



GOLD OUTLOOK 2022



Monetary Metals[®]
Unlocking the Productivity of Gold[™]

Gold Outlook Report 2022

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Introduction

The new year is pregnant with new opportunities and old traditions. It's a time to reflect on the previous year, and chart goals and resolutions for the year ahead.

Here at Monetary Metals, our tradition is to publish the Gold Outlook Report. This annual publication includes our unique analysis of precious metals markets, the macroeconomic conditions to watch in 2022, and last (but certainly not least!) our price predictions for gold and silver.

Price predictions are easy to make, and easy to find. There's no shortage of people out there making them! What's hard to find, and even harder to do, is to be consistently accurate.

2022 marks a decade of Monetary Metals' analysis on precious metal prices and their supply and demand fundamentals (wow...has it been that long?!). Our first Outlook Report was published in 2015. We've missed a few years here and there as we were busy building our business of [offering interest on gold, paid in gold](#).

Ten years is a good time to reflect on our coverage of precious metals, and how accurate our price calls have been historically. We sat down and analyzed our calls against what the market actually did. This year's Gold Outlook begins with a brief summary of the results below.

A Review of Our Previous Price Calls

We created a chart to summarize our price calls over the last ten years against what happened in the market. We provided a score based on how accurate our predictions were. Keep in mind that it wasn't always a clear-cut call. And we did not produce an Outlook Report for 2017 and 2019 as our focus was to grow the business.

			
YEAR	OUR CALLS	WHAT HAPPENED	SCORE
2012-2014	<p>Gold: Neutral to negative Silver: Negative GSR: Rising</p>	<ul style="list-style-type: none"> • Gold fell ~25% • Silver fell ~44% • The GSR rose from 52-77 	A+
2015	<p>Gold: Buy for a quick trade, otherwise no strong buy Silver: Negative GSR: No call</p>	<ul style="list-style-type: none"> • Gold rose 8% then fell ~10% for the year • Silver declined ~15% • GSR traded sideways 	B+
2016	<p>Gold: Good buy and good trade Silver: Better than last year but still a roll of the dice GSR: To Rise</p>	<ul style="list-style-type: none"> • Gold rose in the short term and ended the year higher • Silver did the same. It was a good dice roll • GSR rose but with a lot of volatility 	A
2018	<p>Gold: Good buy and good trade Silver: Good buy and good trade GSR: To Reverse Lower</p>	<ul style="list-style-type: none"> • Gold did rise, eventually, but took a lot longer than we thought. It was down 2% in 2018, but rose 20% in 2019. • Silver down 6% in 2018, and up 7-8% in 2019. • GSR continued rising and broke 90 in 2019 	C
2020	<p>Gold: Higher to much higher Silver: Higher to much higher GSR: To fall</p>	<ul style="list-style-type: none"> • Gold rose over \$2,000/oz a new all time high. • Silver rose over 60% and finished the year over 30% • GSR did fall after rising to ~115 	A+
2021	<p>Gold: To rise Silver: To rise GSR: To fall</p>	<ul style="list-style-type: none"> • Gold fell • Silver fell • GSR rose 	D

We were not sure of what we'd find scrolling through the internet archives. But we are proud of our own track record. Especially when you take into account the backdrop when these calls were made. For years we were a lone voice calling out in the wilderness for flat to falling prices amidst a chorus of perma-bulls (at one point we were even labeled a permabear as a result).

And yet, as we saw the fundamentals changing, we did eventually change our call. And that happened while many institutions were calling for prices to remain low or go lower, a moribund retail market, and not to mention some serious perma-bull fatigue and frustration.

We don't trade metals money for dollar profits more government IOU's. [Generating a real yield on real money](#) keeps us too busy for that. But we are gratified to hear that professional traders, funds and many other industry professionals have used our model profitably. The record speaks for itself. Our supply and demand model is a true signal in an otherwise very noisy market.

So, how exactly do we do it?

We promise to answer that question. But first, let's spend a little time discussing how NOT to do it.

How Not to Think About Gold

It's difficult. Nay, it's impossible to spend any time in the gold market without bumping into all the different theories for what drives gold and silver prices. There are the money supply measurements, interest rates (both "real" and "nominal"), annual mine production numbers, jewelry and manufacturing data, and attempting to track the *flows* of metal from East to West (or is it West to East?) to list a few.

And then there are the non-theories. We refer to the never-ending price manipulation narrative, the imminent Comex default that could happen any day (but never does), the conspiratorial conglomerates who are scheduled to reset the global currency system on _____, 2022 (for the 47th time), that new exchange that will finally reflect gold and silver's "true" price as soon as it comes online, and sundry others.

We catch flack for calling out these folks. Why do we keep doing it you ask? We're not masochists. It's because we've seen firsthand the harm that can come from following these headlines. Follow them, and you may find yourself overexposed to gold before long, and then selling out of frustration all too soon. These stories do not serve investors or the industry. They only confuse and obfuscate.

The fact is that gold does not need these false narratives for why people should own it. The true reasons are good enough. Tarnish is an apt word for this kind of activity.

We've been debunking these theories for a long time, and we now have a sizable repository of all the wrong ways to think, value, and otherwise do gold and silver market analysis. We've compiled these in a report that we plan to release very soon. And there's been some new ones we spotted this year that aren't included in the list above.

If you're interested, you can [sign up here](#) to join the waiting list. Especially if you're new to gold, it might be one of the best financial decisions you can make.

There is one thing that the wrong theories and the non-theories get right. The dollar *really* is a problem. And it *really* is failing. This is why we give the same advice every year.

To anyone who does not yet own gold or silver, you should own some, period. Without regard to price.

The problem is, the dollar failing is not an investment thesis. And it's not obvious how one even begins to try and trade it.

No, the market needs a different approach for analyzing gold and silver.

We offer ours.

We developed a proprietary model that analyzes the supply and demand fundamentals of gold and silver based on the spreads between futures and spot markets. The model

calculates a fundamental price for gold and silver. The price may trade outside its fundamentals for a time, but eventually it tends to converge, and oftentimes, with a vengeance.

Without further ado, let's dive in.

How We Think About Gold and Silver

Fundamental Analysis in Commodities

When it comes to analyzing precious metals, the right methodology isn't immediately obvious. Fundamental analysis in stocks and bonds is well understood. One can discount cash flows, examine the balance sheet, review the income statement, look at growth prospects and arrive at a fundamental value for the company. And there is a sophisticated ratings system for the debt of those same companies.

Commodities are different. Oil doesn't have a balance sheet. Sugar doesn't have an income statement. Gold doesn't have cash flows (though it does generate a yield thanks to our [Gold Fixed Income](#) program). Not to mention that while sugar, oil and gold may be part of the same *class* (commodities), it would be a grave mistake to consider them the same *species*. Just like cheese and chalk are not the same thing, despite both words starting with the same phonetic "ch."

Conventional analysis for commodities hinges on understanding supply and demand dynamics for each commodity. This would involve looking at both the supply side and the demand side and answering questions like; Are there shortages or surpluses? Is demand growing or shrinking? From which markets? And what are the drivers of those increases or decreases?

We would never say this analysis is easy, but it is simple, as in, an [8th grader can understand it](#). But does this same kind of conventional analysis apply to gold and silver?

No.

It is precisely because gold is not *just another commodity* that it defies this kind of conventional analysis.

Gold, Not Just Another Commodity

It's important not to gloss over this point. Thanks to the rise of bitcoin, and the increasingly obvious failure of the dollar, questions about the nature of money are more popular and relevant than ever before. So, what are the reasons why gold and silver are *monetary* metals, and not just mere commodities?

To begin, gold is not *consumed* in the same way that oil, sugar, and wheat are. As the famous refrain goes, "You can't eat gold!" Well, actually [you can](#) but the broader point is, "Zounds man, why would you want to?!"

It's not consumed because it's too valuable. We would rather hold onto it, in some form, than dispose of it. That's not true of oil, sugar or wheat. Not to mention how difficult it would be to "hold onto" those things. In the case of oil, by difficult we mean toxic, hazardous, and costly. You would need some serious square footage and heavy equipment to store any meaningful amount of oil. Whereas you can hold 500 - 1,000 oz (\$1-\$2Million) of gold in your backpack.

Second, even if we wanted to "consume it" we couldn't. Pure gold is virtually indestructible. Unless you're within walking distance of Mount Doom in Mordor, good luck trying to destroy your gold!

These two reasons lead us to a startling conclusion—all of the gold ever mined in human history is still here.

The implications of this are extraordinary.

And the least of them is that you may be wearing the same gold as Cleopatra. Or that the gold interest you earn with Monetary Metals may be the same gold the De Medici family used to finance the Renaissance.

And, the implications go far beyond mere curiosities.

The first implication is that the number that represents the total “supply” of gold is a very, very large number. The World Gold Council estimates this to be about [201,296 tons](#). That’s over 6 billion ounces, and just shy of \$12 trillion dollars (as of this writing).

We think this number underestimates it, potentially by multiples. Why? For two reasons. Humans have been accumulating gold for a very, very long time.

The oldest known gold coin has been dated to the 7th century B.C. by historians. But that’s the earliest evidence we have of gold **coin**. To find the earliest record of humans valuing and accumulating gold itself, we go an additional several thousand years further back in history for that.

Second, gold isn’t exactly the kind of thing people mention that they have. That’s as true today as it ever was.

