THE POLARIS LETTER

Macro Strategies and Insights

What We Intend to Accomplish

April 2021

Macro investing, at its best, involves identifying and participating in major, multi-year trends in asset markets. Typically, these trends last 5-10 years, sometimes extending for 15-20. For some reason, they often seem to coincide with calendar decades -- an interesting pattern, given the enormous changes we experienced in 2020. You don't really need to trade very much. If you get in and out in the right year, you would do pretty well. If you got the right month, you would be an investment genius. If you simply bought and held a well-performing asset class through this five-or-ten-year period, you would do better than the great majority of investors. If you were either able to trade productively around the major secondary market movements, the corrections and retracements, or able to use stock selection to improve your results, the outcomes would be fantastic.

Professional asset allocators, as are commonly found at pension funds or university endowments, sometimes say that asset allocation accounts for about 90% of investment results. I think this overstates the case somewhat, but nevertheless, it shows how powerful a simple asset-allocation approach can be. These same professional asset allocators have also found that short-term market timing and stock selection can be extraordinarily difficult, as evidenced by the mediocre overall results of the high-priced hedge funds they invest in. Across thousands of managers, they have found that a bigcap stockpicker that can produce a 2%-3% annual advantage to an index is a rare thing -- and even that is typically punctuated by periods of underperformance, as various styles fall out of favor. In other words, you can do this asset allocation with simple index funds. Many professionals do exactly this.

One of the most famous traders of history was the legendary Jesse Livermore, who was active in 1892-1934 and became one of the wealthiest Americans of the time. He began as a "day trader," making short-term bets in the "bucket shop" storefront brokers of the 1890s -- the old-fashioned equivalent of the RobinHood app. Unlike the majority of money-losing stock-flippers, he was good at it -- so good that, like a blackjack card counter in Vegas, the bucketshops kicked him out. He moved to the floor of the NYSE to daytrade directly. But even Jesse Livermore, as he became older and wiser, dropped his daytrading habits and became focused on the big, long-term moves. In the great investment classic *Reminiscences of a Stock Operator* (1923), he told journalist Edwin LeFevre:

What old Mr. Partridge said did not mean much to me until I began to think about my own numerous failures to make as much money as I ought to when I was so right on the general market. The more I studied the more I realized how wise that old chap was. He had evidently suffered from the same defect in his young days and knew his own human weaknesses. He would not lay himself open to a temptation that experience had taught him was hard to resist and had always proved expensive to him, as it was to me. I think it was a long step forward in my trading education when I realized at last that when old Mr. Partridge kept on telling the other customers, "Well, you know this is a bull market!" he really meant to tell them that the big money was not in the individual fluctuations but in the main movements that is, not in reading the tape but in sizing up the entire market and its trend.

And right here let me say one thing: After spending many years in Wall Street and after making and losing millions of dollars I want to tell you this: It never was my thinking that made the big money for me. It always was my sitting. Got that? My sitting tight! It is no trick at all to be right on the market. You always find lots of early bulls in bull markets and early bears in bear markets. I've known many men who were right at exactly the right time, and began buying or selling stocks when prices were at the very level which should show the greatest profit. And their experience invariably matched mine that is, they made no real money out of it. Men who can both be right and sit tight are uncommon. I found it one of the hardest things to learn. But it is only after a stock operator has firmly grasped this that he can make big money. It is literally true that millions come easier to a trader after he knows how to trade than hundreds did in the days of his ignorance.

In 1885, the great steel baron Andrew Carnegie told an audience his investment advice: "Put all your eggs in one basket, and watch that basket." He was mostly talking about running operating businesses, but this view was embraced by that great stockpicker, Warren Buffett; and again by that great macro investor, Stanley Druckenmiller. If you are making a major asset allocation decision, you have to watch it closely. You need the insight to get in when it is unpopular, and has probably produced mediocre results for years previous; the confidence to stay in when it has its inevitable shakeouts; and you have to know when to get out, which is commonly when a crowd of latecomers is getting in, and your insight is finally being broadly recognized. The best-performing asset class of a ten-year period, once it passes its peak, is commonly among the worst for many years afterwards. Even Warren Buffett made one great macro call in his career: He closed his hedge fund, the Buffett Partnership, in 1969, claiming that valuations were too high to justify continued investment; and he got back in the market at the bottom in 1974. He was soon joined by his value stockpicking friend Charlie Munger, who, after taking huge losses in the 1973-1974 bear market, closed his fund in 1976.

