RUNNING FOR COVER: FINANCIAL MARKETPLACE ADVENTURES

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A character in the film "It's a Mad Mad Mad World" reasons: "Now look, let's be sensible about this thing. There's money in this for all of us. Right? There's enough for you, there's enough for you, and for me, and for you, and there's enough for..." [They all race to their cars]. (Stanley Kramer, director)

CONCLUSION

Sustained rising United States Treasury interest rates and a strong US dollar have played critical roles in creating the January 2022 price peak for and subsequent declines in the S+P 500. Increasing yields not only in America but also within emerging marketplaces, as well as the powerful dollar, assisted the construction of the earlier high (around February 2021) for emerging marketplace stocks in general. The ongoing UST and other yield climbs of recent months alongside the strong dollar have reestablished long run price and time convergence between the S+P 500 and emerging marketplace equities. The major trend toward higher US and other rates, alongside the high US dollar, and interrelating with the downward trends in the S+P 500 (and other advanced nation stocks) and emerging marketplace equities, probably have created summits for commodities "in general".

The price spike in commodities (enlist the broad S&P GSCI as a benchmark) beginning in December 2021/early 2022 of course underscored inflationary fears, which assisted the rise in interest rates, thus helping to precipitate down moves in the S+P 500 and other stock marketplaces. However, the rising UST (and international) yield trend and strong dollar situation preceded the Russian invasion of Ukraine in late February 2022.

For a long time, yield repression by the Federal Reserve and its central banking friends created negative real returns relative to inflation for US Treasury and many other global debt securities. This very easy money policy (assisted by gigantic money printing/quantitative easing) and enormous US (and other) government deficit spending (especially after the advent of the coronavirus pandemic in early 2020) generated enthusiastic quests for yield (adequate return) by investors and other traders in stocks, lower-quality debt instruments (such as corporate and emerging marketplace sovereign bonds), and commodities. This helped to produce monumental bull trends in these playgrounds. Wall Street and the financial media eagerly promoted the reasonableness of these yield hunts. The sleepy Fed watchdog and other virtuous central bankers were long complacent about inflationary dangers, labeling inflationary signs as temporary, transitory, the result of supply bottlenecks, and so forth. Nowadays, these more vigilant guardian bankers, alarmed by the highest inflation in several decades, have commenced a rate-raising campaign.

Thus the sunny "search for yield" landscape for the S+P 500 and associated stock, debt, and many commodity marketplaces has darkened. An anxious "run for cover" liquidation of assets by many investors and other owners probably has been underway. Compared to the time just prior to the 2020 coronavirus pandemic (and the 2007-09 global economic crisis), the Federal Reserve (and other central bankers) and the American and other national governments probably have much less ability to readily rescue the S+P 500 and other "search for yield" marketplaces.

Other essays discussing key stock, interest rate, currency, and commodity marketplaces and their relationships, as well as the political scene, include "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).

Previous essays noted that the S+P 500 probably peaked on 1/4/22 at 4819. Looking forward, the S+P 500 probably will venture significantly beneath 5/2/22's 4063 low. The bear trend in emerging stock marketplaces will continue. Over the long run, given the American (and global) inflation and debt situation, the yield for the US Treasury 10 year note probably will ascend above its recent high around three percent, although occasional "flights to quality (safe havens)" and thus interim yield declines may emerge. Remember that the dollar rallied from April 2008 to March 2009, alongside the S+P 500's collapse from its important mid-May 2018 interim high (S+P 500 major high October 2007) to its major bottom in March 2009. However, and although it is a difficult call, the current bull trend for the United States real Broad Dollar Index probably will attain its summit in the near future. Commodities in general (spot; nearest futures basis) probably made a major high in early March 2022 and will continue to retreat, although there may be brief price leaps above previous tops in "have-to-have" (very low inventory) situations.

INTEREST RATE HISTORYAND RELATIONSHIPS

"History on Stage: Marketplace Scenes" (8/9/17) and subsequent essays updating it such as Marketplace Trends and Entanglements" (4/4/22), "Marketplace Relationships: Life During Wartime" (3/7/22), "Truth and Consequences: Rising American Interest Rates" (3/9/21), "American Inflation and Interest Rates: Painting Pictures" (5/4/21), and "Paradise Lost: the Departure of Low Interest Rates" (2/9/22) emphasized: "Marketplace history need not repeat itself, either entirely or even partly. Yet many times over the past century, significantly increasing United States interest rates have preceded a noteworthy peak in key stock marketplace benchmarks such as the Dow Jones Industrial Average and S+P 500. The yield climb sometimes has occurred over a rather extended time span, and the arithmetical (basis point) change has not always been large." The US Treasury marketplace has been an important standard for this analysis. The 10 year UST note is a key benchmark.

In first quarter 2020, the advent of the international coronavirus pandemic probably was not the only important variable encouraging weakness in global stock and commodities marketplaces. Recall that before the coronavirus problem became increasingly severe during first quarter 2020, the UST 10 year note yield climbed from 1.43 percent on 9/3/19 to 1.97pc on 11/17/19 (1.95pc on 12/19/19; 1.90pc 1/9/20).

In addition to previous increases in US Treasury yields, the United States dollar sometime in early 2020 probably became "too strong" for many emerging marketplace sovereign (and emerging marketplace corporate) issuers of dollar-denominated debt needing to repay their dollar obligations. This probably assisted yield increases in (price falls for) not only such emerging marketplace sovereign (and corporate) debt instruments, but also yield climbs in "related" relatively low-quality sovereign and other corporate debt around the globe. The pressure of rising worldwide yields going into early 2020 helped to undermine both advanced nation stock playgrounds such as the S+P 500 as well as emerging stock marketplaces.

Substantial ongoing inflation and gigantic government debt are crucial variables generating the current rising United States and global interest rate outlook. Compare interest rate yields in America and elsewhere with consumer price index and similar measures.

Spotlight the upward flight of American inflation measures such as the Consumer Price Index. For several months (and long before Russia's late February 2022 invasion of Ukraine), US CPI-U inflation has surpassed five percent. America's CPI-U (all items) soared 8.5 percent year-on-year in March 2022 (up 6.5 percent without food and energy), 7.9 percent year-on year in February 2022, and 7.5 percent year-on-year in January 2022, following the considerable 7.0 percent year-on-year climb in December 2021. March 2022's inflation figure represents the largest 12 month increase since the period ending four decades ago in December 1981. November 2021's CPI-U advanced 6.8 percent year-on-year, accelerating from the big rise of 6.2 percent in October 2021, and also from the hefty year-on-year trend of between 5.0 and 5.4pc for the months of May through September 2021. Compare the tame 1.4pc year-on-year rise in December 2020 (Bureau of Labor Statistics, 4/12/22; next release 5/11/22).

