MARKETPLACE EXPECTATIONS AND OUTCOMES

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"Are you gonna bark all day little doggie? Or are you gonna bite? Mr. Blonde asks Mr. White in "Reservoir Dogs" (Quentin Tarantino, director), after their gang's jewelry heist went disastrously wrong.

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OVERVIEW AND CONCLUSION

The Federal Reserve watchdog and its central banking companions, after a very lengthy delay, finally awoke to widespread evidence that substantial consumer price inflation was not a temporary or transitory phenomenon. The Fed guardian generally has evaded taking responsibility for its important role in creating substantial inflation (not just in consumer prices, but also in stocks and numerous other asset classes) via its mammoth money printing and yield repression schemes. But to restore and preserve its inflation-fighting credibility and sustain its marketplace reputation, in recent months the Fed noisily has raised policy rates (and significantly reduced yield repression) and started to shrink its engorged balance sheet.

The Fed's need to manifest genuine loyalty to its legislative mandate of stable prices (which other central bankers have echoed) thus has provoked it to do some nipping, and even a little biting, of "investors" and other owners in the S+P 500 and other "search for yield" marketplaces such as corporate bonds and US dollar-denominated foreign sovereign debt. Fed Chairman Jerome Powell's 8/26/22 Jackson Hole, Wyoming speech ("Monetary Policy and Price Stability") further emphasized its rediscovered inflation-fighting enthusiasm. The Chairman confesses: "Inflation is running well above 2 percent, and high inflation has continued to spread through the economy." The Chairman barks: "overarching focus right now is to bring inflation back down to our 2 percent goal"; "Restoring price stability will take some time and requires using our tools forcefully"; "estimates of longer-run neutral are not a place to stop or pause"; this restrictive policy stance likely must be maintained "for some time"; after all, "The longer the current bout of high inflation continues, the greater the chance that expectations of high inflation will become entrenched." Note the dogged determination expressed by this trusty guardian!

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"Summertime Blues, Marketplace Views" (8/6/22) states: "Despite growing concerns about a United States (and global) economic slowdown or slump, and despite potential for occasional "flights to quality" into supposed safe havens such as the United States Treasury 10 year note and the German Bund, the long run major trend for higher UST and other benchmark international government yields probably remains intact." Regarding the S+P 500, that essay concludes: "Although the current rally in the S+P 500 may persist for a while longer, the downtrend which commenced in January 2022 probably will resume. The S+P 500's June 2022 low probably will be challenged."

The Fed's late August 2022 wordplay has encouraged the previously existing trends of higher United States Treasury yields and declining prices for the S+P 500 and related search for yield (return) arenas such as emerging marketplace stocks, corporate bonds, and US dollar-denominated sovereign debt. Prices for commodities "in general" also have withered.

THE US TREASURY YIELD VOYAGE

"A key message is that we may be on the cusp of a new inflationary era….The past year has reminded us how quickly inflation can rise and catch everyone by surprise, not least policymakers." ("The return of inflation", speech by Agustin Carstens, the General Manager of the Bank for International Settlements; 4/5/22)

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For a long time, the ostensibly vigilant Fed and its central banking and finance ministry friends, most players within Wall Street and Main Street investment churches (particularly in stock domains), and a majority of politicians gambled on the continuation of very low inflation ("stable prices") and related low interest rates. Few worried much about the consequences of gargantuan money printing (quantitative easing), ongoing yield repression, and massive debt creation.

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OECD inflation as measured by the Consumer Price Index for June 2022 spiked to 10.3 percent year-on-year, the greatest price increase since June 1988 (8/3/22; 9/6/22 next release), thus continuing the ongoing substantial inflationary trend. Remember that the OECD's average year-on-year inflation rate for calendar 2020 was merely 1.4pc, with that for calendar 2021 4.0pc. Excluding food and energy, the OECD's June 2022 CPI inflation leaped 6.7 percent.

The US consumer price index (CPI-U, all items; Bureau of Labor Statistics; see Tables 1 and 5; 8/10/22; 9/13/22 next release) soared 8.5 percent year-on-year in July 2022 (up 9.1 percent year-on-year in June 2022, the largest 12 month increase since that ending over 40 years ago in November 1981). This inflation indicator's disturbing climb has exceeded five percent year-on-year since May 2021. Compare December 2020's meager 1.4pc increase. In July 2022 as well as June 2022, the CPI-U excluding food and energy ascended a hefty and worrisome 5.9 percent (May 2022's rose 6.0pc relative to May 2021). The price index for personal consumption expenditures rose 6.3 percent year-on-year in July 2022, with June 2022 up 6.8pc versus June 2021 (Bureau of Economic Analysis, Table 11; 8/26/22).

Overall United States and global inflation, despite the slump in commodities prices in general from the March 2022/June 2022 highs, probably will not drop substantially on a year-on-year basis for at least a few more months. The commodities price spike occurred after "around" 4Q21. Overall United States and global inflation, despite the slump in commodities prices in general since March/June 2022, probably will not drop substantially on a year-on-year basis for at least a few more months.

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Sustained low unemployment levels (especially when CPI-U inflation also is ascending) can encourage rising wages. The US August 2022 unemployment rate remained low, standing at 3.7 percent. July 2022's 3.5pc matched the 3.5 percent low achieved in February 2020, before the start of the coronavirus pandemic (compare April 2020's monumental 14.7pc; Bureau of Labor Statistics; 9/2/22).

So what about the trend for America's nominal wage growth? Although nominal wage growth has lagged CPI-U inflation in recent months (and thus real wages have declined), the acceleration of nominal wages signals the risk that an increasing wage pattern may help to entrench rather high CPI-U and other inflation measures. According to the Atlanta Fed's "Wage Growth Tracker", the three month moving average of median (hourly; overall unweighted) nominal wage growth in July 2022 reached 6.7 percent. Compare May 2021's 3.0pc. June 2022's elevation

represents the high for the data series, which goes back to 1997. Compare the prior highs of 5.4 percent in June 1998 and November 2000.

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The major yield increase trend in the United States Treasury marketplace (use the UST 10 year note as a benchmark) embarked with 3/9/20's .31 percent bottom. Lows at .54 percent on 4/21/20 and .50pc on 8/6/20 confirmed this. The UST 10 year note yield soared after 8/4/21's 1.13pc low. The German Bund's yield pattern in recent years broadly has resembled that of the UST 10 year note, although it spent a long time beneath zero (negative yield).

