

WALL STREET MARKETPLACES: FASTEN YOUR SEAT BELTS

© Leo Haviland

December 5, 2022

Leo.Haviland@gmail.com

In the classic American film, “All About Eve” (Joseph Mankiewicz, director), the actress Margo Channing (played by Bette Davis) declares: “Fasten your seat belts. It’s going to be a bumpy night.”

OVERVIEW

In general, from around the beginning of calendar 2022 until mid-October, as American and other key global government interest rates continued to rise (enlist the United States Treasury note as a benchmark), the S+P 500 (and other advanced nation and emerging marketplace stock playgrounds) declined. Growing fears regarding substantial and persistent consumer price (and other) inflation by the Federal Reserve and its central banking allies and the linked policy response of raising Federal Funds and similar rates played key roles in the yield climbs and stock price falls. Bear trends for other “search for yield” assets such as corporate bonds and United States dollar-denominated emerging marketplace corporate debt converged with those of the S+P 500 and emerging marketplace stocks. Commodities “in general” (“overall”) of course do not always trade “together” in the same direction around the same time as the S+P 500. Nevertheless, in broad brush terms since around late first quarter 2022, their downward price and time trends converged. A very strong US dollar encouraged the relationships of higher US Treasury yields, descending stock prices, and eroding prices for commodities “in general”.

However, the US 10 year note yield achieved an important high on 10/21/22 at 4.34 percent. Using the Federal Reserve Board’s nominal Broad Dollar Index as a weathervane, the dollar peaked at 128.6 on 9/27/22 and 10/19/22. The S+P 500 established a trough in its bear trend with 10/13/22’s 3492. Based on the S+P GSCI, commodities in general attained an important low on 9/28/22 at 591.8, holding at 591.1 on 11/28/22. Note the roughly similar times (and thus the convergence) of these marketplace turns, which thereafter reversed, at least temporarily, the preceding substantial trends.

What key changes in central bank policy and marketplace inflation yardsticks encouraged the recent slump in the UST 10 year yield, the depreciation in the US dollar, and the jump in the S+P 500 and the prices of related hunt for yield (adequate return) battlefields? First, various members of the Federal Reserve leadership hinted that future rate increases would slow in extent (be fifty basis points or less rather than 75bp). See the Financial Times summary of officials leaning that way (11/12-13/22, p2). The Fed probably will tolerate a brief recession to defeat inflation, but it (and of course the general public and politicians) likely would hate a severe one. In today’s international and intertwined economy, further substantial price falls (beneath October 2022 lows) in the stock and corporate debt 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, are a recipe for a fairly severe recession. Hence the Fed’s recent rhetorical murmurings aim to stabilize marketplaces (and encourage consumer and business confidence and spending) and avoid a substantial GDP drop.

Second, US consumer price inflation for October 2022 stood at “only” 7.7 percent year-on-year. This rate fell short of expectations for that month and declined from heights exceeding eight percent in the several preceding months. This sparked hopes that American (and maybe even

global) inflation would continue to decline even more in the future, and that the Federal Reserve and other central bank guardians would engage in less fierce tightening trends.

Of course the Fed policy hints and US consumer inflation statistics do not stand apart from other variables. Might China ease its restrictive Covid-fighting policy, thus enabling the country's GDP to expand more rapidly?

Trends for commodities in general (employ an index such as the broad S+P GSCI) and the petroleum complex in particular sometimes have diverged substantially for a while from that of the S+P 500. After all, petroleum, wheat, and base metals have their own supply/demand and inventory situations. The broad S+P GSCI has battled to stabilize during autumn 2022 in response to the determined effort by OPEC+ to rally petroleum prices via production cuts. And over the long run, the S+P 500 and commodities tend to trade together. OPEC+'s ability to successfully defend a Brent/North Sea crude oil price around 83 dollars per barrel (nearest futures continuation) depends substantially on interest rate and stock levels and trends, as well as the extent of US dollar strength.

The "too strong" US dollar during calendar 2022 encouraged price declines in assorted search for yield asset classes, including emerging marketplace stocks and debt instruments as well as commodities. The depreciation of the US dollar in the past couple of months thus interrelated with (confirmed) the price rallies in the S+P 500 and other marketplaces. Yet the Federal Reserve probably will remain sufficiently enthusiastic in comparison with other central banks in its fight against inflation, which should tend to keep the dollar strong, even if it stays beneath its calendar 2022 high.