The OECD's February 2022 CPI (all items, Table 1; 4/5/22; next release 5/4/22) for the OECD countries rocketed upward 7.7 percent year-on-year, the highest rate in about 30 years (since December 1990), continuing the trend of higher consumer price inflation. January 2022's blasted up 7.2percent year-on-year. December 2021's surged 6.6 percent year-on-year; November 2021's leaped 5.9pc year-on-year. The OECD's year-on-year CPI measure ascended 5.2 percent in October 2021, 4.6 percent in September 2021, 4.5pc in August 2021, and 4.6 percent in July 2021. Compare December 2020's modest 1.2 percent climb.

Government debt levels as a percentage of GDP in America and many other key countries were substantial and very elevated from the historical perspective prior to the early 2020 advent of the coronavirus pandemic. Monumental government deficit spending (fiscal stimulus) thereafter by many nations (demand for credit) further assists yield ascents.

In regard to the Fed's rhetoric (opinion) that longer run personal consumption expenditures (PCE) inflation belongs around two percent, a 50 basis point real return via the UST 10 year pushes its yield up to 2.50 percent, beneath its recent high. Yet suppose CPI-U inflation seems likely to remain around seven percent year-on-year. Then the UST 10 year note yield probably will not border 3.00 percent; it will rise substantially. Even if the CPI-U rate plummets to four percent year-on-year, that obviously exceeds a three percent UST yield. Therefore the UST 10 year rate probably will climb more; a 50 basis point real return relative to four percent inflation gives a yield of 4.50 percent.

American wage growth in real terms relative to inflation has been negative for many months. However, in nominal terms wage increases have raced higher. According to the Atlanta Fed's Wage Growth Tracker, the three-month moving average of median nominal wage growth (overall, unweighted) stood at 3.0 percent in May 2021. March 2022's attained 6.0pc, exceeding the prior highs at 5.4pc of June 1998 and November 2000, and substantially surpassing the Goldilocks Era's lower top of 4.4pc. Watch and see if worker compensation in real terms finally becomes positive and begins to catch up with inflation.

Over the long run horizon, substantial inflation in America and the OECD relative to current interest rate levels, as well as globally high government (and other) debt levels, probably will propel UST yields upward. For the debt arena, see the International Monetary Fund's "Fiscal

Monitor" (April 2022). Yields for government debt in Germany and other advanced nations likewise will climb. In general, yields of emerging market sovereign debt securities probably will keep marching upward as well. US dollar-denominated corporate debt yields will ascend.

Increasing yields for debt securities around the globe have led to an important top in and probably to bear trends for the American stock battlefield (S+P 500 high 1/4/22 at 4819) and related advanced nation stock territories. Rising international interest rates also led to the earlier (around mid-February 2021) pinnacle (and subsequent declines) in emerging marketplace stocks in general. Ongoing yield increases will continue to weaken emerging marketplace stocks.

The major yield increase trend in the United States Treasury marketplace (use the UST 10 year note as a benchmark) started 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 ascended sharply 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 yields).

	1Q20 Yield Bottom	Spring 2020 Yield Low	Later 2020 Yield Low	1Q21 <u>Yield High</u>	Aug 21 Yield Low	Recent Yield <u>High</u>
UST 10	.31 pc (3/9/20)	.54pc	.50pc	1.77pc	1.13pc	3.01pc
Year		(4/21/20)	(8/6/20)	(3/30/21)	(8/4/21)	(5/2/22)
Ger	91pc	59	67	07	52pc	1.01pc
Bund	(3/9/20)	(5/5/20)	(11/4/20)	(5/19/21)	(8/5/21)	(5/3/22)

The UST 10 year note yield attained an important interim high with 3/30/21's 1.77 percent. The UST 10 year yield eventually broke above that late March 2021 summit, 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). On 2/25/22, around the time of the Russian invasion, the UST 10 year note yielded 2.01pc.

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 5/2/22's 3.01 percent. The German Bund likewise established an interim yield low around then, on 3/4/22 at -.10 (negative), yet its yield thereafter walked upward.

The timing of an interim top in the nominal Broad Real Dollar on 3/8/22, as it occurred at the same day as the 3/7/22 yield low indicates that the Russian invasion and the financial sanctions response by the United States (and many other nations) inspired a race to acquire US dollars. The UST's flight to quality yield trough on 3/7/22 occurred alongside interim lows in the S+P 500 (3/8/22's 4158 and 3/14/22's 4162; these followed an earlier and slightly lower S+P 500 interim trough, 2/24/22's 4115) and spike pinnacles in commodities in general (broad S&P GSCI 3/8/22 at 853.3).

Previous essays pointed not only to rising rates for high-quality government debt outside of the United States, as in Germany. A long run rising yield environment is an international

phenomenon. Recall the UST 10 year's 8/4/21 interim yield low at 1.13 percent. The rising yield trend since summer 2021 in both US corporate debt securities and US dollar-denominated government bonds issued by emerging market nations, when interpreted in the context of the UST 10 year note's similar pattern (and US and international inflation jumps), reflects the substantial probability of a major and sustained climb in overall global interest rates. An overall increase in global yields, in both high and low-quality debt instruments, has led to the recent weakness in the S+P 500 and other key stock marketplaces.

Let's review a benchmark for United States corporate interest rates travels over the past two 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 (statistics below from the St. Louis Fed, data through 5/2/22). 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 mind.

The Baa made 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 dramatically crashed alongside global stock marketplaces to their March 2020 major bottoms.

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 since summer 2021.

	1Q20 Price <u>Low</u>	Price <u>High</u>	Interim Price <u>Low</u>	Price <u>High</u>	Price Low	Summer 2021 (and Later) Price <u>Highs/Yield Lows</u>	Recent Yield <u>High</u>
Baa	1		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)	5.07 (5/2/22)

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 yield high since summer 2021 of 5.07 percent is a decisive breakthrough of 3/18/21's 3.88pc barrier.

