

HUNTING FOR YIELD: STOCKS, INTEREST RATES, COMMODITIES, AND BITCOIN

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““Because I want you to know that we’re on our way to Las Vegas to find the American Dream.””
Hunter S. Thompson’s novel, “Fear and Loathing in Las Vegas: A Savage Journey to the Heart of the American Dream”

OVERVIEW

In recent years, fervent yield repression (with resulting low United States Treasury yields relative to inflation) by the Federal Reserve and its central banking comrades, often assisted by money printing (quantitative easing), and accompanied by artful easy money rhetoric, often have encouraged epic quests for adequate “yield” (return) and bullish trends in stocks and assorted other (“related”) marketplace domains. Especially since the emergence of the coronavirus pandemic in March 2020 and the related economic and worldwide stock marketplace crashes, the revered Fed and other central bank wizards, in addition to expanding magnificent money printing programs, have promoted and enforced a yield repression regime.

The heroic Fed earnestly and repeatedly declares its devoted allegiance to its legislatively mandated goals of “maximum employment” and “stable prices”. However, how often does the venerated Fed even mention the third aspect of its monetary policy objectives, “moderate long-term interest rates”? The Fed is eager to deflate (repress) UST yields, and seems happy (even ecstatic) to greatly inflate S+P 500 and home prices. Do the magnificent climbs in stocks and homes represent “stable prices”?

American inflation rates in March 2020 and many months thereafter obviously were lower than those of recent months. Yet even around March 2020 and the next several months, real returns from benchmark United States Treasury instruments across the yield curve were small or negative in comparison to the Consumer Price Index. What about more recent times? The UST 10 year yield is about 1.46 percent, but for the past several months, US CPI-U inflation has surpassed five percent. This negative return situation (which encourages borrowers and debtors but thereby cheats savers and creditors) of course (all else equal) tends to make UST ownership unattractive for many marketplace participants.

What has resulted from keeping yields low and often negative in real terms relative to the current Consumer Price Index and similar inflation gauges? Not only have central bankers assisted spenders (consumption) and helped debtors, but also they have encouraged avid searches for adequate (sufficient) “yield” (“return”) in the S+P 500 (and other international equity realms), emerging marketplace dollar-denominated sovereign debt, corporate debt, as well as in other “asset classes” such as homes, commodities “in general”, and many cryptocurrencies such as Bitcoin. The enthusiastic buying by eager and sometimes frantic yield-hunters has generated meteoric price rallies in the S+P 500 and these other realms since their dismal March 2020 bottoms.

Investment rhetoric encourages price rallies in marketplaces, especially in stocks. Thus Wall Street leaders, supported by the loyal financial media, loudly applaud “investment”, “investors”, and bull moves. Assorted investment generals and their loyal troops perennially fight to identify

stocks (especially American ones) as well as other praiseworthy asset classes to buy (or keep holding).

Widespread marketplace faith still exists in the power of the Fed and its trusty friends to engineer and appropriately manage interest rate yield outcomes, especially in the government securities marketplace. Fed epistles and hymns proclaim its praiseworthy pilgrimage of pursuing the goal of an inflation average of two percent over some misty version of the long run, as well as its noble intention to keep long term inflation expectations “well anchored” at two percent.

The Fed and other central banking magicians and evangelical finance ministers have repeatedly claimed (prayed) that recent inflationary signs in America and elsewhere in recent months are merely “transitory”, “temporary”, or the “result of special factors” (such as high prices for used cars; or, supply bottlenecks). However, this inflation viewpoint probably is wrong.

Convergence and divergence (lead/lag) patterns between marketplaces can change or transform, sometimes dramatically. Marketplace history does not necessarily repeat itself, either entirely or even partly. But marketplace history nevertheless provides guidance regarding the probabilities of future patterns.

Increases in benchmark high-grade government interest rates (such as US Treasuries) and higher yields for lower-quality debt securities (such as corporate bonds and emerging marketplace sovereign debt) probably will weaken the S+P 500 and related advanced nation stock marketplaces. Very elevated government debt levels in America and many other leading nations will help to undermine stocks. Price divergence between the S+P 500 and emerging marketplace stocks (which since February 2021 have not soared to new highs, but instead have declined) also warns of potential weakness in the S+P 500.

Price and time trends for commodities “in general” probably will intertwine with and track those of the S+P 500 and other stock marketplaces.

Cryptocurrencies in recent years have attracted widespread attention and increased “investor” and other trading (and regulatory) attention. Despite the great variety of cryptocurrencies, Bitcoin is a well-known and actively-traded representative of the crypto trading arena. The overall “search for yield” financial environment reflected in the bullish price trend in the S+P 500 and elsewhere has assisted Bitcoin’s price ascent. An important additional factor, but not the only one, supporting Bitcoin’s heavenly price leap has been growing inflation and fears that it may increase further. Of course the supply/demand/available inventory situation of Bitcoin is important, and an exciting new marketplace such as Bitcoin can attract additional buyers into its domain, especially when prices have tended to soar upward significantly. Also, Bitcoin offers people a means by which to hide their assets and money movements from government and other regulatory eyes. And fears about American and other government debt levels and trends probably also have been an important consideration fueling Bitcoin’s climb.

These inflation and debt concerns intertwine with wariness regarding the trustworthiness of political and economic leaders and institutions (including banks). Some cryptocurrency participants probably worry about the long run strength of the US dollar, and perhaps other leading currencies as well. Persistent cultural divisions in America and numerous other nations, helps to build and sustain distrust about institutions and leaders.

Bitcoin's price rise since its creation about a dozen years ago (around the time of the global economic disaster of 2007-09) astonishes observers. However, underline also that since around first quarter 2020, Bitcoin's price and time trends often have paralleled those in the S+P 500 and related stock marketplaces.

Bitcoin's celestial advance to date probably constitutes a danger signal regarding the international financial system and thereby potential economic growth. Nevertheless, Bitcoin and other cryptocurrencies are not integral to the current or near-term functioning of the financial system and the global economy. Moreover, worldwide economic and political leaders have long demonstrated an ability to support traditional global economic (financial, commercial, business) and political arrangements. For example, note the interrelated responses around the globe in 2008-09 and thereafter to the worldwide economic crisis, as well as actions in late first quarter 2020 and thereafter to the fearsome economic downturn (and the 1Q20 stock marketplace crash). Consequently, for the near term horizon at least, if the S+P 500 and related stock marketplaces fall significantly in price, then the Bitcoin price probably will decline (whether at around the same time or eventually) as well.

AMERICA: ADVENTURES IN STOCKLAND

Over 60 years ago, William McChesney Martin, Jr. a former Chairman of the Federal Reserve Board, emphasized: "In the field of monetary and credit policy, precautionary action to prevent inflationary excesses is bound to have some onerous effects – if it did not it would be ineffective and futile. Those who have the task of making such policy don't expect you to applaud. The Federal Reserve, as one writer put it, after the recent increase in the discount rate, is in the position of the chaperone who has ordered the punch bowl removed just when the party was really warming up." (Speech to the New York Group of the Investment Bankers Association of America, 10/19/55).

As the Fed has proclaimed historically, the Federal Reserve guardian of current times unsurprisingly preaches that it will be vigilant and prudent about inflation. However, it nowadays appears that this worthy chaperone has joined and taken a few drinks at the party it helped to set up, and apparently has become at least slightly intoxicated. It apparently worries little about the asset price inflation at the joyous United States stock marketplace party. The Fed likewise seems untroubled by the large and exciting home price climb. Moreover, the Fed believes that substantial increases in recent months in inflation measures such as the Consumer Price Index and Personal Consumption Expenditures Index will be merely "temporary" or "transitory."

Sustained low US Treasury interest rates in America (and negative nominal yields in many other jurisdictions such as Germany) create an especially alluring environment to spark and justify inclinations by "investors" (and others) to buy and hold American stocks. In numerous countries, real interest rates are negative. Many plaintively ask, when government interest rates are paltry and a notable need for sufficient (adequate; reasonable) yield (return) exists, "Where do I put my money?"

Moreover, Wall Street and American Dream rhetoric praise "investment" and "investors" as "rational" and "good", which often inspires buying (and holding) securities and other assets of

“investment quality”. This wordplay, assisted by the financial media, is especially prevalent in stocks in general and the American equity marketplace in particular.