Investors in (and other owners of) stocks and other search for yield realms and their financial and media friends joyously applauded recent price rallies. However, to what extent will these bullish moves persist?

US consumer price and other key global inflation indicators remain very high relative to current central bank policy rates. Not only does the US CPI-U all items year-on-year percentage increase of 7.7 percent for October 2022 substantially exceed UST 10 year yields over four percent, but so does October 2022's 6.3 percent year-on-year increase in the CPI-U less food and energy.

Imagine consumer price inflation staying at only 4.5 percent. To give investors a 50 basis point return relative to inflation, the UST 10 year should yield five percent. Thus the Fed will continue to push rates higher in its serious war against excessive inflation, and eventually the rising UST yield pattern probably will reappear eventually, persisting until there are signs of much lower inflation or a notable recession.

Although marketplace history is not marketplace destiny, history reveals that significant climbs in key US interest rate signposts (such as the UST 10 year) tend to precede substantial falls in US stock benchmarks such as the S+P 500. Thus the S+P 500 probably will resume its decline, although it will be difficult for it to breach its October 2022 depth by much in the absence of a sustained global recession. So a return to rising UST rates, all else equal, probably will keep the dollar fairly powerful from the long run historic perspective, although the dollar will find it challenging to surpass its recent high by much (if at all) for very long.

Financial marketplace trends entangle in diverse fashions, which of course can change, and sometimes dramatically. Convergence and divergence (lead/lag) relationships between them can and do evolve, sometimes significantly. An increasing reversal of a given ongoing prior set of patterns between one or more key interest rate, stock, currency, and commodity marketplaces thus can attract growing attention and accelerate price moves in the new directions.

THE US TREASURY YIELD GAME

“All poker is a form of social Darwinism: the fit survive, the weak go broke.” A. Alvarez, “The Biggest Game in Town”

The US consumer price index (CPI-U, all items; Bureau of Labor Statistics; see Tables 1 and 5; (11/10/22; next release 12/13/22) flew up 7.7 percent year-on-year in October 2022, following other substantial increases in recent months. The CPI-U year-on-year increase exceeded eight percent for seven consecutive months beginning in March 2022 (9.1 percent year-on-year in June 2022 the highest during that span). This inflation indicator’s unnerving climb has exceeded five percent year-on-year since May 2021. October 2022’s consumer price inflation rate indeed dipped from September 2022’s 8.2 percent year-on-year rise and consequently represents a hopeful sign, although the measure remains lofty. Entrenched inflation at five percent or more probably will keep the Fed on its monetary tightening path and thus US Treasury yields rather high. Compare December 2020’s meager 1.4pc increase. Moreover, in October 2022, the CPI-U excluding food and energy ascended a still-troubling 6.3 percent year-on-year (September 2022’s spiraled up 6.6pc year-on-year).

In addition, “too high” inflation is a global problem. OECD inflation as measured by the Consumer Price Index for September 2022 leaped a colossal 10.5 percent year-on-year (11/3/22; next release 12/6/22), thus continuing an ongoing substantial inflationary trend. Remember 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 September 2022 CPI inflation jumped 7.6 percent.

And perhaps America’s slight improvement in its October 2022 CPI will not be widely shared. Eurostat’s flash estimate expects Euro area annual consumer price inflation (HICP, all items) raced up 10.0 percent year-on-year in November 2022 (Eurostat, 11/30/22; update scheduled 12/16/22).

Overall United States and worldwide inflation, despite the retreat in commodities prices in general from their March 2022/June 2022 pinnacles, probably will not drop substantially from current heights on a year-on-year basis for at least a few more months.

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 route in recent years broadly has resembled that of the UST 10 year note, although this signpost spent a long time beneath zero (negative yield).

	<u>1Q20 Yield Bottom</u>	<u>Spring 2020 Yield Low</u>	<u>Later 2020 Yield Low</u>	<u>1Q21 Yield High</u>	<u>Aug 21 Yield Low</u>	<u>Following Yield Highs</u>
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) 4.01 (9/28/22) 4.34 (10/21/22)

The Fed’s late August 2022 wordplay (recall the Chairman’s Jackson Hole speech) 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) sectors such as emerging marketplace stocks, corporate bonds, and US dollar-denominated sovereign debt. Prices for commodities “in general” also withered.