The fact is that every ounce of gold that humans have ever accumulated could be potential supply. On short notice, it’s just a quick trip to a refiner to turn jewelry or objets d’art into bullion.

This fact should turn any attempt at conventional analysis for gold upside down.

It means there’s no such thing as a *glut* in gold. There’s no such thing as *oversupply*. People are happy to keep stacking gold today, and for all the today’s going back thousands of years.

It means annual mine production numbers are virtually meaningless (though not to the miners). Using the



official estimate, annual mine production accounts for about a 1.7% increase in the total supply of gold. In other words, it's the proverbial drop in the bucket. There can be more gold volume traded in a day, than what is produced annually.

The technical term for this is **Stocks to Flows**. In regular commodities, this same ratio—stocks to flows—is measured in months. We just don't hoard wheat and oil for the long term, for obvious reasons. Nor even iron or lumber or other durable materials. But for gold, and to a lesser extent silver, the stocks to flow ratio is measured in **decades of annual production**, not months. Increases in gold production does not pose a threat to collapsing the price the way that increases in oil production might.



So, we've covered the supply side. What about demand?

What would lead humans to demand gold and silver this way, for all those years?

There is only one conceivable answer. It's because these metals are money.

Consider the marginal utility of gold compared to other commodities.

People are happy to accept the 1,001st ounce of gold, on the same terms as the 1,000th or the 1st ounce. It doesn't hurt that you could carry those 1,000 ounces in a backpack, nor that you can find a ready market for it anywhere in the world, from London to Lisbon to Lagos to LA to Lima to Laos. The same cannot be said for any other commodity, with the exception of silver.

This too has profound implications. One, if gold and silver are money, then what is the dollar? We've asked and answered that question [many, many](#) times and we won't rehash here.

We want to discuss the implications of gold and silver's moneyness on attempts to analyze their "price." We put "price" in quotations because it's really gold that should be the lens through which we talk about the price of the dollar, not the opposite.

To recap, here's where we are:

Supply: All the above ground gold that humans have been accumulating for millennia, under the right conditions and at the right price.

Demand: Virtually everyone on the planet under the right conditions and at the right price.

This leads to the following.

A change in the desire to hoard or dishoard gold, even a small one, can have a big impact on price.

So, how does one go about measuring the desire to hoard or dishoard gold?

The answer to this question forms the basis (pun intended, if you know, you know) of our Supply and Demand model for gold and silver.

The Only Way to Do Fundamental Analysis of Gold and Silver

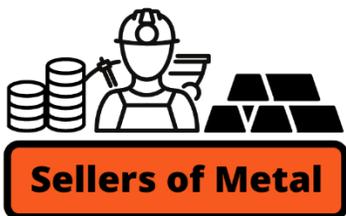
To understand our Supply and Demand model, you must first understand the players. We divide the market into five different actors. Here's a graphic to orient you to our framework.

The Players in our Supply and Demand Model



Buyers of Metal *Emptores Metallii*

The end buyers (not intermediaries e.g. jewelry manufacturers) are typically hoarders. There is no particular price that is necessarily too high, other than whatever they think is a fair price at any given moment. The demand for gold for hoarding is **monetary reservation demand**. Their idea of the fair price changes with market conditions, Federal Reserve announcements, monetary policy, etc.



Sellers of Metal *Venditores Metallii*

They are dishoarding, for whatever reason. They may think the price has hit a high enough level to attract their **greed**, or a low enough level to activate their **fear**. Miners are a subcategory of sellers, though miners are price takers (and a small fraction of the supply in any case).



Buyers of Paper *Emptores Chartae*

Paper here refers to futures, options or other derivatives. These are **speculators**, with three key differences from buyers of metal. One, they use **leverage**. Two (for that reason and others), they have a **short time horizon**. Three, they trade for **dollar gains**.



Sellers of Paper *Venditores Chartae*

Not nearly so big a group as popularly imagined, there are people who take the two lopsided risks of (1) shorting something with limited profit and unlimited loss potential and (2) fighting a 100-year trend. These people are **nimble and aggressive** and certainly their **trades are short-term**.



Warehousemen, aka Market Makers

Factorem Mercatus

If few people are willing to bet on a rising dollar (i.e. falling gold price), then who sells gold futures? Aren't futures a zero-sum game, with a short for every long? Enter the warehouseman. He stands ready to **carry gold** for anyone who wants future delivery. If you buy a future, you are signaling that you want gold, not to be delivered now, but at some date in the future. **For a profit, the market maker will sell it to you.**

The warehousemen buys metal in the spot market and simultaneously sells a contract for future delivery. He doesn't care at all about price, as he has no exposure to price. He responds to spread. Suppose he could buy gold in the spot market for \$1,800 and sell it for December delivery for \$1,836. That is a 2% profit, not unattractive in this market.

It's important to keep in mind that virtually all of the gold ever mined is in someone's hoard. However, the market can experience seasons of relative abundance and scarcity. The spreads of the warehouseman provide a good signal to see it.

If there is a big spread between spot and futures—called [the basis](#)—then this means two things. One, speculators (typically buyers of paper) are bidding up futures contracts. And two, the marginal use of gold is to go into the warehouse. This is a signal that gold is relatively abundant in the market.

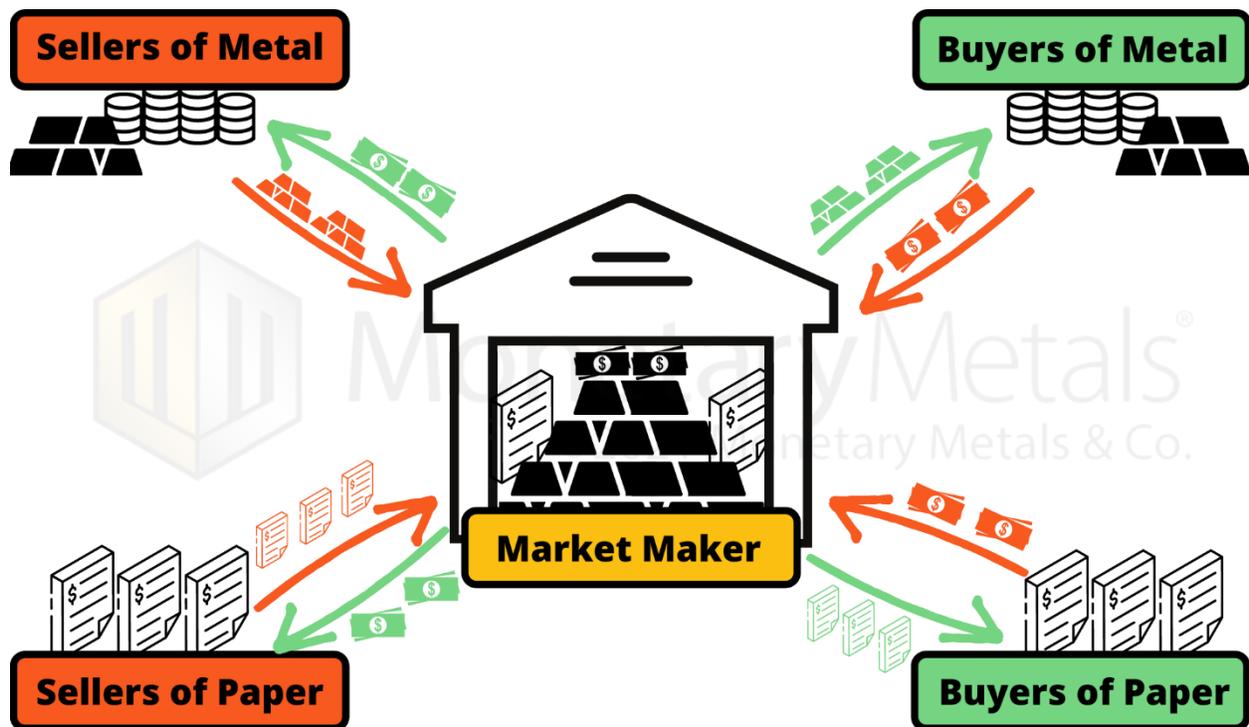
Normally, the price in the futures market is higher than the price in the spot market. This is called *contango*. Contango means it is profitable to carry the metal, which is to buy a metal bar and sell a future against it. However, the basis spread can invert—and it has many times since the crisis of 2008. When it is inverted—called [backwardation](#)—which means it's profitable to sell metal and buy a future. Such decarrying is, by conventional standards, risk free (it's not, see below). It should never happen in gold, as it is a sign of shortage and there is no such thing as a shortage in a metal which has been hoarded for millennia.

Backwardation, therefore, is a signal of relative scarcity of gold in the market. It's a signal to the warehouseman to empty out the warehouse.

In backwardation, the marginal supply of metal is coming from the warehouse (carry trades are unwinding). Obviously, there is only a finite supply of gold held in carry. Thus, backwardation typically heralds a rising price.

To recap, by analyzing the spreads of the market makers in precious metals, we get a glimpse of the activity of all five market participants. A rising basis (growing profitability to carry gold) signals relative abundance. A falling basis/rising cobasis (growing profitability to de-carry gold) signals relative scarcity. Generally, rising abundance warns of a price decline, while rising scarcity presages a price increase.

This is the only way to analyze supply and demand fundamentals for the monetary metals. The five market participants interact to form a constantly changing dynamic. It is this dynamic that we study when we look at spreads between spot and futures, and changes to these spreads.