Since the coronavirus pandemic emerged, many Main Street residents eagerly have plunged into the US stock playground, especially from the buy side. Entry into the US stock playground has few barriers for Main Street dwellers nowadays. In general, stock commissions for those trading for themselves are near rock-bottom or non-existent, execution and trade reporting is lightning-fast (internet), and account and order sizes can be very small.

Let’s survey the glorious rally in the S+P 500 and key American stocks from their early first quarter 2020 peak and March 2020’s major low. In recent decades, the economic (financial; business; commercial) world increasingly has become interconnected and thus globalized. Although the supply/demand situation can vary across equity marketplaces (and marketplace sectors and individual stocks within them), broad stock benchmarks for advanced nations generally have followed (moved together with) United States stock trends. Review the generally similar calendar timing for highs and lows in the stocks of advanced nations in general from 1Q20 to the present. This price direction and timing convergence (similar trend patterns) underlines the entangled relationships of the interdependent global economy.

	<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Interim High</u>	<u>Take-Off Low (date)</u>	<u>Subsequent High (to date)</u>
S+P 500	3394 (2/19/20)	2192 (3/23/20)	3588 (9/2/20)	3209 (9/24/20)	4719 (11/5/21)
	3137 (3/3/20)			3234 (10/30/20)	

Sustained money printing, ongoing yield repression, and huge federal deficit spending have played critical roles in launching the S+P 500 higher since March 2020’s major bottom. The 11/5/21 high jumps up 115.3 percent from 3/23/20’s depth, and exceeds 2/19/20’s pinnacle by 39.0 percent.

The S+P 500’s advance had a later acceleration point as well, 7/19/21’s 4233. Its price broke the 8/19/21 interim low at 4368, but rapidly recovered. These summer 2021 S+P 500 depths were assaulted after 9/2/21’s interim high at 4546, but the S+P 500 rallied enthusiastically from 10/4/21’s 4279 trough.

In the wide world of stock hunting, many define a “correction” as a decline of ten percent or more from a notable high, with a bear move a fall of at least twenty percent from a peak. The S+P 500’s largest slump since its March 2020 major trough is the 10.6 percent fall from 9/2/20’s 3588 to 9/24/20’s 3209. Since March 2020’s major bottom, this has been the single modest (and brief) correction during September 2020. The slide from 9/2/21’s 4546 interim high to the subsequent low, 10/4/21’s 4279, was 5.9 percent.

What is a “high”, “average” (“fair value”; reasonable; rational), “low” stock (or other marketplace) valuation is a matter of subjective perspective (opinion). Nevertheless, United States stocks in general (use the S+P 500 as a signpost) valuations appear quite high according to various historical viewpoints.

FactSet (“Earnings Insight”; 11/5/21) proclaims that the forward 12 month price/earnings ratio for the S+P 500 is 21.4, well above the 18.4 five year average and the 16.5 ten year average. According to Refinitiv (“S&P 500 Earnings Scorecard”, 11/5/21), analysts estimate the four quarter forward price/earnings ratio for the S+P 500 at 21.8.

Professor Robert Shiller’s well-known cyclically adjusted price/earnings ratio (P/E 10; “CAPE”) as of early September 2021 (the most recent month on his website as of 11/6/21) stood at 38.34, a substantial advance from March 2020’s 24.82 low (compare March 2009’s 13.32 bottom). The September 2021 CAPE elevation is not far from the record achieved during the dot-com era, December 1999’s 44.20, and exceeds all the other ratio highs going back over a century (into the 1880s), including September 1929’s 32.56 on the eve of the Great Depression and the Goldilocks Era crest (May 2007’s 27.55).

Allegedly high stock valuations for a broad benchmark (or marketplace sectors or individual equities) can remain high or become even higher. Perhaps “this time is different”; a “new era” can persist. And substantial share buyback programs, new buy-side oriented entrants into stock marketplaces (as from Main Street as the coronavirus pandemic emerged and spread), recent and anticipated corporate earnings, and tax policies influence stock price levels and trends. A “buy and hold for the long run” attitude may become more prevalent as stock prices apparently inexorably ascend. The “free (readily available) supply” of stocks belonging to the S+P 500 (or in other indices) can fall. However, especially if key government and other interest rates march significantly higher or threaten to do so when stock valuations are lofty, stock prices probably become increasingly vulnerable to a price decline. In an era of rising interest rates, will corporate earnings turn out to be as high as many currently predict? The Bureau of Economic Analysis announced that US real Gross Domestic Product in 3Q21 rose at an annual rate of 2.0 percent, substantially below 2Q2021’s 6.7pc real GDP increase (10/28/21).

A mineral lick is a place where animals go to lick essential mineral nutrients such as salt from the ground. James Fenimore Cooper’s novel, *The Deerslayer*,” declares: “The deer that goes too often to the lick meets the hunter at last!”

The following list of several very important and widely-watched large capitalization American stocks includes noteworthy members of important equity marketplace indices such as the S+P 500. Of course, each of these US stocks has its own supply/demand pictures, and each has various tales about or involving it. For the “overall” US stock marketplace (use the S+P 500 as a guideline) to have a noteworthy price correction or bear trend, prices for a significant number of large-capitalization American stocks probably must deteriorate. US large-capitalization stocks over the long run often “trade together”.

	<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Take-Off Low (date)</u>	<u>Subsequent High (to date)</u>
Apple	81.96 (1/29/20)	53.15 (3/23/20)	89.15 (7/24/20)	157.26 (9/7/21) 153.17 (10/28/21)

	<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Take-Off Low (date)</u>	<u>Subsequent High (to date)</u>
Microsoft	190.70 (2/11/20)	132.52 (3/23/20)	196.25 (9/18/20) 199.62 (10/30/20)	338.78 (11/5/21)
Alphabet (Google)	1532.1 (2/19/20)	1013.5 (3/23/20)	1406.6 (9/21/20)	3011.4 (11/5/21)

[Alphabet has two publicly traded classes of shares, A and C. Prices for the Class C/GOOG shares are the ones above.]

Amazon	2186.0 (2/11/20)	1626.0 (3/16/20)	2256.4 (5/4/20) 2871.0 (9/21/20)	3773.1 (7/13/21)
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[Amazon dove down to about 3176 on 8/20/21, a fearful 15.8 percent drop from July's top. Its early September 2021 lower interim high occurred alongside Apple's 9/7/21 high to date.]

Facebook	224.2 (1/29/20)	137.1 (3/18/20)	207.1 (6/29/20) 244.1 (9/21/20)	384.3 (9/1/21)
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[Facebook had another take-off point around the level of its September 2020 low, 1/14/21's 244.6. Facebook had a lower interim top following 9/1/21's pinnacle, 10/20/21's 344.0. It tumbled a bloody 19.8 percent from 9/1/21 to 10/28/21's 308.1.]

Tesla	193.8 (2/4/20)	70.1 (3/18/20)	273.0 (8/11/20) 379.1 (10/30/20) 539.5 (3/5/21)	1243.5 (11/4/21)
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[November 2021's record high travels an amazing 17.7 times 3/18/20's 70.1 valley. Tesla's two important troughs after August 2020's low were much higher.

Tesla fell a murderous 40.1 percent from 1/25/21's 900.4 interim high to 3/5/21's trough, but it recently exploded above that January 2021 resistance. Tesla had an important interim top on 4/14/21 (lower than the January 2021 one) at 780.8. After its April 2021 top, Tesla established a string of interim lows on 5/19/21 at 547.0, 7/8/21 at 620.5, and 8/17/21 at 648.8.]

	<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Take-Off Low (date)</u>	<u>Subsequent High (to date)</u>
JPMorgan (Chase)	141.10 (1/2/20)	76.91 (3/19/20)	91.38 (9/24/20) 95.24 (10/29/20)	172.96 (10/25/21)
Johnson & Johnson	154.50 (2/6/20)	109.16 (3/23/20)	133.65 (10/30/20) 151.47 (3/4/21)	179.92 (8/20/21)

[Johnson & Johnson retreated 12.6 percent to 10/12/21's low at 157.34.]

Berkshire Hathaway	347,400 (1/17/20)	239,440 (3/23/20)	297,817 (10/29/20)	445,000 (5/7/21) 439,850 (10/26/21)
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[Berkshire Hathaway fell 8.4 percent to 7/19/21's low at 407,773.]