Note that the UST 10 year yield’s interim high on 6/14/22 at 3.50 percent occurred very close in time to the S+P 500’s 6/17/22 interim low at 3637. Highlight the similar timing of the UST’s 10/21/22 yield high and the S+P 500’s 10/13/22 price low. From 11/8/22’s 4.24pc elevation shortly before the 11/10/22 release of the US consumer price index statistics, the 10 year note’s yield plummeted to 3.47pc on 12/2/22. Note the S+P 500’s related explosive rally.

To restore and preserve its inflation-fighting credibility and sustain its marketplace reputation, in recent months the Fed noisily has increased policy rates (and significantly reduced yield repression). Yet despite its inflation-fighting rhetoric and actions, the devoted Fed’s struggle to rein in inflation has been relatively gradual in the context of persistent very elevated consumer price index statistics. The Fed hiked up the Fed Funds rate by another 75 basis points in its November 2022 meeting, but a 3.75 to 4.00 percent Fed Funds range still falls well beneath recent CPI-U elevations. So of course does a 4.25 to 4.50pc target.

The Fed’s Economic projections for the Federal Funds rate at the end of a given calendar year (Table 1, 9/21/22) give a midpoint (central tendency) of 4.25 percent for 2022, 4.7pc for 2023, and about 3.9pc for 2024. The watchdog declares the misty “Longer run” PCE inflation level is 2.0 percent, with the Fed Funds rate for that horizon at 2.4pc. In any case, suppose the 10 year US Treasury note offers a real return of 50 basis points at year end 2023 relative to the Fed Funds level projection. Then it will yield nearly 5.2 percent, above its recent crest around 4.3pc. Recall 6/13/07’s yield top at 5.32 percent.

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 provides a real return of 50 basis points relative to this inflation measure. Then the US 10 year yield still hovers above four percent.

Several days ago, the Fed Chairman reemphasized that “inflation remains far too high.” “While October inflation data received so far showed a welcome surprise to the downside, these are a single month’s data, which followed upside surprises over the previous two months...down months in the data have often been followed by renewed increases. It will take substantially more evidence to give comfort that inflation is actually declining. By any standard, inflation remains far too high.” (Speech, “Inflation and the Labor Market”, 11/30/22)

Underscore that the Fed's September 2022 Economic projections display a sharp markdown for US real GDP (midpoint of central tendency) for calendar 2022 and 2023 relative to the June 2022 forecast. The Fed's September 2022 prediction for calendar 2022 GDP growth is a paltry .2 percent (compare June 2022's 1.7pc estimate); it anticipates expansion of a meager 1.0pc in calendar 2023 (down from June 2022's roughly 1.7pc outlook). Therefore the Fed clearly will tolerate very mediocre growth resulting from its decision to put the monetary policy brakes on to halt and reverse the current dangerous inflation pattern. Also, unemployment in America remains low, so the Fed has some room to maneuver in relation to that policy variable.

Not only do the Fed's policy comments herald its determination to defeat inflation (return it to acceptable heights; restore "stable prices"). The anticipated increase from 2022 to 2023 (end of the given calendar year) for the Fed Funds rate indicated in the Fed's Economic projections likewise indicates that (all else equal) the Fed probably will not change course substantially anytime soon from its increasingly restrictive monetary policy. The Fed also is tightening monetary policy by shrinking the size of its balance sheet by up to \$60 billion in UST and \$35bb in agency mortgage-backed securities each month.

The Fed gathers 12/13-14/22, 1/31-2/1/23, and 3/21-22/23.

Another warning light shines on the interest rate horizon. Large and growing credit demand (picture the government, corporate, and household domains), all else equal, tends to increase interest rates. Over the long run, despite increased inflation-fighting inclinations by the Federal Reserve and much of the rest of the global central banking fraternity, debt levels and trends may make it difficult to achieve their inflation target goals.

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 in the government debt sector burden over the next few decades probably encourages a trend toward higher UST yields.

Foreigners hold a substantial amount of US Treasury securities, about \$7.3 trillion as of end September 2022. However, that total drops about \$450 billion from December 2021's sum. Going forward, suppose foreigners are reluctant to add substantially to their UST holdings, or remain net sellers. Suppose also that the Fed continues to reduce the size of its UST-loaded balance sheet). All else equal (unless there is a significant recession), this will encourage rises in UST yields.

