
THE COMING NEW BULL MARKET IN GOLD

**WHY PRECIOUS METALS INVESTMENTS
WILL FLOURISH IN THE 2020s & 2030s**

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Dedication

I dedicate this book to my paying subscribers for their support of my work which allows me to do what I love. I also dedicate this book to my wonderful wife and best friend for her constant love and support.

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**WHY PRECIOUS METALS INVESTMENTS
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Introduction

Our expectations and framework for the future have changed since the first edition of this book. Then, in 2015, we argued that the stock market was in a cyclical bull but not yet in a secular bull while Gold was due for a final run to end the move that began in 2001. While we were on point that precious metals were due to make a significant low our framework was wrong. The stock market continued to make higher highs and precious metals, after a huge rally in 2016 trended sideways to lower.

After writing the second version of this book, the framework is clearer and so is the long-term picture for Gold, gold stocks and the US stock market. The position of the equity market, its current valuation and the position of the gold stocks resembles the early 1960s. So does the position of and secular outlook for bond yields and inflation.

The long-term cycles for inflation and hard assets are very strong. The charts of the CRB (commodities) and Silver show peaks every 30 years and major peaks every 60 years. That suggests the next major inflation and commodity peak could be around 2040. The work of Barry Bannister, a very accurate macro strategist shows that since the early 1800s, the inflation and commodity cycle has peaked every 55 to 61 years. He anticipates a major inflationary peak sometime in 2036 to 2041.

Many metals prices advanced during the 1960s including Platinum and Silver and the gold stocks performed very well throughout the entire decade. The CRB did not begin its bull market until 1968 (energy commodities and soft commodities did not perform in the 1960s) when the rate of inflation (CPI) broke out from 17-year resistance. The corollary this time around could be a break of the 30-year downtrend which entails a move in the CPI above 3.0%. Unless the current economic expansion has a few years left and inflation accelerates, we don't anticipate that break until the middle of the next decade.

The rate of inflation breaking its 30-year downtrend to the upside will be significant and accelerate the new bull market in precious metals because that is the point when, due to financial constraints (the interest on the debt) policymakers will have to intervene and prevent bond yields from rising.

Our work argues that potential price peaks in Gold and Silver will be much higher than even the price targets from some of the most ardent gold bulls. The caveat is the final peak will come much later than expected.

Chapter 1

What Really Drives Gold

Gold as an investment is simple to understand yet is muddled by the endless misinformation and disinformation from detractors and proponents alike. We often hear phrases such as “end of the world trade,” “just a rock,” “flight to quality,” “you cannot eat it,” “hedge for uncertainty,” “inflation hedge,” and “deflation hedge.”

Such phrases mischaracterize Gold and miss the simple fact that Gold is the ultimate money. The actual JP Morgan over 100 years ago said: "Gold is money, everything else is credit."

In today's fiat world, Gold is money, but more so, an alternative currency that performs well when the value of fiat currencies or perceived value is declining. One way to track the current trend or value of any currency is to compare it to the trend in real interest rates or real yields on short-term government bonds.

Over the past 100 years, the best indicator for the trend in the Gold price has been the trend in real interest rates (or real yields), which is essentially interest rates minus inflation. Gold will rise when real rates are negative or declining towards negative territory. Gold declines when real rates rise, and Gold faces long-term headwinds when real rates are rising or sharply positive as they were for the majority of the 1980s and 1990s.

If we can earn a real, inflation-adjusted return on our capital in a savings account, certificate of deposit, or government bond, then there is no reason to seek alternative currencies. Conversely, when the rate of inflation exceeds the rate of interest on the securities mentioned above, then capital moves towards alternative currencies. First and foremost, that means Gold, followed by Silver.

There are various ways to track real interest rates. I have found that what works best for analyzing Gold's trend is tracking the consumer price index as well as the fed funds rate and the 5-year yield. This data is backward-looking, so as traders and investors, we have to anticipate it. Nevertheless, in an educational sense, it works best.

Figure 1.1 plots Gold along with the real fed funds rate, which dates back to 1914. The data is from Greshams-Law.com. Historical secular bull markets in both Gold and commodities concluded with real rates surging into positive territory.

Figure 1.1: Gold & Real Fed Funds Rate

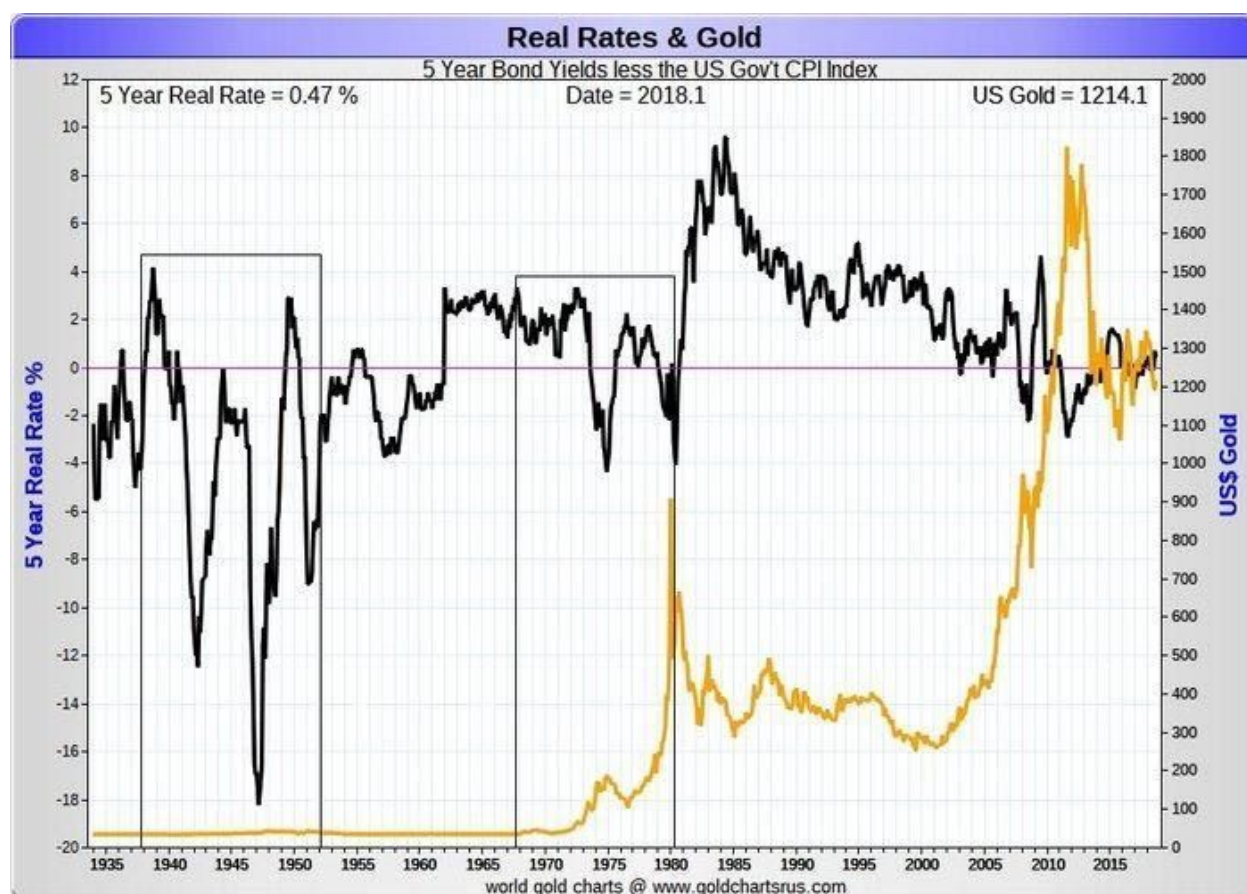


We marked 1920 and 1951, which were the peaks of previous secular bull markets in commodities (which ran from 1897 to 1920 and 1933 to 1951) because the Gold price was mostly fixed until 1971. Commodity prices peaked in 1920 as the real fed funds rate exploded from -19% to nearly 20%. Then in 1951, commodity prices peaked as the real fed funds rate increased from -7% to almost 2%. From 1979 to 1980, when the Gold price went parabolic and then collapsed, the real fed funds rate increased by nearly 15%. It advanced from a low of -5% to 10%.

Although the trend in the real fed funds rate was lower after the early 1980s, note that it was strongly positive for the majority of the 1980s and 1990s. In other words, a reduction from a sharply positive real rate of interest to a slightly positive real rate of interest isn't going to move the needle in terms of Gold's fundamentals. Some say the real rate has to fall below +2% to impact Gold.

Figure 1.2, provided by Nick Laird at sharelynx.com (one of the best sources for Gold charts), plots the real yield on the 5-year government treasury note along with the price of Gold since 1934.

Figure 1.2: Gold & Real 5-Year Yield



Note how real yields spent most of the 1930s and 1940s as well as the 1970s in decline or in negative territory. They spiked from -4% at the end of 1974 and reached 2% in 1976. That coincided with the roughly 45% decline in the Gold price.

The Gold bubble popped in the early 1980s as real yields surged from -4% to nearly 8% within only a few years.

The negative correlation between the trend in the Gold price and real yields (and real rates) should be particularly illuminating over the past 20 years. The real 5-year

yield declined from over 3% in late 2001 to a low of -3% in 2011. That decline was interrupted by a sharp but temporary rise of over 6% during the financial crisis in 2008. The Gold price then declined by over 30%. From 2011 into 2015, the real 5-year yield and the real fed funds rate enjoyed a stable and steady rise. That is the fundamental explanation for the bear market. From mid-2015 through 2016, both the real 5-year yield and real fed funds rate declined by almost 3%. That coincided with the massive recovery in the Gold price, which was unable to break out in 2017 and 2018 as, you guessed it, real interest rates rebounded.

We can posit the question if the trough in real interest rates (and real yields) in 2011 and the peak in the Gold price signal that Gold has made a significant peak in price that will stand for many, many years. While real yields and real rates have trended higher since the summer of 2011, they have not increased by the magnitude seen at previous secular turning points such as in 1920 and the early 1950s and early 1980s.

Let's use the real fed funds rate to compare post-peak increases in real rates. In less than 18 months (from 1980 to 1981), the real fed funds rate exploded by 14%. After 1951, the real fed funds rate climbed by 8% within a few years. Until the collapse in energy prices from 2014-2015, the real fed funds rate had only increased by roughly 3% (from 2011 to 2013). It has been eight years since the peak, and the real fed funds increased by at most 4%.

We will discuss the fundamental drivers for Gold later, but our view is that the debt problem in the US will soon necessitate higher inflation and negative real interest rates. Also, we believe we are in the early stages of the start of a secular upturn in inflation.

Yield Curve

The yield curve is also a driver of the price of Gold, but more so recently than historically.

A flattening curve, as we've endured for many years, usually accompanies economic expansion and stock market strength. This entails a decreasing of the spread between short-term rates and long-term yields. The Federal Reserve is raising short-term rates, and they are rising faster than long-term yields. This scenario entails disinflation rather than rising inflation, which is not bullish for Gold.

A steepening curve is bullish for Gold. This can happen in one of two ways. Either long-term bond yields are rising faster than short-term rates (which implies an increase in inflation expectations), or short-term rates are decreasing more quickly than long-term yields. That reflects risk aversion and a loss of confidence in the economy and financial system.

Figure 1.3 plots Gold and the yield curve (10-year yield and 2-year yield) since the early 1990s.

As you can see, the flattening curve in the late 1990s and in recent years coincided with declines in the Gold price. The steepening of the curve into 2001 coincided with the significant bottom in Gold. The steepening of the curve in 2007 preceded Gold's surge above \$700/oz and to \$1000/oz. The steepening continued after the depths of the financial crisis, and Gold continued to rise alongside.

Figure 1.3: Gold & Yield Curve



US Dollar

The trend in the US Dollar is an important factor in determining the direction of the Gold price because Gold is priced in US Dollars, and the US Dollar is the global reserve currency. However, more importantly, Gold is essentially an alternative to the US dollar, which is the global reserve currency. Gold is negatively correlated with real interest rates, while the US dollar tends to be positively correlated to real interest rates.

In figure 1.4, we plot Gold and the US Dollar Index. The blue lines mark important lows in Gold while the red lines mark significant peaks in Gold and lows in the Dollar.

Figure 1.4: Gold & US Dollar Index



In looking at the history of Gold and the US dollar together, we have three critical observations.

First, Gold cannot be in a sustained bull market if the US dollar is rising. There are periods when the two can trend together, but Gold cannot and will not experience a multi-year bull market if the Dollar is rising.

Second, Gold and the US dollar on a historical basis are not as negatively correlated to each other as you might expect. For example, the dollar's all-time high was in 1985, but Gold's post-1980 low did not occur until 1999. The dollar's all-time low was in 2008, but the Gold price has risen since that time. Here are a few other examples. The dollar's worst decline was from 1985 through 1987, but Gold only experienced a modest bull market as compared to its performance in the 2000s and 1970s. And speaking of the 1970s, we can see that the dollar declined only modestly during that period. That period, of course, was Gold's best historical performance.