Although asset allocation seems very important, the funny thing is: nobody is doing it. The majority of these professional asset allocators, the big institutional funds giving millions and billions to fund managers, are really more like insurance actuaries. They don't want to take any

big, meaningful stance on markets. They don't know how to, were never trained, and have little inherent talent. They are not expected to do this; it is not part of their mandate. If they were wrong, they could lose their job. It's not their money, so the risk/reward proposition for them is all downside and no upside. Unfortunately, even being right is "being wrong" for these professionals, if their timing is off by even a little. Jeremy Grantham of GMO, who has spent his whole adult life wrestling with the contradictions of the professional asset management business, recently summarized:

[F]or any manager willing to take on that career risk – or more likely for the individual investor – requiring that you get the timing right is overreach. If the hurdle for calling a bubble is set too high, so that you must call the top precisely, you will never try. And that condemns you to ride over the cliff every cycle, along with the great majority of investors and managers.

(Jeremy Grantham, "Waiting for the Last Dance," GMO, January 2021)

The huge armies of Investment Advisors, at big institutions like UBS, Goldman Sachs or Merrill Lynch, also give the same generic advice. Just like McDonalds can't function if every hamburger chef was allowed to do things his own way, standardization is a basic business principle for these companies too. The individual investor can take heart that Goldman Sachs is giving nearly the same advice to its big clients, like a state employee pension fund. These are asset-gathering operations. Experience has shown that clients are perfectly content to lose big, as long as everyone else is losing also.

Many of the people who do have a meaningful view of markets, the professional managers of mutual and hedge funds, have been forced by the institutions into asset class boxes. They have been restricted to a single asset class, often with a 100%-long strategy. There is nothing in the Investment Company Act of 1940 that says that a mutual fund can't be involved in different asset classes, or hold 50% cash. But, this never happens. Even the macro hedge funds that seem to have all the freedom in the world, are actually restrained by expectations that they will generate a smooth pattern of monthly returns, which tends to force them into unproductive short-term trading. If you "sit tight and be right," like Livermore suggested, you will be exposed to all the volatility of that asset class during that time period, which many hedge fund investors find intolerable. They are willing to give up long-term results for a sense of month-to-month reliability.

Even when professional managers (or RIAs) take an active stance, they often do so in very small size. If they are right, they can claim credit for a few dozen basis points of outperformance. If they are wrong, the difference from some benchmark is small enough that it is not too embarrassing. Then, they can charge higher fees for active management, while enjoying the career-protecting advantages of hugging the benchmark. I reject this approach. Take a stand. Own a bunch of what you like; and nothing of what you don't.

It turns out that almost nobody is making active and aggressive asset allocation decisions -- which account for perhaps 90% of investment results. In practice, this tends to fall to the more creative

individual investors, professional portfolio managers with an active approach, family offices and a few active-minded RIAs that help them.

Where We Stand Today

With the benefit of hindsight, we can identify the major macro trends in asset markets of the past ten years. U.S. stocks have gone up, mostly due to valuation increases on very modest growth in underlying earnings, boosted by stock buybacks. Equities in the rest of the world have mostly gone sideways, until just recently still below the peaks they made in 2007. Bond yields have fallen to an absolutely incredible degree. U.S. bond yields are the lowest in the history of the United States; bond yields across the developed world have made lows never before seen in the 5000-year history of lending at interest.

It sure seems simple when you look back on it. It is a lot more difficult when you look forward. The runup in U.S. equities, particularly mega-cap tech, looks like it is near the end of the road. Overall valuations for U.S. equities are near or have exceeded the peak in 2000, giving us today, by most measures, the highest valuations in the history of U.S. equities going back to 1875. In the past, high valuations haven't stopped markets from going higher. But, after they stop going higher, and the final speculative excess is exhausted, it usually means they will fall further. Unlike 2000, where there was a gulf between bubbly tech issues and laggard "old economy" value names, high valuations today stretch nearly across the board. The recent outburst of retail speculative excess, bizarrely coinciding with a major recession caused by Covid-19, practically screams "The End is Nigh!" for this aging bull.

Even just since the beginning of 2021, this retail craziness has stepped up to amazing levels. Watch closely because it might be a while before you see it again. According to a poll by Yahoo Finance-Harris, 28% of all American adults purchased GameStop or another "viral" stock in just one month, January 2021. (The other "viral" stocks in the poll were AMC, BB, NOK, and CTRM.) Of the poll respondents that had a brokerage account, 43% said that it had been open less than a month. Things like this typically happen when a bull market is a few months or weeks from its end.