Monetary Metals has developed a proprietary model based on this theory, which outputs the Fundamental Price for each metal. This is [updated every day on our website](#). We provide many charts and analysis of our indicators. We also have a newsletter, The [Supply and Demand Report](#), where we chronicle changes in the fundamentals for gold and silver. You can subscribe to that report by clicking the “Subscribe” button in the top right corner of our website.

The supply and demand fundamentals are a great signal for where prices are likely headed in the short term, but they are not suited for longer term predictions. That is because the model tells us what the participants are doing, not why they're doing it. To understand the why, we must incorporate broader macroeconomic analysis like inflation, interest rates, the madness of Central Bankers and even wildcards like Bitcoin. It is here where we turn our attention to next.

Bitcoin

The following is not a prediction for bitcoin's price in 2022. We don't know what the price will be in the short term, and neither does anyone else. It is a look at the economics of bitcoin.

First off, bitcoin is not a Ponzi scheme. A Ponzi is a fraud, in which the sponsor promises a yield. The sponsor does not actually do anything to generate this yield. He simply reports

gains to investors, while spending the money to support his lavish lifestyle. When investors withdraw money, he pays them some of the new money coming from new investors. Ponzi schemes blow up sooner or later, when the sponsor's spending and withdrawals drain the bank account dry.

Bitcoin is closer to a pyramid scheme. A pyramid is not necessarily a fraud, and not necessarily illegal. Bitcoin does not promise any particular return, certainly not in the sense of a yield on invested capital. You pay X dollars to a seller of bitcoin, not based on an explicit promise, but based on the expectation that in the future a buyer will pay you more than X dollars. Like a Ponzi, the gains come from new investors. Unlike a Ponzi, there is no common pool into which your dollars go.

One does not *put* dollars *into* bitcoin. One does not *convert* dollars to bitcoin. One forks over one's savings to a former owner of bitcoin, who sells the bitcoin to you. The seller now has the dollars, which he can spend as his profits.

The seller is spending your savings.

Bitcoin is therefore like any other bull market fueled by the falling interest rate. They serve as a [mechanism for the conversion of one party's capital into another's income, to be consumed](#). No one wants to be the Prodigal Son, but the falling interest rate incentivizes a Prodigal Society.

Like a Ponzi, a pyramid collapses when more people want to "withdraw" (i.e., sell) than who want to buy.

The above does not mean that the price of bitcoin will collapse tomorrow. Or next year. It could be a penny, a million bucks, or anywhere in between—and probably will.

Do not take our words as a moralizing admonition not to trade. The central banks have waged a war on interest. They have deprived people of a means to earn a yield. Everyone is therefore forced to turn to [speculation as a surrogate for yield](#).

Volatility

It is commonly assumed that as bitcoin grows—whether in price or in trading volume—its price will stabilize. However, despite the total value of all bitcoins reaching over \$1.15 trillion in October, there was a wicked drop in price from over \$67,500 to \$33,000—about 51% in two months. From the perspective of a market observer, the idea of bitcoin price stability seems to be an article of faith.

Let's drill deeper into the economics of price stability. Suppose an industrial commodity was used in manufacturing products. Pipe, wire, electronics, and motors are made with copper. And each has a market price, based on the value of using pipes, wires, etc. If the price of copper fell, it would be an incentive to manufacture more pipes and wires, etc. If it rose, it would be a disincentive to manufacture pipes and wires etc. (or an incentive to switch to the next-best alternative to copper). The price of pipes and wires can only rise so far, before the users do not have an economic benefit from them.

And there are incentives on the production side as well. If the price of copper falls, copper miners have reduced incentive to mine copper ore. If it falls below their cost of mining, then they stop. If the price rises, then they have a powerful incentive to increase their production.

Copper mining consumes oil and labor, and other things. So, the cost of copper depends on the prices of these things. And hence the price at which a copper mine can make money.

The prices of all things in the real world are thus tied to the prices of all other things.

Bitcoin has no such ties. One objection might be that producing bitcoin uses electricity, so is tied to that price. This is true, but bitcoin was designed to be produced at a certain rate. If the cost of electricity rises, then what happens is not less bitcoin production—but fewer bitcoin miners competing to win the predetermined bitcoin production quota.

For copper, the bid is set by the marginal user whether this be wires, pipes, etc. For bitcoin, the bid is set by the marginal speculator.

The Marginal Speculator

One other thing needs to be said about volatility. Suppose it were true that everyone could know and agree on what the *correct* ultimate price for bitcoin is. Let's call this magical price \$1,000,000 or MP for short. Of course, if people did not agree on MP, they would buy and sell. Waves would develop, and chart followers would pile-on.

But let's consider what should market participants do, assuming they all agreed on MP. Suppose everyone bought and bought, until the price finally reached MP. What would they do when it finally happened?

Sell.

Many of them are in it to make *money* and by *money*, here, we mean dollars. They are in bitcoin for the trade of a lifetime. After all, bitcoin is to go up about 30 **times**. But once it hits its ultimate value, there's no more gain.

So, these people sell, and look for the next bubble inflating somewhere (this being the zero-yield world after central bank victory in the War On Interest).

This selling causes the price to drop. And since everyone knows this will occur, the smart thing to do is sell **before** the price reaches MP. With bitcoin, or indeed any market with the bid set by speculation, there are only endless waves of buying and selling, by endless traders trying to front-run their peers.

It's a [Keynesian Beauty Contest](#). Suppose a newspaper (think back to the 1930's) ran a contest. They printed the pictures of many women, and said you had to pick the prettiest one. But prettiest is determined by the vote of all the other people sending in their entries.

The goal is not to pick the one who you think is prettier, but in Keynes' words:

"It is not a case of choosing those [faces] that, to the best of one's judgment, are really the prettiest, nor even those that average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be."

“

One does not put dollars into bitcoin. One does not convert dollars to bitcoin. One forks over one's savings to a former owner of bitcoin, who sells the bitcoin to you. The seller now has the dollars, which he can spend as his profits.

The seller is spending your savings.

”

In other words, it's not what you think the bitcoin MP should be. It's not what you think others think MP should be. It's what you think others think that others think MP should be.

No wonder the price is volatile!

Money Must Be a Unit of Measure

The fundamental question facing every business enterprise is: are you creating or destroying wealth? If a business is destroying wealth, then the sooner it closes its doors and relinquishes its remaining resources to productive enterprises, the better.

The only means of knowing whether a business is creating value is its financial statements. Most businesses—and all big businesses that produce the important things like food, transportation, communications, etc.—make multiyear capital investments. They have to know if their net result after a year, or 10 years, is really a gain or a loss.

The irredeemable dollar begins to show its limitations once you get past a few years. Over a period of decades, at best one has *1996 dollars* which are somehow *adjusted* to be equivalent to *2022 dollars*.

Imagine if the meter shrunk as one climbed up a multistory building. On the ground a meter is, well, a meter. But on the 80th floor, a meter is the width of your hand. So, engineers would have to try to somehow work in *floor-adjusted* meters. We doubt anyone would be able to erect a building taller than perhaps two floors.

Yet this is the problem forced on us by the dollar (and it's compounded by the [unstable interest rate](#)).

If it is problematic to use the dollar for economic calculation over long periods of time, then it is fantastical to use bitcoin.

Just think, in 2009, a new Honda Accord was \$23,000. Today, the Accord is about \$0.66. This—if one took it seriously—is a total collapse. The value of all things, if we attempted to measure them in bitcoin, have utterly collapsed. A near total wipeout of the economic universe.

Quantity Theory of Bitcoin

Why would anyone design a currency system with a strict cap on its quantity?

It is based on the belief that as quantity rises, the value of each unit falls. This belief, it should be noted, is the mainstream view. It is accepted across the spectrum. Proponents of the Fed believe it. Critics of the Fed believe it. And nearly everyone else.

Yet we see, in bitcoin, a currency designed based on this theory is not only observably unstable in value. It is unstable in theory; it will never be stable.

What good is a theory that, if put into practice, does not work?

Anyways, what this theory says in economic terms is that the marginal utility of a currency falls the same way the marginal utility of other goods falls. Marginal utility is the value at the margin, in this case the value of the $N^{\text{th}} + 1$ unit. A falling marginal utility means the value of unit $N+1$ is less than the value of unit N .

To understand this point, imagine walking in the desert around Phoenix in July. It is 115F (46C). You are extremely thirsty, and you are many miles from civilization. You come up to someone selling bottles of water. What is the first one worth to you? You would open your wallet, or your bank account. What is the second one worth? Well, it's water for the walk back home. How about the third, and fourth? It's heavy and you don't really need that fourth bottle.

The value of water rapidly diminishes at the margin.

Is money just like water, something that once someone is sated, he doesn't want and even regards as an inconvenience?

If each unit of money in the economy diminishes in value, the more units there are, it would be like each meter stick diminishing in length the higher you go in a building.

Gold does not behave this way. Gold is not consumed, yet it has been mined for thousands of years. It is still being mined, and the market still readily absorbs whatever gold comes to market. If gold's marginal utility is diminishing, it is diminishing so slowly that its value is still above the marginal cost of gold mining after millennia of mining.

Does the marginal utility of bitcoin diminish? We may not get an opportunity to observe it, as the designer was so terrified of this possibility, that he capped the quantity.

History Offers a Glimpse of the Future

Bitcoin has an intractable problem, and it is intrinsic to bitcoin itself.