Finally, in studying the recent history between the two currencies, one thing I have noticed is the tendency for Gold to lead the US Dollar at crucial turning points. In other words, Gold can bottom before peaks in the US Dollar, and Gold can also peak before troughs in the US Dollar. During its historic bottom in 2001, Gold bottomed more than several months before the US Dollar peaked. In the second half of 2005, Gold began a significant move higher, yet the US Dollar was rising during the early portion of Gold's move. After correcting over 30% during the financial crisis, Gold bottomed in October 2008, yet the US Dollar would not peak until several months later. Gold bottomed in December 2015, but the US Dollar did not peak until the very start of 2017.

This leadership also works in reverse, as can be seen in 2016-2017. Gold peaked in the summer of 2016. The US Dollar declined below its 2016 low in 2017. It made a new low, yet Gold was unable to surpass its 2016 high.

Since early 2018 the US Dollar has been trending higher and Gold, while off its highs has held up relatively well. There are some analysts and fund managers who believe both Gold and the US Dollar will rise together. That remains to be seen, but we should note how Gold has performed at the end of the previous bull markets in the US Dollar.

In figure 1.5, we again plot the two currencies and highlight their performance around the bottoms for Gold in 1985 and 2001. Note that from 1982 to 1985, the US Dollar gained 37% to its peak. Note that from 1999 to 2001, the US Dollar gained 17%

to its peak. During both periods, Gold only lost 5% and gained 1%. So history shows that the US Dollar can rise significantly, and Gold can hold up quite well.

Figure 1.5: Gold & US Dollar Index



Another way to analyze Gold's performance in real terms, is charting Gold against foreign currencies (FC). A simple way to do this is to plot Gold against the inverse of the US Dollar Index basket or multiply Gold by the US Dollar Index. It provides an excellent examination of Gold's performance in real terms. In figure 1.6, we plot Gold along with Gold/FC.

Figure 1.6: Gold & Gold vs. Foreign Currency Basket



Over the past 20 years, there are a handful of examples of Gold/FC leading the Gold price at crucial turning points. In the early 2000s, Gold/FC made a new 52-week high in the spring of 2001, just as Gold was emerging from its double bottom. Several years later, in the middle of 2005, Gold/FC made a significant breakout to the upside. Gold followed several months later. Gold/FC provided another significant divergence during the financial crisis. It bottomed a few months before Gold bottomed in late October 2008. A few months later, as Gold emerged from its bottom, Gold/FC had already broken out to a new high!

There are also plenty of more recent examples, and leadership can go both ways. Before the December 2015 low in Gold, Gold/FC was showing a positive divergence, and it made a new 52-week high in early 2015. Months later, the sector bottomed and began an explosive rally. Note that in 2017 and 2018, the Gold price was making higher highs, but Gold/FC did not confirm that. Then Gold had a sharp selloff.

At present, we can see that Gold/FC surpassed its 2018 high and made a new 52-week high. Gold has yet to do either. It would be a strong bullish signal for the sector if Gold/FC were able to surpass its 2016 high before Gold.

Gold/FC reflects how Gold is performing without the effect of the US Dollar. If Gold is rising, but Gold/FC is weak, then it is a sign of a weak Dollar and not strength in Gold. If the dollar is climbing, but Gold/FC is showing strength, then its a signal of strength in the Dollar more so than weakness in Gold.

Supply & Demand

The supply and demand dynamics for Gold are quite different from other commodities. The vast majority of Gold produced is not consumed as there is so little industrial use for Gold. Therefore its supply grows virtually in perpetuity.

The majority of demand for Gold falls into the category of jewelry demand and second, investment demand, which is the real demand driver of the Gold price. It, like the trend in the price, is usually a function of negative real yields and currency weakness. Jewelry demand tends to trend inversely to the price of Gold. When Gold rises, it falls. When Gold rises, it falls.

According to the World Gold Council, total demand in 2018 was 4,345 tonnes. Jewelry demand totaled 2200 tonnes while investment demand (which is comprised of bars, coins, and exchange-traded funds amounted to 1,159 tonnes, which was a 7% decline over 2017. The remaining demand consisted of central bank buying (651 tonnes) and technological (335 tonnes).

Recent history shows how the fluctuations in investment demand go hand in hand with the Gold price. Since 2011 investment demand has comprised anywhere from 19% to 37% of demand. In 2017 and 2018, it was 29% and 28%. In 2011, 2012, and 2016 when Gold made good annual gains, it comprised 36% to 37% of total demand. However, from 2013 to 2015, it only comprised 19% to 24% of aggregate annual demand.

Evidence of the importance of investment demand is shown in figure 1.7, which is from CPM Group. We can see that investment demand tends to increase in the years of an increase in the Gold price.

Figure 1.7: Investment Demand & Gold Prices

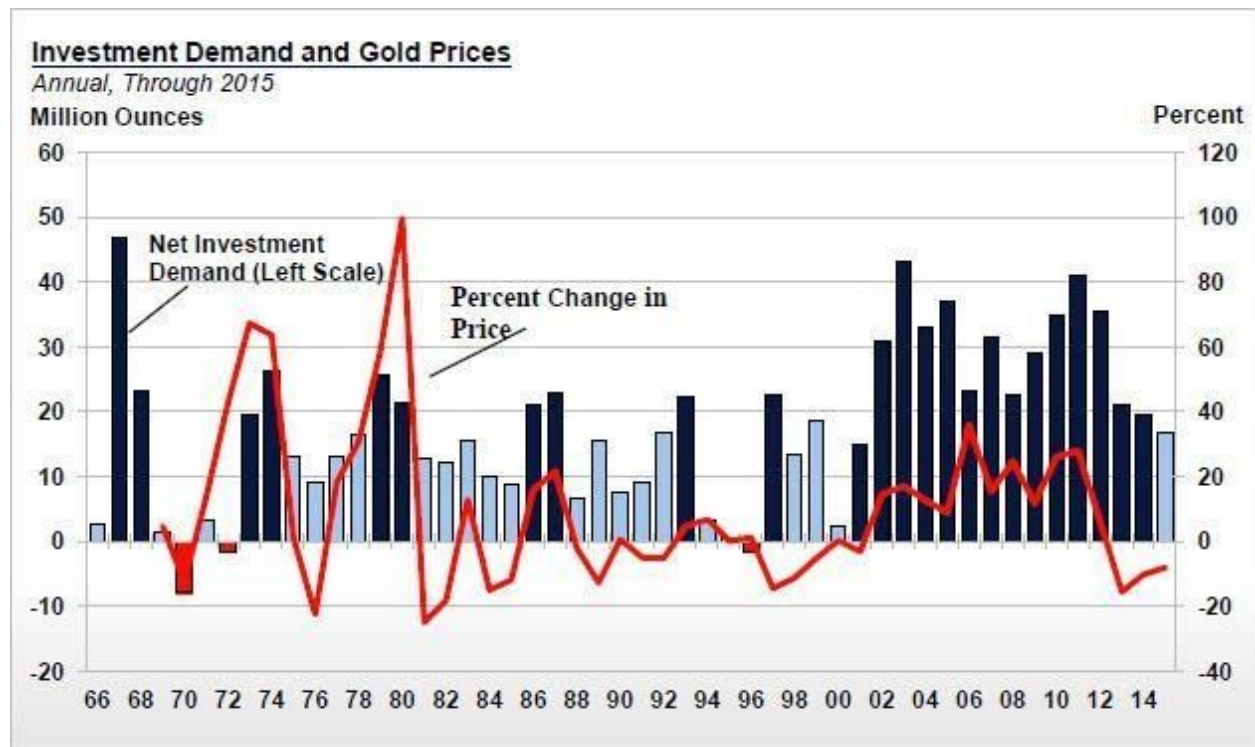
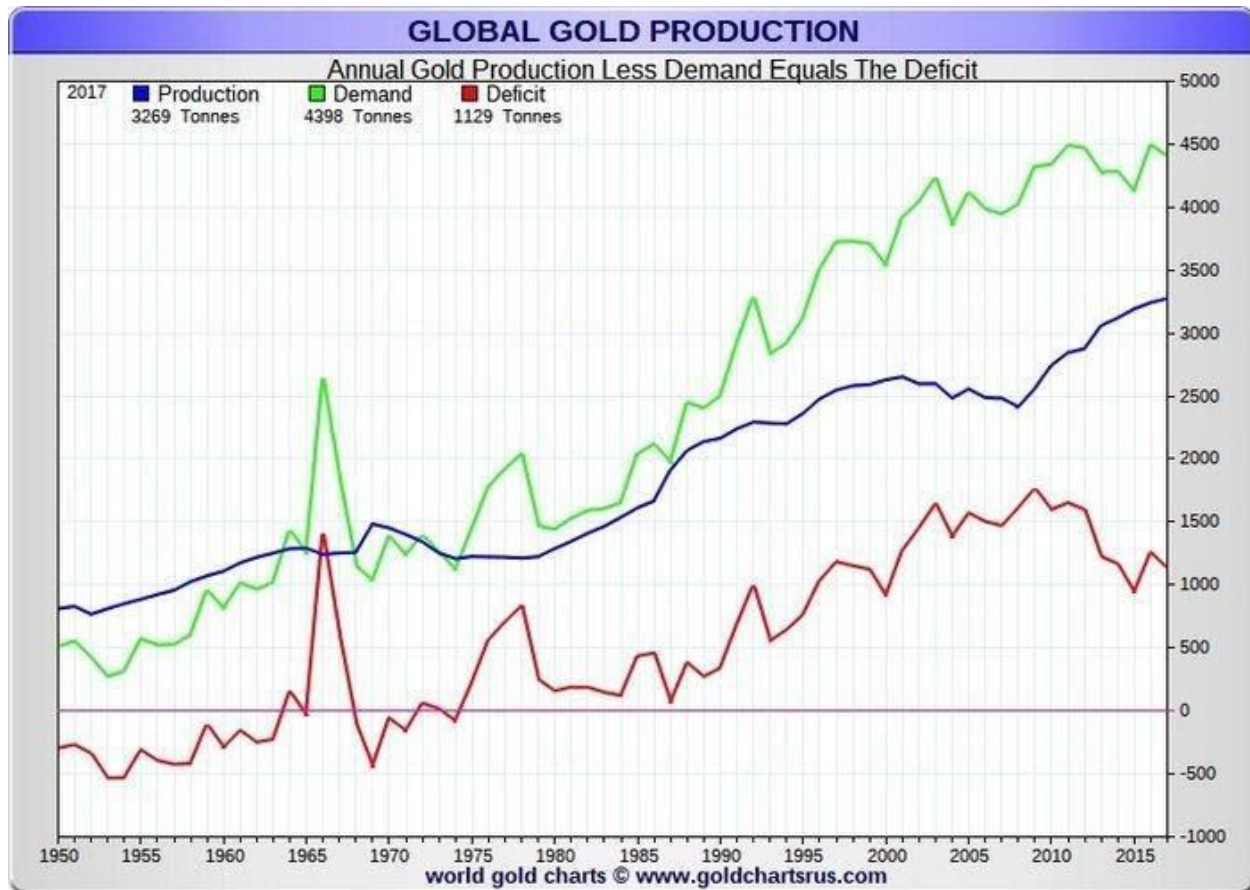


Figure 1.8 shows the global annual demand and production of Gold dating back to 1950. Note how demand is reasonably consistent over time. It even increased during the 1980s and 1990s when Gold was in a secular bear market. Also after Gold's secondary price peak at the end of 1987, the demand for Gold accelerated faster than production. Lower prices are a catalyst for increasing jewelry demand, but that increased demand does not impact the primary trend in price.

Figure 1.8: Gold Demand



From looking at the chart, one might think that production is impacting the Gold price. It appears to decline when the gold price is rising but rises when the Gold price is falling. I credit someone with the moniker "Trotsky," who has a great explanation courtesy of Mike Shedlock.

According to Trotsky, during low gold price environments, mining companies are forced to "high grade" their mines. In other words, they mine the higher grade, lower cost portions of their deposits. However, when the gold price is rising, mining companies can mine the lower grade portions of their deposits.

Also, it takes many years for the effect of higher prices to lead to higher production. The higher prices of both the 1970s and 2000s led to higher output in the following decade.