Having gone sideways for 13 years, you might think that the rest of the world, the Developed World ex-US and the Emerging Markets, are a pretty good value now. But, corporate earnings in these regions have also gone sideways for 13 years, and remain below their 2007 peak. Today, the valuation of those markets, as a multiple of analysts' 12-month forward earnings forecasts, are about the same as they were at the bull-market top in 2007. Not the kind of place from where major bull markets begin. Arguably, earnings might improve, but it hasn't happened yet. Arguably, valuations could soar into the stratosphere, as they have in the U.S. -- but that seems less likely if valuations in the U.S. are coming down in the future. Corporate profit margins in the U.S. are very high, and if they return toward their historical norms as has happened in the past, then profits in the U.S. too might go nowhere for a decade.

If valuations on stocks are high, valuations on bonds are otherworldly. Not only are they the highest valuations (lowest yields) in all of known human history -- stretching back to the lending contracts recorded on cuneiform clay tablets by the ancient Sumerians at the dawn of the third millennium B.C. -- they are troublesome even from a theoretic point of view. What, exactly, is the point of giving a government €100 today so that they can give you back €95 ten years from now? It makes all financial theory burst into flames. In the past, negative interest rates have happened for very brief periods, notably in Swiss government bills in the mid-1970s. But never have they been so sustained and so common. About \$18 trillion in bonds today trade at negative yields. This is a little like a UFO landing in your backyard. It isn't supposed to be there. It might be important.

Every year for the past decade, the consensus of Wall Street's finest has been that interest rates would head higher. It was a "return to normalcy" after the zero interest rates that appeared in the 2008-2009 financial crisis. It made sense. But, every year, they have been wrong. There is every good reason for interest rates to head higher from here -- basically, all the reasons why bonds never got to this point in the first place, over a period of centuries. That would mean a bear market in bonds. But, I think this bull market might have a little further to go. Central banks, and the International Monetary Fund, have been talking about "significantly negative interest rates," perhaps on the order of a negative 3-5%. Since people would rather hold banknotes in a vault rather than take a 3% hit every year on bonds, their thinking now is that this would require "digital cash" to achieve. The central bank could put a leak in your "digital wallet," so that it too loses perhaps 3% per year. These "digital cash" systems, and the eventual elimination of paper banknotes, are being rolled out today. One of the major macro trends of the past ten years is: central banks, and elite international institutions like the IMF, tend to get what they want. They "Do What It Takes," to use European Central Bank head Mario Draghi's phrase from 2012, and it works. So far, this trend has shown no signs of stopping.

If central banks actively try to keep bond yields from rising, it will probably, one way or another, under various names and justifications, lead to more money creation and a tendency for currency values to decline. This might keep yields low and bond prices high, but it would probably cause a decline in the value of the currency the bond is denominated in. Either way, bondholders lose.

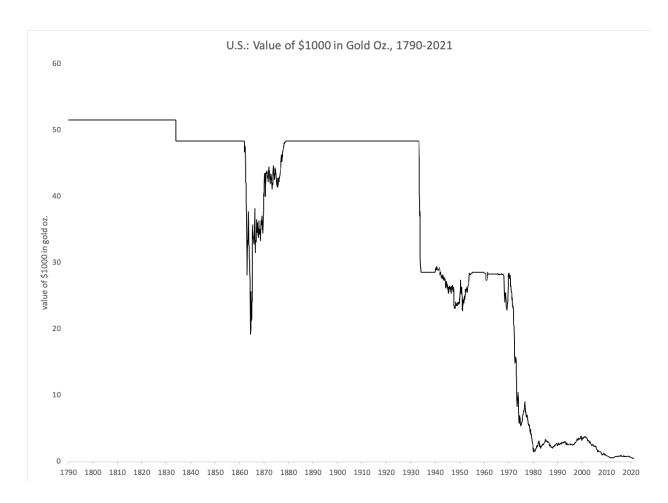
It's Time for Hard Assets

Among our asset class options today, I find that it is time to concentrate on "Hard Assets." Hard Assets are, basically, tangible assets that tend to hold their value in times when currency values are declining. The core Hard Asset is gold bullion. To this, we can add other precious metals including silver and platinum; commodities, including producers of energy, base metals and agricultural commodities; timber; and possibly, real estate. In the past, an investor didn't need to bother with hard assets. Currencies were linked to gold. The U.S. \$20 gold coin, a regular part of the currency system, contained 0.97 troy oz. of fine gold; or, \$20.67 would buy a full troy oz. In 1925, the "price of gold" had been \$20.67 since 1834 (with a major break during the Civil War); and before then, going back to the Coinage Act of 1792, it was \$19.39. Holding gold was not much

of an investment. It paid no dividends, and had no capital gains. You would do far better in government bonds. Prices for copper, wheat or oil were like gold. They went up and down from year to year, but there was no long-term trend higher.