	1Q20 Yield Bottom	**Spring 2020 Yield Low**	**Later 2020 Yield Low**	**1Q21 Yield High**	**Aug 21 Yield Low**	**Recent Yield High**
UST 10 Year	.31 pc (3/9/20)	.54pc (4/21/20)	.50pc (8/6/20)	1.77pc (3/30/21)	1.13pc (8/4/21)	3.50pc (6/14/22)

The UST 10 year yield eventually broke above late March 2021's interim high, attaining 2.06 percent on 2/11/22. Highlight that the S+P 500 peaked during this yield ascent with 1/4/22's 4819, with lower interim tops on 2/2/22 (at 4595) and 2/9/22 (at 4590).

Russia's invasion of Ukraine briefly halted, but did not end, the major trend for rising yields in the United States Treasury marketplace which commenced in March 2020 and accelerated in early August 2021. Reflecting its safe haven status, the UST 10 year's yield increase trend paused, descending to 3/7/22's 1.67pc. Despite the UST 10 year note's "flight to quality" yield fall to its 3/7/22 trough, the long run pattern for increasing UST rates resumed, making a higher high with 6/14/22's 3.50pc (compare 10/9/18's 3.26pc high). Following 8/2/22's yield low at 2.51 percent, the UST yield marched upward to 9/1/22's 3.30pc.

The UST 10 year's 2.51pc yield trough on 8/2/22 was a one year anniversary relative to 8/4/21's 1.13pc interim low and a two year calendar month timing parallel versus 8/6/20's .50pc trough.

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US and other key government interest rates probably will continue to climb further from current levels. All else equal, high (rising) inflation tends to lead to increases in US Treasury and other yields. Importantly, policy rates such as Federal Funds remain significantly beneath both headline as well as core (leaving out food and energy) inflation yardsticks.

Despite its current loud inflation-fighting rhetoric, the devoted Fed's noble actions seeking to rein in inflation have been relatively gradual in the context of ongoing very elevated consumer price index statistics. The current Federal Funds level is at 2.25 to 2.50pc. Compare CPI-U inflation levels over eight percent, with the core CPI-U (excluding food and energy) around six percent. The Fed catch-up quest has much more work to do. Many wizards expect the Fed will increase the Fed Funds height by 75 basis points in its 9/20-21/22 meeting, but that still falls well beneath recent CPI-U heights.

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The Fed's Economic projections for the Federal Funds rate at the end of a given calendar year (Table 1, 6/15/22) give a midpoint of about 3.4 percent for 2022, 3.9pc for 2023, and about 3.3pc for 2024. Suppose the 10 year US Treasury note offers a real return of 50 basis points at year end 2022 relative to the Fed Funds level projection. Then it will yield around 3.9 percent, higher than current levels.

Looking forward, suppose America's core CPI-U inflation dips sharply, yet remains persistently at four percent or higher. Assume the UST 10 year yield offers a real return of 50 basis points relative to this inflation measure. Then the US 10 year yield will sail above four percent, and perhaps by a noteworthy amount (recall 6/13/07's yield top at 5.32 percent).

After its 9/20-21/22 meeting, the Fed gathers on 11/1-2/22 and 12/13-14/22. Looking forward after September's conference, unless the US and global economy weakens very substantially, further Fed Funds increases likely loom.

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America and many other countries currently have high overall debt levels as a percentage of GDP. For the United States, the significant probability (and related expectations) of substantial further growth over the next few decades in the government debt sector burden probably encourages a trend toward higher UST yields.

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Large and growing credit demand (picture the government, corporate, and household sectors), all else equal, tends to increase interest rates. Over the long run, despite increased inflation-battling inclination by the Fed and much of the rest of the global central banking crew, debt levels and trends may make it very difficult to achieve their inflation target goals.

Glance at the current and long run United States federal debt situation. Of course much can change over the next few decades. Higher interest rates over time can boost deficit burdens.

According to the Congressional Budget Office, the US budget deficit for fiscal 2022 was -3.9 percent of GDP (forecast -3.7pc for 2023). However, the CBO's baseline viewpoint predicts the federal deficit will increase by an annual average of -5.1 percent annually from 2023-32, -7.4pc annually from 2033-42, and -10.0pc annually over 2043-52 ("The 2022 Long-Term Budget Outlook", Table 1-1; 7/27/22. See also the CBO's "The Budget and Economic Outlook: 2022 to 2032"; 5/25/22).

Federal debt held by the public as a percentage of GDP greatly expanded in recent years, and especially during the coronavirus pandemic (2020 budget deficit -15.0 percent of GDP, 2021 deficit -12.4pc). Though the American economy expanded and the annual budget deficit shrunk dramatically in fiscal 2022, the CBO still prophesies that debt as a percentage of GDP will stand at a massive 98 percent of GDP at the end of 2022 (down only slightly from both 2020 and 2021's near 100pc of GDP). Contrast the debt as a percentage of GDP of 35.2pc in 2007 (around the end of the Goldilocks Era) and the 79.0pc for fiscal 2019. Under current law, debt as a percentage of GDP begins to rise in 2024, surpassing its historical high in 2031 when it reaches 107 percent. The CBO predicts it will jump to 110 percent of GDP at end 2032, leap 140pc at end 2042, and skyrocket to 185pc by 2052. To what extent will the student loan debt forgiveness program, assuming it survives legal challenges, increase budget deficits and boost inflation?

What about the rest of the globe? In general, since the worldwide economic disaster era of 2007-09, global public and private debt levels as a percentage of GDP have grown substantially. "Total (public plus nonfinancial private) debt rose by 28 percentage points in 2020 to 256 percent of global GDP." Government debt in 2020 accounted for 40 percent of total global debt. (See the International Monetary Fund's "Fiscal Monitor", chapter 1, Figure 1.1; note also the various IMF statistical tables on general government debt; April 2022). At the Jackson Hole Symposium, the BIS Managing Director pointed out a strong trend of increasing debt (sum of public and non-

financial private sector) as a percentage of GDP from the 1970s to the 2010s in both advanced and emerging market economies. See Graph 4 in "A Story of tailwinds and headwinds: aggregate supply and macroeconomic stabilization" (8/26/22).