Thus far, there has been no price breakdown in the overall array of all-stars. However, at least a few of them in the preceding list (Amazon, Facebook, and Johnson & Johnson) arguably have established important highs, as their notable subsequent price declines (corrections) indicate.

US INTEREST RATE HISTORY AND STOCKS

Confucius warns in "The Analects": "He who gives no thought to difficulties in the future is sure to be beset by worries much closer at hand." (Book XV, paragraph 12)

All else equal, rising nominal inflation tends to boost nominal prices of goods, services, and assets. Sustained low interest rates tend to create a low interest rate culture (belief system), and thereby an expectation for continued low yields (and fierce political efforts by those who significantly benefit from such depressed yields to maintain them).

Especially when nominal interest rates offer little or no (or negative) real return relative to inflation, that inspires ardent hunts for yield in stocks and other "asset" realms such as low-grade corporate debt, commodities "in general", and cryptocurrencies. Also, marketplace players (investors, speculators, traders; hedgers, risk managers; the general public; commercial firms, businesses) sometimes race (such as by securing supplies now or sooner rather than later) to "get ahead" of the apparently impending inflation and its consequences. Rising inflation expectations can ignite or further encourage price rises for various goods and services.

Nevertheless, even though nominal inflation tends to propel nominal prices of goods, services, and assets upward, growing widespread fears of substantial sustained inflation eventually can spark and maintain both substantial and worrisome (dangerous) inflationary ascents and

significantly higher interest rates (including real yields) in the UST marketplace and elsewhere. These yield climbs can slow or even reverse price climbs in asset price domains such as stocks and commodities.

Central bank easy money policies (particularly colossal money printing and sustained yield repression) and ongoing government deficit spending have encouraged not only global economic recovery from the coronavirus downturn of late first quarter 2020, but also rising international inflation, both in key weathervanes such as the consumer price index as well as in “asset classes” such as stocks and homes.

Underscore the notable upward march in recent months of American and global inflation measures such as the Consumer Price Index. The OECD’s September 2021 CPI (all items, Table 2; 11/4/21) for the G20 countries rose 4.6 percent year-on-year (up 4.5pc year-on-year in August 2021 and 4.6 percent year-on-year in July 2021). Compare climbs of 2.0pc in December 2020 and 3.1pc in March 2021). For the entire OECD, the September 2021 CPI ascended 4.6 percent year-on-year (August 2021’s climb was 4.3pc versus August 2020). Compare December 2020’s 1.2pc year-on-year increase.

America’s CPI-U (all items; and as noted in the OECD table) increased 5.4 percent in September 2021 year-on-year; June, July, and August 2021 jumped a similar percentage year-on-year. Compare the 1.4pc year-on-year rise in December 2020 (Bureau of Labor Statistics, 10/13/21) and the Fed’s “longer run” target (central tendency) of 2.0 percent for Personal Consumption Expenditure inflation (and calendar 2022’s 2.0-2.5pc PCE forecast range; September 2021 Economic Projections).

However, overall US wages in real terms have risen little, if at all, in recent months. For example, see the US Employment Cost Index in September 2021 (Bureau of Labor Statistics, 10/29/21; see the ECI’s “Historical Listing- Volume IV” Table 4 for constant dollar (real) data). Note also the BLS’s real average hourly and weekly earnings data (Table A-1; 10/13/21).

How often do the Federal Reserve and its central banking friends nowadays criticize themselves for their role in creating sustained substantial (“too much”) inflation in measures such as the consumer price index?

Price gains in the S+P 500 and many commodities such as the petroleum complex, since not only early spring 2020, but also since autumn 2020, have advanced at a rate far in excess of the inflation rate as measured by the US Consumer Price Index. Why are the Fed and other chief central banks generally unwilling to admit that huge price increases in “asset classes” such as stocks (the S+P 500 and related marketplaces), commodities in general, and homes reflect (or portend) significant rises in “Main Street level” inflation as measured by yardsticks such as the Consumer Price Index and the Personal Consumption Expenditure Index?

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 advent of the coronavirus pandemic in early 2020. Massive government deficit spending (fiscal stimulus) thereafter by many nations (demand for credit) further assists yield ascents.

According to the International Monetary Fund's scoreboard, the world's general government gross debt (which includes not only national debt, but also regional/local obligations) as a percentage of GDP leaped from 83.7 percent in 2019 (recall the much lower levels prior to the 2007-09 global economic disaster) to 98.7 percent in 2020, with 2021's height forecast at 98.8pc. For advanced economies, 2019's gross debt of 103.7 percent of GDP spiked to 122.8pc in 2020; the IMF predicts 2021's will remain near that, at 122.5pc. See the IMF's "World Economic Outlook Update" (7/27/21; Box Table 2.1). For the US alone, as federal stimulus spending ballooned, general government gross debt soared from 108.2 percent of GDP in 2019 to 133.6pc in 2020, with 2021's forecast at 134.5 pc, up sharply from 2019's elevation.

Combine the headline numbers for America's various rescue (stimulus) spending schemes enacted during the coronavirus pandemic era. The monumental spending (borrowing) total of \$5.0 trillion represents a massive 21.6 percent of America's calendar 2021 nominal GDP (3Q21 annualized) of about \$23.2 trillion (GDP from the Bureau of Economic Analysis, Table 3; 10/28/21).

Survey the continuing climb in the US federal debt held by the public as a percentage of nominal GDP. According to the Congressional Budget Office, it touches 102.7 percent by end 2021 (compare around 79.0 percent at end 2019). Though federal debt as a percent of GDP dips slightly in subsequent years (2024 is about 99.1pc of GDP), it then expands. By 2031, debt as a percent of GDP grows to 106.4 percent of GDP, the highest in US history. See "An Update to the Budget and Economic Outlooks 2021 to 2031" (7/1/21, and note Table 1; scan also the CBO's 7/21/21 "Additional Information About the Updated Budget and Economic Outlook: 2021 to 2031", Table 1-1). The previous peak, in 1946, followed sizable World War II deficits. The CBO warns in "The 2021 Long-Term Budget Outlook" (Table 1; 3/4/21) that by 2051, federal debt as a percent of GDP will reach a celestial 202 percent.

These CBO's baseline budget projections do not incorporate the gigantic cost of government infrastructure projects suggested by the Biden Administration.

Looking forward over the long run, United States Treasury yields probably will continue to rise. So will yields for government debt in Germany and other advanced nations. In general, yields of emerging market sovereign debt securities probably will keep climbing as well. US dollar-denominated corporate debt yields will ascend. Substantial inflation and massive government debt are important variables for this rising interest rate outlook. Increasing yields for this array of debt securities around the globe probably are leading to an important top and subsequent bear trends for the American stock battlefield and related advanced nation stock territories (and further falls in emerging marketplace stocks).

Tapering (reduced buying) of UST and agency mortgage-backed securities by the Fed reduces demand for them, thus helping interest rates to increase.

"History on Stage: Marketplace Scenes" (8/9/17) and subsequent essays updating it (such as 3/9/21's "Truth and Consequences: Rising American Interest Rates", "Financial Marketplaces: Convergence and Divergence Stories" (4/6/21), and "American Inflation and Interest Rates: Painting Pictures" (5/4/21) 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 signpost. In the worldwide global debt securities marketplace, yield climbs and declines in various other high-quality sovereign debt securities such as those of Germany often roughly parallel and thus confirm UST trends.

In first quarter 2020, the coronavirus problem and related economic weakness obviously inspired a major economic slump and a crash in the S+P 500 and other stock marketplaces (as well as price drops in many search for yield territories such corporate bonds. Yet even 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). The EEM emerging marketplace index peaked on 1/13/20 at 46.32, with the S+P 500's pinnacle not long thereafter, on 2/19/20 at 3394.

A major yield increase trend in the United States Treasury marketplace (use the UST 10 year note as a benchmark) probably started with 3/9/20's .31 percent bottom, which the lows at .54 pc on 4/21/20 at .54 pc and 8/6/20 at .50pc on 8/6/20 confirmed. The UST 10 year note yield high to date is 3/30/21's 1.77 percent. Ongoing yield repression by the Federal Reserve (its huge UST buying assists this) and other countries probably has delayed substantial UST yield increases. However, the UST 10 year note yield has ascended since 8/4/21's 1.13pc low, reaching 1.70pc on 10/21/21).