The history of every industry is the story of producing more, with less. Fewer resources and less labor go into everything. From raw materials to factory machines, to consumer goods, to distribution, and retailing there have been relentless gains in efficiency and relentless reductions in cost. Historically, food was so expensive that French kings in the 17th century and American politicians in the first half of the 20th promised a "chicken in every pot." Today food is so cheap that obesity, not starvation, is the big nutrition problem among the poor.

The process of improving production is a journey, not a destination. No one believes that the amount of wheat grown per acre has been perfected, and that's it. No one thinks that fertilizer cannot be improved, or that harvesting cannot be further automated. No one claims that computers have become as fast and as capable as they ever will, and that software won't be improved. And obviously, no one asserts that the speed limit for commercial air travel is 500 miles per hour. [There are now several companies working on supersonic aircraft.](#) Not to mention, [space travel.](#)

So, bitcoin is an interesting social phenomenon. The technology is clever—but then, so is the technology for harvesting grain by the square mile, making chips that run at 3 GHz, and airplanes that can fly 1,000 mph. No, the point here is the social phenomenon itself.

The Social Phenomenon of Bitcoin

Bitcoin promoters believe that bitcoin technology is the final destination, not a journey. That everything man knows—everything man can know—about monetary computer networks was incorporated into bitcoin. Bitcoin is a summit that will not be surpassed, because it cannot be.

And for them, **this is a necessary premise**. It is necessary, because if the technology could be improved incrementally, let alone if there could be further revolutionary developments, then bitcoin itself could be abandoned in favor of the next new kind of cryptocurrency.

Could there be some sort of transition for holders of bitcoin to end up with the equivalent amount of the new cryptocurrency which replaces it? Maybe. It would depend on the nature of the new technology. Suppose Ethereum were gaining market share at an accelerating pace, perhaps due to its smart contract capability. Would there be a way to *convert* \$50,000 worth of bitcoin to \$50,000 worth of Ethereum? Obviously not. Note we cannot just say that all bitcoin holders sell their bitcoin to buy Ethereum. The attempt would crash the bitcoin price. Only a few on the leading edge could exit with their value intact.

A graceful bitcoin conversion would also depend on the incentives that motivate the various players. No one cares about your wealth. They care only about their own. They do not exist to ensure that you retain your value in a transition. What happened to those who were invested in making buggy whips, when internal combustion engine technology was adopted?

If the big node operators of the bitcoin network collaborated on a new version of the bitcoin protocol, then maybe all existing holders would stay even. But if a new technology emerged from new innovators (which is often how it goes), then bitcoin holders could lose everything.

Thus, their implicit premise is that bitcoin has perfected the technology, and it shall remain static until the end of the world. A change, much less a revolutionary change, poses an unacceptable financial risk to those who trade their life savings for bitcoin, those who put their house in hock to buy bitcoin, and those who turn their software companies into leveraged bitcoin hedge funds. The idea of a change poses an unacceptable psychological risk.

If new innovations are possible, and if those new innovations are not plug-compatible with bitcoin, or if they are developed independently by new players who are not interested in giving a trillion dollars' worth of their new cryptocurrency to those who happened to bet on the obsolete cryptocurrency 1.0... well, that just can't be possible!

The Technology of Bitcoin

Finally, let's look at bitcoin's technology, through the lens of the constant drive to improve efficiency. Maintaining the bitcoin network consumes enormous amounts of energy. And requires enormous amounts of capital in the form of the hardware that crunches the numbers. In any other industry, producing any other good or service, inventors, innovators, engineers, entrepreneurs, and investors would be hammering on this problem. For example, look at the internal combustion engine. Today, engines produce more horsepower, using less fuel.

Or look at dairy production. An acre of land supports more cows, and each cow gives more milk. And each cow requires less labor. This labor is freed up to work on producing other things, that 18th century agrarian societies could not have imagined.

But bitcoin has a problem in this regard. The enormous cost of operating the network is not incidental. It is not waste, per se. It is designed into bitcoin, part of bitcoin's very nature. Bitcoin operates on a principle, called "proof of work", which is central to how the disparate operators of its network nodes agree on every transaction. If they did not agree, then a bitcoin could have multiple holders. The system would not work. You could not eliminate proof of work—or the computational work—from bitcoin, the way you could not remove moving parts from an internal combustion engine. The way you could not remove dairy from cheese. The way you could not remove production from the economy.

In computers, work means performing calculations. And calculation requires electricity. The amount of electrical energy consumed to calculate a single thing (e.g., the sum of two numbers) has been going down since the dawn of the computer age. In the 1950's, a computer had thousands of vacuum tubes. It was large enough to fill a room and required 240-volt power. Today, the supercomputer in your pocket (i.e., mobile phone) has more computing power than the entire world had in 1975. It requires so little power, that a small battery can keep it running all day.

However, bitcoin was designed to use more and more computing power as time goes on. At first, someone with a personal computer could operate a node profitably. Today, one needs a lot more computing power. And even though the electricity per calculation has decreased significantly in the last decade, the amount of electricity you need to operate a successful bitcoin node has increased. By a lot.

This power-burning arms race is inherent in bitcoin's "proof of work" architecture. You see, the purpose of performing all those calculations is not because the output is otherwise useful. The work itself, the very need to do this work, is intrinsically necessary to operation of the bitcoin network.

Bitcoin depends on large numbers of people performing large numbers of computations. And the number of transactions is rising, along with the amount of hardware required, and the amount of electricity burned.

It is **this**, that bitcoin promoters promote as being the end of progress, the pinnacle from which no further progress is possible. And they have a trillion-dollar bet riding on this premise.

Macroeconomic Conditions for 2022

The Economic Outlook

One of the fundamental fallacies of [socialism](#) is that it does not admit **production is conditional**. In order for you to be able to buy goods, or get paid to do a job, many things have to occur first. An inventor needs to invent the product. An entrepreneur needs to organize a business. Then the business has to raise capital from investors, and later, lenders. It has to hire people (perhaps you). It has to produce the goods. Then distribute them. And finally, sell the goods to you.

If the necessary conditions for any of these steps is absent, then the goods do not appear. Unfortunately, the socialists do not acknowledge this. They assume that goods appear automatically, as the sun appears in the eastern sky. Then, they leap to politicizing every aspect of producing and distributing goods. They presume to say what *share* of the profits is *supposed* to go to the workers, and how much the buyers *should* be paying. More and less, respectively, according to socialism.

Any deviation from these alleged ideals is evidence that the producer is *greedy*.

Which is germane to the top economic issue in 2022: why are prices rising so much?

When President Biden and Senator Warren blame corporate *greed*, they are appealing to this socialist dogma.

It should be obvious that *greed*, so called, is a constant. Everyone wants what they want. And that was true yesterday, as much as today. Also last year, and last decade too. *Greedy* is therefore not an explanation for a recent change. Those blinded by socialist dogma cannot see the obvious.

As an aside, there are three kinds of people calling themselves economists. The first is a **dirigiste**, who seeks the power to impose his whims as the central plan. The second is a **court-economist**, who spins the facts and sells whatever propaganda to keep the victims happy at their plight. The last type is a **scientist** who studies coordination, including the pathologies induced by the dirigistes. That's what we are trying to do. We publish our views in this Gold Outlook 2022 report to help people gain a better understanding of how it all works. Or, increasingly, is failing to work.

No theory of prices can be built by studying only monetary factors. There are significant nonmonetary forces that push prices in both directions. Prices are pushed down by efficiency gains. Every industry is constantly working to increase efficiency, to produce more with less.

Prices are pushed up by four nonmonetary forces. We have written many articles about the first one, that we call [useless ingredients](#), things that regulators and taxinators force producers to add to their products, but which consumers do not value (and often do not know about).

For example, gasoline producers are forced to add ethanol or MBTE. This adds to the cost, and hence the price to the consumer. We will come back to the other three nonmonetary forces, below.

The problem with the word *inflation* is that it includes all causes for rising prices, both monetary and nonmonetary (and it overlooks the mitigating effect of improving efficiency). It is easy to ignore the nonmonetary forces when laying blame for the calamity of rapidly rising consumer prices. It doesn't help that Milton Friedman famously said that "[inflation is everywhere and always a monetary phenomenon.](#)"

And now we have a case of rapidly rising quantity of money, combined with rapidly rising consumer prices. Surely, this is not mere correlation? It must be causation, right?!