	1Q20 Price Low	Price <u>High</u>	Interim Price Low	Price <u>High</u>	Price Low	Summer 2021 (and Later) Price <u>Highs/Yield Lows</u>	Recent Yield <u>High</u>
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)	89.59 (5/2/22)

105.83 (2/2/22) 103.51 (2/16/22) 98.41 (3/17/22)

The EMB collapsed 22.8 percent from 1/4/21's 116.09 to 5/2/22's low. Note the EMB's pattern of lower interim price highs since January 2021, which resembles the picture of emerging marketplace stocks since mid-February 2021.

The rising yield trend in both US corporate and US dollar-denominated government bonds issued by emerging market nations since summer 2021, when interpreted in the context of the UST 10 year note's similar pattern (and American and international inflation jumps), reflects a major and sustained climb in overall global interest rates. The climbing yield links to weakness in the S+P 500 and other key stock marketplaces.

The Baa's yield currently borders 3/20/20's 5.15oc coronavirus epoch summit. The EMB's 5/2/22 price low is rather close to 3/18/20's 85.00 bottom. This ongoing upward climb in yields in the Baa and EMB close to their March 2020 highs interrelates with (confirms) the price falls in the S+P 500 (and emerging stock marketplaces).

Watch interest rate credit spread trends, such as those between high-quality and low-grade sovereigns, or between high-grade sovereign debt and lower-quality corporate debt. Widening credit spreads probably are a danger signal warning of (confirming) weakness in the S+P 500, other advanced nation stocks, and emerging stock marketplaces. For the Baa less US Treasury 10 year spread, the pandemic's widest expanse was 3/23/20's 431 basis points. 11/10/21's 166 basis point differential is a critical bottom. The spread gradually widened, with 3/10/22's 238 basis points the high since. The differential eroded to 177 basis points on 4/5/22, but widened to 4/26/22's 206bp.

THE US DOLLAR: TWISTS AND TURNS

History reveals complicated and dynamic relationships between the United States dollar, and American stock and interest rate marketplaces (and other important global equity and debt battlefields) and commodities arenas. Convergence and divergence (lead/lag) patterns between marketplaces and other "economic" phenomena can change or transform, sometimes in revolutionary fashion.

Let's review US dollar history to enhance the perspective on its lofty heights in early 2020 and during 2022 and to portray its relationship to other financial marketplaces. The Federal Reserve (H.10) releases a real as well as a nominal "Broad Dollar Index" (including both goods and services). The US real "Broad Dollar Index" is a monthly average (January 2006=100; 5/2/22 latest release). The Fed's nominal Broad Dollar Index release provides daily data (5/2/22 latest release, 4/29/22 most recent data point).

Recall that during the global economic crisis of 2007-09, America's real Broad Dollar Index rallied from a low at 86.8 in April 2008 (87.2 May 2008) to 101.6 in March 2009. The US dollar's appreciation coincided with the S+P 500's drop from its important 5/19/08 interim top at

1440 (S+P 500 peak occurred 10/11/07 at 1586) and its major bottom at 667 on 3/6/09. Thus back then, a strengthening dollar paralleled a big stock marketplace slump.

However, guidelines such as "a weak (weakening) US dollar equals (leads to; confirms) strong (strengthening) American stocks" and "strong (appreciating) US dollar means feebler American stocks" are not always true in practice. Numerous other variables matter and therefore influence financial fields and their interrelationships.

Thus a strong (bullish; high-priced) S+P 500 can associate for quite some time with a lofty (bullish) dollar. One aspect of such a scenario can involve central bankers around the globe (not just the Fed) repressing policy interest rate levels (and thus government debt yields) relative to inflation. In a low or negative real return from government debt securities environment, investors and other buyers enthusiastically search for yield (adequate return) in stocks, lower-quality sovereign and corporate debt, and even commodities (use the broad S&P GSCI as the weathervane for commodities in general). Given their size and substantial market share, dollar-denominated securities are critical destinations for such yield-hunters; also, much of world commodity trade occurs in dollars.

Alternatively, a peak in the S+P 500 or commodities (or both) and their subsequent weakening can interconnect with an "overly strong" US dollar, depreciation in the US dollar from an important height, or both. A "too high" US dollar can help to spark significant declines in the S+P 500, and the US dollar and stocks even may fall "together" in bear slumps. Imagine widespread central bank tightening measures involving a notable actual or highly probable sustained boost in interest rates (particularly in real yields).

Assume a long-running trend of a strong dollar (use the Fed's Broad Dollar Indices as the benchmarks) alongside a bullish pattern for the S+P 500 (and commodities in general) exists, and that the dollar finally has reached a historically rather elevated height, so that its appreciation probably has made it "too strong" (for it to easily sustain that towering height). Thus the emergence of noteworthy weakness in the S+P 500 (or commodities, or both) can confirm the existence of an overly strong US dollar; the very strong dollar thus has helped lead to declines in stocks and commodities in general. Recall the early months of calendar 2020. Also, the US dollar eventually can weaken from a lofty elevation, as it did after March/April 2020.

With calendar 2020 in mind, calendar 2022 history for the dollar offers a warning sign that the bullish trends for stocks and commodities since their spring 2020 lows have ended. And the long run rise in US Treasury interest rate (and other international) yields likewise has provided a related danger signal to stocks and commodities.

The nominal Broad Dollar Index made an important initial high at 117.7 on 3/8/22, and it has become even stronger thereafter. Significantly, the broad S&P GSCI's high occurred 3/8/22 at 853.3. ICE Brent/North Sea crude oil's (nearest futures continuation) pinnacle in its astonishing climb occurred on 3/7/22 at 13913. COMEX copper (nearest futures) attained its top at 5.010 on 3/7/22. Note also the 3/7/22 timing for CBT wheat's spike high of 1425. These various commodity tops occurred in "Russia (or) Ukraine-related commodities". For example, Russia is a big oil exporter, Ukraine a key grain exporter. COMEX gold's high to date (nearest futures continuation) also occurred on 3/8/22 at 2072, with a second and lower high on 4/18/22 at 1997.