	<u>1Q20 Yield Bottom</u>	<u>Interim Yield Spike</u>	<u>Spring 2020 Yield Low</u>	<u>Later 2020 Yield Low</u>	<u>1Q21 Yield High</u>	<u>8/2021 Low</u>
UST 10 Year	.31 pc (3/9/20)	1.27pc (3/19/20)	.54pc (4/21/20)	.50pc (8/6/20)	1.77pc (3/30/21)	1.13pc (8/4/21)

“Rising Global Interest Rates and the Stock Marketplace Battlefield” (10/5/21) portrayed and analyzed important price highs and lows (yield trends) for assorted emerging marketplace dollar-denominated (as well as local currency-denominated) sovereign debt and US dollar denominated corporate debt ETFs (“exchange-traded funds”). In a hunt for yield (return) environment, these emerging marketplace and corporate interest rate securities can seem attractive relative to high-grade sovereign debt because of their higher nominal yields. Many investors and other marketplace adventurers charged into these instruments in voracious quests for yield (return) after the Fed and its central banking allies engaged in sustained massive money printing beginning around the end of first quarter 2020 while still maintaining a yield repression policy (and as the global governments enacted gargantuan deficit spending stimulus programs). But even if the emerging marketplace and corporate debt instruments receive the honored label of investment, and even if many of them are deemed high-grade, they are not of the highest investment quality (as currently incarnated by interest rate realms such as the US Treasury and German government debt marketplaces).

Recall the 1Q20 peaks in the S+P 500 and numerous other global stock benchmarks. In the enthusiastic search for yield playground for stocks (both advanced nations and emerging marketplaces) and these debt securities preceding those summits, their bull moves connected with (confirmed) each other. Rising yields in emerging marketplace sovereign debt and US dollar-denominated corporate securities helped to lead to (confirmed) the downtrends in advanced

nation as well as emerging marketplace stock territories. During the murderous price crash, stocks and these lower-grade debt instruments travelled together to their March 2020 lows.

For the current situation for the emerging marketplace sovereign and US corporate debt arena, the assorted instruments reviewed established important price highs around late December 2020/early 1Q21. The price highs for the majority of these instruments in calendar 2021 occurred not long before the high in emerging stock marketplaces in general (EEM's 2/16/21 high at 58.29).

The subsequent slowly rising rate trend for these corporate bonds and emerging marketplace sovereign dollar-denominated debt indicates the increased unattractiveness of such instruments, especially in an environment of increasing inflation, despite yield repression by the valiant Fed and its central banking cohorts. This rising yield pattern probably helps to undermine prices for other search for yield ("investments") such as United States and other stock marketplaces and commodities "in general".

The Federal Reserve's tapering of its ravenous securities consumption program, announced 11/3/21, portends interest rate climbs. This trusty sentinel gathers on 12/14-15/21, and 1/25-26/22. Watch for tightening action by other central banks as well.

EMERGING MARKETPLACE STOCKS

"It never does to trust too much to foresight, for Fortune has her own way of doing things."
Petronius, "The Satyricon"

Emerging marketplace stock price and time patterns since the last years of the Goldilocks Era and 2007-09's ensuing global economic crisis generally have converged (traded "together") with those of the S+P 500. 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.

However, since around mid-February 2021, emerging marketplace stock trends have diverged from those of the S+P 500 and related advanced nation equity benchmarks.

Supply-demand considerations of emerging stock marketplaces vary to some extent from those of advanced nations. However, given the long run historical convergence pattern between the S+P 500 and emerging stock marketplaces, and given the importance of emerging/developing nations (especially China) to the intertwined international economy, this sustained divergence over the since first quarter 2011 probably will not persist.

In this divergence context, the pattern of rising worldwide interest rates (though these yield boosts in the UST and elsewhere indeed have been modest thus far) and the current high valuations for the S+P 500 warn that the eventual convergence between emerging and developed nation stock playgrounds probably will involve falling prices for the S+P 500 and associated advanced country stocks. Thus rising yields and sliding emerging stock marketplace prices probably will lead the S+P 500 downhill.

"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 classify it as an emerging

market nation from the economic perspective. It possesses a 33.5 percent portion of the EEM (see BlackRock’s iShares website, 9/30/21).

	<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Interim High</u>	<u>Take-Off Low (date)</u>	<u>Subsequent Highs (to date)</u>
EEM	46.32 (1/13/20)	30.10 (3/23/20)	45.56 (8/28/20)	42.29 (9/25/20)	58.29 (2/16/21)
	44.84 (2/12/20)			44.41 (10/30/20)	56.18 (6/1/21)
	40.83 (3/3/20)				55.62 (6/28/21)
					53.58 (9/7/21)
					52.62 (10/20/21)

Emerging marketplace stocks, as they began to decline in mid-January 2020, “led” the decline in the S+P 500 and other advanced nation stock cathedrals. Note, however, the similarity in the EEM’s drop-off points in mid-February 2020 and early March 2020 to those in the S+P 500.

Since February 2021 in the EEM, note the pattern of lower highs. This substantially contrasts with the S+P 500’s glorious bull move. The EEM’s low since 2/16/21’s summit is 49.11, reached on both 8/20/21 and 10/6/21, a 15.7 percent drop.

KEEPING IT REAL: COMMODITIES

Madonna sings in “Material Girl”: “Cause the boy with cold hard cash Is always Mister Right, ‘cause we are Living in a material world And I am a material girl.” (Lyrics: P. Brown and R. Rans)

Many marketplace pundits label commodities as an asset class. Such gurus typically claim commodities in general (and arguably some commodities in particular) are suitable instruments for “investment”. Entrancing wordplay praising the wisdom (reasonableness) of diversification in investment holdings aims to make commodities appealing to investors (especially those already owning stock and debt securities) seeking the benefits of having a properly balanced financial (investment) portfolio capable of achieving adequate (sufficient) returns (yields).

The table below enlists the S&P broad GSCI index, although it is heavily petroleum-weighted. ICE Brent/North Sea crude oil is the nearest futures continuation contract. “LMEX” is the London Metal Exchange’s base metals index. Often changes in major trends for commodities in general have occurred at around the same time as those in the S+P 500.

Commodities do not pay dividends or interest. But commodities “in general” in recent years often have been a vehicle by which purchasers (investors, speculators, and other traders) have sought to win sufficient “yields” (returns) from rising prices.

Not only have commodities in general enjoyed bull moves alongside the S+P 500 since their major bottom in first half 2020. Over at least the past dozen years, price and time trends for

commodities roughly have moved alongside those of the S+P 500 (and emerging stock marketplaces). The current stage of recent months in the bull move in commodities has diverged from the sideways to down trend in emerging stocks (EEM).

Looking forward, will price trends for petroleum (and commodities “in general”) continue to converge with those in the S+P 500 and other stock marketplaces? At the dawn of the global economic crisis of 2007-09, the S+P 500 peaked on 10/11/07 at 1576. However, the trends for the broad GSCI and petroleum complex diverged from that of the S+P 500 for a while. 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 (not long after the S+P 500’s final top, 5/19/08’s 1440).

However, though price divergence may emerge between commodities and the S+P 500, long run history and the trend since first half 2020 indicates they probably will trade “together” over the long run. Thus a slump in commodity prices will confirm a fall in the S+P 500 and other stock territories.

	<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Take-Off Low (date)</u>	<u>Subsequent High (to date)</u>
Broad S&P GSCI	453.2 (1/8/20)	218.0 (4/21/20)	333.1 (11/2/20)	599.9 (10/25/21)

Asset price inflation in commodities in general, as in the S+P 500, has been large. The broad GSCI’s 32.4 percent advance above its first quarter 2020 peak, like that for the S+P 500, is substantial.

The skyrocketing price for commodities “in general” (petroleum, for example) over the past year and a half suggests that inflationary forces and trends are significantly more powerful than the Fed believes. In particular, the GSCI’s 80.1 percent and one year long bull move since November 2020’s take-off point (about the time when inflation measures such as the consumer price index began to ascend) reflects substantial and durable inflation pressures, not transitory or temporary ones.

In first quarter 2020, the broad S&P GSCI peaked about the same time as emerging marketplace stocks (EEM). The GSCI cratered from 2/20/20’s 406.6; compare the time of the S+P 500’s crowning height. The GSCI’s spring 2020 trough, like that of the petroleum complex, occurred about a month after those in the S+P 500 and the EEM. Note the timing coincidence of the important autumn 2020 price lows for the S+P 500 and various other stock marketplace benchmarks and the broad GSCI’s early November 2020 trough.