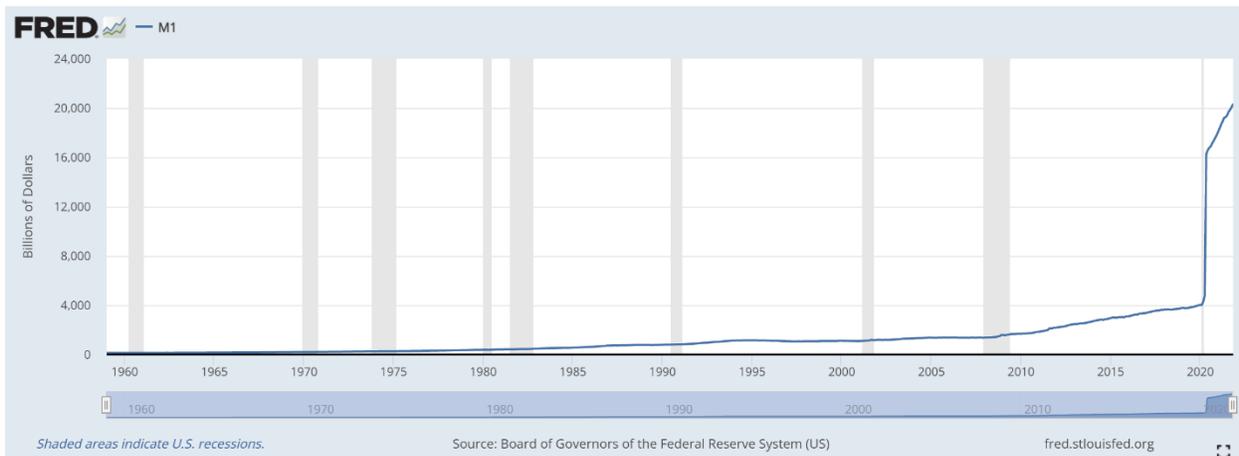


Chart of M1 measure of the quantity of dollars

This measure increased about 5 times—from \$4 trillion to well over \$20 trillion, and still climbing. It makes the then-breathtaking moonshot increase after the 2008 crisis look like a gentle ramp! But is this the cause of rising prices today?

Not so fast.

Before we proceed, we have to address a very common error. Isn't it true that the government has doled out trillions in free money, and that the recipients spend this free money? Yes, but if this causes rising prices, then it's not the increase in quantity of dollar extant—monetary policy. It is the spending of free money by people who did not produce something to exchange—fiscal policy. An attempt to break the iron law of economics known as [Say's Law](#) (in essence, you must produce before you consume).

In any case, when companies see increased demand for their goods, they invest in increasing production. So, a rise in demand does not, in itself, cause rising prices. When the central bank is pushing down the interest rate, the free goodies do not come at the cost of higher prices. They come at the cost of eating the seed corn, consuming the capital base that makes all production possible.

A **too-low** interest rate is a subsidy for production. It feeds savings to consumers, via the producers. And a **falling** interest rate is an **increasing** subsidy for production.

Back to nonmonetary causes of higher prices, we do not believe that there has been such a big change in ordinary useless ingredients, that it can explain the skyrocketing prices of late. So, we will not focus on this particular factor.

Trade War and Economic Nationalism

There are three relevant nonmonetary forces to today's problem of rising prices. One is trade war, or more broadly economic nationalism. It is not simply tariffs, such as the recent doubling of the tax on lumber exported from Canada to the US. This will drive up the price of lumber in the US (and drive down the price in Canada). It is also the response of every corporate supply chain management department, to buy less from offshore, especially certain jurisdictions, and shift to buying more from preferred jurisdictions.

It should be obvious that if a company preferred to buy from vendor A, but now is forced to switch to second-choice vendor B, then it means higher costs. That's why the company preferred vendor A in the first place.

One force driving corporations to change vendors is tariffs. Any American homebuilder has to be looking for domestic lumber vendors. Even if the new American vendor charges higher prices than the homebuilder's old Canadian vendor, the net cost after the new tariff may be lower.

But another is geopolitical uncertainty. The high-tech sector, and likely many others, are reevaluating their dependency on Chinese suppliers, and looking elsewhere. This not only causes higher prices, but there can be shortages while the new vendors ramp up.

China, by the way, seems to be responding by stockpiling certain commodities. Russia, for other reasons, has been cutting back on its exports of natural gas. And this ties into the next nonmonetary force.

Green Energy Restrictions

Green energy restrictions have been rising all over the Western world for a long time. And rising prices is a feature, not a bug. The selling proposition is that if it costs more to use fossil fuels, then people will switch to something else. It turns out that a \$100 increase in the cost of heating a house for the winter does not do it. The increase has to be much bigger.

And it's happening now. Fueled by bans on production methods such as fracking, and bans on power generation methods such as oil, coal, and nuclear, Europe and the UK are increasingly dependent on natural gas. Of which Russia is supplying less.

So, they turn to shipping it in. Shipping natural gas has costs that would drive electric power prices up, even in normal times. And this is not a normal time. There is a global shipping and logistics crisis. Everything from Christmas tree ornaments to natural gas costs more and takes longer to get from producer to consumer.

If all energy users are increasingly herded into natural gas, this is going to cause skyrocketing prices. Not only of natural gas specifically and energy generally, but everything that depends on energy. Like fertilizer. And the things that depend on fertilizer, like food. Europe is struggling to heat homes this winter. They may struggle to feed people next winter.

Naturally (pun intended) the skyrocketing price that Europeans are willing to pay for natural gas means that they will seek to buy whatever supplies can be exported from the US. The US has not yet banned fracking, so we have lots of natgas.

In the US, pipelines are being blocked. Sometimes by voters (it's not just an evil elite who impose energy poverty). This has a synergistic effect when combined with the [Jones Act](#) which...

“...requires that all goods transported by water between U.S. ports be carried on ships that have been constructed in the United States and that fly the U.S. flag, are owned by U.S. citizens, and are crewed by U.S. citizens and U.S. permanent residents.”

There is not much of a domestic merchant fleet in the US. So, the Jones Act basically prohibits shipping natgas from the refineries to New England. Pipeline bans prevent natgas from getting to where it's needed overland. New Englanders would end up paying more to heat their homes, even if Europe weren't bidding up the price of natgas for export.

Natgas will flow where it can—to foreign markets—with the result being higher prices for everyone. And in case it's not clear, this has nothing to do with the quantity of dollars.

Lockdown Whiplash

This segues into the last nonmonetary force for higher prices. The initial response to Covid was a globally synchronized lockdown, which destroyed demand for certain goods. Makers of those goods were forced to reduce their capacities, or even shut their doors forever.

Lockdown also altered consumption patterns. There were shortages of the kind of [toilet paper](#) used in homes, and a glut of the larger rolls of single-ply stuff used in office buildings. Manufacturers of domestic toilet paper were running extra shifts, while manufacturers of commercial toilet paper were contracting and going bust.

The next response was to stimulate and subsidize those affected by lockdowns and those not affected. In other words, governments offered massive perverse incentives not to work. Apart from the impact on prices created by this subsidized spending, the greater effect was that many people quit their jobs. They found it better to sit on the couch playing Xbox getting more money from the government, than to show up at work every day and getting less money from their boss.

Then governments unlockdowned. Transportation assets were in the wrong places. By this time, some suppliers and shipping firms had closed their doors for good, or at least reduced their capacity. Most companies had laid off workers. Rehiring is not necessarily simple or quick even in normal times, much less when the government is paying so generously to idle the workforce.

And since then, there have been various waves of new Covid variants. With each wave of a new virus mutation, came a new wave of workers getting sick and not coming to work. And in many jurisdictions, there are long government-mandated quarantine periods. These can apply, not only to those who test positive for the virus and those who were exposed to someone who later tested positive, but everyone crossing an international border. For example, China is now mandating a 2-week wait before ships which changed crews can dock in China, and 7-week quarantines for returning Chinese sailors.

Add one more reason for goods to be delayed arriving at US or European stores. And one more driver for corporations to seek suppliers outside China. And one more additional cost for those goods which do get here. Plus of course, a smaller quantity of goods supplied will cause higher prices.

In other words, producers cannot increase the quantity of goods, in response to higher prices or even higher profit margins. And profit margins are not necessarily increasing, as input costs are also rising. Changing supply chains will take time.

In the US (though we have also read of the same thing in Australia), there is a shortage of certain chicken products. Some restaurants and some groceries are out of stock. Prices are up considerably. A friend of ours sent us this picture of a local restaurant menu:



Normally, lobster or king crab legs say, "market price". But chicken wings?!

We believe the reason meat prices have been rising for a while has been the challenge of meat packers keeping 100% staffed. Food regulations force them to send many people home when one worker tests positive. Mandatory vaccination policies have driven some workers to quit the industry. Generous free money policies have driven workers in every industry to quit. But especially in industries where the work is dirty, smelly, or arduous—such as meat packing plants.

And now, as omicron spreads rapidly, large numbers of workers are home sick. Production is down again. Political rhetoric and lawsuits are flying, accusing meat packers of not *sharing* the higher selling price with

chicken farmers. It is certainly a fact that meat packers have growing profit margins right now, and the price they pay for live birds [fell 29% between last September 20 and the writing of this Report](#).

The wider spread between price paid to farmers and price paid by consumers is going to meat packers' profits. Think of this like a bid-ask spread. The farmers are obliged to dump their birds on the meat packers' bid price. If they don't sell to the meat packers, then to whom? A fresh batch of birds will be ready soon. The consumers pay the meat packers' offer price (marked up by the supermarket spread).

A wider spread is evidence of **decreasing coordination** (this was the key premise proved by Keith Weiner in his [dissertation](#)). Think of it as two groups that are being forced farther apart. Farmers suffer financial hardship and bankruptcy, for lack of a good buyer. At the same time, consumers are paying more and even foregoing chicken, for lack of product.

In a free market, enterprising individuals are always looking for ways to bridge gaps. The spread is their incentive, because they earn it as a profit. A wider spread is a bigger profit margin, which attracts more entrepreneurs until the spread is no bigger than other spreads across the economic landscape.

If the spread is widening, then some outside force is forcing it to widen.

Analysis of the poultry market is beyond the scope of this Report. We wanted to call attention to the simultaneous lower and higher prices of chicken, to show that this is not a simple case of rising quantity of dollars → rising price of chicken. It's a falling price of chicken—for chicken growers.