US household debt at end 3Q22 stood at about \$16.5 trillion, up about 16.7 percent from the pre-coronavirus pandemic high of almost \$14.2 trillion at end 4Q19 ("Household Debt and Credit", New York Fed; November 2022).

SCRAMBLING FOR YIELDS, RUNNING FOR COVER

"The percentage you're paying is too high-priced
While you're living beyond all your means
And the man in the suit has just bought a new car
From the profit he's made on your dreams." Traffic, "The Low Spark of High-Heeled Boys"

In general, price trends for assorted “search for yield/return” interest rate arenas (such as corporate bonds and US dollar-denominated government bonds issued by emerging marketplace nations) probably will continue to converge with the S+P 500.

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.

The Fed’s need to demonstrate genuine loyalty to its legislative mandate of stable prices (which other central bankers have echoed) finally 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.

Let’s review travels of a benchmark for United States corporate interest rates travels over the past couple of years. 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 (following statistics from the St. Louis Fed). 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 and has a weighted average maturity of about 12.3 years (9/30/22). 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 yield steadily ascended steadily since its second half 2021 troughs around 3.10 percent (3.15pc on 8/2/21; 3.13pc on 11/9/21; 3.16pc on 12/3/21. Keep in mind the preceding yield low at 3.11pc on 12/31/20), which more than doubled to reach 10/24/22’s 6.59 percent yield summit to date. Recall the UST 10 year’s 8/4/21 interim yield low at 1.13 percent. The October 2022 Baa yield high breaks decisively through the 1Q20 yield high ceiling established during the coronavirus pandemic, 3/20/20’s 5.15 percent. Though the Baa yield’s drifted down to 5.54pc on 12/2/22, it remains above March 2020’s summit.

The EMB’s price and time trends generally have paralleled those of the Baa. The EMB collapsed 34.2 percent from 1/4/21’s 116.09 pinnacle to 10/21/22’s 76.35 trough. The EMB also manifested a pattern of lower interim price highs since January 2021. This resembles the picture of emerging marketplace stocks in general, which peaked in mid-February 2021, close in time to the EMB’s January 2021 price high. For example, see the EMB’s 8/31/21 top at 113.64 and 1/3/22’s 108.73. The EMB’s renewed price retreat (yield increase) from 8/11/22’s 90.71 minor top began shortly before the S+P 500’s interim top on 8/16/22 at 4325. The EMB price crash (yield spike) in recent months burrowed well beneath 3/18/20’s 85.00 price low.

Significantly, note the closeness in time of the late October 2022 yield highs (price lows) for the Baa (10/24/22) and EMB (10/21/22) are in relation to the UST 10 year notes yield high (10/21/21’s 4.34 percent) and the S+P 500’s important low on 10/13/22 at 3492. The EMB’s price high since its October 2022 trough is 12/1/22’s 87.86.

STOCK MARKETPLACE ADVENTURES

In “The Conquest of Gaul”, Julius Caesar notes “the general tendency of mankind to wishful thinking”.

Richard Petty, a greatly accomplished US race car driver (nicknamed “The King”), underscores: “No one wants to quit when he’s losing and no one wants to quit when he’s winning.”

Very long run American marketplace history 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. Sometimes a yield climb, after preceding a stock marketplace top, then retreated; yet in some cases yields marched even higher after the equity peak.

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 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 27.5 percent to 10/13/22’s gloomy 3492 low, which rested merely 2.9 percent above 2/19/20’s 3394 pre-coronavirus pandemic peak.

The S+P 500’s 6/17/22 interim low at 3637 occurred only three days after the UST 10 year note’s 3.50 percent yield interim top. The UST 10 year’s yield high at on 10/21/22 at 4.34 percent occurred only a few days after the S+P 500’s critical trough at 3492 on 10/13/22.

Spotlight also the upward move in the UST 10 year yield from 8/2/22’s interim low at 2.51 percent in conjunction with the S+P 500’s rapid retreat after 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 S+P 500’s low on 11/9/22, shortly before the US consumer price index announcement, was 3742. It blasted up to 4101 on 12/1/22, a 17.4 percent rally from 10/13/22’s 3492 trough.

The long-run rising yield pattern in America’s UST arena (and in interest rates around the globe) probably will continue to place downward pressure on US and other stock marketplaces. Though the UST 10 year yield has slipped since 10/21/22, a sustained yield increase moving toward (and especially above) the 4.34 percent October 2022 crest probably will propel the S+P 500 lower.