To what extent are current and prospective government fiscal situations in America and elsewhere risky in regard to inflation and economic growth? Some believe that unless governments improve their fiscal policies, central banks over the long run will be unable to tame inflation. See "Inflation as a Fiscal Limit" (by F. Bianchi and L. Melosi; dated 8/19/22 and 8/11/22), an analysis released during the Jackson Hole conference on 8/27/22. Highlight various conclusions from this study, which focuses on American history and policies.

For example, "Low and stable inflation requires an appropriate fiscal framework aimed at stabilizing government debt." "Trend inflation is fully controlled by the monetary authority only when public debt can be successfully stabilized by credible future fiscal plans….When fiscal imbalances are large and fiscal credibility wanes, it may become increasingly harder for the monetary authority to stabilize inflation around its desired target…If the monetary tightening is not supported by the expectation of appropriate fiscal adjustments, the deterioration of fiscal imbalances leads to even higher inflationary pressure. As a result, a vicious circle of rising nominal interest rates, rising inflation, economic stagnation, and increasing debt would arise. In this pathological situation, monetary tightening would actually spur higher inflation and would spark a pernicious *fiscal stagflation* [italics in original], with the inflation rate drifting away from the monetary authority's target and with GDP growth slowing down considerably." And finally: "When the fiscal authority is not perceived as responsible for covering the existing fiscal imbalances, the private sector expects that inflation will rise to ensure sustainability of national debt."

SEARCHES FOR YIELD, YET RISING RATES

"In the days when wishing still worked": Jacob and Wilhelm Grimm's tale, "The Iron Stove"

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If prices for assorted "search for yield (return)" marketplaces such as stocks (picture the S+P 500) and lower-grade debt securities can climb "together" (roughly around the same time), they also can retreat together.

After the S+P 500's titanic peak in January 2022, prices tumbled in that playground and related financial arenas (such as emerging marketplace stocks; corporate bonds and US dollar-denominated emerging market sovereign debt), avid "searches for yield/return" transformed into fearful "runs for cover". Consumer (Main Street) and small business confidence destruction interrelated with capital destruction (loss of money) by "investors" and other owners in stock and interest rate securities marketplaces.

In general, price trends for assorted "search for yield/return" interest rate arenas (such as corporate bonds) probably will continue to converge with the S+P 500.

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Let's review a benchmark for United States corporate interest rates travels since first quarter 2020. Also, investigate emerging marketplace sovereign debt arenas. The Moody's seasoned Baa corporate bond yield is based on bonds with maturities of 20 years and above (statistics below from the St. Louis Fed, data through 8/30/22). The "EMB" ETF, from iShares (BlackRock)/J.P.

Morgan, provides exposure to United States dollar-denominated government bonds issued by emerging market countries. The EMB includes over 30 countries. The EMB is quoted in price terms, so falling prices reflect rising yields. Keep price trends for the S+P 500 and other stock marketplaces in view, as well as an eye on price trends for commodities in general.

The Baa established an early 2020 yield low (price high) on 3/6/20 at 3.29 percent. The EMB attained its price highs (yield lows) around then, on 2/21/20 at 117.20 and 3/4/20 at 117.08. Their prices crashed alongside global stock marketplaces to their March 2020 major bottoms.

	1Q20 Price Low	Price High	Interim Price Low	Price High	Price Low	Summer 2021 (and Later) Price Highs/Yield Lows	Recent Yield High
Baa	5.15pc (3/20/20)	3.12 (8/6/20)	3.52 (10/5/20)	3.11 (12/31/20)	3.88 (3/18/21)	3.15 (8/2/21) 3.15 (9/14/21) 3.13 (11/9/21) 3.16 (12/3/21)	5.48pc (6/14/22) 5.48 (9/1/22)

Recall the UST 10 year's 8/4/21 interim yield low at 1.13 percent. Note the rising yields in the Baa and EMB following summer/end year 2021. On the day of Russia's invasion of Ukraine, 2/24/22, the Baa yielded 4.20pc. After fluctuating for the next few weeks, the Baa yield increased rapidly from 4/1/22's interim low at 4.20pc. The Baa's initial yield high since summer 2021, 6/16/22's 5.48 percent, decisively broke through 3/18/21's 3.88pc barrier, and it also exceeds 3/20/20's yield top.

The Baa's recent yield low, 4.98pc on 8/1/22, occurred alongside the UST 10 year's 8/2/21 interim low at 2.51pc. However, the Baa yield jumped to 5.48pc on 9/1/22, matching June 2022's level.

	1Q20 Price Low	Price High	Interim Price Low	Price High	Price Low	Summer 2021 (and Later) Price Highs/Yield Lows	Recent Yield High
EMB	85.00 (3/18/20)	114.65 (8/11/20)	109.20 (9/24/20)	116.09 (1/4/21)	106.70 (3/8/21)	113.64 (8/31/21) 111.08 (11/9/21) 109.70 (12/13/21) 108.73 (1/3/22) 105.83 (2/2/22) 103.51 (2/16/22) 98.41 (3/17/22) 92.62 (5/27/22)	81.87 (7/14/22)

The EMB collapsed 29.5 percent from 1/4/21's 116.09 to 7/14/22's low. Note the EMB's pattern of lower interim price highs since January 2021, which resembles the picture of emerging marketplace stocks in general, which peaked in mid-February 2021.

The S+P 500 made a notable low on 6/17/22 at 3637 (see the Baa's 6/14/22 yield high), with an important second one on 7/14/22 at 3722 (compare the timing of the EMB's 7/14/22 yield high). The EMB advanced 10.8 percent from 7/14/22's trough to 8/11/22's 90.71 high. Its renewed price retreat (yield increase) from 8/11/22 began shortly before the S+P 500's interim top on 8/16/22 at 4325.

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The rising yield trend in US corporate as well as emerging marketplace sovereign US dollar-denominated bonds since summer 2021, when interpreted in the context of the UST 10 year note's similar pattern (and American and international inflation jumps), reflected a major and sustained climb in overall global interest rates. The dangerous climbing yield (falling price) linked to the bear moves in the S+P 500 and other key stock marketplaces. This pattern of higher yields probably will continue to undermine global stock prices.