However, the policy response which may come next is of concern to everyone. Based on that hoary socialist notion of political apportionment of everyone's *share* of the goodies that *somehow* get here, Biden and Warren are calling for antitrust attacks against the meat packing industry. We don't know whether they will get their way. But we are absolutely certain that inflicting additional costs on the meatpackers and forcing them to add more useless ingredients such as compliance staff, will not increase prices paid to growers nor decrease prices charged to consumers.

That spread will widen even further.

The government cannot increase coordination, other than by repealing prior bad laws (which we assume is not on the table in 2022). If Biden and Warren prevail, look for higher chicken prices and more chicken scarcity. And those higher prices too will not be monetary in origin.

There is one other thing of which we can be fairly confident. Companies have over-ordered and double-ordered inventory, to be assured of getting products on the shelves. When the logistics industry gets the situation sorted out, and goods are flowing again, this extra inventory will clog warehouses, store shelves, and balance sheets. Then high prices could abruptly slam into reverse.

If it is not sorted, if this is the new post-Covid and economic nationalist reality, where supply chains are in continuous disruption by the government, and regime uncertainty plus rolling lockdowns make it impossible to reliably produce and distribute goods, then much higher prices are likely coming.

Do not think of such rising prices as a dollar being worth less. The problem is not the *purchasing power* of the dollar. It is purchasing all sorts of things, just not the ones you want or even know about. And do not expect any investment to *keep up* with what will be mislabeled *inflation*.

Our penultimate take-away from this section is that it is not true that a sound currency can buy just as many goods during such times as during normal times. Governments are trying hard to restrict production, constrain distribution, add costs, keep buyers and sellers apart, and this synergistically combines with lockdown and unlockdown in a violent process we call [*lockdown whiplash*](#).

For the same reason, it is not true that investments will pay a yield equal to or greater than the increase in prices due to the disruptions in coordination. In other words, do not expect what is misleadingly called *positive real rates*.

Hiking Interest Rates?

Our final conclusion is that it would be insane to hike interest rates in this environment. Let's look at why.

Perhaps meat packers can afford a higher interest expense, as they have higher margins. But most other companies are squeezed by margin compression: rising input costs and selling prices that cannot rise proportionally.

[This has been the driver of the downtrend in interest rates since 1981.](#) The bid on interest is always getting weaker, as it has mutual causality with shrinking unit margins.

There is also an immediate practical consideration for not raising rates. If the rate on longer maturities is falling, then the Fed would invert the yield curve by pushing up the rate on short maturities. This would bring more pain to the banks, hardly a recipe for doing any



good to the economy.

Chart of Interest Rates as measured by the 10-year US Treasury Note Constant Maturity

Clearly, there has been a rise in the yield (which is nothing unusual during its 41 years of falling). Though the main rise was August 2020 through March 2021. It's been sideways for almost a year.

We note that the current **high** yield is still **below** the pre-Covid **low**.

Since President Roosevelt's 1933 executive orders, [there has not been a way for Americans to express a preference for higher yields](#). [Since Nixon's order in 1971](#), even foreign central banks are also put into the same trap, disenfranchised as the American citizens.

Sure, you can buy another asset—assuming its price hasn't been bid up beyond your risk tolerance—but then you just transfer the dollars to the seller. The seller takes your place in the same trap.

And that trap is profound. To hold a *money* balance, is to either directly hold a Treasury security, or else hold it indirectly via another party. If you have a bank deposit, you are granting credit to a bank which uses it to finance its portfolio of assets. Which is biased towards Treasuries. Or if you hold paper cash—Federal Reserve Notes—you are granting credit to the Fed so that it can buy Treasury bonds. Or, if you are a bank, and you hold reserves at the Fed, you are granting the Fed credit to buy Treasuries.

There is no way out.

Interest rates **can** go up, for decades and by tens of percentage points. This **did happen**. It last happened in the postwar period up to 1981. Corporations were bidding up interest rates—i.e., pushing down the bid on bond prices—to finance growing hoards of commodities, work-in-progress, and finished goods. It was a sure bet, because prices for their finished goods were rising fast. The return on goods in a warehouse due to inflation was higher than the yield they paid on their bonds. And bond yields kept rising.

If you think this is the situation today—especially as goods become obsolete so much faster now, than in the 1970's—then we have an NFT of a bridge to sell you!

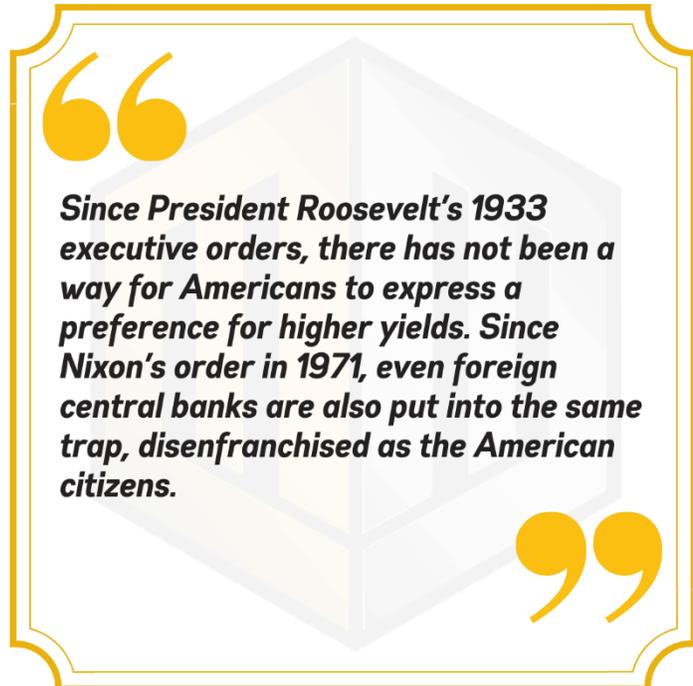
The opposite is now occurring. Investors and institutions are pressing the bid on interest rates—i.e., lifting the offer on bond prices. They are piling up vast money balances, which they hold as buffers against the vast debts which they have piled up.

Falling unit margins do not enable businesses to bid up interest rates. Instead, they groan under historically high debt loads. That debt may have once done them some good. But now it acts as an albatross, an anchor dragging down their net profits.

Where is the appetite to take on massive new debt to build massive new projects? Cases of this are few and far between.

We note that automakers continue to [offer 0% financing for 72 months](#), even in this purported *inflationary* environment, and with actual shortages of cars.

Keith said [something at the end of 2014](#), when the Fed loudly proclaimed that it would hike rates. We say it again now: if they try, they will not be able to push rates up very far, nor hold them there for very long.



And the Fed would do further damage if they tried. Higher rates will destroy the marginal producer in every industry. A big percentage of corporate debt is so-called *zombie*—where profits < interest expense. Higher rates will put these companies out of business. Reduced supply will lead to higher prices.

And what will happen to the price of imported goods from China, if some shipping and trucking companies go under? It will further exacerbate the logistics crunch.

We hope that it is now clear why the conventional prescription of **hiking rates to cure inflation is not even wrong**. The cause is not monetary, and besides, higher interest rates cause higher prices by increasing the cost of production.

Our Price Call for 2022

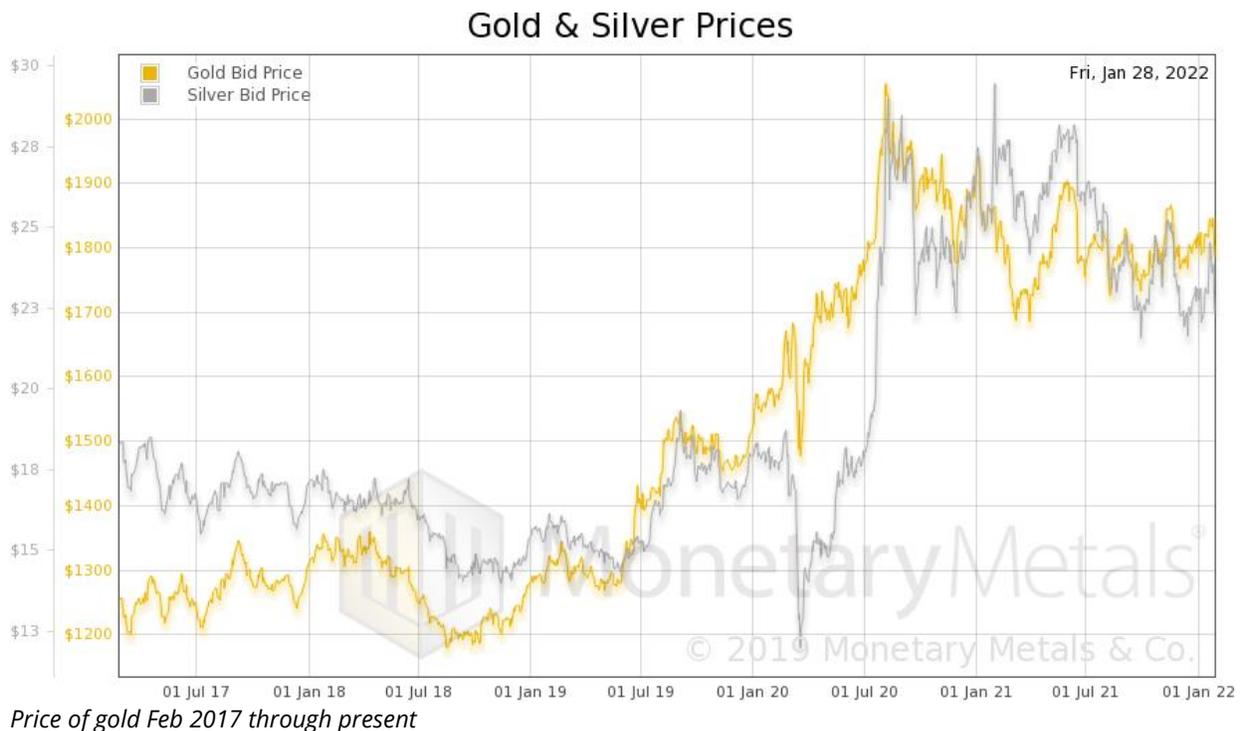
Above, we made two points that we need to underscore here. One, it is not necessarily true that the dollar price of gold keeps up with consumer prices. A nonmonetary policy, such as green energy restrictions, drives up the prices of everything from gasoline and electricity to food. But not the price of gold.