	<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Interim High</u>	<u>Take-Off Low (date)</u>	<u>Peak and Other Highs(date)</u>
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)
				<u>Key 2022 Lows</u>	4308 (4/28/22)
				3637 (6/17/22)	4325 (8/16/22)

3722
(7/14/22)
3492
(10/13/22)

Wall Street and Main Street stock investors (and other equity owners) of course love stock marketplace bull moves. They also 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 noble effort to subdue “too high” inflation to become too vicious and thereby “overly injurious” to stock prices.

In practice, many owners of American stocks (especially those who buy and hold for some version of the long run) will decide a ten percent price decline (“correction”) is livable, at least for a while. However, a sustained bear move of 20 percent or more in an iconic benchmark such as the S+P 500 probably troubles many greatly. A ten percent slide from 1/4/22 is 4337, a 20pc retreat gives 3855. A 25pc nosedive is 3614, close to the June 2022 depth, which 10/13/22’s 3492 breached. Calendar 2022’s bloody price decline in the S+P 500 undoubtedly dismayed stock investors and other stock owners, eventually provoking numerous owners to call out for help. A fearsome 33 percent or more crash from a major high probably will horrify many investors in US stocks as well as 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 American stock prices tumbled downhill about twenty percent, the conventional definition of a stock bear trend. However, note the Fed’s wordplay signaling its inflation fight (including 8/26/22’s Jackson Hole sermon), as well as its unwillingness to support the S+P 500 by means of direct action (not merely via wordplay) when it eroded nearly 25pc by mid-June 2022. However, the S+P 500’s decisive surpassing of the 25 percent decline milestone in October 2022 probably inspired many Federal Reserve leaders to utter vague and cautious (yet soothing) rhetoric about possibly reducing the extent (basis point amount) and speed of future Federal Funds increases.

Recall the breathtaking 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 awful 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 moved 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 (and risks of a looming severe recession), the Fed probably will talk and act to halt that erosion in stocks and the economy. For example, it may postpone planned Federal Funds rate increases, or at least make smaller or slower rate rises in Federal Funds.

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. During the S+P 500’s major bull advance up from 3/23/20’s bottom at 2192, there remains a price gap between 3405 (11/4/20 low) and 3389 (11/3/20 high), which now represents important support. Another gap exists between 3336 (11/3/20) and 3330 (11/2/20). Traumatic 50 percent carnage in the S+P 500 relative to 1/4/22’s summit gives 2410, close to March 2020’s major bottom.

Will an eager crowd of “year-end buyers” rush into the S+P 500 and other stock marketplace arenas as calendar 2022 heads to its finish line?

Although it is a truism that “we live in the real world”, prices such as the S+P 500 obviously are quoted in nominal terms. Looking forward, suppose American and other key central bank policy interest rates for quite some time continue to offer insufficient real return relative to inflation weathervanes such as the consumer price index. What if financial marketplaces (Wall Street and Main Street) also significantly start to doubt the devotion (or ability) of the Fed to successfully defeat inflation (restore “stable prices”). Suppose also that at least modest growth in nominal worldwide GDP and nominal corporate earnings exists. Though numerous other entangled economic and political variables matter and influence stock marketplace levels and trends (and those of other search for yield ballparks), such a scenario may help to support (at least for a while) nominal prices in the S+P 500 and many related financial assets.

“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 31.3 percent portion of the EEM (BlackRock’s iShares website, 9/30/22).

Rising yields in emerging marketplace debt securities helped lead to price peaks for and subsequent weakness in emerging stock marketplaces (EEM). 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.

The EEM’s low in its bear move since 2/16/21’s 58.29 crown is 10/24/22’s 33.49, a bone-shattering 42.5 percent crash (35.80 low on 11/9/22, before the US CPI release). The 10/24/22 valley neighbors the mournful 3/23/20 coronavirus bottom at 30.10. The EEM’s high since its October 2022 low is 12/1/22’s 39.71.

In the EEM’s pattern of descending interim highs following the February 2021 crest, note the proximity in time of 1/12/22’s 50.89 to the S+P 500’s major high on 1/4/22. In today’s interconnected global economy and its financial marketplaces, if the EEM resumes its decline following its bounce since 10/24/22, that will be a bearish omen for the S+P 500.