The GSCI’s 7/6/21 interim high at 594.5 borders its 10/25/21 elevation. The GSCI descended a sharp 16.9 percent from 7/6/21’s high to its 8/20/21 low at 494.0. Compare the timing of the GSCI’s August 2021 low with the S+P 500’s summertime interim troughs, 7/19/21’s 4233 and 8/19/21’s 4368.

ICE Brent/ North Sea	7175 (1/8/20) 6000 (2/20/20)	1598 (4/22/20)	3574 (11/2/20)	8670 (10/25/21)
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Brent/North Sea crude oil collapsed from 5390 on 3/3/20; the S+P 500 plummeted from its 3/3/20 interim top. The timing of Brent/North Sea crude oil's interim high on 7/6/21 at 7784 paralleled the broad GSCI's 594.5 high that day. Recall the timing of Brent's lows on 7/20/21 at 6774 and 6460 on 8/23/21 (plummeting 17.3 percent from 7/6/21) in conjunction with those of the GSCI and the S+P 500 (7/19/21 at 4233 and 8/19/21 at 4368).

Compare Brent's recent high level with 10/3/18's 8674 peak. Ongoing failure to sustain a move above this barrier will confirm that the bull move in commodities in general has paused, and perhaps ended. Brent slipped about 7.5 percent from 10/25/21's 8670 to 11/4/21's 8020 low. A sustained decline in the petroleum complex (and the broad GSCI), especially if a slump in base metals accompany it, probably will warn of (confirm) a fall in the S+P 500.

LMEX	2894	2232	2873	4763
(base metals)	(1/20/20)	(3/23/20)	(10/1/20)	(10/15/21)
	2699			
	(2/13/20)			

The LMEX index made an intermediate top at 4402 on 5/11/21, diving 9.3 percent to 6/18/21's 3993. From October 2021's 4763 high to 11/4/21's 4297 low, the LMEX has fallen about 9.8pc.

CRYPTOCURRENCY ADVENTURES

The poet Percy Bysshe Shelley states in "Queen Mab": "Gold is a living god, and rules in scorn All earthly things but virtue" (Canto V, lines 62-63)

Overview

What equals "money", "currency", or a "means of exchange" can be debated. Definitions of "asset" (or "financial asset") and "investment" (and what instruments belong in an "investment class) likewise are subjective (matters of opinion).

In any case, since its advent about a dozen years ago, the complex realm of cryptocurrencies in recent years increasingly has captured financial marketplace attention on both Main Street and Wall Street. Acceptance (approval) of the overall crypto concept, at least in much of Main Street has grown.

Numerous cryptocurrencies inhabit this digital world. Not all are alike, and supply/demand for the assorted ones vary. For example, some design cryptocurrencies to have a relatively stable price ("stablecoins"), being tied to an external reference such as a currency or commodity price (or via collateralization or through algorithmic mechanisms).

Others cryptocurrencies such as Bitcoin, not only are "money" (a medium of exchange), but also (since their design does not attempt to have a stable price) can represent a "store of value". Thus prices for this species of cryptocurrencies can and often do fluctuate substantially. Also, financial marketplace participants can label Bitcoin and similar crypto instruments as members of an "asset class". The labeling of a cryptocurrency as an asset, as it becomes more widely accepted, encourages its buying (ownership). Suppose Bitcoin is viewed as a financial asset (store of value) capable of being owned for "yield" ("return"). Then Bitcoin (at least partially) resembles

securities such as stocks and bonds, as well as commodities in general; consequently Bitcoin’s price movements, trends, and performance (yield) reasonably can be compared with them.

Some believe that at least some (reputable; trustworthy) cryptocurrencies in the store of value (asset class) territory deserve the honored label of “investment”. All else equal, being blessed as an investment of course tends to encourage and increase marketplace involvement with it, and thus its purchase and ownership. Nevertheless, cryptocurrencies ostensibly representing a store of value thus far generally have not yet won widespread acceptance (especially in Wall Street and in the financial regulation sphere) as “investment” type assets. However, quite a few marketplace participants and financial experts believe that some such crypto assets (or at least allegedly worthy ones such as Bitcoin) currently deserve or eventually will receive the praiseworthy investment badge.

The supply/demand situations and price trends for the store of value category cryptocurrencies are not all alike. However, as Bitcoin’s asset value is substantial, and it is well-known and widely trades, the following cryptocurrency review focuses on Bitcoin. Bitcoin in principle has a finite supply. Bitcoin prices are quoted in US dollars, Euro FX, and other currencies.

Gold and Bitcoin: a Comparison (and the US Dollar and Inflation)

Gold of course has a long monetary history. Even in the era of floating currencies, it remains widely viewed as an asset, a store of value and investment vehicle (or alternative asset), as a form of “money” or something “currency-like”, a good hedge against inflation and currency risks. But to some financial players, Bitcoin can be viewed in a similar fashion.

Everyone knows that assorted variables influence “money” (“currency-like” or currency substitute) weathervanes such as gold and cryptocurrencies like Bitcoin. Of course supply/demand/inventory considerations differ between gold and Bitcoin (and other cryptocurrencies).

To the extent confidence diminishes in currencies in general and America’s dollar in particular (given its role in the global economy), price trends in gold and cryptocurrencies such as Bitcoin at times can indicate (confirm) weakness in the dollar (and perhaps also in the American (and international) economic and political system in general). Gold and crypto also can be havens for those concerned about political unrest or efforts by governments to identify, monitor, and perhaps seize their wealth.

Let’s compare the price voyages of gold (nearest futures continuation) and Bitcoin over the past two years. The following table prices gold and Bitcoin in US dollars.

	<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Key and Interim Highs</u>	<u>Subsequent Lows</u>	<u>Following Highs</u>
Gold	1702 (3/9/20)	1452 (3/16/20)	2063 (8/6/20) 1960 (1/6/21)	1674 (3/8/21) 1693 (8/9/21)	1916 (6/1/21) 1834 (9/3/21)

Gold rallied 42.1 percent from March 2020’s bottom up to 2063 on 8/6/20 (recall Brent/North Sea crude oil’s interim top on 8/21/20 at 4653). It is notable that gold has not surpassed August

2020's stellar height, especially as commodities in general soared from their early November 2020 lows. Gold remains beneath its zenith of a decade ago, 9/6/11's 1912.

	<u>1Q 2020 High (date)</u>	<u>1Q 2020 Low (date)</u>	<u>Key and Interim Highs</u>	<u>Subsequent Lows</u>	<u>Following Highs</u>
Bitcoin	10,769 (2/13/20)	3,926 (3/13/20)	64,897 (4/14/21)	28,800 (6/22/21) 29,301 (7/20/21) 39,600 (9/21/21)	66,998 (10/20/21)

Bitcoin's loftier peaks at 19,787 on 12/18/17 and 13,868 on 6/26/19 preceded its important February 2020 summit. Bitcoin's first quarter 2020 high occurred shortly before the peak in the S+P 500; it attained its March 2020 major bottom several days prior to that in the S+P 500.

In its ascent from March 2020's valley, Bitcoin made a minor top on 8/17/20 at 12,485, between the June 2019 and February 2020 highs. It slipped to 9/9/20's 9,820, but ascended from there and jumped up from 11/26/20's 16,200 trough. Bitcoin established an important interim high in early January 2021 (1/8/21 at 41,989) as did gold. However, Bitcoin spiked again, to an interim top in April 2021, and attained an even higher level in October 2021.

One factor helping to produce the sideways trend in gold in recent months (since around early March 2021) probably is the modest rally (4.5 percent) of the real Broad Dollar Index (Federal Reserve Board, H.10) from its January 2021 low to its subsequent high in October 2021.

The US real "Broad Dollar Index" is a monthly average (January 2006=100; 11/1/21 latest release). The real Broad Dollar Index ("BDI") started a major bull appreciation from July 2011's bottom at 83.9. The rally, though it had various twists and turns, persisted for almost ten years.

The real BDI peaked in April 2020 at 113.6. The BDI fell about 9.0 percent to 103.4 in January 2021 (compare March 2009's global economic disaster pinnacle at 101.5). The high since then is October 2021's 108.1, a modest rally of 4.5 percent. From a long run historical perspective, though the real BDI fell after April 2020, October 2021's real Broad Dollar Index height is rather strong.