Two, it is not necessarily true that the dollar interest rate keeps up with consumer prices. As with the price of gold, the price of borrowing money is not driven up when restrictive policies drive up the prices of gas and food.

[There is not a direct correlation between the interest rate and the price of gold.](#) However, there is a link. The lower the rate of return on dollars, the lower the opportunity cost to own gold. While the Fed may bluster about raising interest rates, they are fighting with plate tectonics. They may achieve some kind of temporary gain, but cannot hope to overpower the forces they would battle.

As the interest rate falls, it gets under more and more savers' time preference. Many of those people logically turn to gold. Those who don't, will buy some other asset as a speculation. But what do the sellers of those assets turn to?

The breathtaking plunge in interest rates in the wake of Covid quickly led to nearly a \$600 jump in the price of gold. Admittedly, this occurred after the price had been in a rising trend since mid-2019. It was already \$200 higher in the short-lived dip low on March 18, 2020, than back in late May 2019.



“

A zombie cannot afford to service its debts, except by borrowing more.

”

The drop in interest rates was accompanied by a jump in government spending (one of the many counterintuitive and perverse behaviors in irredeemable currency). Higher spending equates to higher risk. No wonder people increasingly preferred gold.

The above discussion applies to silver too, to some extent. But some silver demand is for use in industrial and consumer products. As the economy grinds its way forward, this could decrease.

Also, gold is the purer capital asset. Gold tends to be bought with the proceeds from selling another asset. Asset prices, in general, are rising when interest rates are falling. Though it is not necessary that asset prices are rising, merely that people have marketable assets and growing concern about the solvency of the counterparties of those assets. Gold has no counterparty.

Speaking of counterparties, a high and rising proportion of debt is issued by so-called *zombie* corporations—corporations whose profit is less than their interest expense. **A zombie cannot afford to service its debts, except by borrowing more.** Zombies exist not only because of only ultra-low interest rates, but in addition the credit markets are very tolerant. Lenders have long been happy to lend to zombies, to chase a slightly higher yield compared to sound borrowers.

The Fed has the task of preventing them from defaulting. If defaults were to begin in earnest, it would not be contained to just zombies. A full-scale *contagion* would begin to wipe out many creditors, which would impair their creditors, all the way up to the big banks. The ones deemed by the government to be *too big to fail*.

Fear of zombie defaults will drive two trends. One, the Fed will have to loosen credit. Two, market participants will increasingly prefer gold to counterparty risk.

Silver, by contrast to gold, is the ideal vehicle for wage earners to save. They can buy silver with a portion of their wages every week. With physical gold, this is impractical (though electronic gold accounts make this feasible). Thus, the silver price is more sensitive to the real economy and to wages. As we've written several times, [a falling interest rate tends to put downward pressure on wages.](#)

This year, we have the toughest price call to make, of any that we have done. On the one hand, the promise of rate hikes (temporary though they will be) could cause all sorts of things to crash. We would expect the price of gold to crash less than other assets, as in 2008. And less than it did in 2008. On the other hand, plate tectonics is a force on the gold price, like pushing up a mountain range. There is also an upward force on the gold-silver ratio (i.e., higher gold price compared to silver price). Yet on the other hand, it is around 80 now which is on the high end of the range. Yet it hit well over 120 in March 2020.

Let's break this down into shorter-term and longer-term. For the former, we will look at the basis and our fundamental analysis. For the latter, current market conditions do not necessarily predict how coming macro events will change the market.

Gold Basis Continuous



Chart of the six-month rolling gold basis, overlaid with the dollar measured in gold

Since August last year, the price of the dollar has been volatile, but it is currently 0.4mg gold lower (i.e., the price of gold, measured in dollars, is \$40 higher). And the cobasis (i.e., scarcity of gold to the market) is 27bps lower. Which moved greater in proportion?

Gold Fundamental Price

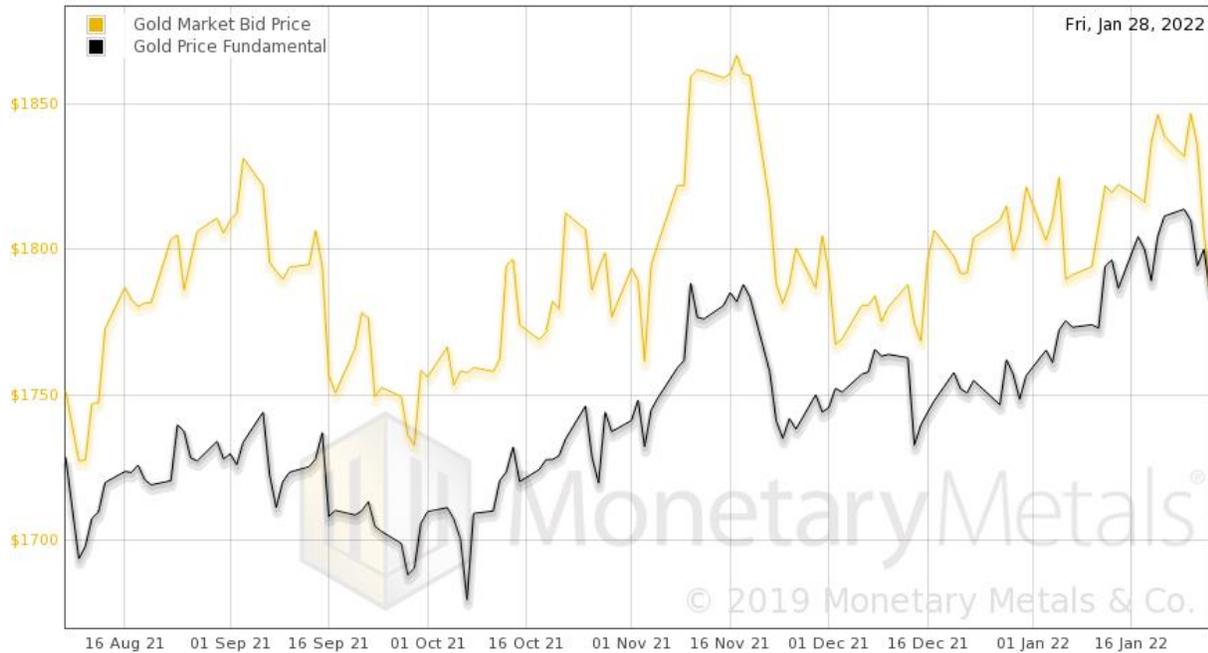


Chart of the gold market and fundamental price

The fundamental price, as calculated by our model, rose around \$60 to \$1,784. Also notable, the market price has converged down to meet the fundamental price. The conspiracy theory holds that the short sellers hold the market price down below where it would be trading. We calculate that the futures market, at this one moment in time, has no net effect on the price. That is, this is the price at which metal would be exchanged without a futures market and leveraged trading on margin. Make of this what you will.

There's a clear uptrend, though we note a \$27 drop in the fundamental in the last five days. And this coincided with increased volatility in the stock market in the last few weeks—the volatility index (VIX) hit a high not seen since March 2020.

It is logical for futures contracts to sell off, but we shall have to watch the fundamentals to see how owners of metal react to continuing volatility—assuming the Fed doesn't change its policy stance quickly—if not weakness in other assets.

If asset prices go over the cliff as in 2008, then the price of gold will go down less. And stay down for a briefer moment. This is because there is not a lot of leverage bidding up the gold price right now, but people have many reasons to buy gold even if their reasons to buy meme stocks, real estate, and crypto currencies turn to dust in the wind.

If not, if the Fed manages to loosen credit (whether openly admitting it, or not) then we do not see drivers for a lower gold price. Quite the opposite. And keep in mind that if there is a crash, the Fed's means of *fixing* it is to lower the Fed Funds Rate and loosen credit. This would tend to spur gold buying.

If the Fed does not *fix* it, then this is likely the end of the dollar system. All dollar credit will be wiped out, as the dollar goes to zero. It won't be about the price of gold, measured in now-worthless dollars, but how much gold you have. And food and ammo. It's a bleak scenario, and we won't dwell on it here. We believe that, as Aragorn would say, today is not that day.



Our longer-term prediction—looking beyond the incipient crisis—is a higher price of gold. We expect to see the gold price up another few hundred bucks in a year (assuming the crisis does not develop now, or it is *fixed* quickly). Call it \$2,100 plus or minus.