ADVENTURES IN STOCK LAND

"Nations, like individuals, cannot become desperate gamblers with impunity. Punishment is sure to overtake them sooner or later." Charles Mackay, "Extraordinary Popular Delusions and the Madness of Crowds" ("The South-Sea Bubble")

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Economic (financial; business), political, and social fields are cultural phenomena. Thus perspectives and explanations regarding past and current marketplace history and relationships are subjective (matters of opinion, not science), even if expressed by learned social "scientists" such as economists. Viewpoints (including probabilities) regarding marketplace futures likewise are not objective at all. For marketplaces (and elsewhere in culture), the subjective outlooks on "the past" and "the present" (and opportunities and risks) nevertheless influence subjective expectations and thus actions regarding "the future".

When a widely shared (and broadly advertised and enthusiastically promoted by respected advocates) expectation (outcome) related to a marketplace does not occur, many discourses label the development as surprising or shocking. Some fervently declare: "no one could have foreseen it."

In any case, marketplace history is not marketplace destiny, either entirely or even partly. Relationships between marketplaces and variables can change, sometimes dramatically.

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Very long run American marketplace history nevertheless shows that substantially climbing United States interest rates in important benchmarks such as the US Treasury 10 year note have preceded noteworthy peaks and led to bear trends in key stock marketplace signposts such as the Dow Jones Industrial Average and the S+P 500.

Quite some time prior to Russia's 2/24/22 attack on Ukraine, rising interest rates and tumbling emerging equity marketplaces warned that the S+P 500 probably would fall significantly. "Emerging Marketplaces, Unveiling Dangers" (12/2/21) concluded that "the S+P 500 probably

has established a notable top or soon will do so". "Paradise Lost: the Departure of Low Interest Rates" (2/9/22) stated: "The S+P 500's stellar high, 1/4/22's 4819, probably was a major peak; if its future price surpasses that celestial height, it probably will not do so by much." "The S+P 500 price probably will decline further and establish new lows beneath the January 2022 trough. The development of a bear trend (decline of at least 20 percent) also is probable."

Sustained rising US (and global interest rate) yields led to the majestic 1/4/22 pinnacle at 4819 in the S+P 500. UST 10 year yields began rising in early March 2020, accelerating 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 glorious January 2022 summit (focus also on the descending pattern of lower interim highs after that peak), it collapsed 24.5 percent to 6/17/22's 3637 low.

The S+P 500's low since 1/4/22's 4819 peak occurred only three days after the UST 10 year note's 3.50 percent yield high. The S+P 500 thereafter made a very important second trough, 7/14/22 at 3722 (remember the earlier interim low at 3723 on 3/4/21 and the 3588 (9/2/20)/3550 (10/12/20 interim highs).

Note the resumed upward move in the UST 10 year yield from 8/2/22's interim low at 2.51 percent (9/1/22 high 3.30pc) in conjunction with the S+P 500's rapid retreat since 8/16/22's 4325 interim high (including its nosedive from 8/26/22's 4203, the day of the Fed Chairman's Jackson Hole speech). The rising yield pattern in America's UST field (and in interest rates around the globe) probably will continue to place downward pressure on US and other stock marketplaces.

	1Q 2020 High (date)	**1Q 2020 Low (date)**	**Interim High**	**Take-Off Low (date)**	**Subsequent High (to 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)
					4513 (4/21/22)
					4308 (4/28/22)
				3637 (6/17/22)	4178 (6/2/22)
				3722 (7/14/22)	4325 (8/16/22)

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"He was an honest Man, and a good Sailor, but a little too positive in his own Opinions, which was the Cause of his Destruction, as it hath been of many others." "Gulliver's Travels", by Jonathan Swift (Part IV, "A Voyage to the Country of the Houyhnhnms", chapter 1)

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Wall Street and Main Street stock investors generally hate deflation, and they also probably do not want inflation to be "overly high" for "too long". However, most stock owners probably do not want the Fed's apparently fierce effort to subdue "too high" inflation to become too rabid and thereby "overly injurious" to stock prices.

In practice, many owners of American stocks may view a ten percent price decline ("correction") livable, but a sustained bear move of 20 percent or more in an iconic benchmark such as the S+P 500 probably would trouble them. A ten percent slide from 1/4/22 is 4337, a 20pc retreat gives 3855. A vicious 33 percent or more slump from a major high probably will terrify not only many investors in US stocks, but also their economic and political allies.

Prior to the first quarter 2020 slump in the S+P 500, the Federal Reserve often talked and acted to support equity prices (and the economy) when stock prices tumbled downhill about twenty percent, the conventional definition of a stock bear trend. However, note the Fed's recent rhetoric signaling its inflation fight (including 8/26/22's Jackson Hole sermon), as well as its unwillingness to support the S+P 500 when it eroded nearly 25pc by mid-June 2022. The Fed therefore probably will not seek to support the S+P 500 if it revisits 6/17/22's 3637 or a height slightly beneath that.

Recall the 35.4 percent decline in the S+P 500 from 2/19/20's 3394 to 3/23/20's 2192 as the coronavirus pandemic emerged. During that horrific shipwreck in the S+P 500 (and other stocks and search for yield marketplaces), as well as in the US and global economy, the Federal Reserve (massive monetary easing by it and other central bankers) and politicians (gigantic deficit spending) resolutely acted to rescue the situation and restore confidence. Therefore, if the S+P 500 declines roughly 33 percent from its January 2022 pinnacle, and if the US economy shows additional signs of weakness (will GDP keep declining), the Fed probably will talk and act to halt that erosion in stocks and the economy. For example, it may suggest smaller or slower rate rises in the Federal Funds rate than most marketplace observers currently expect.

A 33 percent collapse from 1/4/22's 4819 peak equals 3209. Recall the interim troughs at 3209 on 9/24/20 and 3234 on 10/30/20, as well as 6/8/20's 3233 minor top. Above this 33pc decline height, watch a price band bordering it, running around 3405 to 3300. The S+P 500 crashed dramatically from 2/19/20's 3394 pinnacle; during its major bull charge up from 3/23/20's major bottom at 2192, there remains a price gap between 3405 (11/4/20 low) and 3389 (11/3/20 high). Another gap exists between 3336 (11/3/20) and 3330 (11/2/20).