According to the NYTimes (3/4/22, ppB1, 4), America and its comrades "have weaponized the most powerful nonmilitary tool they have available: the global financial system." For example,

their arsenal of sanctions froze billions of dollars of Russian assets held by their own financial institutions and removed Russian banks from SWIFT, the messaging system that enables international payments. The widespread imposition of assorted sanctions (note the oil embargo as well) on Russia by America and some of its allies after the Russian invasion probably assisted the stage in the dollar rally up to its early March 2022 interim top as well as the frantic price rally in many commodity marketplaces around then.

Russia is not a major United States trading partner. However, the Russian Ruble's cross rate trend and the timing of its recent low against the US dollar is a relevant variable in assessing whether the US real Broad Dollar Index recently became "too strong" (and probably will weaken) and whether commodities in general and the S+P 500 established major tops.

The Ruble attained a critical low around two years ago, on 3/18/20 at 82.90. That critical Ruble trough was challenged thereafter by a low on 11/2/20 (at 80.95) and by 80.41's valley on 1/26/22, but the mighty dollar did not destroy that resistance until it rallied just after the Russian invasion of Ukraine on 2/24/22. The Ruble made an interim high against the dollar on 2/10/22 at 74.26. After an initial low near 90.00 on 2/24/22, and a minor high at 80.97 on 2/25/22, the Ruble was massacred, falling about 107.7 percent from 2/10/22's elevation to 154.25 on 3/7/22. Since 3/7/22, the Ruble has rallied sharply, falling beneath 70.00 on 5/3/22.

The real Broad Dollar Index ("BDI") started a major bull appreciation from July 2011's bottom at 83.9. The rally, though its path had various twists and turns, persisted for almost ten years. The real BDI peaked in April 2020 at 113.4.

Note the significant run up in the real BDI in the final stage of its bull trend from February 2020's 107.9 to March 2020's 111.8 and April 2020's 113.4. For the entire 2006 to the present time span, April 2020's elevation is the high. It also exceeds December 2016's lofty top at 110.0. Thus the April 2020 height represents a very (and probably too) strong dollar.

But the real BDI, as it is a monthly average, does not tell the whole story of the last chapter in that US dollar appreciation and its interrelation with trends in international securities domains. The nominal BDI on 2/19/20, the day of the S+P 500's peak at 3394, was 116.8, close to its 3/3/20 height (it started calendar 2020 with 1/2/20's 115.0). Recall the nominal BDI's sharp appreciation (rally) in March 2020. From 3/3/20's 116.5 (the same day as the critical 3137 drop-off point for the S+P 500), it blasted up to 126.1 on 3/23/20, an 8.2 percent leap in only 20 days.

This US dollar spike probably led to (contributed to; confirmed) the S+P 500 and many other marketplace price crashes. The S+P 500 bottomed on 3/23/20 (the same day as the nominal Broad Dollar Index high) at 2192. Recall the timing of the price trends in other stock marketplaces as well as in emerging marketplace sovereign debt and US dollar-denominated corporate securities.

What do the following and current horizons on the US dollar reveal? Dollar depreciation ensued for a while. The real BDI fell to 103.2 in January 2021 (compare March 2009's global economic disaster pinnacle at 101.6). However, the dollar's bullish climb resumed, with the high since then April 2022's 112.6, a substantial appreciation of 9.1 percent. Also, from a long run historical perspective, April 2022's real Broad Dollar Index is very strong and arguably "too high" (as was March 2022's 111.3). It neighbors April 2020's pinnacle and exceeds December 2016's summit.

This strengthening US dollar pattern and the current high BDI elevation represent a fearsome risk for emerging marketplace sovereign and corporate debtors, particularly for those with substantial US dollar-denominated debt, and more especially within an overall trend of rising interest rates for dollar (and other) debt securities. The ongoing weakening trend in emerging stock marketplaces since February 2021 partly reflects this noteworthy dollar advance. In part due to the interconnections of global stock and other financial marketplaces, especially given a trend of increasing worldwide interest rates, these factors eventually encourage declines in the S+P 500.

1020 **Key Low** Percent Fall Next **PC Rally** High (date) Level (date) from 1Q20 High High (date) from 2021 Low Nominal 126.1 110.9 120.2 12.4pc 8.8pc (1/6/21)**Broad Dollar** (3/23/20)(4/28/22)Index 110.5 (6/1/21)

The dollar of course did not ascend as quickly from January (June) 2021 to the present as quickly as it did during March 2020. Yet importantly, the price appreciation in the real and nominal Broad Dollar Indices since around January (June) 2021 up through April 2022 is greater in percentage distance terms than the 8.2 percent rally (using the nominal BDI) during March 2020. When interpreted alongside rising yield trends in the UST 10 year note as well as in emerging marketplace sovereign debt and US dollar-denominated corporate securities, this BDI strength (bull move) since January/June 2021 probably not only assisted weakness in emerging marketplace stocks, but it also warned of significant price falls in the S+P 500 and various advanced nation stock marketplaces linked to it. The current high BDI level probably remains a bearish omen for emerging marketplace stocks and the S+P 500 as well as commodities in general.

STOCK PRICE PATTERNS

"If it keeps on rainin' levee's goin' to break
When the levee breaks, I'll have no place to stay...
Cryin' won't help you, prayin' won't do you no good
When the levee breaks, mama, you got to move". Led Zeppelin, "When the Levee Breaks"

Prices for both emerging marketplace stocks and emerging marketplace debt securities "in general" peaked in first quarter 2021. Price tops (yield bottoms) in key emerging marketplace interest rate instruments (around early January 2021) preceded (led to) mid-February 2021's summit in "overall" emerging marketplace equities. Therefore the subsequently rising yields in important emerging marketplace government (and corporate) debt instruments, as well as rising interest rates in the US 10 year note, helped to create the key peak in February 2021 and the ensuing downtrend for emerging marketplace stocks in general.

"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 30.0 percent portion of the EEM (see BlackRock's iShares website, 3/31/22).

	1Q 2020	1Q 2020	Interim	Take-Off	Subsequent
	<u>High (date)</u>	Low (date)	<u>High</u>	Low (date)	<u>Highs (to date)</u>
EEM	46.32 (1/13/20) 44.84 (2/12/20) 42.08 (3/3/20)	30.10 (3/23/20)	45.56 (8/28/20)	42.29 (9/25/20) 44.41 (10/30/20)	58.29 (2/16/21) 56.18 (6/1/21) 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) 50.11 (2/10/22) 46.78 (4/4/22)

Rising yields in emerging marketplace debt securities apparently helped lead to price tops 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 fields produced further 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 glorious 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 3/15/22's 40.80, a violent 30.0 percent fall. The trough at 41.15 on 4/26/22 following 4/4/22's interim high neighbors this. A sustained EEM break beneath March 2022's valley (compare the mid-March 2022 timing of lows in the broad GSCI and within the petroleum complex) probably will encourage further withering in the S+P 500 and related advanced nation equities.