Central Bank Buying and Geopolitics

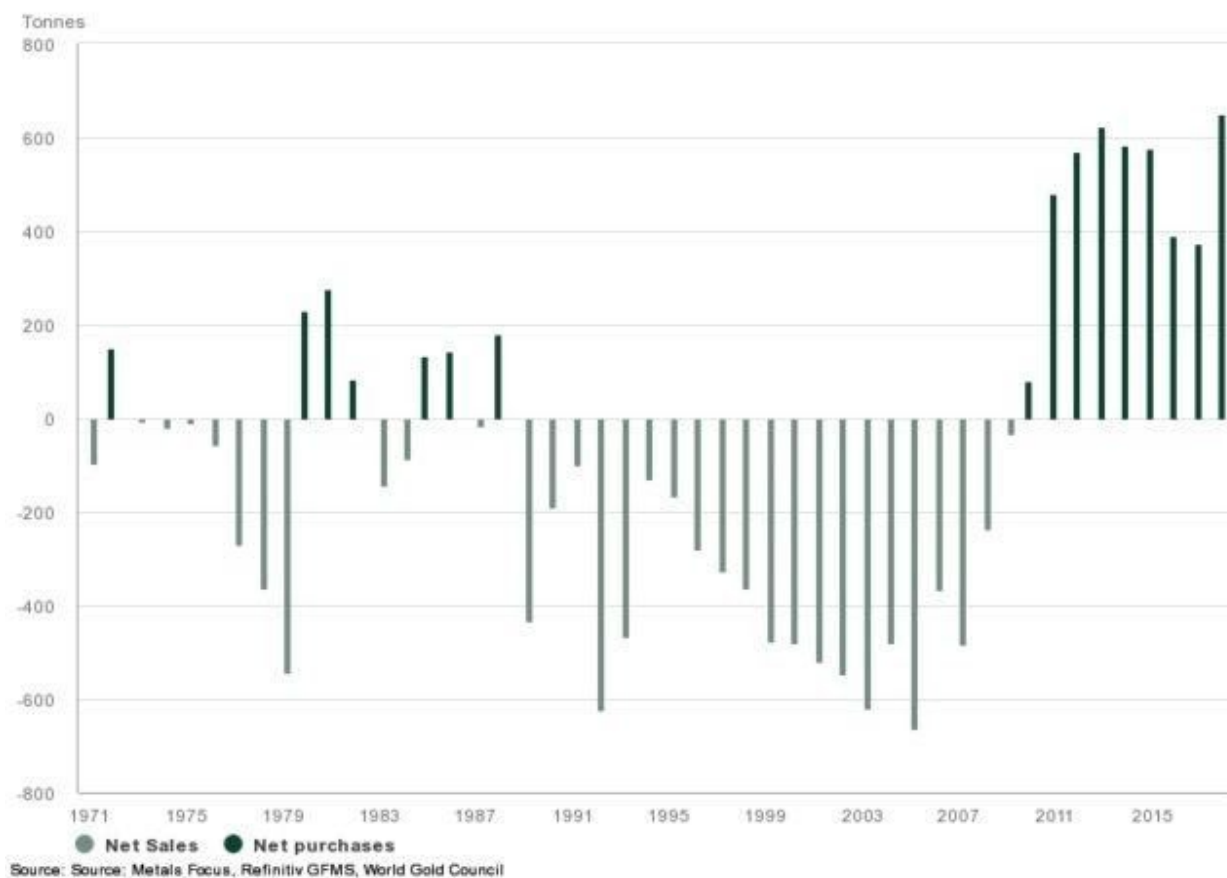
Central Bank buying in 2018 was the strongest in nearly half a century, and yet the Gold price was down for the year. According to the World Gold Council, central bank demand increased by 74% in 2018. Gold Bugs have deemed this as Gold bullish, but that has not come to pass.

Central Banks are powerful entities that help set policy and manage economies. Therefore, logic would seem to indicate they know something and might have some inside information.

However, the truth is central Banks do not have any inside information, and their buying or selling should not be considered for market timing purposes. Figure 1.9 shows that the 2001 to 2011 run in Gold began with record central bank selling. Since Gold peaked in 2011, central banks have been consistent buyers. The historical data shows that central banks buy almost always when Gold is not in a bull market.

Figure 1.9: Central Bank Gold Demand

Central bank demand in 2018 was the highest since Nixon closed the gold window



Contrary to popular opinion, geopolitics do not play a significant role in terms of Gold's fundamentals. Geopolitical happenings in the 1970s impacted Gold because they usually impacted the Oil market, which is an essential driver of inflation. Unless geopolitical events directly change the direction of interest rates or inflation, then their impact on Gold would be short-lived.

Conclusion

In reviewing Gold's history, it should be quite clear what drives its bull and bear cycles. Negative or declining real interest rates are the key driving force. That is what drives investment demand, which drives the trend in price. If real rates and real yields are rising or are in definite positive territory, there is little incentive to hold Gold, and that is why it has performed poorly under those circumstances. Conversely, when real rates and real yields are falling (and particularly around 0%, gold will trend higher.

Too many gold bugs spend too much time citing things like production levels, gold supply, Chinese demand, or hot physical demand that do not impact the market. Investment demand is what moves the market.

It's the decisions of hedge funds, pension funds, family offices, and the like that move Gold. When real interest rates are negative and falling, these types of funds cannot earn a real return (on massive amounts of capital) and therefore are forced to allocate money to Gold. When they can make a real return of 2% or 3% on a bond, they do not need Gold. That return is significant when the capital to allocate is in the millions.

As traders and investors, we need to cut out the nonsense from both sides and focus on the proven driving forces of and indicators for Gold. Trends in inflation and interest rates (and bond yields) determine real interest rates. The yield curve and the US Dollar also impact Gold. The direction of Gold, when denominated in foreign currencies, can be an excellent leading indicator for Gold.

Finally, the stock market also plays a role, and we will discuss this in more detail later in the book. We should note that Gold has never enjoyed a real bull market without outperforming the stock market. The only minor exception was from 1985 to 1987 due to a massive decline in the US Dollar.

Chapter 2

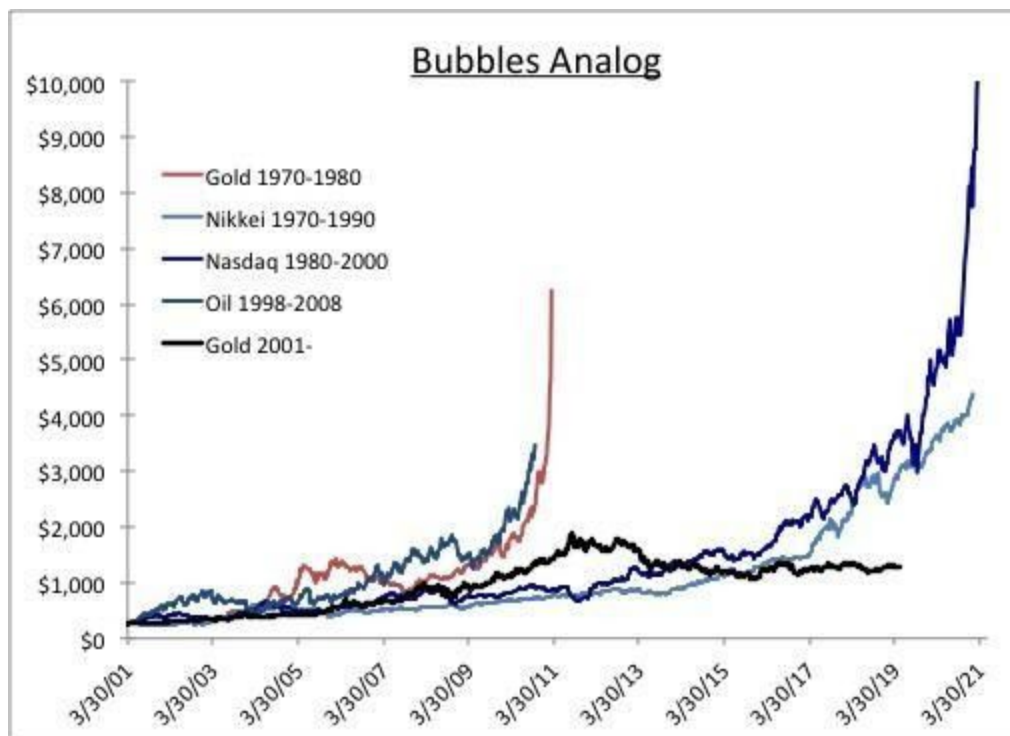
Bear Market, Not Bubble Collapse

Gold's detractors proclaim that Gold was in a bubble and that it will be a dead investment for another 20 years as it was during the 1980s and 1990s. Only time will give us a correct answer, but we provide a series of charts to argue that point and clarify that Gold has experienced a bear market and not a collapse from a bubble.

Over the past 40 years, we've witnessed various bubbles in capital markets as well as the ensuing collapses. We collected the data from those bubbles and compared it to Gold's performance since its peak in 2011.

In figure 2.1, we plot Gold's performance since 2001 compared to the performance of markets, which reached a bubble in the past. These bubbles include Japanese equities (Nikkei index), technology stocks (Nasdaq), Gold in the 1970s, and, more recently, Oil. We plotted those bull markets on the same scale (time and price) as Gold, starting at its 2001 bottom.

Figure 2.1 Bubbles Analog



The bull markets in Oil in the 2000s and Gold in the 1970s appreciated far more than Gold did from 2001 to 2011. At its 2011 peak, Gold had advanced less than 650%.

That is dwarfed by Gold's gains in the 1970s (over 2,300%) and Oil which gained 1,250% into its 2008 peak. If Gold had increased as much as Oil, then it would have peaked at nearly \$3,500/oz.

The Nasdaq and Japan's Nikkei index reached roughly \$10,000/oz and nearly \$4,500/oz on the Gold-equivalent scale.

Silver's bull is not shown, but we should note that it gained over a whopping 3,500% in its previous bull market in the 1970s. That dwarfs its recent run from 2001 to 2011, during which it increased by less than one-third of that at 1,107%.

Also, let's consider inflation-adjusted performance by using the consumer price index. Gold gained 884% in the previous bull market compared to only 463% recently. Silver gained 1,374% then yet only 730% recently. In inflation-adjusted terms, the bull market in the 1970s was nearly twice as strong.

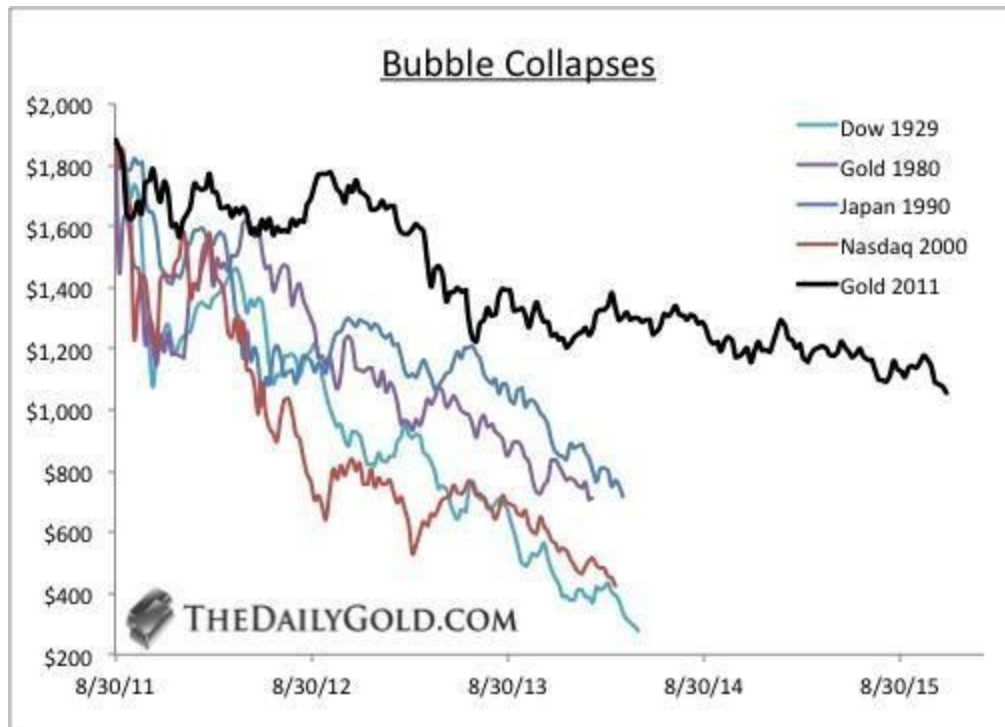
Furthermore, note the acceleration in both Gold (in the 1970s) and Oil into its 2008 peak. Oil gained 170% within 18 months while Gold went ballistic in 1979 and reached a full-blown mania in 1980. Gold surged nearly 300% in its final 12 months and rose close to 200% in its last six months. In the six months leading up to its September peak in 2011, Gold gained about 50%.

The difference in these figures is defined by the degrees of acceleration in the chart. Gold steadily increased into its 2011 peak. It went vertical into its 1980 peak. Oil also accelerated in near-vertical fashion in 2008.

We can also compare the post-2011 peak performance of Gold with the various bubbles. If Gold were a bubble in 2011, then we'd expect its recent decline to mirror that of the other historical bubbles, which follow a similar pattern.

Figure 2.2 plots the aftermath of the four biggest bubbles in capital markets history along with the recent bear market in Gold. Those four bubbles and their peaks were the Dow Jones in 1929, Gold in 1980, Japan in 1990, and the Nasdaq in 2000. We align those four bubbles to the same scale as Gold's 2011 peak.