A 50 percent crash in the S+P 500 from 1/4/22's summit is 2410, fairly close to March 2020's major bottom.

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Slowing and especially declining GDP growth troubles stock investors and other owners. To what extent will stock owners and analysts reduce their corporate earnings estimates for the S+P 500? According to America's Bureau of Economic Analysis, although real GDP grew 5.7 percent in calendar 2021, the first two quarters of calendar 2022 dropped: 1Q22 at a -1.6pc annual rate, 2Q22 at -.6pc annually (Table 1; 8/25/22).The International Monetary Fund's July 2022 "World Economic Update" (7/26/22) forecasts world GDP will increase 3.2 percent in 2022 and 2.9pc in 2023, down sharply from 2021's 6.1pc expansion (compare 2020's dismal -3.1pc slump).

Monitor housing marketplace indicators alongside stock trends. For example, the sales price of US existing single-family homes attained its recent high in June 2022, falling about 2.5 percent in July 2022 (National Association of Realtors). Though July 2022's 3.3 months of inventory supply is moderate, it flies above January 2022's 1.5 months. Moreover, total existing home sales tumbled 20.2 percent year-on-year in July 2022, even greater than June 2022's significant 14.4pc fall versus June 2021. The NAHB/Wells Fargo National Housing Market Index has retreated a lot

in recent months. Compare April 2022's 77 with August 2022's 49 (April 2020's 30 was the coronavirus period bottom, November 2020's 90 the subsequent summit).

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As a footnote, suppose the S+P 500 does not move up or down far relative to current levels ,and that high consumer price inflation persists (and significantly exceeds dividend payouts) for an extended time span. This situation will displease many stock owners, for since stock prices of course are quoted in nominal terms, they will be losing money from the real return vantage point.

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"EEM" is the iShares MSCI Emerging Stock Markets ETF. It covers over 800 large and mid-size companies. Despite Mainland China's global economic power, most analysts classify it as an emerging market nation from the economic perspective. It possesses a 35.2 percent portion of the EEM (BlackRock's iShares website, 6/30/22).

	1Q 2020 High (date)	**1Q 2020 Low (date)**	**Interim High**	**Take-Off Low (date)**	**Subsequent High (to date)**
EEM	46.32 (1/13/20)	30.10 (3/23/20)	45.56 (8/28/20)	42.29 (9/25/20)	58.29 (2/16/21)
	44.84 (2/12/20)			44.41 (10/30/20)	56.18 (6/1/21)
	42.08 (3/3/20)				55.62 (6/28/21)
					53.58 (9/7/21)
					52.62 (10/20/21)
					52.14 (11/15/21)
					50.89 (1/12/22; S+P 500 top 1/4/22)
					50.11 (2/10/22)
					46.78 (4/4/22)
					43.23 (6/6/22)
				38.05 (7/14/22)	41.20 (8/11/22)

Rising yields in emerging marketplace debt securities apparently helped lead to price peaks for and subsequent weakness in emerging stock marketplaces (EEM). Stocks for these developing nations built a framework of lower and lower interim highs since February 2021. The higher yield pattern since around August 2021 in both advanced and emerging marketplace debt domains encouraged further price drops in emerging marketplace stocks. Compare the timing of the late summer 2021 and November/December 2021 price drop-off points in emerging marketplace debt provinces with interim highs in emerging stock marketplaces, including the EEM's 50.89 on 1/12/22. Emphasize not only the UST 10 year note's long run campaign of rising yields since March 2020, but also the arrival of the upward stage beginning with the UST 10 year's early August 2021 trough at 1.13 percent. These debt and EEM price and time relationships intertwine

with the timing of the S+P 500's heavenly 1/4/22 peak at 4819 (about one week before the EEM's 1/12/22 interim high).

The EEM's low in its bear move to date since 2/16/21's 58.29 crown is 7/14/22's 38.05, a vicious 34.7 percent collapse. Compare the date of the EEM's trough with the S+P 500's 7/14/22 low at 3722 and the nominal Broad Dollar Index's high that day at 124.1. Although the S+P 500's summer 2022 rally broke above its minor top of early June 2022, the EEM's did not. The subsequent EEM rally to 8/11/22's 41.20 is a modest 8.3 percent, considerably less than the S+P 500's 18.9pc climb from 6/17/22 to 8/16/22. The EEM slipped quickly from 8/26/22's 40.96. The EEM therefore remains feeble. A sustained move in the EEM beneath its 7/14/22 low probably will be an ominous bearish sign for the S+P 500.

US DOLLAR PATTERNS

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 equities and debt prices peaked in first quarter 2021). The very strong dollar and price slumps in emerging marketplace securities have helped to undermine the S+P 500.

The United States dollar remains very strong and UST 10 year note yields stand fairly near their mid-June 2022 highs, which encourages weakness in emerging marketplace dollar-denominated sovereign (and corporate) debt securities and stocks. Note the relatively minor rally in emerging marketplace stocks in comparison to that in the S+P 500 after mid-July 2022.

The strong (or "too strong") US dollar, especially in an era of ascending interest rates for US dollar (and other) debt securities probably has assisted price weakness in emerging nation (and other foreign marketplace) corporate and sovereign debt denominated in US dollars. In this context, higher yields in emerging marketplace debt help to weaken emerging marketplace stocks.

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The Federal Reserve releases a real Broad Dollar Index (H.10; January 2006=100; monthly average; 9/1/22 release) as well as a nominal Broad Dollar Index (daily data; 8/29/22 latest release; 8/26/22 most recent datapoint) covering both goods and services.

.	1Q20 High (date)	Key Low Level (date)	Percent Fall from 1Q20 High	Next High (date)	PC Rally from 2021 Low
Nominal Broad Dollar Index	126.1 (3/23/20)	110.9 (1/6/21) 110.5 (6/1/21)	12.4pc	124.1 (7/14/22) 123.7 (8/22/22)	12.3pc

Note the initial nominal BDI low in early January 2021 (1/6/21) occurred close in time to the EMB price high (yield low) on 1/4/21, as well as the emerging marketplace stocks pinnacle on 2/16/21.