Price convergence between emerging marketplace stock and debt securities probably will persist. If UST yields continue their upward move and climb substantially, that will place pressure on prices of emerging marketplace debt instruments and equities as well. Looking ahead, emerging marketplace stocks probably will remain under siege and continue to decline alongside the S+P 500.

All else equal, rising interest rates (particularly in the US dollar-denominated domain), especially when linked with US dollar appreciation, increase burdens on emerging marketplace sovereign and corporate borrowers. The rally in the United States dollar since around January 2021 (see the Fed's H.10 real Broad Dollar Index) helped to erode prices for emerging marketplace dollar-

denominated sovereign and corporate debt instruments, and thereby to weaken emerging marketplace stocks. The real BDI has been strong during 2022.

	1Q 2020 <u>High (date)</u>	1Q 2020 <u>Low (date)</u>	Interim <u>High</u>	Take-Off Low (date)	Subsequent <u>High (to date)</u>
S+P 50	00 3394 (2/19/20) 3137	2192 (3/23/20)	3588 (9/2/20)	3209 (9/24/20) 3234	4819 (1/4/22)
	(3/3/20)			(10/30/20)	4637 (3/29/22)
					4513 (4/21/22)

The 1/4/22 high skyrocketed 119.8 percent from 3/23/20's valley.

The S+P 500 low since its peak is 5/2/22's 4063, edging beneath 2/24/22's 4115 (and minor lows at 4158 on 3/8/22 and 4162 on 3/14/22) and a 15.7 percent fall from 1/4/22's majestic summit.

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."

The bull move in the broad S&P GSCI (see petroleum prices as well) from around early December 2021 to late February 2022 helped to undermine prices for the S+P 500 and related stock domains. ICE Brent/North Sea crude oil (nearest futures) rallied from 6572 on 12/2/21 to 10579 on 2/24/22. Growing fears regarding the potential for a Russian invasion probably played a role in the S+P 500's drop from its early February 2022 interim highs. Note the S+P 500's drop off points on 2/2/22 at 4595 and 2/9/22 at 4590 in the context of the further leaps in the broad S&P GSCI from its interim lows on 1/24/22 (595.2)/2/9/22 (627.7)/2/18/22 (632.1).

However, rising commodities prices were not the only variable helping to lead to (encourage) the S+P 500's decline. Economic (financial, commercial, business) and political leaders and their troops in investment and other camps should not blame the S+P 500's peak and following slump since early January 2022 primarily on Russia's invasion of the Ukraine, or on fears this event would occur. Many observers were surprised by the Russian attack, or at least that it occurred "as soon and as significantly as it did."

Significantly, the time of the S+P 500's awesome 1/4/22 high at 4819 and its initial 12.4 percent correction to 1/24/22's initial low at 4223 preceded Russia's 2/24/22 invasion of Ukraine by several weeks. Thus that attack did not initiate significant S+P 500 weakness. Other factors also inspired the S+P 500 decline from its January 2022 peak (and thereafter).

In a yield repression era with low inflation, soothing central banking wordplay and devoted investment (buying) rhetoric from Wall Street and financial media guides inspire many investment pilgrims (buyers) to seek good (acceptable) yields (sufficient return) from American and other stock marketplaces, and elsewhere. The Fed, in its long-running, highly accommodative monetary policy, definitely did not perform well as a chaperone in regard to potential inflation. Actually, its tremendous money printing (quantitative easing) helped to create and sustain the significant consumer price inflation over the past several months.

Yet when interest rate yields look like they no longer will be significantly repressed, when inflation in signposts such as consumer price indexes increasingly looks very substantial and likely to persist, stock marketplace and other asset owners may become less willing to keep buying and holding. At some point, the search for yield orientation in the S+P 500 (related to "buy the dip" hymn and diversification dogmas) may shift to a run for cover (flight to safety) attitude.

Rising American and international interest rates encouraged the decline after 1/4/22 in the S+P 500. Recall the UST 10 year note's yield climb prior to the peaks in first quarter 2020 in the S+P 500 and emerging marketplace stocks. In addition to the ascending United States (and other) yields (increasing inflation; as well as lofty debt levels and ominous debt outlook), central bankers finally began admitting that rising and substantial inflation was not a temporary trend.

For quite some time following February 2021, an increasingly feeble emerging marketplace stock (EEM) price picture (note the pattern of lower and lower interim tops) substantially contrasted with and thus diverged from the S+P 500's magnificent ongoing bull charge. America's S+P 500 and stocks in other advanced nations triumphantly flew to new highs after February 2021 while emerging marketplace equities marched downhill (price divergence).

Nevertheless, despite price trend divergence between the S+P 500 and the EEM from around mid-February 2021 through end December 2021, emerging marketplace stock price and time patterns since at least the last years of the Goldilocks Era and 2007-09's ensuing global economic crisis generally have converged with those of the S+P 500. Over the long run, these stock landscapes are bullish (or bearish) "together" (have similar price and time trends). For example, the EEM's Goldilocks Era major high occurred 10/31/07 at 55.83. Compare the neighboring timing of the Goldilocks Era's S+P 500 summit, 10/11/07's 1576. The EEM attained its 1/13/20 peak at 46.32 fairly close in time to the S+P 500's major high at 3394 on 2/19/20.

As of around early January 2022, emerging stock marketplaces had been weakening for quite some time, but their trend and that of the S+P 500 (finally) were converging (compare the timing of the S+P 500's 1/4/22 peak with the EEM's 1/12/22 interim high at 50.89), and thus helping to lead the S+P 500 downhill. Don't overlook the timing of the S+P 500's subsequent drop-off points on 2/2/22 at 4595 and 2/9/22 at 4590 alongside the EEM's early February 2022 interim top.

From its long run historic perspective, the S+P 500's valuation in early January 2022 (and for several months before then) probably was high (although it is less so nowadays).

Moreover, the strong United States dollar prior to Russia's late February 2022 attack also pointed to US stock marketplace weakness. That dollar strength persists now.