Before 1971, there were two great moments when owning gold was wonderful. One was during the Civil War, when the dollar was floated and devalued due to the issuance of "greenback" paper money to pay for the war. The second was in 1929-1932. Although the "price of gold" didn't go up during this time, it sure beat owning stocks, which crashed 90%. Also, it was far better than having a savings account at a bank that went bust. Then, in 1933, the dollar was devalued, sending the "price of gold" 69% higher to \$35/oz. It was really just a decline in the value of the dollar, rather than an increase in the real value of gold. But, if you could go from 1929 to 1933 with a portfolio gain of 69%, while everyone else was getting massacred, that was not too bad. Unfortunately, in 1933, President Roosevelt confiscated all the gold coins in the United States, and paid only \$20.67/oz. for them, thus frustrating gold investors at the time.

In 1971, the world changed. For centuries previous, excepting some wartime aberrations, the major countries of the world linked their currencies to gold. After 1971, when President Richard Nixon effectively ended the Bretton Woods global gold standard system that had been established in 1944, all the currencies in the world "floated." Or rather, they sank. Like fiat paper currencies throughout history, they declined in value. By the end of the 1970s, it took over \$300 dollars to buy the same ounce of gold that cost only \$35 in 1968. This had little to do with gold, and everything to do with the declining value of the fiat dollar, which was now worth less than 1/300th of an ounce of gold. Not surprisingly, the price of a barrel of oil also went up thirteen times, from \$3 to \$40. This too had little to do with oil, and everything to do with the dollar. OPEC, which suddenly raised its prices in 1973, explained at the time that it was reacting to the declining market value of the dollar. In the U.S., this was called the "Oil Shock." In the rest of the world, it was called the "Nixon Shock."



Sometimes, fiat currencies decline in a continuous fashion. If you look at the history of the Turkish lira, Indian rupee or the Brazilian real, it is one long tale of near-continuous depreciation. But for the dollar and other major currencies, there have been two major episodes of decline, followed by two episodes of relative stability. The years of currency decline were 1970-1980; and 2001-2011. These were the times when gold and other hard assets outperformed nearly everything. When these periods ended, gold and the hard assets had terrible performance, while stocks and bonds soared.

Today, it takes about \$1800 to buy the same ounce of gold that once cost \$20.67. This, I assert, has been almost entirely due to the decline of the paper fiat dollar, mostly since 1971, and has almost nothing to do with gold, which probably has about the same real value as it did in 1900. We know for certain that, if not for the events of 1933 and 1971 which overturned the Gold Standard Act of 1900, the dollar today would have the same value as in 1930, or \$20.67/oz. of gold. The \$20 gold coin of 1925 would still be worth \$20 today.

Going forward, the "price of gold" might go to \$3000, \$5000, \$10,000 or \$1 million. This too would have nothing to do with the real value of gold, which doesn't change very much. It would just be the mirror reflection of declining dollar value. You can think of the dollar/gold ratio as a kind of foreign exchange rate, between new money and old-fashioned money. Most sophisticated gold investors think of it this way, which they express by saying that "Gold Is

Money," even though gold is rarely used in transactions today. For centuries, gold had the characteristic which people desire money to have, which is Stability of Value. I, and many others, think that it basically retains this characteristic today.

I find that understanding gold in this monetary sense makes a big difference in how people invest. If you saw gold as simply a speculative plaything, without any practical use or fundamental value based on cashflow; in short, that its market value was supported by little more than an enduring superstition or enthusiasm for necklaces in India, then you probably wouldn't want to have very much of it in your portfolio. But, if you see it as a form of "cash" that has proven its ability to hold a relatively stable value through all kinds of macro turmoil, from wars to episodes of worldwide currency debasement over a period of centuries, then you might be comfortable holding a lot of it, and you might be very uncomfortable holding USD-denominated cash or bonds when the government is creating trillions more dollars each year, while wantonly running deficits in excess of 10% of GDP.