Figure 2.2 Bubble Collapses

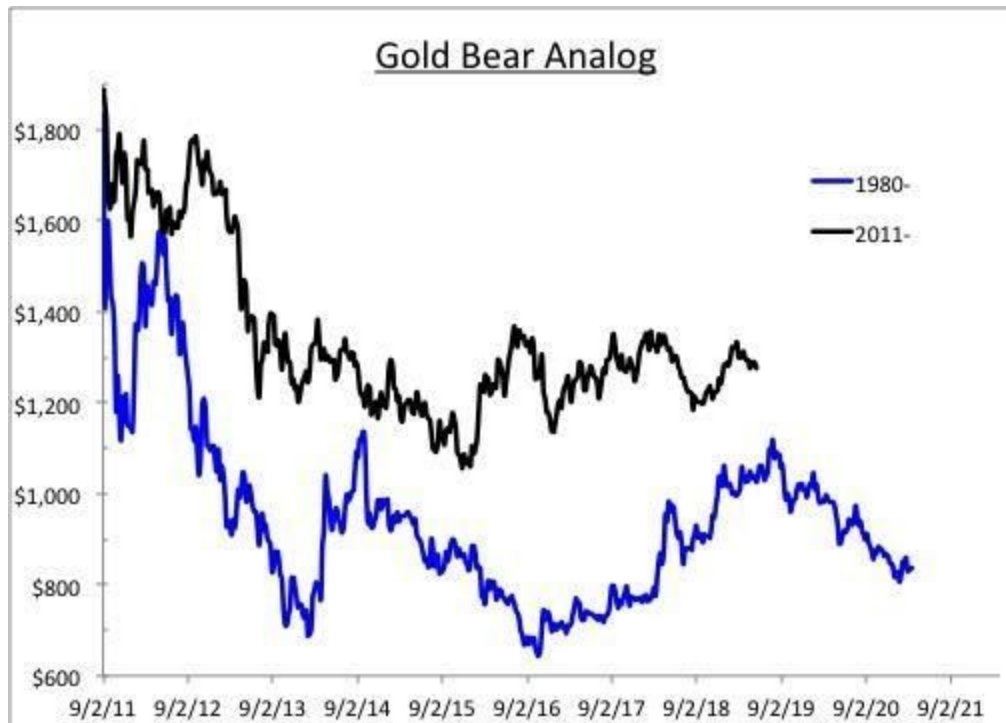


Note how bubbles tend to deflate in a similar pattern. There is an initial sharp decline that is followed by a strong but brief rebound. These events last roughly six to eight months. Then the bubble steadily loses more value in a Chinese water torture type fashion. This phase can last up to two years.

Overall, declines in the four bubbles ranged from 62% to 85% and lasted slightly longer than two and a half years. The median and average declines are about 71% and 72%. Since 2011, Gold has declined a maximum of 45%.

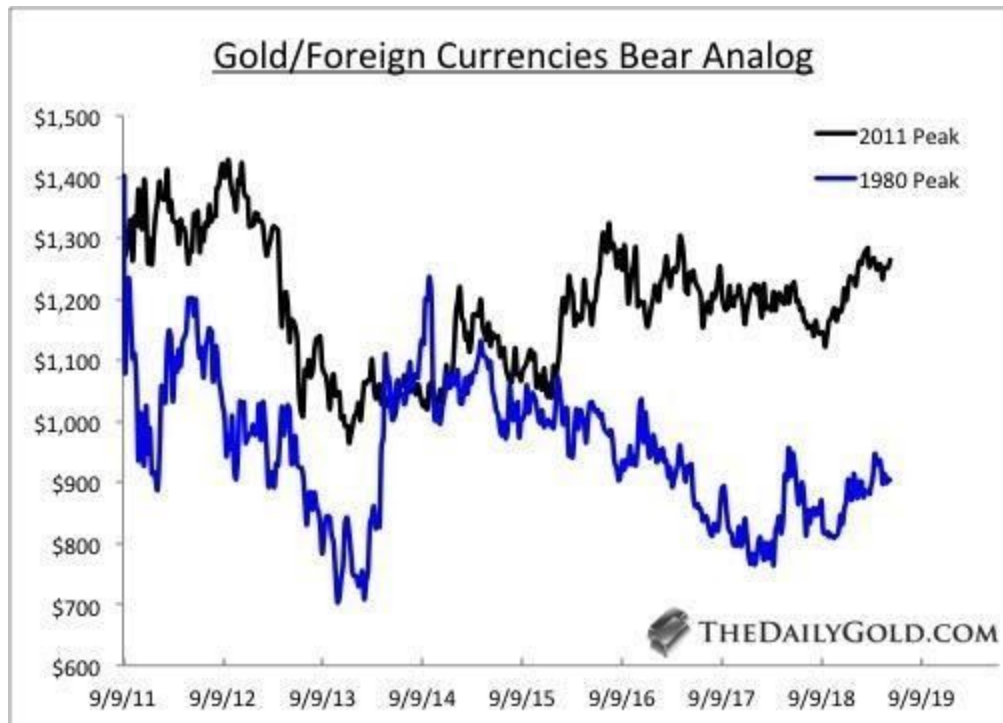
It has been almost eight years since Gold peaked and its performance since the peak does share some similarity to the price action following the 1980 peak. Figure 2.3 plots Gold's performance following the 1980 and 2011 peaks by using the 2011 peak scale. The similarity is that Gold, at present, has been range-bound for several years and has been unable to break out of this range and begin a real bull market. The difference is this time; Gold has held quite a bit more of its gains.

Figure 2.3: Gold Performance Post 1980 & 2011 Peaks



Another, similar difference this time (post-2011 peak), is Gold relative to foreign currencies (FC) has held up much better. Figure 1.4 plots the two bear markets on the 2011 scale. Note that at present, Gold/FC is only 11% off its all-time high. At the same point in the late 1980s, Gold/FC was 35% off its high.

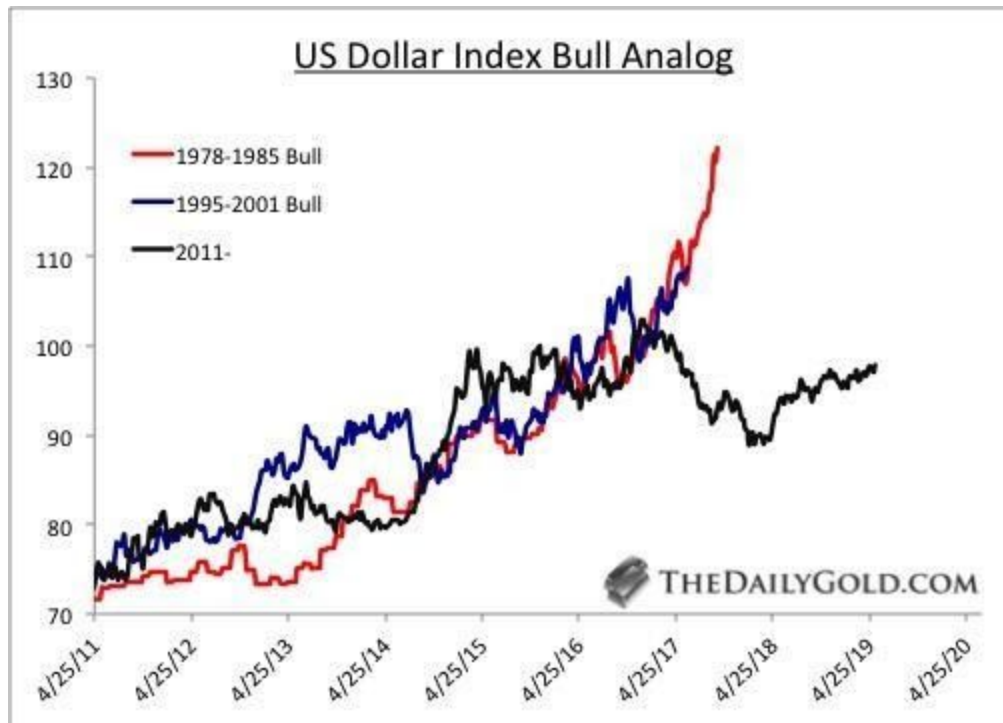
Figure 2.4: Gold/FC Post 1980 & 2011 Peaks



The relative strength in Gold/FC at present compared to the late 1980s reflects the fact that by this point in the 1980s, the US Dollar index had experienced a significant bear market. From 1985 through 1987, the US Dollar index declined by 48%, and Gold failed to break out from its bottoming pattern. Today, the US Dollar index is currently 5% from its December 2016 peak, yet Gold is trading closer to its 2016 peak than its December 2015 low. If the US Dollar were to begin a multi-year bear market, then Gold would likely capitalize and break out from its range.

While there is not a particularly long history, the US Dollar appears to be in its longest bull market in history. Gold's failure to break out from its range suggests the US Dollar bull market is not over. Figure 2.5 plots the current US Dollar bull and how it compares to the two in the past.

Figure 2.5: US Dollar Bull Market Analog



Overall, while Gold's price action since its 2011 peak looks similar to that since its 1980 peak, that is where the comparison ends. As we showed, Gold's performance in the 1970s dwarfs that of the 2000s. Gold's performance leading to the 2011 peak pails in comparison to the vertical move seen before the 1980 peak. As a result, Gold did not collapse in price after its peak the way other bubbles did.

Moreover, Gold has held up well, considering there has not been a bear market in the US Dollar for quite a while. The current position of the dollar suggests that a move to new highs could be part of a terminal move. History indicates that Gold holds up quite well at the end of US Dollar bull markets.

Chapter 3

Current Valuations

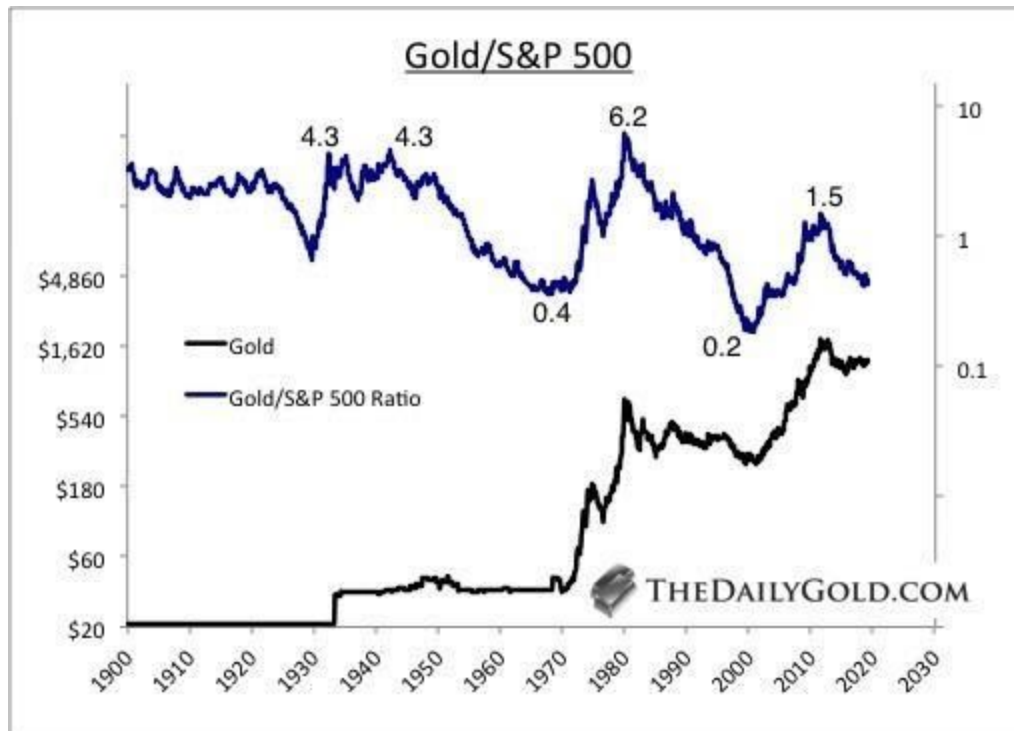
In this chapter, we examine current valuations for Gold and Silver as well as the mining companies that produce the metals.

Valuing Gold is difficult as, unlike a stock or bond, it generates no income or yield. Traditional valuation metrics do not work. However, we can value Gold by comparing it to other asset classes as well as the money supply, monetary base, and the Fed balance sheet. Essentially, we can compare Gold to anything that has a historical dataset.

When we wrote the first edition of this book in 2015, valuations for gold mining companies were approaching historical, multi-decade lows, and that has barely changed. Gold, in comparison to many things, continues to be as cheap as it has been in decades. Silver is even less expensive.