The astounding price spike to their early March 2022 pinnacles in the broad S&P GSCI, petroleum, wheat, and many other commodities occurred after the Russian invasion. However, the S+P 500's initial low occurred at the time of the initial Russian assault, at 4115 on 2/24/22, a withering 14.6 percent decline from its January 2022 peak. The S+P 500 rallied significantly following its 2/24/22 trough, but it resumed its downhill travels.

Over the long run, as price trends between commodities "in general" and the S+P 500 in general have converged, let's further examine the relationships between these marketplace sectors.

Note the 2/24/22 timing of the S+P 500's interim low at 4115 alongside the broad S&P GSCI's 2/25/22 take-off rally point at 648.0. A critical Brent/North Sea crude oil take-off stage started with 2/25/22's 9600. On the emerging stock marketplace front, an EEM trough occurred 3/15/22; compare the timing of minor lows in the S+P 500 at 4158 (3/8/22) and 4162 (3/14/22).

The broad GSCI made a second and lower high on 3/24/22 at 789.7. See 3/24/22's lower tops in ICE Brent/North Sea (12374) and NYMEX crude oil (11664). Compare the timing of the recent S+P 500 high at 4637 on 3/29/22 with 3/24/22's one for commodities in general. The S+P 500 made an interim high on 4/21/22 at 4513; the If the convergence between commodities in general and the S+P 500 (and emerging marketplace stocks) continues, a further bear broad GSCI attained a minor top on 4/18/22 at 784.1. A descent in commodities in general beneath their mid-March 2022 lows (broad GSCI's 3/15/22 at 679.3; Brent/North Sea crude oil's trough 3/16/22's 9693) probably will portend a renewed (or further) fall in the S+P 500.

The bottom line for the S+P 500's long run trend remains unchanged. Its heavenly bull move following March 2020's dismal bottom up to January 2022's high probably ceased with a major peak in January 2022. A bear trend of at least 20 percent is likely, and one notably greater than that is probable.

For the S+P 500, a five percent dip from 1/4/22's 4819 equals 4578. Many marketplace wizards define a "correction" in stocks as a decline of ten percent or more from a notable high. It is a marketplace truism that support (or resistance) looks rather formidable... until it breaks. Experts label a collapse of at least twenty percent from a peak as a bear move. A ten percent decline from 4819 gives 4337. A twenty percent plunge from 4819 equals 3855, a vicious 25pc slump 3614, and a dreadful 33pc gives 3209. The S+P 500 attained its pre-coronavirus pandemic peak at 3394 on 2/19/20; the marketplace's bull charge accelerated following the crucial interim bottom at 3209 (9/24/20)/3234 (10/30/20).

Some bullish underpinnings for the S+P 500 of course exist. According to the International Monetary Fund, world GDP growth likely will decline from 2021's robust 6.1 percent to a still fairly strong 3.6 percent in both 2022 and 2023 ("World Economic Outlook, Table 1.1; April 2022). United States output grew 5.7 percent in 2021; the IMF expects US GDP to expand 3.7pc in 2022 and 2.3pc in 2023. China's GDP climbed substantially in 2021, rising 8.1 percent. The IMF predicts China's GDP will increase 4.4 percent in 2022 and 5.1pc in 2023.

US corporate earnings forecasts remain optimistic, and previously "high" valuations have subsided somewhat. Share buybacks by American corporations apparently have been significant. The American housing marketplace remains strong. And might many people purchase homes and stocks (and some commodities, especially in distant month contracts) until yields for United States Treasury instruments such as the UST 10 year note (and other key debt securities

signposts) provide a decent real return relative to inflation? Besides, if inflation (as in the consumer price index) stays elevated, won't that (all else equal) help to raise the price of goods, services, and assets priced in nominal terms, including the S+P 500 price? Unemployment levels are low.

If the Russia/Ukraine war ends or at least has a notable ceasefire (although one does not look imminent as of now), stocks may rally.

In any event, looking forward, the S+P 500 probably will continue to retreat. In regard to the probabilities of a renewed slump in the S+P 500, underscore the rising United States Treasury yield trend, including its climb after the S+P 500's 2/24/22 low. The global inflation and debt situation is substantially worse now than it was in first quarter 2020. As the head of the Bank for International Settlements proclaimed a month ago, "A key message is that we may be on the cusp of a new inflationary era. The forces behind high inflation could persist for some time." ("The return of inflation"; 4/5/22). The US dollar remains strong. These two factors will tend to weaken the S+P 500 as well as commodities in general. In addition, even if commodity prices in general weaken, they remain high from the historical perspective, and miles above the early 2020 tops achieved prior to the global coronavirus disaster. Do not forget the relevance of 2020 trend relationships (convergence patterns) between marketplace domains in analyzing the current 2022 situation.

GDP growth for the world, the United States, and China may well be less than the IMF predicts. Not only has the S+P 500 fallen substantially since early January 2022. First quarter 2022 American GDP dropped at a 1.4 percent annual rate. Does a recession, or at least very low future GDP increases, loom for the US? Some might wonder if American (and other NATO) support for Ukraine in its war with Russia exacerbates US (and global) inflation (and makes some business investment appear overly risky), thereby tending to endanger economic expansion. China's stringent anti-covid strategy probably hampers the country's growth. In addition, China has massive corporate (especially property-related) debt.

Note the decline in the Shanghai Composite Index since mid-February 2021's peak (2/18/21 at 3732; low to date is 4/27/22's 2864, a 23.3 percent fall). See 12/31/21's 3708 minor top (1/4/22's 3652) as well as 3/3/22's 3500 and 4/7/22's 3290. Underline the timing of these descending interim highs in the Shanghai Composite in recent months in the context of various tops in the EEM and S+P 500. Compare the timing of highs in the EEM and S+P 500.

In this context of Chinese stock marketplace weakness, note the recent sharp depreciation of the Renminbi against the US dollar over the past two months. The Renminbi established its cross high against the dollar on 2/28/22 at 6.304. The take-off point of its depreciation was 4/18/22's 6.361; compare the timing of the recent interim high in the S+P 500, 4/21/22's 4513, and the S+P 500's subsequent fall. The Renminbi's recent cross rate low is 4/29/22's 6.650, a 5.5pc nosedive from 2/28/22's level.