Sometimes (but not always) the Broad Dollar Index has attained key marketplace tops alongside important bottoms in the S+P 500. For example, recall the real Broad Dollar Index peak at 101.6 in March 2009 in connection with the S+P 500's major low on 3/6/09 at 667. The S+P 500 bottomed on 2/11/16 at 1810 (1/20/16 at 1812); compare the real BDI's January 2016 interim high at 107.5 (final top at 110.0 in December 2016, though). The S+P 500 made a significant

trough on 12/26/18 at 2347; November 2018's real BDI interim top at 107.8, though not a final high in the major bull move of the real BDI, was not exceeded by much for quite a few months (September 2019 minor high at 108.6) until March 2020/April 2020. Many on Wall Street and Main Street surely recognize that the nominal Broad Dollar Index's 3/23/20 pinnacle coincided with the S+P 500's 3/23/20 major low at 2192.

The real Broad Dollar Index ("BDI") for August 2022 is 117.4, about the same as July 2022's 117.5 and 3.5 percent over April 2020's 113.4 summit. The nominal Broad Dollar Index edged lower since 7/14/22, falling about 2.7 percent to 8/11/22's 120.8 (S+P 500 interim high 8/16/22 at 4325). Recall the date of the second recent low in the S+P 500, 7/14/22's 3722. However, the nominal BDI in mid-July and late August 2022 approached its late March 2020 high and thus remains very strong.

THE COMMODITIES BATTLEGROUND

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

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Assorted commodities of course have their own supply/demand profiles. Of course in practice, not all individual commodities necessarily trade "together" (in the same direction, around the same time span). Price and time trends for various commodities are not always the same. One marketplace may be in a bull trend, another in a less bullish, sideways, or bear pattern. Thus price trends over a given time horizon for a given commodity group (such as the "overall" petroleum complex) or a member within it (such as gasoline or diesel fuel) can venture further in a given direction than, or indeed have an opposite marketplace trend from, that of another commodity sector (such as agriculture "in general").

In recent years, numerous marketplace generals and their lieutenants have included commodities "in general" as a worthy member in their compelling arsenal of asset classes. Enlist the broad S&P GSCI as a benchmark for commodities "in general", although the GSCI is heavily petroleum-weighted.

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History indicates that over the long run, the S+P 500 and commodities in general tend to travel together (in the same direction, around the same time). Often major highs (major bottoms) for commodities in general (broad S&P GSCI) and the S+P 500 occur around the same time.

Traders nevertheless must beware of price and time divergence (significant leads and lags) between commodities and the S+P 500. For example, in 2007-08, the high in the S+P 500 time and price pattern diverged from and preceded that in commodities by several months. At the dawn of the 2007-09 global economic crisis, the S+P 500 peaked on 10/11/07 at 1576. The broad GSCI peaked about nine months later, on 7/3/08 at 894. ICE Brent/North Sea crude oil attained its pinnacle on 7/11/08 at 14750. Yet note that these July 2008 major highs in the GSCI and petroleum occurred not long after the S+P 500's final top, 5/19/08's 1440.

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The S+P 500 peaked in January 2022, the broad GSCI in early March 2022. The S+P 500's 1/4/22 pinnacle preceded that of the overall commodities complex (broad GSCI on 3/8/22 at 853.3) by about two months. This represents relatively modest divergence between those

marketplace realms from the time parameter. After around March 2022, the S+P 500 (note its lower interim high on 3/29/22 at 4637) and broad GSCI price trends have tended to converge, usually (roughly) moving lower together.

Prices for commodities in general climbed substantially after December 2021 (Russia invaded Ukraine 2/24/22), magnifying inflation concerns and levels and thus assisting the price decline in global stock marketplaces. Though commodities peaked in early March 2022, on balance they remained quite high until around mid-June 2022.

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.	**1Q 2020 High (date)**	**1Q 2020 Low (date)**	**Nov 2020 Take-Off Low (date)**	**Take-Off Points**	**High (to date)**
Broad S&P GSCI	453.2 (1/8/20)	218.0 (4/21/20)	333.1 (11/2/20)	509.1 (12/2/21) 522.3 (12/20/21) 595.2 (1/24/22) 627.7 (2/9/22) 632.1 (2/18/22) 648.0 (2/25/22) 679.3 (3/15/22) 632.9 (7/14/22)	853.3 (3/8/22) 825.4 (6/8/22) 705.3 (7/29/22) 703.2 (8/29/22)

Regarding increases in the US and OECD's consumer price measures since their troughs around end 2020, remember the timing of the fourth quarter 2020 take-off lows for the GSCI and especially the oil complex. After around late calendar 2021, encouraged by the threat and eventual reality of the Ukraine/Russia war, sharply rising prices for commodities in general, and food and fuel in particular, helped to accelerate consumer price inflation in the United States (see the CPI-U), the OECD, and elsewhere. Substantial price increases in the commodities theater thereby likely severely wounded Main Street consumer confidence.

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The broad S&P GSCI collapsed 20.4 percent from its 3/8/22 top to 3/15/22's 679.3. However, it rebounded impressively. Thus prices for the overall commodities complex remained lofty in early June 2022. After 6/8/22's 825.4, the GSCI resumed its decline, attaining a new trough at 632.9 on 7/14/22, down 25.8 percent from March 2022's peak. Relative to the time of the GSCI's 6/8/22 interim top, note the S+P 500's 6/2/22 interim high at 4178, as well as the EEM's on 6/6/22 at 43.23. Significantly, the GSCI's 7/14/22 low thus occurred on the same day as the S+P 500's second trough (at 3722), the EEM's low at 38.05, and the nominal Broad Dollar Index's high at 124.1.

The GSCI rallied 11.4 percent from 7/14/22 to 7/29/22's 705.3. But it then quickly retreated, with 8/8/22's 637.4 the recent low. Though the GSCI ascended to 8/29/22's 703.2 (around the time of the Fed Chairman's speech), it thereafter slumped.

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Marketplace warriors and guides interpret the GSCI's maneuvers in recent months from diverse perspectives and consequently generate assorted and competing explanations, outlooks, and probability assessments.

The significant price decline in commodities in general following the second high on 6/8/22 at 825.4 down to 7/14/22's 632.9 arguably encouraged the price rallies in the S+P 500 and related search for yield marketplaces. This renewed slide in the overall commodities field (especially the petroleum complex) following 3/8/22's major high at 853.3 probably mitigated inflationary concerns of some marketplace participants.