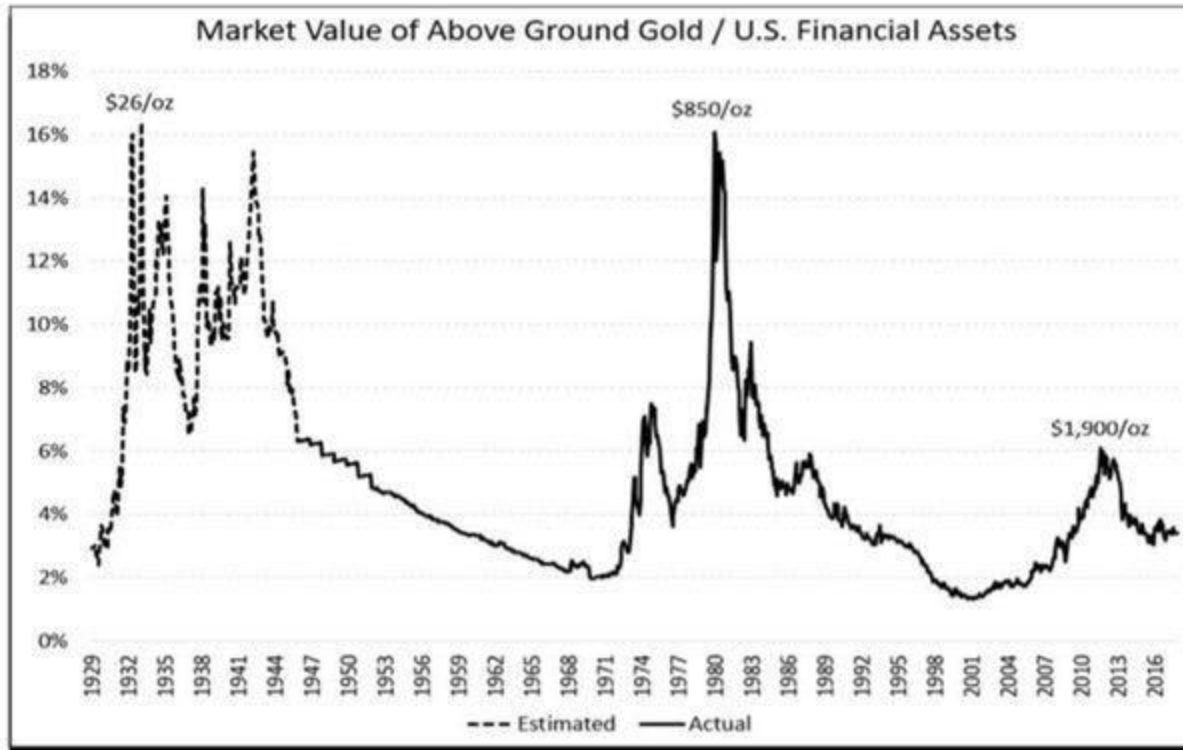
Figure 3.1 plots Gold and the ratio of Gold against the S&P 500 since 1900. As of May 19, 2019, the ratio closed at 0.45. The ratio has only been lower from 1996 through 2007 and from 1960 to 1971. The ratio has been higher, about 82% of the time over the last 115 years. The peaks of 1934, 1942 and 1980 dwarf the 2011 peak of 1.5.

Figure 3.1: Gold vs. S&P 500



Next, in figure 3.2, which is courtesy of Tocqueville Gold Fund and John Hathaway, we compare the value of all above-ground Gold against the value of US Financial Assets. The present value of less than 4% is much closer to historical troughs than peaks. The troughs in 1970 and 2000 were roughly 2% and 1.5%. Contrast that with the peaks in 1934 and 1980, which were at 16%. The price of Gold would need to gain more than 4x to match those historical peaks.

Figure 3.2: Gold as Value of Financial Assets



Source: U.S. Geological Survey, World Gold Council, Federal Reserve, Bloomberg.

In figure 3.3, we plot what Gold price would be required to back 40% of the monetary base (which was the required cover ratio under the gold standard) and 100% of the monetary base. We calculate this by valuing US Gold reserves (using the Gold price) relative to the monetary base.

Note that US Gold reserves, the Gold price, and the monetary base have all shifted over time. At present, the Gold price and the monetary base change while US Gold reserves have been static for a while.

Figure 3.4 shows what percentage of the monetary base is backed by the value of those Gold reserves. Currently, it's only 10%!

Figure 3.3: US Gold Reserves vs. Monetary Base

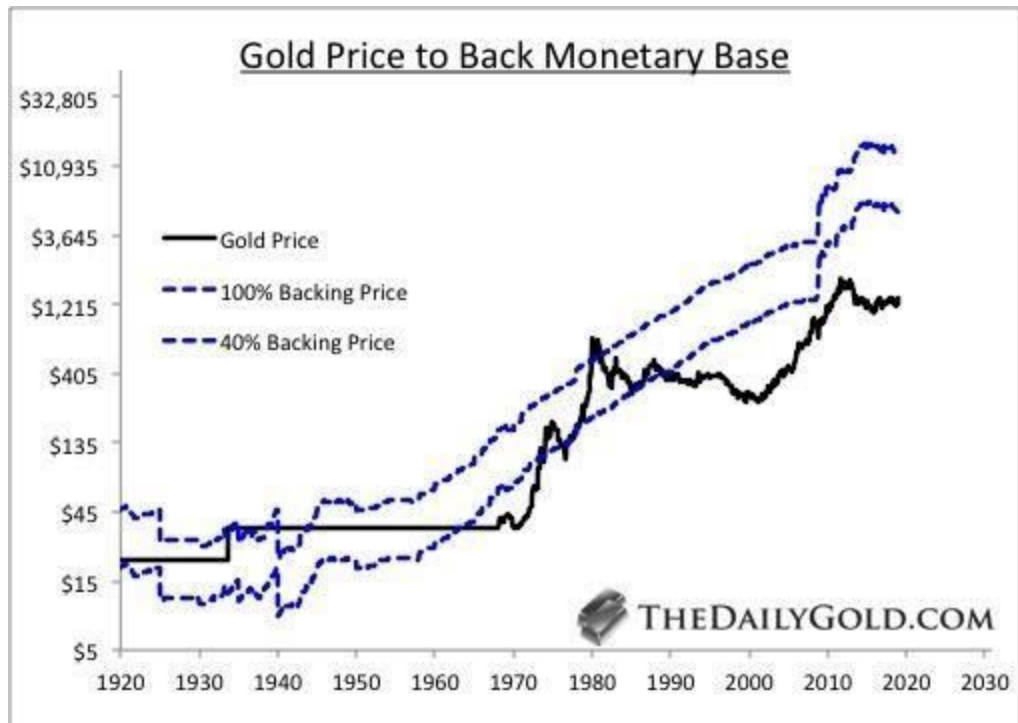
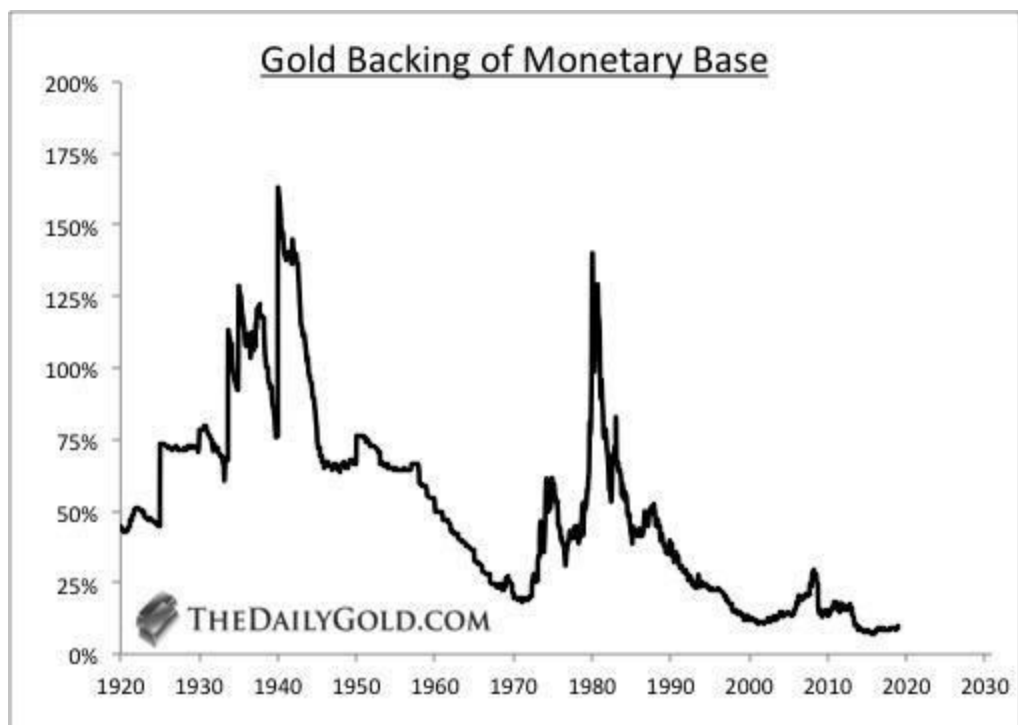
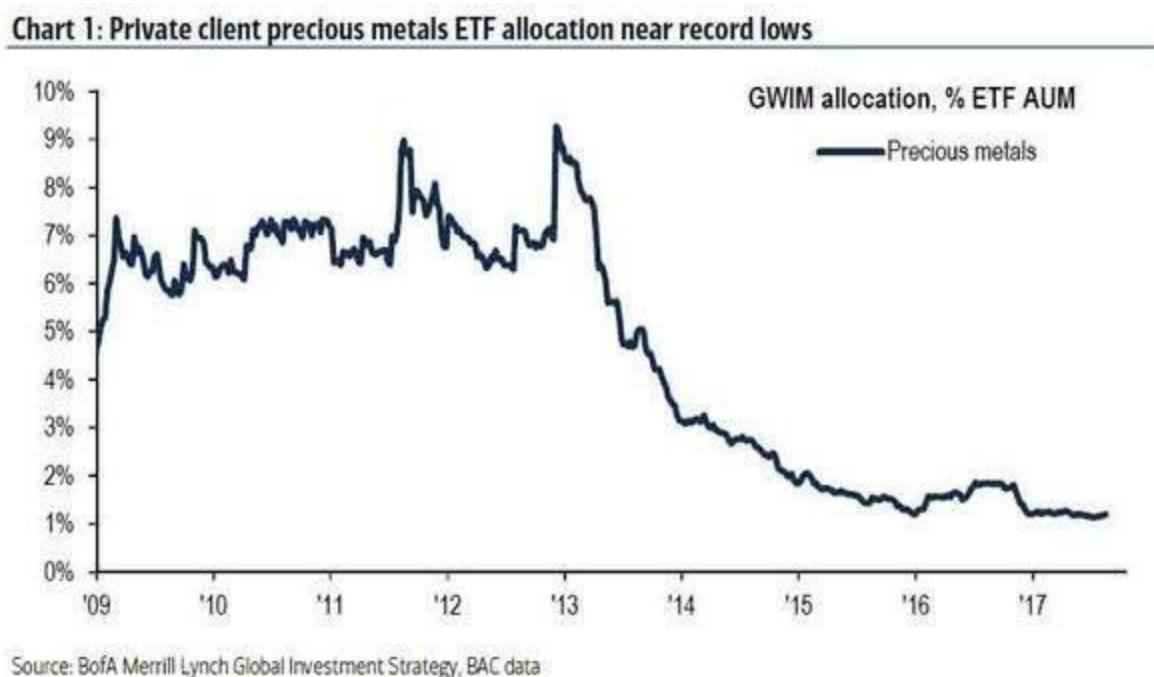


Figure 3.4: Percent Backing of Monetary Base



The next chart (figure 3.5) shows the allocation to precious metals ETFs as a percentage of total ETF assets. It comes from Bank of America Merrill Lynch. The data is over one year old, but given the lack of upward movement in precious metals, it probably has not changed much. We see an allocation of around 1.5%. From 2009 through 2012, the allocation ranged from 6% to 10%.

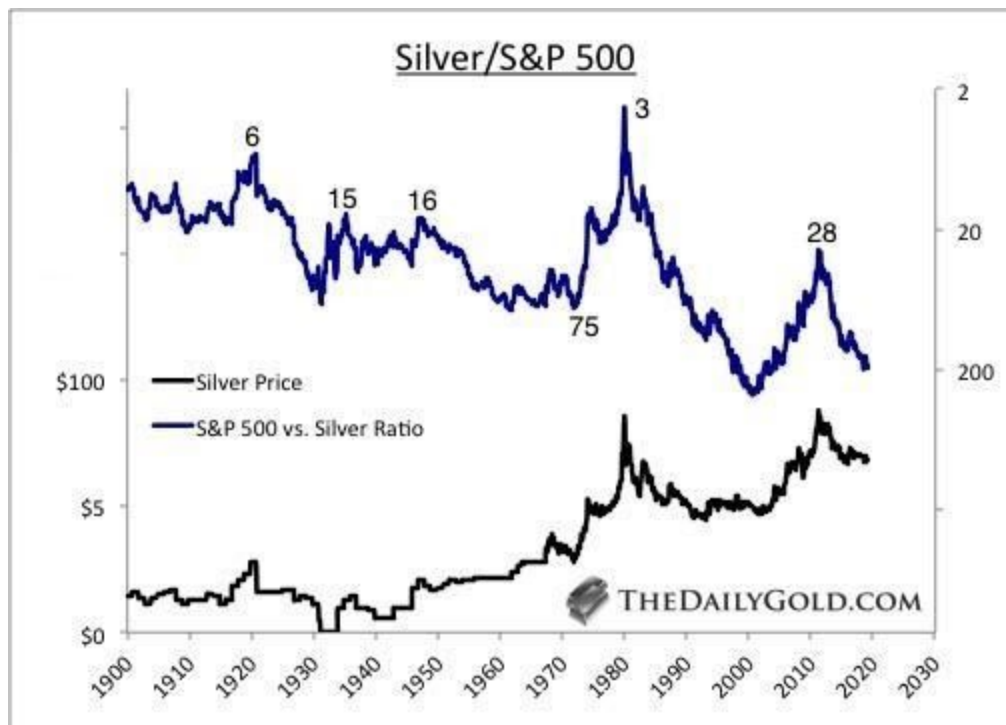
Figure 3.5: Gold as a Percentage of ETF Assets



Before we get to the gold mining stocks, let's take a quick look at Silver, which has underperformed Gold during the current decade. In figure 3.6, we plot the price of Silver along with the Silver to S&P 500 ratio on an inverted scale. The current ratio as of May 19, 2019 (on an inverted scale) is 199. The S&P 500 is 199x the price of Silver.