Many investors around the globe, particularly owners of United States and other advanced nation stocks, probably have faith (or at least are hopeful) that the Federal Reserve and its comrades will fight to support the S+P 500 (and related benchmarks) through strong rhetoric and perhaps significant action if the S+P 500 declines around twenty percent or more from a prior noteworthy high. Indeed, the beloved Fed often has been accommodative in the past! Yet, even if the Federal Reserve elects to slow the speed of its interest rate (Federal Funds) increases, the Fed probably

has less room to maneuver and rescue stocks nowadays. United States and OECD inflation over the past several months is much higher than that in early 2020 (and for a more than twenty-five year span before then). Moreover, US and other international central bank balance sheets are far more bloated at present due to their extravagant debt securities acquisitions than they were in 2020 (and at the outset of the 2007-09 global economic disaster).

Given their massive deficit spending of recent years (including but not limited to the extraordinary coronavirus-related expenditures), highly- indebted governments) probably have less room to maneuver to rescue the global economy (and stocks) than they possessed in early 2020. For America in particular, with its ongoing fierce cultural wars, the upcoming 2022 highly competitive election season makes it very challenging for the parties to enact new economic (financial; business) salvation packages.

COMMODITIES: CONVERGENCE VERSUS DIVERGENCE

The assorted commodities of course have their own supply/demand profiles. Of course in practice, not all individual commodities necessarily trade "together". The price trend of the petroleum complex often is particularly important for conversations regarding the "overall" commodities situation and trend.

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

Although traders must beware of divergence between commodities and the S+P 500 (as in 2007/08), long run history indicates that the price trends for the S+P 500 and commodities in general probably converge eventually even if they diverge (have notable leads and lags) for several months.

The S+P 500's 1/4/22 pinnacle preceded that of the overall commodities complex by about two months. This represents relatively modest divergence between those domains from the time parameter. Recall that 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 on 7/3/08 at 894. ICE Brent/North Sea crude oil attained its pinnacle on 7/11/08 at 14750. However, 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.

The highs for commodities in general occurred in early March 2022 and were followed by a sharp and very substantial (but not an enormous) decline. Note the recent price and time convergence between the S+P 500 (and emerging marketplace stocks) and the overall commodities complex. Compare the drop-off dates of the interim highs in the S+P 500 subsequent to its 1/4/22 pinnacle at 4819, 3/29/22's 4637 and 4/21/22's 4513 with those in the broad GSCI, 3/24/22's 789.7 (following the 3/8/22 summit at 853.3) and 4/18/22's 784.1. In the S+P 500 and for the commodities territory, emphasize the descending steps in the late March 2022 and mid-April 2022 interim highs versus the prior major high.

Regarding trends for the commodities complex going forward, also note the similar timing of their early March 2022 peaks in the context of the nominal Broad Dollar Index's 3/8/22 initial high at 117.7.

Using the broad GSCI as a benchmark, given the very high commodity price levels for early March 2022 from the long run historical perspective, it is unlikely that a bear marketplace trend finished in only one week (or even one month). Keep in view the recent crude oil sales strategies by the US and others from their strategic petroleum reserves. And all else equal, over the long run, very elevated oil prices tend to encourage incremental production and diminish demand.

If commodities in general continue to head downward, and if the Russia/Ukraine war continues, the S+P 500 probably will travel lower alongside them for a while. Suppose commodities in general do not exceed their recent peaks but linger relatively close to them. That situation still probably will continue to place downward pressure on the S+P 500. Sustained rather high commodity prices tend to fuel inflationary concerns. What if key commodities (nearest futures continuation) spike close to or above their early March 2022 highs? That probably will be bearish for stocks, for such action will magnify fears regarding both inflation and an eventual recession.

The following table covering first quarter 2020 to the present enlists the S&P broad GSCI index as a guide to commodities in general, although it is heavily petroleum-weighted. ICE Brent/North Sea and NYMEX crude oil are the nearest futures continuation contracts. The huge rallies in the GSCI and petroleum have helped to fuel consumer price inflation in the US (see the CPI-U), the OECD, and elsewhere. Regarding the increases in the US and OECD's consumer price measures since their troughs around end 2020, note the timing of the November 2020 take-off lows for the GSCI and Brent/North Sea and NYMEX crude oil (nearest futures continuation).

	1Q 2020 <u>High (date)</u>	1Q 2020 Low (date)	Nov 2020 Take-Off Low (date)	Recent Take-Off <u>Points</u>	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)	853.3 (3/8/22) 789.7 (3/24/22) 784.1 (4/18/22)
	1Q 2020 <u>High (date)</u>	1Q 2020 Low (date)	Nov 2020 Take-Off Low (date)	Recent Take-Off <u>Points</u>	High (to date)
ICE Brent/ North Sea Crude Oil	7175 (1/8/20) 6000	1598 (4/22/20)	3574 (11/2/20)	6572 (12/2/21) 6928	13913 (3/7/22)

	(2/20/20) 5390 (3/3/20)			(12/20/21) 8504 (1/24/22) 9012 (2/18/22) 9600 (2/25/22)	12374 (3/24/22) 11484 (4/18/22)
	1Q 2020 <u>High (date)</u>	1Q 2020 Low (date)	Nov 2020 Take-Off Low (date)	Recent Take-Off <u>Points</u>	High (to date)
NYMEX Crude Oil	6565 (1/8/20) 5450 (2/20/20) 4866 (3/3/20)	-4032 (4/20/20)	3364 (11/2/20)	6243 (12/2/21) 6604 (12/20/21) 8190 (1/24/22) 89.03 (2/18/22) 9006 (2/25/22)	13050 (3/7/22) 11664 (3/24/22) 10981 (4/18/22)

The broad GSCI collapsed 20.4 percent from its 3/8/22 top to 3/15/22's 679.3. Brent/North Sea crude oil cratered 30.3 percent to 9693 on 3/16/22, which remains the trough following March 2022's peak (4/11/22 low 9757). NYMEX crude oil plummeted 28.8pc to 4/11/22's 9293 (3/15/22 low 9353).

NYMEX RBOB/gasoline (nearest futures) peaked on 3/7/22 at 3.890, crashing 25.8 percent to 2.886 on 3/15/22. NYMEX diesel's initial crown occurred on 3/9/22 at 4.671. It swooned 37.2 percent to 2.933 on 3/15/22.

