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The Canary in the Bitcoin Mine
From Copper to Corn to Crypto, What Do Soaring Asset Prices Portend?

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Introduction
Let’s face it, assessing risk is not as simple as canaries made it look. Starting in the late 1890’s, canaries saved countless lives in coal mines by dependably signaling dangerous levels of carbon monoxide, allowing miners to evacuate to safety. Virtually every profession, from medicine to weather forecasting, has sought its proverbial “Canary” that provides reliable warnings without generating false alarms. The asset management industry utilizes an increasingly broad and sophisticated set of indicators to assess risk and valuation. Exiting 2020, when markets defied most traditional metrics, do we need a new paradigm to determine fair value or are most asset classes priced ahead of their fundamentals? If the latter, does this suggest a sharp correction on the horizon or will underlying economic growth over time enable earnings to catch up to markets? In this edition of Global Foresight, we examine the current disconnect between price and value and what we are gleaming from the canaries.

The 175 Million Dollar Pizza
Lazlo Hanyecz, a software developer, was credited in 2010 with the first transaction using Bitcoin (BTC). He used 10,000 BTC to purchase two pizzas, which at today’s price of roughly $35,000 per BTC, translates to $175 million per pie. (Details are lacking if that included toppings). The BTC story demonstrates that price and value, while often thought to be synonymous, can diverge in certain circumstances. Price is about cost, while value measures buyer utility. For tangible goods there can be a big difference between the two - consider how an eighty-year-old might value the new COVID-19 vaccines compared to how a twenty-year-old would. Although they are the same product, there is a significant difference in the usefulness to each person.

Corporate acquisitions are another excellent example where the value of an asset can diverge from its market price. Company ABC may be able to defend paying a 50% premium over public market prices to acquire company XYZ, because it can capture synergies from combining the two businesses, a public shareholder cannot unlock that value.

For financial assets, a divergence between price and value is less typical. Most investors hold assets for financial gain. When price and fundamental value diverge, it suggests investors are placing a high intangible value on owning certain assets. Over the long-term, equity prices should reflect the discounted present value of a company’s expected future cash flows - price should equal value. In the short run, fear and greed can lead to equity prices that can become disconnected from value. During periods of rapid economic growth or technological innovation, investors often become too euphoric, while in periods of economic contraction, panic typically prevails.

What is unique about 2020 is how broad-based the rally in asset prices has been. Consider the biggest market excesses of the last 50 years: 1) technology stocks from 1999-2000, 2) Japanese equities and real estate in the late 1980s, and 3) the “Nifty-fifty” growth stocks on the early 1970s. Each of these was a period of unbridled optimism about growth prospects for a specific sector, one economy, or a small slice of the market. For instance, in 2000, technology and telecom stocks in the U.S. market were highly valued as investors became overly optimistic about “New economy” stocks and neglected “Old economy” stocks like industrial companies. In the late 1980s, Japanese assets were very expensive, but this was not a commonly found characteristic around the rest of the world. During the Nifty-fifty era, valuation excesses were mostly limited to this group of U.S. blue-chip companies and not the several thousand other publicly traded companies. By contrast, in 2020, we saw much more broad-based bullishness - soaring commodity, bond and equity prices across sectors and regions.

Paradigm Shift?
Has there been a logical paradigm shift explaining why so many types of assets have generated such investor excitement of late? Or
is the explanation as simple as unprecedented monetary easing boosting asset prices? If so, will that feed through to inflation and ultimately interest rates potentially ending the virtuous cycle of ever-higher P/E ratios? Let’s look at various asset classes and indicators to identify common traits and what they suggest for markets going forward.

**Bitcoin vs Bitcoin Index**

Perhaps no better asset class epitomized investor exuberance than cryptocurrencies. BTC was priced at $7,158 at the close of 2019, plunged to $4,904 during March 2020 and closed the year out at $28,996. Just a few short days into 2021, BTC had already raced above $40,000. Let’s assume for argument’s sake the changes in BTC prices have been defensible, after all it is a difficult asset class to value and even many long-time skeptics became believers in 2020. What is impossible to justify is the premia many crypto funds are trading at relative to the net asset value of their underlying holdings. If we consider price versus value, investors have been paying too high a price for an asset that can be objectively measured - i.e., the underlying holdings in the fund. Traditionally, excessive premia (or discounts) for funds have been an indicator of overvaluation or undervaluation. The current price activity in various crypto funds suggests a lot of euphoria in this asset class without even needing to make the case that the underlying crypto currencies are overpriced.

**Gold**

Gold had a six-thousand-year head start on BTC, so it’s understandable if it’s not considered as hip as crypto. Nonetheless, gold like BTC, rallied in 2020, but to a much smaller magnitude. One can read this as gold is perhaps undervalued versus BTC. A safer conclusion is that both are indicating a lack of faith in the U.S. dollar and potential for inflation to finally accelerate, something that has been anticipated since the U.S. Federal Reserve massively expanded its balance sheet during the global financial crisis but has failed to materialize since then.