Bitcoin obviously spiked in recent months in contrast to gold's sideways walk (though gold arguably remains still "high" in price). Bitcoin's rally in recent months, unlike gold, thus seems significantly independent of the dollar's current relatively high level and near term bullish trend.

Although gold remains elevated relative to its major bottom attained many years ago during the global economic disaster (688 on 10/24/08), are Bitcoin and similar cryptocurrencies part of a new era which makes gold relatively less attractive?

Bitcoin's explosive rally in recent times (and the ability of gold to stay at least fairly high) perhaps results partly due to long run concerns about US dollar depreciation (and perhaps due to declining faith in the ability of traditional currencies in general to maintain real value). However, Bitcoin's extraordinary leap from its March 2020 major bottom and its huge jumps from its June-

September 2021 interim ones probably substantially derive from growing concerns about inflation in America and around the globe. In an era of American and other central bank yield repression (with resulting low or negative real interest rates) and money printing, in a landscape in which many investors (and other traders) avidly hunt for adequate yield (return), Bitcoin and many other cryptocurrencies have been an alluring “asset class” to own.

Bitcoin’s remarkable and rapid price rally, and the increasing interest in and popularity of cryptocurrencies in general, indicate that public faith in the ability of governments in general and central bankers in particular to keep inflation under control has diminished significantly.

Bitcoin, the S+P 500, and Commodities: Price and Time Trends

Kenneth Burke remarks in “A Grammar of Motives”: “And so one can seek more and more money, as a symbolic way of attaining immortality.”

Stock benchmarks such as the S+P 500 are one, but not the only asset, in the hunt for yield (return) jungle. History shows that marketplace price convergence and divergence (and lead/lag) relationships can and do change, sometimes very substantially. However, in the current economic and financial context in an interconnected global world, it is very significant that Bitcoin’s major price and time trends roughly have resembled those of the S+P 500 and commodities in general.

Note the first quarter 2020 pinnacles in Bitcoin, the S+P 500, and the broad S&P GSCI (and the petroleum complex). The subsequent major bottoms also occurred around the same time: Bitcoin on 3/13/20, the S+P 500 on 3/23/20, and the GSCI on 4/21/20. Note the bullish acceleration around autumn 2020; the S+P 500’s key lows were on 9/24/20 and 10/30/20, the broad GSCI’s (and Brent/North Sea crude oil’s) on 11/2/20, and Bitcoin’s on 9/9/20 and 11/26/20. Note the generally similar timing for important lows in second half 2021. Recall the S+P 500’s 7/19/21 (at 4233) and 10/4/21 (at 4279); after falling from 594.5 on 7/6/21, the broad GSCI made an interim low on 8/20/21 at 494.0. The timing of Bitcoin’s lows on 6/22/21 (at 28,800), 7/20/21 (29,301), and 9/21/21 (39,600) approximately paralleled those in the S+P 500 and GSCI.

Will the timing of peaks in Bitcoin be similar to those in the S+P 500 and related stock benchmarks? Probably. Will the timing of highs in commodities in general be near those in cryptocurrencies such as Bitcoin? Probably.

The S+P 500 has continued its magnificent bull trend in the past couple of weeks, but Bitcoin and commodities have not. Bitcoin fell 13.9 percent to 10/28/21’s 57,665 low, and it remains modestly beneath its 10/20/21 high. Similarly, the GSCI likewise rests under its 10/25/21 crest (as does Brent, which dipped 7.5pc to 8020 on 11/4/21). Perhaps ongoing easy money schemes, including yield repression and money printing, will help the S+P 500 to continue to ascend, and could assist Bitcoin and commodities in general to achieve highs above their late October 2020 ones. The Fed’s tapering program announced on 11/3/21 was not aggressive, and this high priest displayed little if any inclination to boost policy rates soon. And after all, not much time has passed since the late October highs in Bitcoin and the GSCI. In addition, OPEC, in its 11/4/21 meeting, did not change its existing crude oil production policy, disappointing nations such as America requesting higher output.

Note too the 10/20/21 date for the latest interim high in the EEM (emerging marketplace stocks), which also is lower than prior calendar 2021 tops.

In any event, further weakness in Bitcoin and the overall commodities complex, given past convergence patterns with the S+P 500, would be a bearish warning sign for the S+P 500 and other advanced nation stocks.

A five percent rally in Bitcoin above 10/20/21's 66,998 gives 70,348. A five percent drop from 10/20/21's level is 63,648, a ten percent correction equals 60,298, a twenty percent (bear move, according to some definitions) equals 53,598. A 25pc Bitcoin slump is 50,249, a 33pc collapse 44,621.

As an especially enthusiastic search for yield era fades or ends, given price and time linkage between advanced nation stocks (and lower-grade debt instruments as well as commodities in general) and crypto...cryptocurrency prices for instruments such as Bitcoin can fall alongside the S+P 500 and related stock marketplaces, perhaps substantially. However, given its astounding climb from the prices of its early history and its March 2020 major bottom, Bitcoin nevertheless may remain relatively elevated even if its price crashed.

Bitcoin and Tesla: Trends and Valuation

“It was astonishing how many New England clergymen, in the time of the petroleum excitement, took chances on oil. The Wall Street brokers are said to do a good deal of small business for country clergymen, who are moved no doubt with the laudable desire of purifying the New York stock board.” “The Gilded Age: A Tale of Today”, a novel by Mark Twain and Charles Dudley Warner

Bitcoin belongs to some version of a new era for currencies and as a type of asset class (vehicle). Cryptocurrencies such as Bitcoin are relatively new inventions, having been introduced only about a dozen years ago. The seminal white paper for Bitcoin, Satoshi Nakamoto's “Bitcoin: A Peer-to-Peer Electronic Cash System”, appeared in October 2008. The Bitcoin ledger (blockchain) commenced in January 2009. Tesla and its stock also represent a relatively recent development. Tesla's substantial production of electric vehicles also created an innovation for transportation. It released its first electric car in 2008.

Since at least around first quarter 2020, Tesla and Bitcoin have tended to “trade together”. Tesla's 1Q20 peak occurred on 2/4/20, Bitcoin's on 2/13/20. Bitcoin's major bottom was 3/13/20's 3,926; Tesla's on 3/18/20 at 70.1. After making an interim high on 8/17/20 at 12,485, Bitcoin slipped to an interim low on 9/9/20 at 9,820; compare the timing of important interim troughs in Tesla, 8/11/20's 273.0 and 10/30/20's 539.5.

Note also the similar timing of important interim highs in both Bitcoin and Tesla during January 2021 and April 2021, although Bitcoin's April 2021 top (unlike Tesla's) exceeded its January 2021 one. See Bitcoin's 1/8/21 high at 41,989 and 4/14/21's remarkable 64,897 in conjunction with Tesla's tops on 1/25/21 (at 900.4) and 4/14/21 (at 780.8). Keep in view the timing Bitcoin's sequence of notable lows around mid-year 2021 (28,800 on 6/22/21, 29,301 on 7/20/21, and 39,600 on 9/21/21) alongside those of Tesla (5/19/21's 547.0, 7/8/21's 620.5, and 8/17/21's 648.8).

Tesla's price has motored to new highs since Bitcoin's 10/20/21 record high. Tesla has been one of the important leaders within the American stock universe in recent months for the S+P 500's ongoing bull move. Admittedly, Bitcoin's October 2021 high occurred less than three weeks ago. Yet given the price and time trend similarities for moves in Bitcoin and Tesla since 1Q20, the failure of Bitcoin to establish new highs arguably is a warning sign for Tesla bulls. If Tesla's price begins to venture downhill, that probably will be a bearish signal for the S+P 500.

Note the similar enormous distance traveled by Bitcoin and Tesla since their major bottoms in March 2020. Bitcoin's price high skyrockets up 17.1 times its March depth (66,998/3,926), Tesla's has flown an astronomical 17.7 times higher (1243.5/70.1). Although the S+P 500 has rallied hugely from its dismal March 2020 valley, more than doubling (2.1 times; 4635/2192), the Tesla and Bitcoin bull moves dwarf that of the S+P 500.

Marketplace valuation viewpoints, methods, and conclusions are subjective (they are not scientific). What is "too high" (or high; expensive; overvalued), average (or reasonable, rational, common sense; normal, typical; natural; fair value or true value), too low (or low; cheap; undervalued), irrational, and so on are opinions.