NYMEX	242	2758
Intramarket	(12/3/21)	(3/9/22)
Crude Oil Spread	777	
(June 2022 contract price less June 2023 contract price)	(1/24/22)	
	894	2461
	(2/18/22)	(3/24/22)
	999	
	(2/24/22)	
	1248	
	(3/1/22)	

In times where supply interruption fears prevail, many commodity inventory holders choose to hold some extra supply (increase coverage) "just-in-case" (as opposed to low inventory level needs of a "just-in-time" attitude). The explosive price spike in petroleum and many other commodities to their March 2022 highs and their subsequent rapid and substantial price drop evidences that the global supply/demand and inventory picture for commodities briefly entered a "have-to-have" ("buy at any price") situation, and thereby probably enabled the establishment of an extraordinary yet nevertheless final price peak. The behavior of the NYMEX intramarket June

2022 less June 2023 crude oil spread (and the May 2022 less July 2022 CBT wheat spread) confirms this viewpoint. That spread, after its amazing March 2022 peak, spiraled down to 734 on 4/12/22.

Venture back about two years ago to 2020 regarding the issue of historically massive intramarket crude oil spread moves and related "extreme" spread levels in the context of assessing current and predicting future trends for outright (flat) price petroleum trends. As NYMEX crude oil plummeted in its horrific bear market trend of first quarter 2020, a shocking mammoth contango developed in the NYMEX intramarket crude oil spread for December 2020 less December 2021, with the December 2020 contract price slumping to about six dollars per barrel beneath the December contract 2021 price on 4/21/20 (around the date of the huge negative price for nearest futures continuation contract). April 2020's huge negative price for NYMEX crude oil nearest futures alongside this colossal NYMEX intramarket crude oil spread backwardation probably reflected containment problems (oversupply relative to available storage) at the delivery location.

Underscore that a major bull marketplace commenced after the huge negative price level in NYMEX crude oil (nearest futures continuation) and that awesome contango. As the 2022 pattern for NYMEX crude oil (nearest futures) and a key intramarket spread (lofty price, extreme backwardation) is the reverse of that of the 2020 situation, a notable bear marketplace for crude oil (nearest futures continuation basis) probably appeared in March 2022.

Although commodities in general probably established price peaks around early March 2022, that does not preclude brief spikes in individual marketplaces (and especially in the spot, physical or nearest futures continuation contract month; and in some intramarket spreads) toward or even above prior peaks. Such bullish moves probably reflect a near-term, have-to-have situation in which the "free supply" (readily available inventory) is extremely low. They also may suggest that available inventory for the commodity (at least at a given delivery location, and perhaps elsewhere) probably will remain rather low (even if not desperately so) for several more months.

For the post-early March 2022 economic and political scene, such spikes may emerge intermittently in petroleum, natural gas, a base metal, or some agricultural marketplaces such as wheat, especially if the Russia/Ukraine battle continues to be very active for the next several months. For example, NYMEX diesel (nearest futures) briefly exploded to 5.860 on 4/29/22, far surpassing 3/9/22's top at 4.671. That front month diesel contract nevertheless closed at 4.782 on that 4/29/22 day, close to 3/9/22's elevation. Although the NYMEX June 2022 less June 2023 crude oil spread spiraled down to 734 on 4/12/22, it thereafter soared to 2006 on 4/29/22 (above 4/19/22's minor high at 1699).

Consider also the ferocious short-term upward flights in NYMEX natural gas (nearest futures continuation) recently, on 1/27/22 to 7.346 and to 8.065 on 4/18/22. Yet trends for various commodities obviously can vary to some extent, and perhaps substantially; after all, supply/demand situations across the commodity universe are not necessarily identical. Whereas NYMEX and Brent/North Sea crude oil (nearest futures continuation) have not made new highs above their March 2022 peaks (and their subsequent interim highs), NYMEX natural gas (nearest futures) jumped above its 4/18/22 high to reach 8.169 (5/3/22).

If in fact free supply remains quite low for the given commodity, trends for deferred month commodity contracts may remain relatively bullish, even if their prices remain significantly beneath the peaks previously achieved by its spot/physical (or nearest futures) marketplace benchmark. For example, consider NYMEX's December 2022 crude oil contract. Despite its

sharp fall from 3/7/22's 104.80 crest to 3/9/22/s 80.80, 5/2/22's close at 9394 is only about ten percent away from 3/7/22's high.

MAIN STREET VIEWS: CONSUMER AND SMALL BUSINESS CONFIDENCE

Whether or not Main Street dwellers in America have substantial confidence in (optimism regarding) the economic situation reflects and influences their spending and investment. These Main Street attitudes thus intertwine with GDP growth and are relevant variables in assessing (or confirming) trends in the S+P 500.

The US Consumer Confidence Index (Conference Board; 1985=100; 4/26/22) was 107.3 in April 2022, down slightly from March 2022's 107.6. However, April 2022's level dives substantially from June 2021's 128.9, which had neared the pre-coronavirus height (February 2020's 132.6; recall the timing of the first quarter 2020 peak in the S+P 500) and stood fairly close to July 2019's 135.8 top. The ongoing slump in this yardstick since June 2021, which thus commenced well before Russia's invasion of Ukraine, probably is a bearish signal for the American economy and US stocks. Although the Consumer Confidence Index sits well above the coronavirus period depths of 85.7 (April 2020; not long after the S+P 500's March 2020 major bottom) and 87.1 (December 2020), further declines in the CCI toward those troughs will be ominous.

Small businesses play a critical role in the American economy. What about American small business confidence? Review the NFIB's "Small Business Optimism Index" ("Small Business Economic Trends", March 2022; 1986=100). This benchmark peaked in July 2018 at 107.9. Its February 2020 elevation on the eve of the coronavirus pandemic at 104.5 remained high. It plummeted to 90.9 in April 2020. It thereafter rebounded, reaching an interim high at 104.0 in October 2020. Though the Small Business Optimism Index ebbed to 95.0 in January 2021, it rallied to a subsequent top at 102.5 in June 2021, the same month as Consumer Confidence Index top. Like the Consumer Confidence Index, the Optimism Index has retreated, with March 2022's 93.2 the low since June 2021. This slump in the Optimism Index, as well as March 2022's closeness to April 2020's bottom, are bearish warnings for the US economy and S+P 500.

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