**Copper & Other “Co” Commodities**

Copper makes gold look like the new metal on least 8000 B.C. Copper, with its many industrial uses, has earned the moniker “Dr. Copper” because its price was thought to be a reliable forecaster of global economic activity, akin to a Ph.D. in Economics. Like BTC and gold, copper plunged in March but subsequently rebounded to levels last seen in 2012. Copper gained 25% in 2020, which at first blush seems excessive considering the outlook for 2021 economic activity is for the world to recover to levels that were expected for 2020 (pre-pandemic), when copper was much lower. Or perhaps copper, like BTC and gold, is merely signaling future inflation.

As a random exercise, let’s look at commodities beginning with “co” to confirm if copper was an outlier. Corn also gained 25% in 2020 and is now at its highest levels since 2013. Coal gained 20% in 2020 and cotton gained 10%. For good measure, cobalt, which is used for electric vehicle batteries, was flat in 2020, but up 20% in the first two weeks of 2021. This is quite the commodity basket signaling inflation as it includes: inputs for food, clothing, old energy and new energy.

**Home Prices**

Data on home prices have a lag of a few months as transactions are not as instant as bonds and commodities. But the major home price indices through October 2020, such as Case-Shiller and FHFA, suggest nationwide home prices will be up at least 10% in 2020. Lumber prices doubled last year, reaching a record high. Water and sewage services for your home, went up an average cost of 3.3% according to the Bureau of Labor Statistics. The cost of filling your refrigerator and pantry went up 3.9% in 2020, as food prices had their largest gain in years.
Fixed Income Spreads
For market strategists and many equity investors, fixed income spreads have been the equivalent of a barometer for weather forecasting - a vital tool to track economic direction, well before published data reveal changes in growth. With the major modifications in U.S. Federal Reserve policies announced in March, spreads will have limited utility for now. With the Fed buying corporate debt, including high-yield, the premia these trade over treasuries is not useful to assess the growth outlook as credit spreads are distorted. However, spreads between treasuries and inflation-protected treasuries (TIPs) still serve as a useful market-derived forecast and are signaling inflation greater than the Fed’s target of 2.0%, rising sharply since the lows in March.

Volatility
The Volatility Index (VIX) became a household word during the Global Financial Crisis in 2008 when it shattered previous records. The long-term volatility of U.S. equities has averaged roughly 15%, so large deviations from that level by the VIX have been used as an indicator of fear and greed. However, the VIX had always been thought to be a more reliable indicator of fear and therefore a useful indicator for when markets have been overly punished by investors rushing for the exits. The VIX historically has been a less reliable indicator for when to sell – low levels of the VIX suggest investor complacency, but not necessarily market frothiness. The VIX worked as expected in 2020, with levels peaking in mid-March, days off the market lows. It has been trading recently around 24, twice where it was entering 2020 and well above historic norms. This is an indicator worth monitoring, but there is no clear signal of investor sentiment to be gleaned from it.

Put/Call Ratios
Like the VIX, the ratio of the amount of put option volume to call option volume is a useful barometer of investor sentiment. Put volume soared in March but is about as low as it has been since before the Global Financial Crisis. Unlike the VIX, put/call ratios suggest a fair amount of investor complacency.

Valuation
With seemingly every market cycle, new valuation metrics appear to justify price levels, and many are useful tools to fully appreciate businesses’ long-term growth prospects. No matter your preferred valuation metric, we are either in a new paradigm where price to earnings (P/E) multiples should trade higher than they have historically, or many sectors of the equity markets have disconnected prices from their underlying values. The argument for higher multiples has been that they are justified by very low interest rates. If you share this view, then inflation becomes critically important to monitor as its impact on rates could derail the case for permanently high P/E multiples.

Antoninianus
Concerns about the Fed’s role in monetizing our country’s massive deficits should be placed in historical context as cheapening currency is about as old as documented history. The pictures below show the devolution of the ancient Roman currency, the Antoninianus. There probably is no better endorsement for BTC or gold than how this coin went from being nearly entirely made of silver to having less than 5% silver content. Central banks such as the European Central Bank, the Bank of England and the Bank of Japan have had accommodative policies in place for most of this century, while the U.S. Federal Reserve massively increased its level of accommodation back in March. Yet despite so much central bank easing, we have not seen any consistent pickup in published overall inflation statistics.

DECLINE OF THE ANTONINIANUS

240’s CE ~40% fineness
250’s CE ~30% fineness
260’s CE ~20% fineness
270’s CE <5% fineness

Source: Rasiel at English Wikipedia, CC BY-SA 3.0 <https://creativecommons.org/licenses/by-sa/3.0>, via Wikimedia Commons
Conclusion
The chart above shows the frequency with which “canary coal mine” was searched on Google Trends going back the last ten years. Amazingly, the peak coincided within days of the market lows in March. How ironic that the “Canary in the Coal Mine” for equity markets was literally the term “canary in a coal mine”.

Doing the same search on Google Trends for “inflation” shows no such trend. Inflation is clearly not top of mind yet for investors, despite signs of it appearing across the commodity complex. This is the number one threat we see today, potentially taking euphoria out of equities and fixed income.

Higher inflation should lead to higher rates and lower P/E multiples. The path from here is uncertain as to when inflation will appear in the widely-followed personal consumption expenditure index (PCE) and consumer price index (CPI), as there are lags before input prices work their way through the system. If Bitcoin and gold are the proverbial canaries for inflation, then we should be taking note.