US DOLLAR MANEUVERS

Ty Cobb was an American baseball star in the early decades of the 20th century. In his autobiography, “My Life in Baseball: the True Record”, Cobb states: “I’d like to emphasize that the greatest weapon of all—*yet the most overlooked force in the game*—is an astute understanding of an opponent’s thought processes, and application of that knowledge. Train yourself, boys, to think along psychological lines.” (Italics in original)

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). The very strong dollar and price slumps in emerging marketplace securities helped to undermine the S+P 500.

In recent months, the United States dollar remained very strong, and UST 10 year note yields advanced above 6/14/22's 3.50 percent interim high. These factors encouraged weakness in emerging marketplace dollar-denominated sovereign (and corporate) debt securities and stocks. Higher yields in emerging marketplace debt help to propel emerging marketplace stocks lower.

The Federal Reserve releases a real Broad Dollar Index (H.10; January 2006=100; monthly average; 12/1/22 release) as well as a nominal Broad Dollar Index (daily data; 12/5/22 latest release; 12/2/22 most recent datapoint) covering both goods and services.

	1Q20 High (date)	Key Low Level (date)	Percent Fall from 1Q20 High	Next Highs (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) 128.6 (9/27/22) 128.6 (10/19/22)	16.4pc

Note the initial low in the 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.

The real Broad Dollar Index ("BDI") was very strong (arguably "too strong") in recent months. From August 2022's lofty 117.1, it appreciated to 120.0 in September 2022 and 121.5 in October 2022, smashing about 7.1 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 blasting over it to reach 9/27/22's and 10/19/22's 128.6 (see also 11/3/22's 128.4).

The late September/October 2022 highs in the real and nominal Broad Dollar Indices coincide with (interrelate with; confirm) the October 2022 lows in the S+P 500 (10/13/22 at 3492) and other search for yield marketplaces as well as the timing of the UST 10 year note yield highs at 4.01 percent (9/28/22) and 4.34pc (10/21/22).

Since late September/October 2022, the US dollar has depreciated a moderate amount. The real Broad Dollar Index ebbed to 119.2 in November 2022. A five percent decline from October 2022's 121.5 equals 115.4, a ten percent tumble gives 109.4, a fifteen percent drop 103.3, with a twenty percent crash 97.2. The nominal BDI's low following its September/October 2022 highs around 128.6 is 12/2/22's 122.1, a 5.1 percent slide. A five percent fall in the nominal BDI gives 122.2, a ten pc correction 115.7, a fifteen pc one 109.3, with a twenty pc collapse 102.9.

Marketplace history indicates that dollar weakness can fuel or coincide with (confirm) a rally in the S+P 500. Sometimes (but not always) the Broad Dollar Index has attained critical 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 attained a significant trough on 12/26/18 at 2347; November 2018's

real BDI interim top at 107.8, though not a final milestone 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 the nominal Broad Dollar Index's 3/23/20 pinnacle at 126.1 coincided with the S+P 500's 3/23/20 major low at 2192. The nominal BDI's recent venture beneath its 3/23/20 summit at 126.1 probably has accelerated the rally in the S+P 500 and many other key global stock marketplace signposts.

The Federal Reserve provides currency weights for the Euro Area and various nations within its United States Broad Dollar Index (H.10; as of 1/3/22). In the following table, the weights of these seven currencies add up to about 75.0 percent. Note the timing of the recent cross rate lows in various key currencies relative to the US dollar.

Currency (PC Weight in BDI)	Recent Cross Rate Low Versus US Dollar (date)	Following High (so far) Vs. USD (date); PC Rally
Euro FX (19.6 percent)	.954 (9/28/22)	1.060 (12/5/22); 11.1 percent
British Pound (5.0pc)	1.035 (9/26/22)	1.235 (12/5/22); 19.3pc
Canadian Dollar (13.0pc)	1.398 (10/13/22)	1.323 (11/15/22); 5.4pc
Mexican Peso (13.2pc)	20.58 (9/28/22)	19.04 (11/29/22); 7.5pc
Chinese Renminbi (14.8pc)	7.327 (11/1/22)	6.946 (12/5/22); 5.2pc
Japanese Yen (6.0pc)	151.9 (10/21/22)	133.6 (12/2/22); 12.0pc
Swiss France (3.4pc)	1.015 (10/21/22)	.933 (12/2/22); 8.1pc

Remember the vigorous recent intervention by the Bank of England to defend the British Pound (and British securities marketplaces as well as the economy), as well as Japan's intervention to support the Yen.