As a currency declines vs. gold (the "price of gold rises"), in time, other commodity markets also reflect this new currency value. If the value of the USD falls in half, we can expect the "price of gold" in USD to double. Following this, over a period of time from a few months to a few years, we can also expect the prices of other major commodities to also double as a consequence of the change in USD value, "all else being equal." In practice, all else is never equal, but that is a good theoretical framework to begin with. This is entirely a monetary effect.

Today, we also have some interesting situations in other commodities, suggesting some major price increases for reasons separate from these monetary effects. Oil and gas have been beaten into the basement due to industry overinvestment and the recent Covid-related demand collapse. For the price of crude oil to return to its long-term average vs. gold, it would have to more than double. \$100+/barrel oil is much more likely, going forward, than most people think. Agricultural commodities are so cheap that the majority of U.S. farms have been losing money since 2013. Recently, the United Nations has been ringing alarm bells that a major shortage of food may erupt worldwide over the next few years. The battery in an electric BMW i3 automobile contains an estimated 30kg of copper, 12kg of cobalt, 6kg of lithium, 12kg of nickel, 12kg of manganese and 27kg of aluminum. The battery in the Tesla S is more than double the size. It gets worse: The battery for an electric heavy truck has 3190kg of base metals, including 680kg of copper and 440kg of nickel. At present rates of mining, it would require 866 years of global cobalt production, and 5x all the cobalt known to exist in the world, to replace the existing global auto/truck transport fleet with battery-powered electric vehicles. Engineers look at these figures and laugh. Even just a small percentage of EV adoption could drive gigantic demand for base metals. The world won't be giving up fossil fuels anytime soon, although the U.S. and Europe, only a small part of the world's population, might make some significant changes. (I think that electric trains, a 1950s technology already proven throughout Europe and Asia, are a far better form of electricpowered transportation. To this we might add greater use of electrified bicycles.)

Deficits and Money-Printing: Today, we have something new that wasn't a major factor in past episodes of currency decline, 1970-1980, 2001-2011 or even 1933. The Federal Government has

increasingly relied upon the central bank "printing press" to finance its deficits. In practice, little actual printing of money takes place, but the Federal Reserve has purchased huge amounts of government bonds, in effect making them disappear. The payments for these bonds by the Federal Reserve end up as reserves at banks, on the Federal Reserve's balance sheet, a form of base money. This trend began in 2009, when a very large deficit that year of 9.8% of GDP, the largest since World War II, was mostly financed, indirectly, by the Federal Reserve. In large part, the increases in Federal Reserve bank reserves that resulted were required due to the Basel III agreements finalized in November 2010, and phased in through 2019. But, this was like heroin to politicians in Washington D.C. The trend toward worrying about long-term budget issues including the future cost of entitlement programs was replaced by a new habit, of piling big new spending commitments on top of these long-term concerns. Economically, 2019 was one of the best years since 2008, as President Trump's reduction in corporate tax rates produced rising employment and wages. Despite these good times, however, the deficit that year was 4.6% of GDP.

The U.S. Federal budget deficit in fiscal 2020 (ended September 2020) was estimated at \$3.13 trillion, or about 15% of GDP. This is an incredible figure, in all of U.S. history exceeded only during World War II. The Federal Reserve's total assets increased by \$3.16 trillion, including a \$2.37 trillion increase in Treasury securities. The Federal Reserve bought most of the new issuance. Already for 2021, we have had the passage of a \$900 billion "stimulus" bill in late 2020, and an additional \$1.9 trillion bill. The Congressional Budget Office estimates a \$3.421 trillion deficit for FY21, about 15.6% of GDP, and another \$1.584 trillion for FY22 even before any more spending projects, which Congress is already talking about. And why? Never has so much money been spent for so little reason.

Some representatives of the Federal Reserve have been saying that much more money-printing is needed, including Neel Kashkari, president of the Minneapolis Federal Reserve, who recommended in November another \$3.5 trillion of Federal Reserve expansion ("money-printing"). Some Democratic advisors, including "Modern Monetary Theory" advocate Stephanie Kelton, have thrown out numbers in excess of \$5 trillion.

This is Crazytown. I think much of the Federal Reserve's expansion to date, even through 2020, was largely justified by the banking system needs mandated by Basel III. That is the main reason, in my view, that it has not had the dramatically inflationary effect that many expected. However, that transition has been accomplished. Further central bank expansion will probably be rude excess. But, as long as these huge deficits continue, central banks will find that they have little alternative but to finance them. Many governments have got themselves in serious trouble this way.