An array of marketplace stories of course can and do explain the extraordinary price rises in both Tesla and Bitcoin. For example, the "free supply" of inventory for Tesla as well as Bitcoin may be very low. Many marketplace prophets obviously can and do generate analysis justifying further price rises in Tesla and Bitcoin, especially over some "long run" horizon. Marketplace history proves that alleged "overvaluation" (or "undervaluation") can persist or even grow over time.

Nevertheless, the extremely large percentage bull moves of both "assets" in comparison with that in the S+P 500 since their March 2000 should warn Tesla and Bitcoin bulls that their stock prices arguably are "overvalued" (perhaps extremely so). Tesla's current price/earnings ratio arguably is extraordinary. The Financial Times (11/6-7/21; citing FactSet) says that Tesla trades at a forward price/earnings multiple of over 150, in comparison with the P/E of about 22 for the S+P 500 as a whole. Also, compare Tesla's current marketplace valuation with that of other automobile manufacturing companies. On the genuine currency side, have the real exchange rates of any currency such as the US dollar, Euro FX, Chinese renminbi, Japanese Yen, Mexican Peso appreciated or declined anywhere near the extent of Bitcoin's towering climb?

Cryptocurrency: Culture and Power

Blockchain (digital technology) may have merit separate and apart from the cryptocurrency world. And national (central bank) creation of digital home currencies (such as for the US dollar) may have practical merit.

However, such considerations do not make the development and spread of cryptocurrencies such as Bitcoin a desirable phenomenon from the standpoint of overall American national (the general public) interest (or that of other leading countries around the globe).

To the extent America permits or legitimizes cryptocurrency accounts according to its own laws (within its jurisdiction), its substantial role on the global financial stage and in the international economic system encourages the spread of cryptocurrency accounts and transactions outside of the United States.

Bitcoin and many other cryptocurrencies attract and sustain interest and participation for reasons in addition to their being (becoming) an “asset class” and a means by which to search for yield (return) and hedge against inflation risks. Bitcoin’s huge price rally (and large profits for many owners) helps to justify its merit as a useful alternative (even investment) mechanism. Thus it becomes easier for cryptocurrency advocates to promote it and other crypto offerings. Moreover, Bitcoin’s massive price swings have made it exciting and, given the assistance of a bullish longer run price pattern, generally entertaining for its owners.

The US dollar and other leading currencies and the S+P 500 and other stock and debt securities marketplaces obviously have existed for a long time. By comparison, as a representative of today’s global digital and Internet world, and where substantial parts of leading cultures (as in America) seek out and frequently praise newness and innovation, Bitcoin and its sophisticated blockchain technology generate appeal. Also, many players nowadays in some cultural quarters (whether in economics, politics, the fine arts, or elsewhere on the social scene) to some extent are enamored of some notion of “progress” and find many “traditional” viewpoints, activities, and institutions unappealing. In any case, Bitcoin and other crypto can become alluring as they become chic, fashionable, and part of a progressive (and therefore a supposedly “good”) movement.

Even Wall Street banks are showing increasing interest in cryptocurrencies. “With Crypto, Banks Race to Catch Up”, headlines the NYTimes (11/1/21).

As a preliminary, there obviously are other asset classes other than Bitcoin by which investors and others can seek to avoid inflationary risks. Picture stocks, homes, inflation-adjusted (floating rate) debt securities, lower-grade investment quality corporate debt, gold, and many commodities.

Some individuals and institutions may make money (profit) from trading or promoting Bitcoin. But neither that nor Bitcoin’s growing (even widespread) cultural popularity, excitement, entertainment, and fashionableness proves that cryptocurrencies such as Bitcoin are beneficial to the overall national (or even international) interest. Claims that cryptocurrencies like Bitcoin should exist because they involve “capitalism” or the “free market” do not objectively demonstrate that Bitcoin should be permitted or embraced.

Bitcoin current requires substantial electricity for its mining (coin creation). This is one reason to avoid Bitcoin. But let’s look further into reasons to be wary about Bitcoin and other crypto instruments similar to it.

Nakamoto’s groundbreaking paper on Bitcoin states: “A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution.” Cryptocurrencies, to the extent they exist outside the traditional banking and payment system, injures the ability of economic and political leaders to guide outcomes. Thus Bitcoin institutions (structures), practices, and assets will be hard for a given national government (its laws) to regulate, especially when the Bitcoin holdings are offshore (and thereby probably outside its jurisdiction).

An array of people approve of secure, essentially anonymous, and non-public (non-third party) electronic payment and ownership structures. Yet criminals, terrorists, and other wrongdoers

readily can hide and transfer Bitcoin (and thus “money” and “currency”) outside the reach (or at least the easy grasp) of public authorities.

Also, as Bitcoin and other crypto increasingly become viewed as suitable assets for widespread public ownership and trading, and their price trends entwined with other financial marketplaces, significant Bitcoin price behavior probably can surprise and disrupt national and international economic stability.

What might happen if Bitcoin’s free supply (availability) was low enough to enable it to be squeezed or otherwise disrupted?

To some extent, faith in America and its institutions is reflected by a willingness to own substantial amounts of dollar-denominated assets. Declining faith in American assets (and its cultural institutions and its economic and political leadership) can inspire shifts away from such assets, even by American individuals and corporations. As US citizen faith in the country’s situation declines, so probably likewise will (or has) that of foreigners in regard to America.

Let’s focus on Bitcoin’s characteristic as a currency (form of money). Start from the vantage point of the US dollar in relation to it. Assume a seemingly extreme hypothetical.

Suppose Bitcoin increasingly became viewed as a better alternative to owning dollars (and dollar-denominated assets). Persons can acquire Bitcoin assets not only with dollars, but with other currencies. Suppose individuals, institutions, or foreign governments took a gigantic amount of their US currency (or dollar-denominated assets), sold those dollars for another currency, and bought Bitcoin priced in that non-dollar currency. That of course (all else equal) not only will tend to rally the Bitcoin price (probably in various foreign exchange terms), but also depreciate the US dollar. Substantial and ongoing depreciation in the US dollar probably will help to undermine the leading role of the dollar as an international reserve currency, and to discourage the US dollar as the key currency for purposes of international trade. Widespread international embrace of the dollar as the paramount reserve and trading currency reflects and helps to maintain America’s very substantial (and key leadership) power in the global economic and political order. So why should America from the standpoint of its overall national interest want to encourage, or even tolerate, the creation and existence of Bitcoin or other cryptocurrencies which in principle and practice can endanger its national interests and international economic and political position?

This argument in relation to cryptocurrency risks to a nation’s currency and international standing is not restricted to America.

The more widely that cryptocurrencies such as Bitcoin are viewed as an appropriate asset class, the greater the chance that money will move into them. Transactions involving a move into Bitcoin (priced in non-dollar terms) and out of United States stocks and US Treasury debt (and out of the dollar itself), if they were sufficiently enormous relative to the size of (for example) the S+P 500 or the US Treasury marketplace, could cause a notable fall in American stock prices and increase in UST yields. From this perspective, given the long run risk from the availability of the cryptocurrency outlet to US stock prices and debt yields, and despite the American love of “capitalism” and “free markets”, why would the American government and American stock and debt owners want to encourage the existence of cryptocurrency accounts?

How are cryptocurrencies like Bitcoin a practical improvement relative to currencies such as the US dollar for purposes of commercial life and economic growth in general, or for capital formation via securities marketplaces?

Cryptocurrency: Cultural Divisions and Trust

A character in the film “The Deer Hunter” (Michael Cimino, director) asks: “Did you ever think life would turn out like this?”

The growing popularity of Bitcoin and similar cryptocurrencies evidences more than notable inflation fears or grand opportunities for money-making via a new and alluring asset class. It also probably partly reflects increasing worries about large and growing worldwide debt as a percentage of GDP, especially in the national government realm. Many nations (think of America) have long run debt challenges. And corporate and household debt also is substantial in many countries. Default on governmental interest rate obligations, at least by major nations, currently appears unlikely. Yet even governments of major nations at some point might elect to boost taxes substantially (or, conceivably, though substantially less likely, directly confiscate bank accounts, securities, and other assets) to maintain or increase spending programs or to cover debt obligations. All else equal, such schemes tend to penalize savers and other asset holders.