The broad GSCI resumed its decline from 705.3 (7/29/22)/703.2 (8/29/22) alongside the fall in the S+P 500 from 8/16/22's 4325 (and 8/26/22's 4203). Don't forget the 8/26/22 date of the Fed Chairman's Jackson Hole speech in this context.

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The GSCI still remains above its December 2021 lows, as well as the very important 10/25/21 high at 599.9. So looking forward for a few more months from now, if the GSCI does not sustain a significant break beneath its October 2021 high, commodities still will contribute to some extent to noteworthy year-on-year consumer price inflation in the CPI-U and similar signposts.

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Watch GSCI price levels with memories of the 2/24/22 Russian invasion of the Ukraine. The GSCI's 7/14/22 low at 632.9 stands near its pre-Ukraine invasion take-off points on 2/9/22 at 627.7 and 632.1 on 2/18/22. Regard also 1/24/22's 595.2, which rests close to 10/25/21's summit.

Since over the long run, major trends in the S+P 500 and commodities in general tend to converge, further substantial bearish moves in the broad GSCI beneath its 7/14/22 trough probably will lead to (or confirm) declines in the S+P 500.

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Suppose the GSCI falls significantly from its current height. That probably would warn of (confirm) economic weakness. A sustained breach of 7/14/22's 632.9 trough might persuade some equity bulls that inflation has been or soon will be tamed, and that the Fed consequently may not boost rates as much. Nevertheless, commodities obviously are not the only source of consumer price (and other) inflation. Given substantial current consumer price inflation (including in core inflation, which excludes food and energy), CPI-U inflation might not drop substantially (at least for a while) unless a notable recession emerged.

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Marketplace expectations are not marketplace certainties. So even if price convergence between the S+P 500 and commodities in general continues, at present there remains some risk of significant commodity price spikes relative to current prices. Imagine, for example, a leap in energy prices due to further noteworthy curtailment of Russian (or other major producer) supplies. That scenario might create price divergence between commodities and stocks, with the GSCI rallying and the S+P 500 falling.

BITCOIN, SMALL CAP STOCKS, MAIN STREET, AND S+P 500 PRICE TURNS

The Beach Boys sing in "Sloop John B":
"Why don't they let me go home?
This is the worst trip I've ever been on".

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In recent years, cryptocurrency marketplaces have become another territory appealing to some search for yield participants (especially Main Street fortune-hunters). As they do in stocks and other financial domains, such retail marketplace investment pilgrims typically enter (establish) positions from the buying (long) side. Increasingly, Wall Street and the financial media (and regulators) have paid attention to cryptocurrencies. Bitcoin is a key signpost within the cryptocurrency playground.

"IJR" is the iShares (Blackrock) ETF of small-capitalization United States stocks (the IJR's benchmark is the S&P SmallCap 600 Index). Small-cap stocks are popular with many Main Street dwellers (and of course with some Wall Street kingpins).

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	1Q 2020 High (date)	**1Q 2020 Low (date)**	**Peak (or Interim High)**	**Recent Take-Off Low (date)**	**Subsequent High (to date)**
Bitcoin	10769 (2/13/20)	3926 (3/13/20)	69000 (11/20/21) 52100 (12/27/21) 48237 (3/28/22)	17579 (6/20/22) 18892 (7/13/22)	25214 (8/15/22)
IJR	85.92 (1/17/20)	47.52 (3/23/20)	121.45 (11/8/21)	88.53 (6/16/22) 89.88 (7/14/22)	106.98 (8/16/22)

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Note the roughly similar timing shifts (trend changes) since first quarter 2020 for Bitcoin, IJR, and the S+P 500.

As the coronavirus pandemic emerged, the S+P 500 made a major high on 2/19/20 at 3394; Bitcoin attained an important interim top shortly before then, on 2/13/20 at 10769. The IJR's on 1/17/20 at 85.92 preceded those February major tops by a few weeks; recall the similar timing of the emerging stock marketplace peak, EEM's 1/13/20 summit at 46.32. Bitcoin's major bottom on 3/13/20 at 3926 slightly preceded the S+P 500's major low on 3/23/20 at 2192; IJR's major low occurred the same day as the S+P 500's.

Bitcoin's record peak occurred on 11/20/21 at 69000, a few weeks before the S+P 500's major high in January 2022. Bitcoin attained an important second top on 12/27/21 at 52100, very close in time to the S+P 500's 1/4/22 summit at 4819. What about Bitcoin's later and lower interim

high on 3/28/22 at 48237? That marketplace top occurred close in time to the S+P 500's 3/29/22 interim high at 4637.

Bitcoin's important recent low, 6/20/22's 17579 (beneath 12/18/17's 19787 high), bordered the S+P 500's 6/17/22 bottom at 3637. IJR's recent low was 6/16/22's 88.53. Again recall the S+P 500's second low, 7/14/22's 3722. IJR's second and slightly higher low occurred 7/14/22 at 89.88. Bitcoin rallied further from 7/13/22's 18892 trough, reaching 25214 on 8/15/22 (compare the time of the S+P 500's August 2022 interim top), a 43.4 percent spike from its 6/20/20 depth. Main Street money (buyers) moving into Bitcoin, small capitalization stocks, and the S+P 500 during June and July 2022 probably helped to rally these marketplaces.

Further price slumps in Bitcoin probably will encourage (confirm) price declines in the S+P 500.

INFLATION EXPECTATIONS

Jack Kerouac's novel, "On the Road" concludes: "and nobody, nobody knows what's going to happen to anybody besides the forlorn rags of growing old."

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Marketplace history and personal experience of course show that a given expectation (belief, opinion; probability assessment; forecast) held by an individual or group (even authoritative and experienced ones) regarding potential marketplace outcomes is not always (or necessarily) realized. This applies to the S+P 500, the United States Treasury 10 year note, the US dollar, Brent/North Sea crude oil, American inflation as measured by the CPI-U, and so forth.

Within and regarding marketplaces and other economic realms, as in other cultural domains, diverse narrators create and promote competing perspectives, explanations, and forecasts. In this process, the selection and weighing of variables ("facts", data, evidence, and factors) differs, sometimes considerably. Thus in theory and practice, rhetorical crosscurrents and a range of expectations and actions related to stock, interest rate, foreign exchange, and commodities battlegrounds inescapably exist. Economic (financial; business; commercial) and intertwined political and social variables (conditions) and opinions regarding them can persist or change. So therefore can important marketplace trends and relationships as well as expectations related to them, sometimes dramatically.