Structuring a portfolio with gold: How much gold, or other Hard Assets, should you have in a portfolio? In the end, this depends on the investor. Studies have found that, since 1971, putting about 10% of a traditional stock/bond/cash portfolio in gold would have produced overall improvements in returns, along with a desirable element of negative correlation. It is basically a hedge against these periodic episodes of currency decline. This is an agnostic, passive, all-

weather approach that doesn't try to identify periods of gold outperformance, but recognizes that they happen from time to time. Another approach has been the "permanent portfolio," which has: 25% gold, 25% cash, 25% bonds and 25% equities skewed toward the markets worldwide that offer the best value proposition. This has outperformed a straight 100% allocation to the S&P500 index since 1970. Today, if you were going to take an aggressive stance on a Hard Asset theme as I suggest, while also taking weightings of overpriced bonds and stocks way down, you might have 60% of a portfolio in Hard Assets. This could be broken down as: 10% gold bullion, 5% silver, 5% platinum, 10% gold and silver mining stocks (including royalty companies), 30% other Hard Asset themes including equities of energy producers and agricultural businesses; 20% cash (US Treasury bills); and 20% other equities. Despite Andrew Carnegie's admonitions, it is good to always keep some meaningful portfolio diversification.

In the end, an investor should take their individual needs into account, and not invest more than they are comfortable with. All of Wall Street is constantly holding the hands of stock and bond investors, telling them to "buy the dip" and "stay the course." Hard Asset investors rarely get much support, even when they are right. Gold was the best-performing asset of the 2000-2010 decade. Do you remember the celebrations? (Crickets.) Recently, gold has been in a bull market for over five years, after bottoming in 2015, but you will still be ridiculed for owning it. If an investor is not comfortable or committed, they will tend to sell during periodic periods of weakness. "Selling the dip" can be a money-losing strategy even in a bull market.

You can get very involved in individual stock picking among gold miners or energy producers. But, to do this well usually requires full-time commitment. Years of specialized industry experience also helps. It might be best to leave it to a professional, such as an actively-managed mining stock mutual fund like the Tocqueville Gold Fund. You can also do pretty well just by buying an ETF, such as the Van Eck Vectors Gold Miners ETF (GDX) or the iShares Global Energy ETF (IXC). One advantage of a mutual fund or ETF is that it becomes easier to manage medium-term trading of a portfolio, taking advantage of the rallies and retracements that tend to happen about once a year. You can keep your eye on the big picture, rather than getting bogged down on the latest drill results from a mining property in Chile.

Conclusions: A portfolio with 60% stocks and 40% bonds is not likely to do well when those two asset classes are at the highest valuations, and lowest potential returns, of the last 150 years. If we were still on a gold standard system, and we didn't have to worry about currency depreciation (or government default), it would make sense to hold a portfolio with dramatically reduced positions in stocks and bonds, and a dominant position in cash, probably Treasury Bills since we would want to avoid the risk of bank failure.

But that is not our situation today. Rather, I think we are in a new episode of currency depreciation, a periodic occurrence in all fiat currency regimes that have ever existed. There is no safety in dollar-denominated cash -- especially since, unlike the 1970s, you aren't getting paid any interest income to offset currency depreciation. Given the Federal government's new enthusiasm for deficits in excess of 10% of GDP, and expectations that these will continue to be financed by Federal Reserve money-creation, over the next 5-8 years we might experience the

most dramatic currency decline event in the history of the United States. I personally think that we will eventually end up in a moderate hyperinflation, of the sort common in Latin America during the 1980s. Between 1980 and 1990, the Mexican peso went from 23/dollar to 2800/dollar. Nearly all other countries in Latin America had a similar experience. It's not about speculating on the commodity market. You simply cannot survive an episode like this in any combination of stocks, bonds or cash. Other major currencies such as the euro, British pound or Japanese yen are not likely to do much better. Just as in the 1970s, and again in 2001-2011, all the major currencies tend to go down together. But, let's set aside such storytelling for now. It is not necessary to predict the future in such detail. Even if things are not so dramatic, and the outcome is as painless as the relatively benign 2001-2011 period, a portfolio heavy with gold and other Hard Assets would be among the best ways to endure, and profit from, a continuation of the declining currency trend that has been in place since 2015.

Nathan Lewis April 1, 2021