Gold's recent low at 1615 on 11/3/22 occurred close in time to the highs in the US dollar. Note its subsequent rapid acceleration up to 12/5/22's 1808 (12.0 percent rally).

Suppose the real BDI stays beneath October 2022's 121.7 high, but that it nevertheless hovers significantly above April 2020's 113.4 prior top for an extended time. It still would be quite strong 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.

To some extent, the dollar at present is a safe haven in troubled global economic (and political) epochs. Watch the currency trends of emerging marketplaces for signs of crisis.

All else equal, United States dollar feebleness tends to inspire ascents in the nominal value of dollar-denominated assets, including stocks. However, the dollar can depreciate alongside falls in stocks. Picture a world of rising US and international interest rates, widespread belief that America's public debt situation is poorly controlled and at dangerous levels, and tighter monetary policy in many other leading nations relative to the US.

To what extent over the long run will the ongoing development of a more multipolar world (and with the US capturing a declining share of global GDP) and the growing fragmentation of trade patterns (reduced globalization) diminish the appeal (relative hegemony) of the US dollar?

And consider recent US rhetoric about the importance of democracy relative to autocracy. For example, see the White House’s “National Security Strategy” (10/12/22). Is that talk and related American global policy actions on topics such as the Ukraine/Russia conflict and the Taiwan/China relationship an effort to keep the dollar strong?

THE WILD WEST OF COMMODITIES

The racing car driver Pete Aron declares in the movie “Grand Prix” (John Frankenheimer, director): “I don’t think there’s one of us who doesn’t ask himself at least once in the middle of a race, ‘What the hell am I doing here/’ Of course, when it’s over, we conveniently forget we asked ourselves that question. I think about it and a lot of reasons I don’t know. Maybe to do something that brings you so close to the possibility of death and to survive it is to feel life and living so much more intensely.”

In recent years, numerous marketplace guides and their fans have included commodities “in general” as a worthy member in their alluring arsenal of “investment” asset classes. Enlist the broad S&P GSCI as a benchmark for commodities in general, although the GSCI is heavily petroleum-weighted.

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 (nearest futures continuation) 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.

Let’s summarize the broad S+P GSCI’s key price moves since January 2020.

	<u>1Q 2020</u>	<u>1Q 2020</u>	<u>Nov 2020</u>	<u>Take-Off</u>	<u>Highs</u>
	<u>High (date)</u>	<u>Low (date)</u>	<u>Take-Off</u>	<u>Points</u>	<u>(to date)</u>
			<u>Low (date)</u>		
Broad S&P	453.2	218.0	333.1	509.1	853.3
GSCI	(1/8/20)	(4/21/20)	(11/2/20)	(12/2/21)	(3/8/22)
				522.3	
				(12/20/21)	825.4
				595.2	(6/8/22)
				(1/24/22)	

<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Nov 2020 Take-Off Low (date)</u>	<u>Take-Off Points</u>	<u>Highs (to date)</u>
			627.7 (2/9/22)	705.3 (7/29/22)
			632.1 (2/18/22)	703.2 (8/29/22)
			648.0 (2/25/22)	
			679.3 (3/15/22)	
			632.9 (7/14/22)	
			591.8 (9/28/22)	
			591.1 (11/28/22)	

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 and into autumn 2022, the S+P 500 (note its lower interim high on 3/29/22 at 4637) and broad GSCI price trends 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 very elevated until around mid-June 2022.

The broad S&P GSCI collapsed 20.4 percent from its 3/8/22 top to 3/15/22's 679.3. However, the index 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, making a temporary stop at 632.9 on 7/14/22, down 25.8 percent from March 2022's peak.

The significant price decline in commodities in general following the second high on 6/8/22 at 825.4 (compare the timing of the UST 10 year note's interim yield top, 6/14/22's 3.50pc) down to 7/14/22's 632.9 arguably ignited the interim 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.

Russia invaded Ukraine on 2/24/22. The GSCI's 7/14/22 low at 632.9 rested near its pre-Ukraine invasion take-off points on 2/9/22 at 627.7 and 632.1 on 2/18/22. The GSCI rallied 11.4 percent from 7/14/22 to 7/29/22's 705.3 (and 8/29/22's 703.2, around the 8/26/22 date of the Fed Chairman's Jackson Hole speech). 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).