Silver is a more mixed story. In the scenario of taking risk off, what would motivate the sellers of bonds, real estate, and stocks to trade it for large piles of silver? Yes, the metal has a potential speculative kicker. The gold-silver ratio could easily drop from 80 to 50 — which means a gain in the silver price relative to gold of 60%. But would people be in a precious metals betting mood, when they are removing bets on everything else?

Silver Basis Continuous

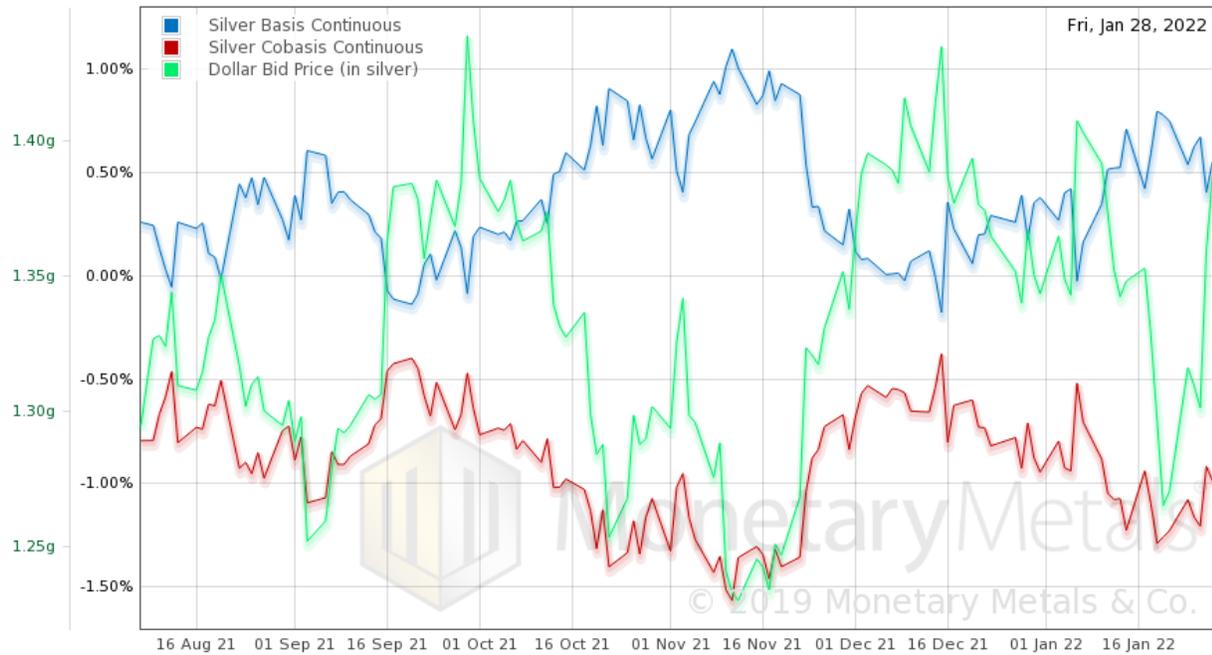


Chart of the six-month rolling silver basis, overlaid with the dollar measured in silver

Unlike in gold, the price of the dollar measured in silver is higher. And silver’s scarcity is lower, at the same time.

Silver Fundamental Price

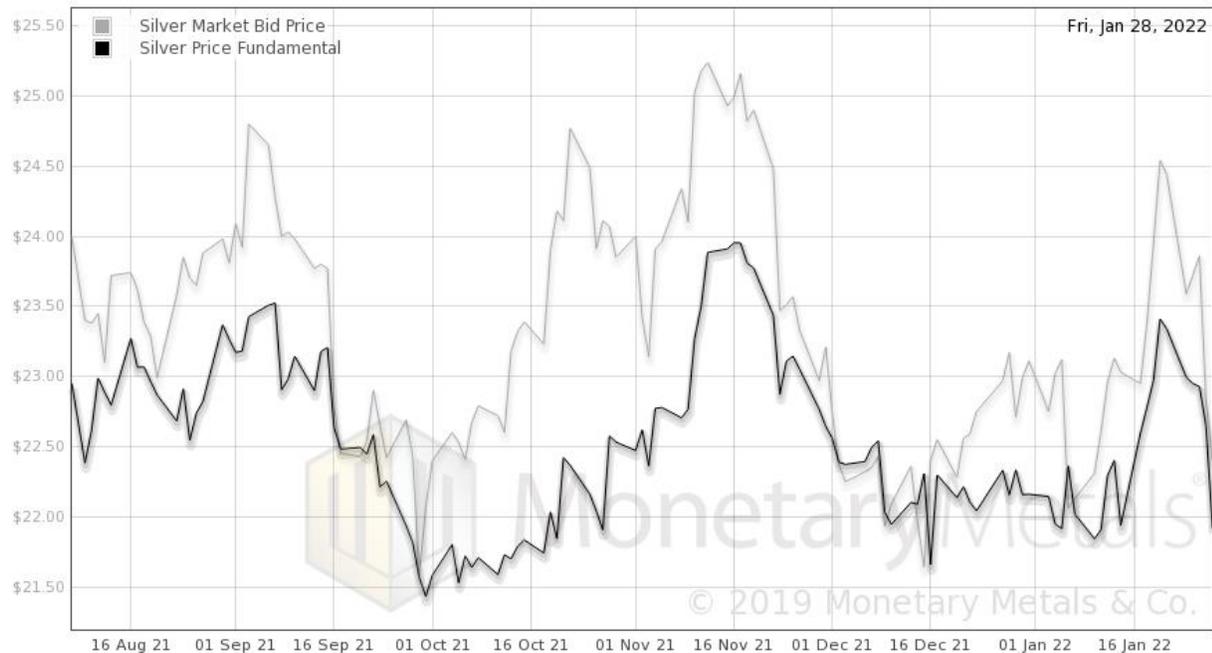


Chart of the silver market and fundamental price

The silver fundamental price is now lower than last August. Even if we ignore the fundamental price drop over the last week (which came after a short spike), it's not much higher than last August.

Compared to gold, silver is behaving more like the risk assets.

If the crisis metastasizes, there could be a big drop in the silver price. And a big rise in the gold-silver ratio. 120 is not out of the question.

If the Fed reacts to this crisis, to tamp down any credit stress among zombies and everywhere else and gets even meme stocks to go back to their old ways of rising against all reason, then the silver price could jump much more than gold's, call it 60% more. If gold goes from \$1,800 to \$2,100, then silver could hit \$40.

We feel the frustration of President Truman, who in exasperation when economists kept saying on the one hand this and on the other hand that, blurted out that he wanted a "one-armed economist."

The financial system is, once again, on the brink of an abyss postponed several times previously. And each postponement was done at the cost of digging the abyss deeper—i.e., increasing the pressure with which credit effluent was pumped to support unsound and unsustainable enterprises including government welfare programs such as the CARES Act.

There is not a single call that applies to both scenarios: (1) the Fed postpones again, and (2) we take the plunge. Though there could be an in-between scenario, where we begin plunging and then the Fed reacts belatedly and overly aggressively.

We hope that any frustration is targeted at the regime of central planning. A free market, which means gold standard, does not have such crises—as it does not subsidize zombies. And people do not wait with bated breath, to find out what the central planner will do to them next.

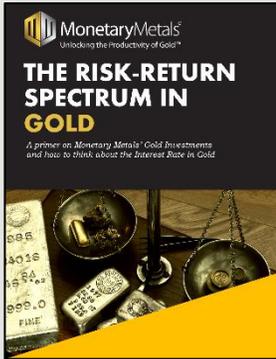
The gold standard—[which Monetary Metals is making profitable to invest in](#), by paying interest on gold—is stable. It does not have foreign exchange volatility, as gold is the same everywhere in the world. It does not have interest rate volatility. And therefore, it does not have asset price volatility.

As it stands, we need to wait to see what the Fed will do, and when. We will be monitoring these events as we have done for the last ten years, in our Supply and Demand Report and Gold Exchange Report newsletters.



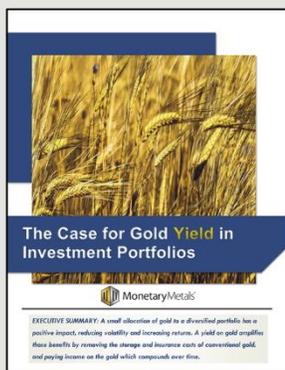
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The Risk-Return Spectrum in Gold

A primer on Monetary Metals' Gold Investments and how to think about the Interest Rate in Gold. Monetary Metals has completed enough gold-paying deals, with sufficient variety of circumstances and rates, that we can offer some perspective.



The Case for Gold Yield in Investment Portfolios

Adding gold to a diversified portfolio of assets reduces volatility and increases returns. But how much and what about the ongoing costs? What changes when gold pays a yield? This paper answers those questions using data going back to 1972.

About Monetary Metals

[Monetary Metals[®]](#) is Unlocking the Productivity of Gold[™] by offering a [Yield on Gold, Paid in Gold[®]](#) to investors, and [Gold Financing, Simplified[™]](#) to gold-using businesses (mints, miners, refiners, jewelers, etc.). In addition, the company's market analysis and proprietary charts, including the [gold forward rate](#), are utilized by gold investors and gold-using businesses globally. The company's content is widely syndicated on gold, alternative investing, and mainstream sites.

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