From the perspective of Silver, this ratio has only been lower from roughly late 1997 through 2005. In other words, over the past 120 years, Silver relative to the S&P 500 has only been cheaper for only eight years. Moreover, from the entire period of 1900 to 1997, Silver relative to the S&P 500 was more expensive than it is today.

Figure 3.6: Silver vs. S&P 500



Next, we will examine the gold stocks which historically are incredibly cheap and even quite a bit cheaper than Gold.

First, let's see how the gold stocks stand against the S&P 500. In figure 3.7, we plot the ratio of gold stocks to the S&P 500. We use two of the only historical gold stock indices. The top is the S&P TSX Gold Index, and the bottom is the Barron's Gold Mining Index.

Both ratios hit 80 to 90-year lows in recent years. The S&P TSX Gold Index (relative to stocks) hit its lowest point in the summer of 2018 while the Barron's Gold Mining Index did so in January 2016.

Figure 3.7: Gold Stocks vs. S&P 500



Next is figure 3.8, which shows the ratio of gold stocks to Gold. Again we use the S&P TSX Gold Index at the top and the Barron's Gold Mining Index at the bottom.

Once again, both ratios are incredibly depressed relative to their 80 to 90-year history. At the end of 2015, both ratios were essentially at the lowest points they had ever been in modern history. Despite the massive rally in the first half of 2016, the gold stocks continue to be historically cheap relative to Gold.

Figure 3.8: Gold Stocks vs. Gold



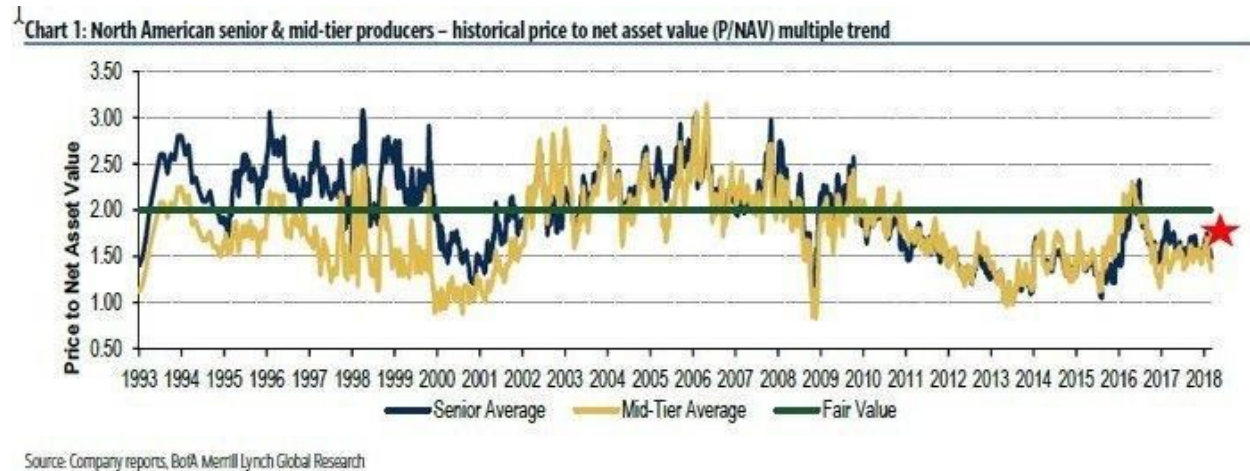
Next, in figure 3.9, we use monthly data from the S&P TSX Gold Index to plot rolling returns over various long-term periods. A study of the 10-year, 15-year, and 20-year rolling returns show that concerning long-term oversold conditions, the present and the past few years only compare to the late 1950s and the year 2000.

Figure 3.9: Gold Stocks Rolling Return



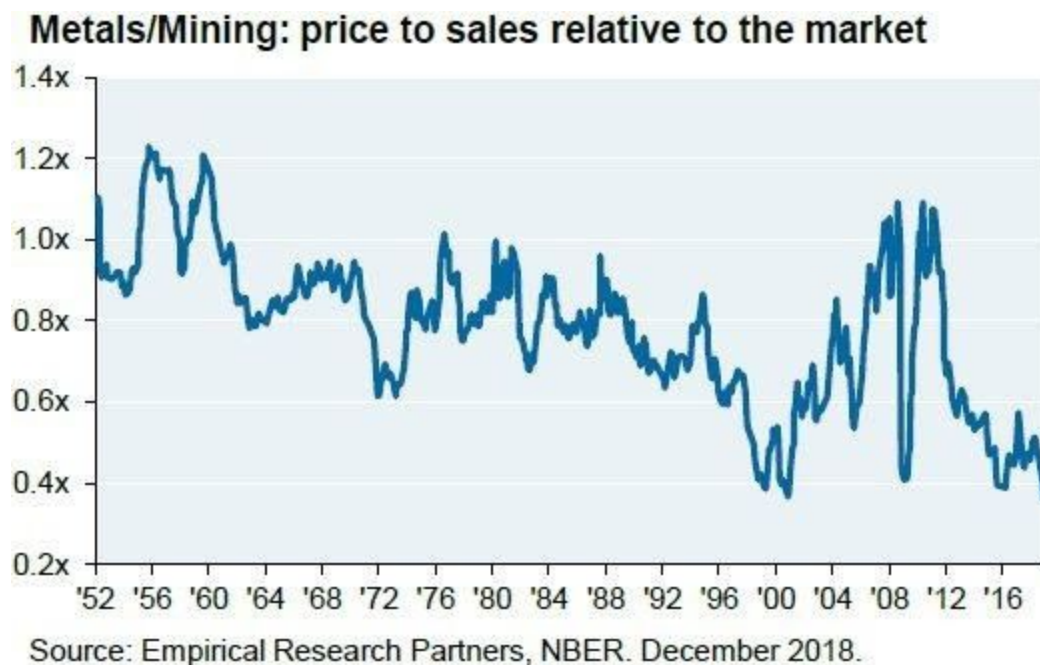
Figure 3.10 shows the price to net asset value for senior and mid-tier gold producers, dating back to 1993. Over the past 25 years, valuation for both categories has ranged from as low as 1.0 times net asset value to as high as 3.0 times net asset value. Both the senior and mid-tiers are trading below 1.5 times net asset value. Senior producers aren't quite as cheap as they were in 2013 and late 2015, but they are relatively close.

Figure 3.10: Gold Stocks Price to Net Asset Value



The final chart in this chapter is figure 3.11, which plots the price to sales ratio for mining stocks relative to that of the stock market. By this metric, metals and mining stocks are the cheapest they've been in nearly 70 years!

Figure 3.11: Metals & Mining Price to Sales Relative to Stock Market



In the first edition of this book (published and released in the summer of 2015), we concluded that gold mining companies were trading at their lowest valuations in potentially as much as 90 years. According to the data on price to cash flow and price to book value, gold miners were trading at valuations not seen since before 1980. Given the strong performance in the 1960s and 1970s, it was likely that gold stocks were trading at valuations not seen since at least 1960. Relative to Gold as well as the stock market, the gold stocks had never been cheaper in modern history.

From a bird's eye and historical view, we would characterize Gold as very cheap, but Silver and gold stocks as extremely cheap. Yes, Gold is very cheap, but history argues that gold stocks and Silver are so cheap that it has to be considered extreme. The gold stocks are no longer as oversold or as cheap as they were in late 2015, but in the context of history, the needle has moved only slightly.

We had previously noted that the most significant buying opportunities in gold mining stocks included 1929, 1942, 1960, 1971, 1976, 2000, and 2008 with 1960 and 2000 marking the best buying opportunities on a secular basis.

The best buying opportunity for sustained long-term performance was in the late 1950s into the early 1960s. In the mid-1950s, gold stocks had gone nowhere for several decades and were in position for strong performance beyond the next five to ten years. Gold stocks performed very well until Gold's blow-off top in 1980.

The second best buying opportunity was in 2000. Then, gold stocks embarked on 11 years of strong performance.

The present setup most closely resembles the early 1960s as there is a substantial historical similarity in how many years the gold stocks have gone without making any progress.

Listen to these numbers. At the 2018 summer low, the S&P TSX Gold Index was trading at the same price level as 38 years ago. At its 2000 low, it was trading at the same level as 21 years earlier. In 1963, the index was trading at the same level as 35 years prior. Meanwhile, the Barron's Gold Mining Index in summer 2018 was trading at the same level as 44 years earlier. At the low in 2000, it was 27 years.

Ultimately, when Gold's fundamentals come into bullish alignment, and inflation begins a secular move higher as it did in the 1960s, Gold and precious metals will

perform exceedingly well over the following years. We discuss the fundamental trigger for the start of the next bull market in Chapter 4.

Chapter 4

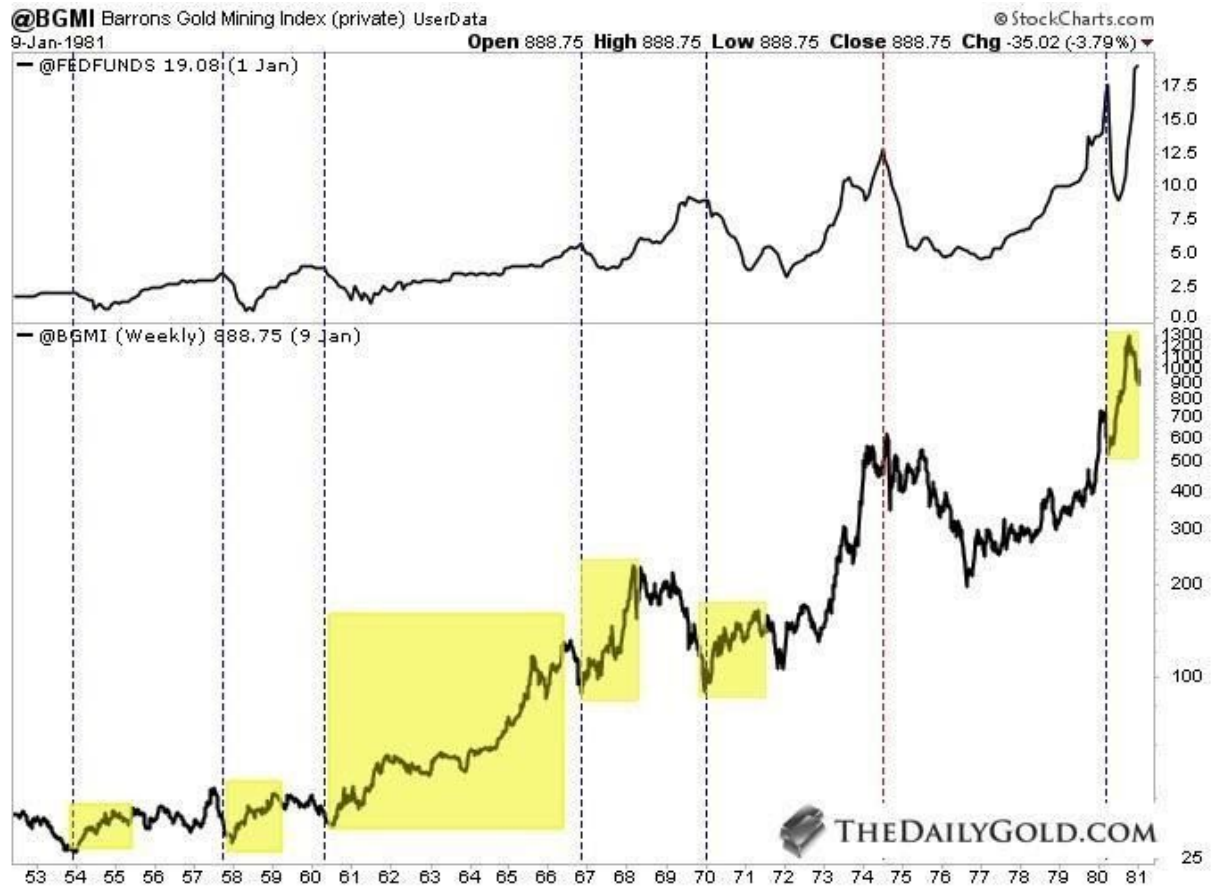
Fundamental Drivers for the Next Cycle

As we know, the key fundamental driver for a bull market in precious metals is negative or falling real interest rates. From 2011 through 2018 (excluding 2016), real interest rates have increased, and that is the fundamental cause and underpinning of Gold's bear market. Only a persistent decline in real interest rates will reverse that and put Gold back into a bull market.

There are essentially two ways this can happen. Either the rate of inflation can rise faster than interest rates, or interest rates can decline more quickly than the rate of inflation. In other words, the Federal Reserve can cut interest rates. Given the current economic and financial climate at the end of 2018 (weakening stock market, growth concerns, and limited potential for future rate hikes), it appears Federal Reserve rate cuts rather than increasing inflation will be the initial catalyst for the turnaround in precious metals.

