situation probably would elicit fervent and fearful appeals for help from Wall Street (particularly from armies of investors and those who serve them), agitated shouts from an armada of politicians and the financial media, and widespread concern on Main Street. October 2022's 3492 depth borders the 2/19/20 pinnacle at 3394, achieved as the horrible worldwide coronavirus pandemic emerged. The respected Federal Reserve gatekeeper and its trusty central banking cohorts likely would halt monetary tightening (and perhaps even ease conditions significantly), in the event of such a damaging downturn in the S+P 500. Recall the lively massive central banking (and fiscal) actions as the S+P 500 (and American and international economy) violently tumbled in first quarter 2020 during the coronavirus disaster. The S+P 500 plummeted 35.4 percent from 2/19/20's 3394 to 3/23/20's 2192.

A 33 percent retreat from 1/4/22's peak equals 3209. A fifty percent rally from 3/23/20's 2192 gives 3288. Support in this 3200 to 3500 region further derives from price gaps between 3405 (11/4/20)/3389 (11/3/20) and 3336 (11/3/20)/3330 (11/2/20). Scout out as well the take-off rally point at 3209 (9/24/20)/3234 (10/30/20) created during the major bull charge up to January 2022's 4819 peak.

US DOLLAR CONNECTIONS

The essay "US Dollar and Other Marketplace Adventures" (2/5/23) concluded: "Based upon the Federal Reserve Board's real and nominal Broad Dollar Indices, the United States dollar probably established a major top in autumn 2022." This remains the case.

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The Federal Reserve releases a real Broad Dollar Index (H.10; January 2006=100; monthly average; 7/3/23 is the latest) as well as a nominal Broad Dollar Index (daily data; 7/3/23 release; 6/30/23 most recent datapoint) covering both goods and services.

A mighty dollar and price slumps in emerging marketplace securities helped to undermine the S+P 500 and create the S+P 500's January 2022 pinnacle. A "too strong" United States dollar intertwined with ongoing price declines in both emerging marketplace equities and US dollar-denominated sovereign debt securities (both emerging marketplace stock and debt prices peaked in first quarter 2021). A very strong US dollar encouraged the relationships of higher US Treasury yields, descending stock prices, and nosediving prices for commodities "in general".

Although the United States dollar, the leading international reserve currency, has depreciated from its major high milepost reached in autumn 2022, it arguably remains "very strong". The Federal Reserve's benchmark real Broad Dollar Index currently is far from feeble from the long run historical perspective. Perhaps a somewhat weaker dollar will encourage American economic growth for a while. In any case, the dollar's retreat since its autumn 2022 peak probably assisted the S+P 500's rally from its 10/13/22 bottom at 3492.

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The real Broad Dollar Index's attained its peak (monthly average; Fed H.10; goods and services: January 2006=100) in October 2022 at 121.2. From its major bottom over 11 years before then in July 2011 at 83.9, the BDI skyrocketed 44.5 percent. The real BDI jumped substantially, 17.3 percent, from January 2021's 103.3 low to October 2022'2 peak about 21 months later.

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Although the real broad Dollar Index (a monthly average) has declined since October 2022, it currently borders critical support, April 2020's 113.4 summit. The nominal BDI (daily data) has retreated almost eight percent from its autumn 2022 pinnacle, fairly close to the important ten percent "correction" distance.

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.	**1Q20** **<u>High (date)</u>**	**Key Low** **<u>Level (date)</u>**	**Percent Fall** **<u>from 1Q20 High</u>**	**Next** **<u>Highs (date)</u>**	**PC Rally** **<u>from 2021 Low</u>**
Nominal Broad Dollar Index	126.1 (3/23/20)	110.9 (1/6/21) 110.5 (6/1/21)	12.4pc	123.9 (7/14/22) 123.5 (8/22/22) 128.3 (9/27/22) 128.3 (10/19/22)	16.1pc

Note the initial low in the nominal Broad Dollar Index low in early January 2021 (1/6/21) occurred close in time to the peak on 1/4/21 in US dollar-denominated government bonds issued by emerging market countries (iShares EMB ETF top at 116.09) as well as the emerging marketplace stocks pinnacle on 2/16/21 (iShares EEM ETF top at 58.29).

The real Broad Dollar Index peaked in April 2020 at 113.4. It sank to 103.3 in January 2021. With May 2022's 114.3, it surpassed April 2020's key resistance barrier. The real Broad Dollar Index ("BDI") was triumphantly strong (arguably "too strong") in the several months running up to and including its pinnacle in October 2022. From August 2022's lofty 116.6, it appreciated to 119.5 in September 2022 and 121.2 in October 2022, smashing 6.9 percent over April 2020's 113.4 summit. The nominal BDI in mid-July and late August 2022 approached its late March 2020 high, eventually accelerating through it to reach 9/27/22's and 10/19/22's 128.3 zenith (see also 11/3/22's 128.1).

Following late September/October 2022's highs, the US dollar "in general" has depreciated a moderate amount. The real Broad Dollar Index tumbled down to 114.2 in January 2023. However, the real BDI has held above April 2020's 113.4 top. It increased slightly to 115.1 in

March 2023. Though the real BDI slipped to 113.8 in April 2023 (a 6.1 percent decline from autumn 2022's high), it inched up to May 2023's 114.2, with June 2023 averaging 114.1. The US dollar therefore remains rather strong from the historical perspective.

The nominal BDI's low following its September/October 2022 highs around 128.3 remains 2/2/23's 118.3, a 7.8 percent slide. The nominal BDI appreciated 3.2 percent from 2/2/23's trough to 122.1 on 3/15/23, which remains the high to date. It thereafter weakened for about a month, with its subsequent low at 118.6 on 4/13/23 adjacent to 2/2/23's depth.

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The late September/October 2022 highs in the real and nominal Broad Dollar Indices coincided with (interrelated with; confirmed) not only the October 2022 lows in the S+P 500 (10/13/22 at 3492) and other search for yield marketplaces, but also the timing of the UST 10 year note yield highs at 4.01 percent (9/28/22) and 4.34pc (10/21/22).

Therefore, looking forward for the near term, a fairly strong dollar could intertwine with higher UST yields and a falling S+P 500. Suppose the real BDI stays beneath October 2022's 121.2 high. If it nevertheless continues to rest above or even "around" April 2020's 113.4 prior top, it still will be quite powerful from the long run historic perspective. The real BDI therefore probably would be a bearish factor for the hunt for yield/return securities playgrounds, especially if United States and other key interest rate benchmarks continued to climb.

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