The GSCI's recent low on 11/28/22 at 591.1 descended 30.7 percent from March 2022's 853.3 peak, a terrifying bear move for commodities investors and other owners of this "alternative asset class". The GSCI's 9/28/22 and 11/28/22 lows stood near its crucial 10/25/21 high at 599.9 (and 1/24/22's important take-off point at 595.2, only a few weeks before Russia's invasion of Ukraine). On 10/3/22, shortly before the 10/5/22 OPEC+ production cut scheme aiming to support and elevate petroleum prices, it stood at 607.8.

Emphasize the roughly similar timing of the GSCI's 9/28/22 bottom at 591.8 (and a subsequent minor low on 10/21/22 at 616.1) with yield highs in the UST 10 year (4.01 percent on 9/28/22; 4.34pc on 10/21/22), summits in the nominal Broad Dollar Index (128.6 on 9/27/22 and 10/19/22), and 10/13/22's 3492 low in the S+P 500. The GSCI bounced up about 13.5 percent to 671.5 on 10/10/22 (11/7/22's 671.1 bordered this); that elevation remains the high of the interim rally.

ICE Brent/North Sea crude oil (nearest futures continuation) traveled beneath its critical 10/25/21 top at 8670 (and 10/3/18's 8674 high) making an important initial low at 8365 on 9/26/22. Compare the timing of these lows with those in the S+P 500 and other financial marketplaces. Brent/North Sea crude oil's subsequent high to date, 11/7/22's 9956, rises 19.0 percent from 9/26/22's trough. However, Brent recently motored downhill to establish a new low, 11/28/22's 80.61. Anxious to avoid a further collapse in petroleum prices, OPEC+'s 12/4/22 meeting reaffirmed its 10/5/22 decision to slash its crude oil output by about two million barrels per day from November 2022 to end 2023.

Since over the long run, major price and time trends in the S+P 500 and commodities in general (broad GSCI) tend to converge, and as that convergence pattern arguably still exists, substantial moves in the GSCI (and the petroleum complex) probably will parallel (or confirm) those in the S+P 500.

However, bullish convergence between commodities and the S+P 500 probably has limits. A sustained rally in commodities in general (and especially in the petroleum complex) ultimately can be "too inflationary", thus tending to generate higher interest rates and thereby helping to push stocks downward.

In any case, looking forward for a few more months from now, if the GSCI does not sustain a significant break beneath its October 2021 high and challenge its December 2021 elevations around 509.1/522.3, commodities still will contribute to some extent to noteworthy year-on-year consumer price inflation in the CPI-U and similar signposts.

CRYPTOCURRENCY PRICE SWINGS AND S+P 500 PRICE PATTERNS

Captain Miller declares in the World War II film, "Saving Private Ryan": "Things have taken a turn for the surreal." (Stephen Spielberg, director)

In recent years, cryptocurrency marketplaces have become an alluring racetrack for some search for yield competitors (especially Main Street fortune-hunters, but also numerous institutions).

Since first quarter 2020, Bitcoin and the S+P 500 have displayed roughly similar price and time shifts (trend changes).

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. Don't overlook 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.

Bitcoin's record peak occurred on 11/10/21 at 69000, a few weeks before the S+P 500's major high at 4819 on 1/4/22. Bitcoin attained an important second top on 12/27/21 at 52100, very close in time to the S+P 500's January 2022 summit.

The timing of Bitcoin's initial low on 6/20/22 at 17579 (beneath 12/18/17's 19787 high) was close to the S+P 500's 6/17/22 interim low at 3637. Bitcoin exploded up a sharp 43.4 percent to reach 25214 on 8/15/22 (compare the date of the S+P 500's 8/16/22 interim top at 4325). However, Bitcoin thereafter declined, tumbling violently from 11/7/22's 21479 to 11/10/22's 15518. Bitcoin thus has collapsed 77.5 percent since its November 2021 summit.

Looking forward, perhaps Bitcoin trends will diverge from those in the S+P 500. However, given the history of marketplace trend convergence in the past few years between Bitcoin and the S+P 500, the significant recent price collapse in Bitcoin arguably warns of a renewed price fall in the S+P 500 and related search for yield assets.

For additional analysis of key stock, interest rate, currency, and commodity marketplaces and their relationships, as well as the economic and political scenes, see: "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); "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).

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

All content copyright © 2022 Leo Haviland. All Rights Reserved.