There happens to be a strong relationship between the performance of gold mining stocks and the start of Fed rate cuts. In figure 4.1, we plot the Fed funds rate (top) and the Barrons' Gold Mining Index. Only once did a new rate cut cycle not lead to a move higher in gold stocks.

Figure 4.1: Fed Funds Rate & Barron's Gold Mining Index



In figure 4.2, we plot the Fed funds (top) and the S&P TSX Gold Index. Again, only one time did a new rate cut cycle not lead to a move higher in gold stocks.

Figure 4.2: Fed Funds Rate & S&P TSX Gold Index



In figure 4.3, we include the exact data around 11 rate cut cycles in the past 65 years. We include how both the Barron's Gold Mining Index and S&P TSX Gold Index, as well as Gold, performed. Also, we include the time between the last rate hike and the first rate cut as well as the dates these markets bottomed.

Figure 4.3: Gold, Gold Stocks & Rate Cuts

Gold, Gold Stocks & Rate Cuts

<i>Last Rate Hike</i>	<i>First Rate Cut</i>	<i>Time B/w Hike & Cut</i>	<i>Time B/w Hike & Low</i>	<i>BGMI / HUI Low</i>	<i>BGMI / HUI Performance</i>	<i>S&P TSX Low</i>	<i>S&P TSX Performance</i>	<i>Gold Low</i>	<i>Gold Performance</i>
1/53	1/54	12 months	11m	12/53	42% in 1y 6m	12/53	16% in 8m		
9/57	11/57	2 months	3m	12/57	48% 1y	12/57	84% in 2y 4m		
10/59	5/60	7 months	9m	7/60	331% in 6y	6/60	84% in 6y		
10/66	12/66	2 months	1m	11/66	161% in 1y 4m	11/66	91% in 1y 3m		
7/69	2/70	7 months	5m	12/69	65% in 1y 5m	10/71	336% in 2y 4m	1/70	461% in 5y
3/80	4/80	1 month	0	3/80	144% in 7m	3/80	146% in 5m	3/80	48% in 6m
8/84	9/84	1 month	5m	6/86	142% in 1y	1/85	284% in 2y 8m	2/85	77% in 2y 7m
3/89	5/89	2 months	-3m	1/90	52% in 1y	12/88	57% in 1y 1m	6/89	18% in 7m
2/95	7/95	5 months	-1m	10/95	38% in 6m	1/95	60% in 1y 4m	1/95	12% in 12m
6/00	1/01	7 months	5m	11/00	601% in 3y	11/00	234% in 3y	3/01	65% in 2yr 9m
6/06	9/07	15 month	4m	10/06	84% in 1y 6m	10/06	68% in 1y 6m	6/06	78% in 1y 6m



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While each rate cut cycle is different, one thing is clear. Gold and gold stocks perform well with the start of rate cuts. This information is not included in the image, but gold stocks make a low an average of and median of one month before the first rate cut.

While rate cuts will undoubtedly trigger a big rally in precious metals, they do not guarantee a multi-year bull market. That requires a continued decline in real interest rates, which implies some combination of rising inflation or falling nominal rates. Essentially, a severe recession (which necessitates massive Fed easing and debt monetization) could do the trick or a mild recession that is followed by increasing inflation in the next expansion.

There are two reasons why the next cycle and the 2020s as a whole should entail increasing inflation.

First, monetary policy is likely to be directed to benefit main street rather than wall street. Previous monetary policy of ZIRP (zero interest rate policy) and QE (quantitative easing) has been more successful at reviving the capital markets than main street. It has disproportionately benefited those who own assets (stocks, property, etc.) and as a result, led to widening income inequality and rising populism. A repeat of such a policy is politically unacceptable.

Enter Ray Dalio's "monetary policy 3."

According to the billionaire hedge fund manager and investor, monetary policy 1 is interest rates, monetary policy 2 is QE, and monetary policy 3 is something that will have to be directed at spenders more than investors and savers.

Policymakers and alleged experts have discussed a negative interest rate policy. Still, Dalio notes that it won't drive investors and savers to buy the sort of assets that will finance more spending. Besides, QE won't change the behavior of investors, savers, lenders, and borrowers.

The implementation of monetary policy 3 could involve coordination between the Federal Reserve and government (the central bank monetizes debt incurred from excess government spending) or sending cash to people directly, (known as a helicopter drop) through a tax rebate. Former Federal Reserve Chairman Ben Bernanke wrote about the implementation of such for the Brookings Institute in 2016.

To illustrate, imagine that the U.S. economy is operating well below potential and with below-target inflation, and monetary policy alone appears inadequate to address the problem. Assume that, in response, Congress approves a \$100 billion one-time fiscal program, which consists of a \$50 billion increase in public works spending and a \$50 billion one-time tax rebate. In the first instance, this program raises the federal budget deficit by \$100 billion. However, unlike standard fiscal programs, the increase in the deficit is not paid for by the issuance of new government debt to the public. Instead, the Fed credits the Treasury with \$100 billion in the Treasury's "checking account" at the central bank, and those funds are used to pay for the new spending and the tax rebate. Alternatively and equivalently, the Treasury could issue \$100 billion in debt, which the Fed agrees to purchase and hold indefinitely, rebating any interest received to the Treasury. In either case, the Fed must pledge that it will not reverse the effects of the MMFP on the money supply (but see below).

The government spending component would likely be more effective in raising aggregate demand and inflation as there is no guarantee with helicopter money (or tax rebates) that the recipients would spend the money. Some would spend it while some would save.

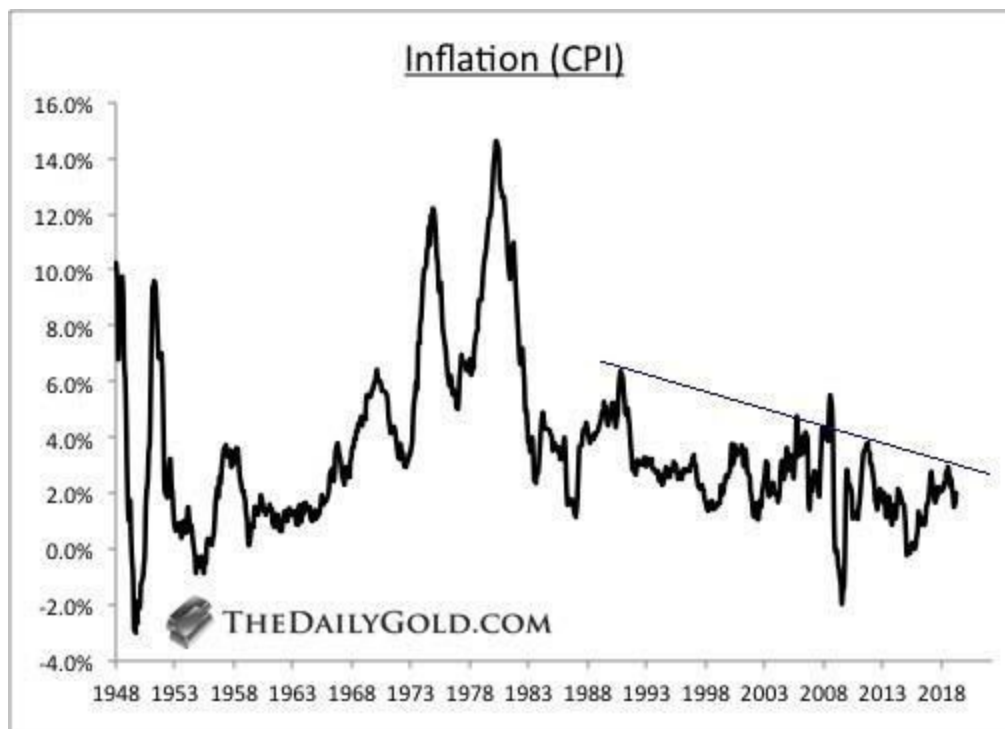
The United States is overdue for infrastructure spending, and if the next economic downturn is severe, then increased deficit spending, financed by the Federal Reserve on Public Works projects, could happen.

In any case, Monetary Policy 3 will target main street and the real economy (not the financial economy), and this should prove to be more inflationary. To what degree is up for debate.

The second reason we can expect rising inflation in the 2020s is two-fold. We may have seen an end to the secular downtrend in inflation, and inflation is the only realistic way out of the government debt bubble, which will become a more pressing matter in the years ahead.

Figure 4.4 shows monthly data from the consumer price index. The rate of inflation has trended down for the past two decades (aside from the brief spike before the global financial crisis). A rise to or above 4% could mark the definite end of the downtrend. I anticipate that this could happen during the next economic expansion.

Figure 4.4 Consumer Price Index



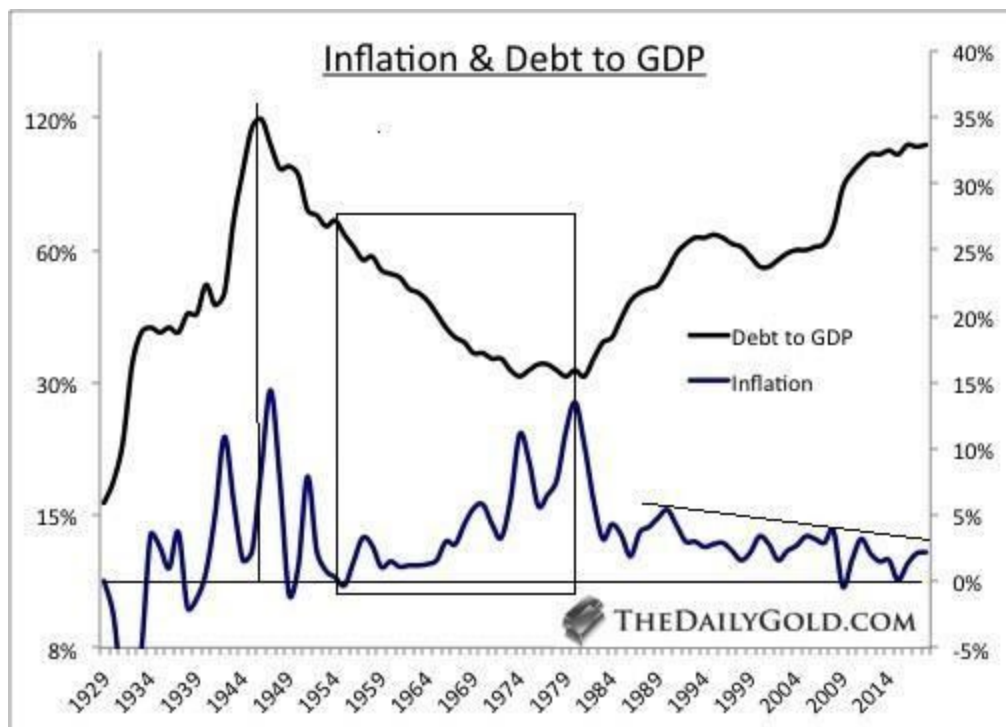
My long-term bullish case for Gold is driven by the inevitability of rising inflation and negative real interest rates as the only way the federal government can get its debt under control.

In figure 4.5, we plot the rate of inflation and the debt to GDP ratio, using annual data.

Note the relationship between the two data series. The secular peak in inflation in the early 1980s coincided with the secular low in debt to GDP. During the previous decades, inflation trended higher, while debt to GDP trended lower.

Rising inflation after World War II helped engender a peak and reversal in debt to GDP, which peaked in 1945-1946. From 1946 through 1948, inflation increased by 34%. The late 1940s and early 1950s did most of the work, but debt to GDP continued to decline as inflation accelerated in the late 1960s and 1970s.

Figure 4.5: Debt to GDP & Inflation



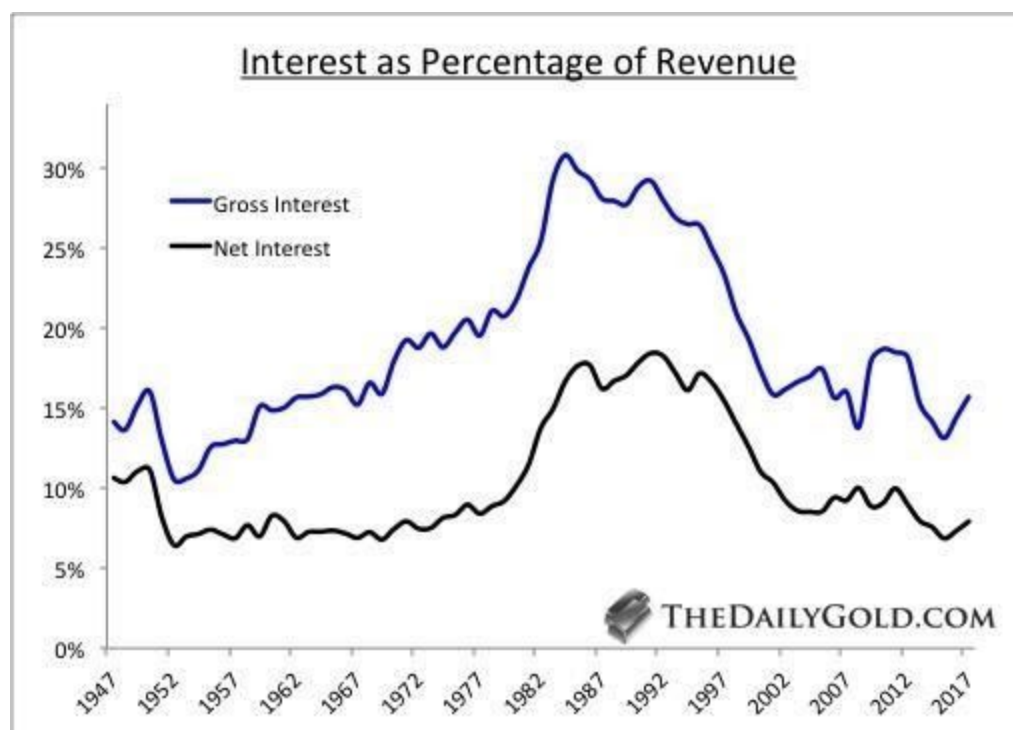
Growing your way out of debt requires accelerating nominal GDP growth more so than real GDP growth. Nominal GDP growth has to outgrow debt growth.