In any case, ongoing and increasing anxiety regarding inflation and indebtedness can intertwine with and encourage worries regarding the strength of a country’s economic (financial) and political system as a whole, as well as in national economic and political leadership (their motives, judgments, and actions). Such diminishing faith in key institutions and authorities can occur across the globe.

The growth of Bitcoin and similar cryptocurrencies also likely responds to distrust in many circles of financial institutions such as banks, investment banks, and other related intermediaries. This increasing loss of faith in financial organizations involves not only the economic strength of such firms, but also their motives. Slumping confidence in the quality of a nation’s government (its economic and political structures and leadership) can interrelate with this distrust of banks and similar entities.

Recall the global economic disaster of 2007-09, during which the US and other governments (assisted by highly accommodative central bank monetary policies) rescued (bailed out) numerous banks and investment banks. In this context, underscore the timing of Sakamoto’s pioneering paper, “Bitcoin: A Peer-to-Peer Electronic Cash System” in late October 2008 and the start of its blockchain ledger (January 2009). Bitcoin is decentralized and peer-to-peer, and thus does not require third party intermediaries such as banks, governments (central banks), or similar administrators.

Bitcoin incarnates lack of trust. Sakamoto notes: “Commerce on the Internet has come to rely almost exclusively on financial institutions serving as trusted third parties to process electronic payments.” Note the reference to trust. The writer adds that this system works adequately for most transactions. However, “it still suffers from the inherent weakness of the trust based model.” Again, note the trust concern. The author emphasizes: “What is needed is an electronic payment system based on cryptographic proof instead of trust.”

Thus at its founding (invention) and thereafter, Bitcoin reflects and responds to a substantial lack of trust in key traditional (third party) economic structures and methods (typically involving banks and similar intermediaries). Bitcoin's development, design, and increased use probably therefore to some extent also implicitly indicates actual and growing distrust (declining faith) in the economic and political system supporting, promoting, and benefiting from those traditional arrangements.

But suppose a traditional banking (financial) system and its members are well-regulated and strongly capitalized. Is there really any great benefit to a nation's economy or its financial system (or international ones) by moving many payments away from it (from third parties) and into a "peer-to-peer" setup such as Bitcoin?

A key factor boosting popularity in (and thus rising prices thus far for) Bitcoin is not just inflation fears. Neither is Bitcoin's appeal and enormous bull ascent just a hunt for yield (adequate return). The S+P 500 and other equities, lower-grade sovereign debt and corporate bonds, and commodities "in general" also are search for yield (return) fields. Bitcoin and similar cryptocurrencies derive growth in part from substantial cultural divisions and declining trust in economic and political institutions and leaders.

The growth of Bitcoin and similar cryptocurrencies has been paralleled by increasing cultural divisions and distrust within America and in many other countries around the world. Sustained, severe, and diverse cultural divisions have generated so-called cultural wars. In wars, whether physical (military) or in other cultural realms, people generally do not trust their enemies.

In wide-ranging and intense cultural wars, there tends to be relatively low (and arguably at times falling overall) trust in any given set of economic and political institutions and leaders. Faiths like the American Dream, once broadly accepted, increasingly may be called into question, or at least said to require repair or revision. Moving outside the traditional system and into cryptocurrencies suggests declining confidence in economic and political institutions and leaders.

Increasingly sharp and ongoing conflicts between cultural alternatives, all else equal, probably tend to decrease consumer confidence and cause mounting worries about the state of and direction of a country, especially when widespread concerns about economic growth and economic and political stability (and inequality and social mobility) develop, whether in America or elsewhere. Cultural conflicts are one factor, in conjunction with other variables, which can help to weaken appeal of (faith in) a nation's currency and financial assets.

A seriously divided America confronts a cultural crisis. So probably does much of the rest of the globe. That reflects and generates ongoing economic, political, and social uncertainty and risk.

Although many other nations around the globe in recent times have endured significant cultural divides and conflicts, America's cultural battles seem particularly wide-ranging and intense nowadays. Great numbers of cultural partisans currently are unwilling to sacrifice their ideals and compromise much with their antagonists.

Cultural divisions within the United States exist across various parameters. These include "political" ideology (such as left wing versus moderates versus right wing; various species of "radicals"; liberal/progressive versus conservative/traditional; globalist versus nationalist; assorted varieties of populism). Think also of divergent "economic" principles (and "haves" versus "have-nots" as well as "capitalists" versus "socialists"). Focus on the heated rhetoric and

ideological fights relating to America's substantial economic inequality. Underscore the divisions according to age, sex/gender, region, urban/rural, racial/ethnic background, and religion. Look at intense battles relating to immigration, abortion, law and order ("justice"), climate change, and coronavirus vaccination (and masking).

Much of current Republican (and former President Trump's) doctrine wars ferociously with that of Democrats in general. Populist agitation from diverse directions will persist. So will fervent efforts by various elites (the establishment) to preserve or enhance their privileges (forms of entitlement). The US midterm 2022 and 2024 presidential election campaigns beckon.

America's ongoing substantial cultural battles in economic, political, and social arenas reflect and encourage reduced national unity and tend to undermine domestic confidence and mutual trust. Trust in economic and political institutions and their leaders can decline and even wither. Although political leaders can differ in their doctrines and are not saints, increasing cultural divisions (wars) tend to create increasing doubt within the overall political domain regarding the "disinterestedness" of such authorities. Increasingly sharp and ongoing conflicts between cultural alternatives, all else equal, probably tend to decrease US consumer confidence and increase worries about the state of and overall direction of the country, especially when widespread concerns about economic growth and stability develop. American confidence in the nation's overall direction has slumped in recent months (despite the big bull rally in the S+P 500).

Moreover, in America and elsewhere in recent years, cultural divisions probably have been encouraged and exacerbated by growing concerns regarding truth (truthfulness).

Cultural worlds and relationships always have some degree of dishonesty. People of course do not always tell the truth. People have diverse ideologies and values.

However, in today's cultural battlefields, many people perceive a large and increasing deluge of lies, misinformation, disinformation, misleading statements, gross exaggerations, and so forth. Note talk of "fake news". Regard the popularity of some incredible conspiracy theories. Much of the untruths, misinformation, and so on come from authoritative (and even respected) sources. The internet and other media enable such information and associated viewpoints at lightning-fast speed around the globe. This current situation on the truth dimension to some probably increases distrust in authorities and institutions in general.

In such a tumultuous and uncertain cultural environment filled with widespread distrust, Bitcoin and similar cryptocurrency assets increasingly may appear to be attractive appropriate domains (alternatives to traditional ones) to trust and in which to place funds.

The creation and growth of Bitcoin and similar cryptocurrencies does more than reflect and respond to actual and growing distrust (declining faith) in the economic, political, and social system as a whole (or at least numerous important aspects of it). Bitcoin and similar cryptocurrency "assets", as their popularity grows, as they themselves are based upon and create means by which to channel distrust, probably help to diminish cultural (economic, political, social) faith within overall national communities and between their members.

As Bitcoin and similar cryptocurrencies encourage distrust between groups and individuals, and arguably especially within a community with existing substantial and intense cultural divisions (and related rampant "individualism"), why should a country's leaders and their supporters

(whether in America or elsewhere) desirous of strengthening their overall national community support the existence and growth of Bitcoin and its brethren?

For further detailed discussion of stock, interest rate, currency, and commodity marketplaces and the political scene, see essays such as “Rising Global Interest Rates and the Stock Marketplace Battlefield” (10/5/21); “America Divided and Dollar Depreciation” (9/7/21); “Great Expectations: Convergence and Divergence in Stock Playgrounds” (8/14/21); “Financial Fireworks: Accelerating American Inflation” (7/3/21); “Marketplace Rolling and Tumbling: US Dollar Depreciation” (6/1/21); “American Inflation and Interest Rates: Painting Pictures” (5/4/21); “Financial Marketplaces: Convergence and Divergence Stories” (4/6/21); “Truth and Consequences: Rising American Interest Rates” (3/9/21); “GameStop and Game Spots: Marketplace and Other Cultural Backgrounds” (2/13/21); “The Fear Factor: Financial Battlefields” (1/5/21); “Games People Play: Financial Arenas” (12/1/20); “Born to Be Wild: American Economic and Political Battlefields” (11/2/20); “Adventures in Marketland: Hunting for Return” (10/6/20).

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