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Marketplace expectations regarding either "inflation" or a particular inflation measure (such as the CPI-U, and there are very numerous other inflation yardsticks) are merely one variable influencing inflation levels and trends (and opinions, rhetoric, and actions regarding them). Marketplaces such as interest rates, stocks, currencies, commodities, and so forth interrelate with and respond to such cultural expectation assessments regarding inflation. As part of its subjective perspective, a given marketplace observer may select a given inflation indicator as well as an analytical duration for it as particularly important. Inflationary time horizons are very numerous (and partly overlapping); picture month-to-month inflation, a one year span, or longer vistas such as five or ten years.

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To what extent has the Federal Reserve been successful in its campaign to keep inflation and inflationary expectations well-anchored?

In its 6/15/22 “Economic projections” for calendar 2022, the Federal Reserve oracle sharply raised its predictions for Personal Consumption Expenditures (“PCE”) inflation from its March 2022 outlook. In June, the “Central Tendency” for 2022 PCE inflation jumped to a range of 5.0 to 5.3 percent from March’s 4.1 to 4.7pc. The Central Tendency for the Federal Funds rate likewise flew upward in June 2022’s projections, reaching 3.1 to 3.6pc relative to March 2022’s 1.6 to 2.4pc. See Table 1 and Figure 2.

In June 2022 the Fed high priest left its prediction for 2023 PCE inflation essentially unchanged, at 2.4 to 3.0 percent (March 2022 estimate 2.3 to 3.0pc). However, it boosted the Federal Funds range for 2023 to 3.6-4.1 percent from March 2022’s 2.4-3.1 percent. In June 2022’s projections, the gospels of “longer run” levels for PCE inflation at two percent and Federal Funds at 2.3 to 2.5 percent remained unchanged.

What will the Fed do in regard to Fed Funds in its upcoming 9/20-21/22 meeting? To what extent will it revise its June 2022 economic projections?

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Various private and public institutions issue estimates of United States “inflation expectations”. Monitor levels and trends in these indicators alongside those in interest rate, stock, and other marketplaces.

Several of the Federal Reserve banks publish inflation expectation measures. The St. Louis Fed publishes a daily “5-year, 5-year forward inflation expectation rate”. Its website states: “This series is a measure of expected inflation (on average) over the five year period that begins five years from today.”

	Major Bottom	**Key 2022 Low**	**Subsequent High**	**Next Low**	**Recent High**
5 Year, 5 Year Forward Inflation Expectation Rate	.86pc (3/19/20)	1.92 (1/20/22)	2.67 (4/21/22)	2.08 (6/30/22; 7/11/22)	2.45pc (8/24/22)

The highs for this expectation benchmark going back to 2004 are around 3.00 percent. For example, recall 11/12/08’s global economic disaster summit of 3.05pc as the S+P 500 and other stock marketplaces crashed.

Calendar 2018’s high for this expectation measure was 2/2/18’s 2.35pc. This remained a peak for 5-year, 5 year forward expectations for quite some time. The measure stayed around and often under 2.00 percent thereafter. It plummeted from around 2/19/20’s 1.65 percent (S+P 500 peak 2/19/20’s 3394).

The inflation expectation indicator bottomed on 3/19/20. The UST 10 year note yield major low occurred 3/9/20 at .31 percent. The S+P 500 reached its 1Q20 crash bottom on 3/23/20 at 2192.

The 5 year, 5 year forward rate thereafter gradually rose. Although it increased to interim highs of 2.38 percent on 5/11/21 and 2.41pc on 10/15/21, it generally stayed fairly close to two percent and never decisively breached 2/2/18’s important 2.35pc high. Central banks, as well as Wall Street and Main Street marketplace participants in general, became married to the ideology (faith) that any seemingly significant pattern of rather large increases in consumer price inflation (CPI-U

and similar variables) probably represented a transitory or temporary phenomenon. These modest inflationary expectations (and related low US Treasury yields; assisted by the Fed's optimistic rhetoric and yield repression despite its massive money printing and colossal global deficit spending) probably helped the S+P 500 to rally substantially after first quarter 2020.

However, inflation measures such as the CPI-U remained high and became increasingly lofty. And the St. Louis Fed's measure established an important low on 1/20/22, close in time to the S+P 500's 1/4/22 peak at 4819. To the Fed and other central bank gurus as well as Wall Street and Main Street inhabitants, "inflation" increasingly became less and less transitory and appeared more and more ongoing, significant, and disturbing. As the 5 year, 5 year forward inflation expectation rate climbed, reaching a high to date at 2.67pc on 4/21/22 (well above 2/2/18's resistance), the S+P 500 declined.

Note the late June 2022/mid-July 2022 lows in the St. Louis index at 2.08 percent and the timing of the S+P 500's rally from 6/17/22 at 3637 and 7/14/22 at 3722. Reduced inflation fears probably helped to rally equities and related search for yield marketplaces. However, this benchmark ascended after mid-July 2022, reaching 2.45 percent on 8/24 and 8/29/22 (9/2/22 at 2.39pc). Note the renewed slump in the S+P 500 commencing with 8/16/22's 4325.

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Other essays discussing key stock, interest rate, currency, and commodity marketplaces and their relationships, as well as the economic and political scenes, include: "Summertime Blues, Marketplace Views" (8/6/22); "We Can't Get No Satisfaction: Cultural Trends and Financial Marketplaces" (7/13/22); "Gimme Shelter (and Food and Fuel" (6/5/22); "Running for Cover: Financial Marketplace Adventures" (5/3/22); "Marketplace Trends and Entanglements" (4/4/22); "Marketplace Relationships: Life During Wartime" (3/7/22); "Paradise Lost: the Departure of Low Interest Rates" (2/9/22); "Emerging Marketplaces, Unveiling Danger" (12/2/21); "Hunting for Yield: Stocks, Interest Rates, Commodities, and Bitcoin" (11/7/21); "Rising Global Interest Rates and the Stock Marketplace Battlefield" (10/5/21).

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