For example, let's assume debt grows by 5%, and real GDP grows by 3%. An inflation rate of 0%-1% is healthier for the economy than an inflation rate of 3%. However, an inflation rate of 3% with real GDP growth of 3% results in nominal GDP growth of 6%. In that scenario, inflation helps the economy outgrow the increase in debt.

Naturally, an increase in inflation juices nominal GDP growth and interest rates trend higher. However, because of the government debt load and its sensitivity to rising rates, policymakers will not raise rates as aggressively as they usually would. If necessary, policymakers could buy long-term bonds to keep long-term interest rates down as they did during the financial crisis.

The US government (and those in the West) have taken on vast amounts of debt in recent years, but that has not been a problem yet due to historically low long-term interest rates. As we can see in figure 4.6, interest payments as a percentage of federal revenue have declined for most of the past 25 years. However, it began to increase after 2016 due to the combination of higher interest rates and a growing budget deficit.

Chart 4.6: Interest Payments as a Percentage of Federal Revenue



Recall figure 4.5 and how debt to GDP declined from the late 1940s into the early 1980s. Then, inflation significantly reduced the overall debt load. Long-term interest rates surged, and that impacted interest costs.

The problem now is the government needs inflation to get Debt to GDP under control, but the consequence of higher long-term interest rates would cause interest payments to spike. In the fiscal year 2018, the government paid \$566 Billion in interest on the national debt is \$21.6 Trillion. That amounted to an interest cost of roughly 2.6% and 17% of federal revenue of \$3.34 Trillion. If the interest cost increased by only 2%, the government would be paying \$1 Trillion in interest costs! Even if we assume a 10% growth in tax receipts in 2020 and 2021, the gross interest cost would be 25% of revenue in 2021.

At some point in the 2020s, it is almost sure that we could see a repeat of the Federal Reserve policy of the 1940s when they kept rates artificially low for many years. The 90-day T-bill rate was fixed below 0.5% from late 1941 through most of 1947, and the 10-year Treasury yield had a ceiling of 2.5% from 1942 through 1950.

The debt to GDP ratio eventually peaked and declined, but the cost was inflation. It surged in the 1940s. From 1941 through 1951, the consumer price index (CPI) rose 88% or 6% per year, compounded annually (CAGR of 6%). From 1945 through 1951, the CPI rose 49% (CAGR of 6%). Real GDP growth was only 6% from 1945 through 1951, while nominal growth was 52% over the same period.

It is important to note that the debt problem and necessity of higher inflation is unlikely to be an issue until after the next downturn. Sure, the budget deficit could explode during the next recession, but interest rates would likely decline, thus temporarily mitigating the debt burden. The problem could come during the subsequent recovery when interest rates would trend higher and therefore impact the debt load and fiscal situation. That could hit around the middle of the 2020s.

Regardless of whether the economy has a few more years left of growth or less, it appears the Federal Reserve is going to cut rates this year or in early 2020. That is the immediate positive catalyst for precious metals. Whether they begin a new bull market in earnest or not, depends on their relationship with the stock market, which we discuss in the next chapter.

Chapter 5

Precious Metals' Relationship to the Stock Market

Over long periods, Gold and the US equity market have an inverse relationship. When equities are in a secular bull market, Gold is in a secular bear and vice versa. However, over shorter periods (such as a few years), the relationship between the two asset classes can take many forms. There have been multiple periods in which the two assets gained together, declined together, and trended in opposite ways.

Our focus in this chapter is to explain why there is a long-term inverse relationship and to explore the current setup and why it is incredibly favorable for Gold and precious metals.

Secular bear markets in equities usually begin with extreme over-valuation and too much debt. To combat the resulting adverse effects, policymakers decrease interest rates, and increase government spending. Lower rates and particularly declining real interest rates help counteract recessionary forces by reducing the burden of debt and encouraging more borrowing and consumption. Increased government spending also picks up the slack. These policies are inflationary and most favorable to Gold and hard assets.

Positive and/or rising real interest rates are a sign of a healthy economic environment and usually coincide with secular bull markets in equities and often (but not always) in bonds. They keep a lid on inflation but facilitate sustainable growth. Depositors, savers, and lenders can earn a real rate of return while providing capital for productive investment. During these periods, the economy and financial system are healthy enough to withstand conventional monetary policy. At lows in the business cycle, policymakers will decrease rates and increase spending but not to the degree seen recently as well as in the 1930s.

Concerning inflation, it's important to note that significant peaks in inflation tend to coincide with troughs in stock valuations and the start of secular bull markets in stocks. Recall figure 4.6 and note that the peaks in the rate of inflation came in the late 1940s and 1980.

These are some of the tenets of secular bull and bear markets between stocks and Gold.

In figure 5.1, we plot the Barron's Gold Mining Index against the S&P 500 to review the history and long-term negative correlation between the two. Because Gold's price was mostly fixed until 1971, we use the gold stocks as a basis for comparison.

Figure 5.1: Gold Stocks to Stock Market Ratio



The long-term negative correlation is quite apparent.

The stock market strongly outperformed gold stocks in the 1940s and 1950s, while the gold stocks strongly outperformed the stock market for most of the 1960s and entire 1970s. Then the stock market had its turn in the 1980s and 1990s. Gold and gold stocks strongly outperformed in the 2000s, while the stock market has outperformed dramatically since the end of 2011.

The underperformance of gold stocks has been so drastic that recently, relative to the stock market, they were trading near all-time lows. Before we get to short-term correlations, we want to note the effect of extreme stock market valuation on the gold sector.

In figure 5.2, we plot the cyclically adjusted price-earnings ratio and the S&P TSX Gold Stock Index. The 10-year PE ratio, also known as CAPE or the Shiller PE, was developed by Yale Professor Robert Schiller.

Figure 5.2: 10-Year PE Ratio (CAPE) & S&P TSX Gold Stocks



Whether you look at the CAPE, the Buffet valuation indicator (market cap to GDP), or something else, they all lead to a similar conclusion. Over the past 100 years, the valuation extremes for US Stocks were in 1929, the mid-1960s, 2000, and 2018. Gold stocks performed incredibly well after each of those valuation peaks. That's not a surprise considering gold stocks were the cheapest they had ever been around 1960 and 2000. We can add 2015 and the present to that group.

As an aside, note that the troughs in CAPE in 1942, 1949, 1982 and 2009 all proved to be excellent points to buy equities. The troughs in 1949 and 1982 coincided with secular peaks in the rate of inflation.

While history argues that there is a secular negative correlation between Gold and stocks, history also shows that there can be a negative correlation on a cyclical basis.

Before I get to history, let me explain the fundamental reason for a negative correlation on a cyclical basis. Gold responds to falling real interest rates, which means its catalyst is Fed interest rate cuts or accelerating inflation. The Federal Reserve will cut interest rates to fight a recession, which is accompanied by a bear market in stocks. Accelerating inflation, like in the 1970s, is negative for stocks.

A negative correlation between Gold and stock market persisted for a good part of the 1970s. Figure 5.3 plots the Barron's Gold Mining Index (BGMI), Gold, and the S&P 500 from 1972 through 1978. From the end of 1972 through summer 1974, precious metals surged while the S&P 500 experienced a severe bear market, falling 50%. Until the 2000s, this was the worst bear market in stocks for over 50 years. As the S&P 500 recovered, precious metals began a cyclical bear market that lasted almost two years. The bull market in precious metals resumed in the summer of 1976. From then until early 1978, the S&P 500 corrected nearly 20%.

Figure 5.3: Precious Metals and Stocks 1973-1980



Following the first quarter of 1978, precious metals and the stock market trended in the same direction, and that continued, for the most part until 1983. However, we should note that from 1981-1982, the stock market experienced a mild bear market while the precious metals sector crashed. Both recovered together, but the stock market broke out to new all-time highs while the oversold bounce in precious metals eventually faded.

The negative correlation between precious metals and the stock market reappeared in the late 1990s until the end of the technology crash and equity bear market. Figure 5.4 plots the NYSE Arca Gold Miners Index (the forerunner to the GDX ETF), Gold and the S&P 500 from 1994 through 2004. The gold stocks began their then worst bear market in history in 1996 while the stock market began a historic run, which ended in a full-blown bubble. The stock market peaked in March 2000 but started its decline in earnest several months later. The gold stocks bottomed in the fourth quarter while Gold emerged from its double bottom pattern by the end of the first quarter of

2001. The gold stocks enjoyed sensational performance while the S&P 500 again was cut in half.

Figure 5.4: Precious Metals and Stocks 1996-2003



This brings us to the present and figure 5.5, which details the ongoing negative correlation that began in the summer of 2011. The negative correlation was particularly sharp from 2011 through 2015 as well as in 2017 and 2018.

Although precious metals bottomed at the start of 2016, it is essential to note that since their peak in the summer of 2016, they have failed to make higher highs while the stock market has continued to make higher highs. Since that peak, Gold has gone sideways while both the gold stocks and Silver have made lower highs.

Figure 5.5: Precious Metals and Stocks 2011-2019



Precious metals surged in 2016 for several reasons. The stock market had corrected by almost 20% and was close to experiencing a real bear market. Hence, the Federal Reserve, which was overdue to begin hiking rates, hiked rates in December 2015 but then paused for the next 12 months. Real interest rates declined as inflation rebounded.

However, that wasn't quite enough for a sustained bull market in precious metals. The Fed would resume hiking rates, and inflation remained tame enough that real interest rates stopped falling.

At the end of 2018, the stock market again corrected 20%, and yet this was not enough to push precious metals into a bull market. The Federal Reserve decided to pause its rate hikes, and as a result, precious metals rallied. However, Gold failed to reach its 2016 high, and gold stocks made another lower high.

Circling back to Gold's relationship with the S&P 500 leads me to an important point. Gold has never experienced a real bull market without simultaneously outperforming the stock market — note figure 5.6.

Figure 5.6: Gold & Gold vs. Stock Market



Gold's bull runs in the 1970s, and the 2000s are mirrored by strong performance in the Gold to S&P 500 ratio. However, Gold's strength at other points (notably the mid-1980s, the mid-1990s, and from 2016-2018) was not confirmed by a rise in that ratio. That speaks to the lack of relative strength and lack of sustainability in Gold's increases during those periods. From 1985 through 1987, Gold gained 77%, but that was on the back of a 50% decline in the US Dollar.

At present, Gold needs to outperform the S&P 500 for a real bull market to take shape. A bull market has not begun yet because the bull market in the S&P 500 has not ended. If the stock market retreats again and the economy rolls over, then the Fed will begin to cut rates. Gold would outperform the stock market and likely break out of its trading range. On the other hand, if the stock market resumes its bull market, then the

Fed would have no reason to cut rates and would consider hiking rates. That would be negative for Gold, and the Gold to S&P 500 ratio would roll over again.

Unlike in 2008, the impact of an equity bear market and recession would be positive on precious metals. History shows that when precious metals and the stock market are negatively correlated several years before a recession and a bear market, they remain negatively correlated during the recession and bear market. This is reflected in figures 5.3 and 5.4.

There are periods when the two asset classes can rise or fall together. Examples of rising together include 2003 to 2007, 2009 to 2010, and 1978-1980. During periods before 1971, Gold was fixed in price, but the gold stocks often trended with the stock market. The two assets declined together, most notably in 2008 and 1980-1981.

Gold and the stock market often rise together immediately following an equity bear market or recession. The reason is that real interest rates are still falling, and the Fed hasn't shifted to tighter policy yet.

Gold and the stock market decline together, usually after several years when the two are rising together. Again, examples include the late 1970s and the years leading up to 2008.

Assuming the US economy rolls over into recession and the Federal Reserve cuts interest rates, precious metals would be poised to perform well through the duration of the bear market in stocks. Whether the negative correlation would continue as the stock market and economy recovered would depend on the trajectory of real interest rates and, specifically, inflation. Should the Federal Reserve cut rates, and the US economy can avoid recession for another few years, then the upside in precious metals would be limited.

Chapter 6

Long-Term Outlook for US Stocks

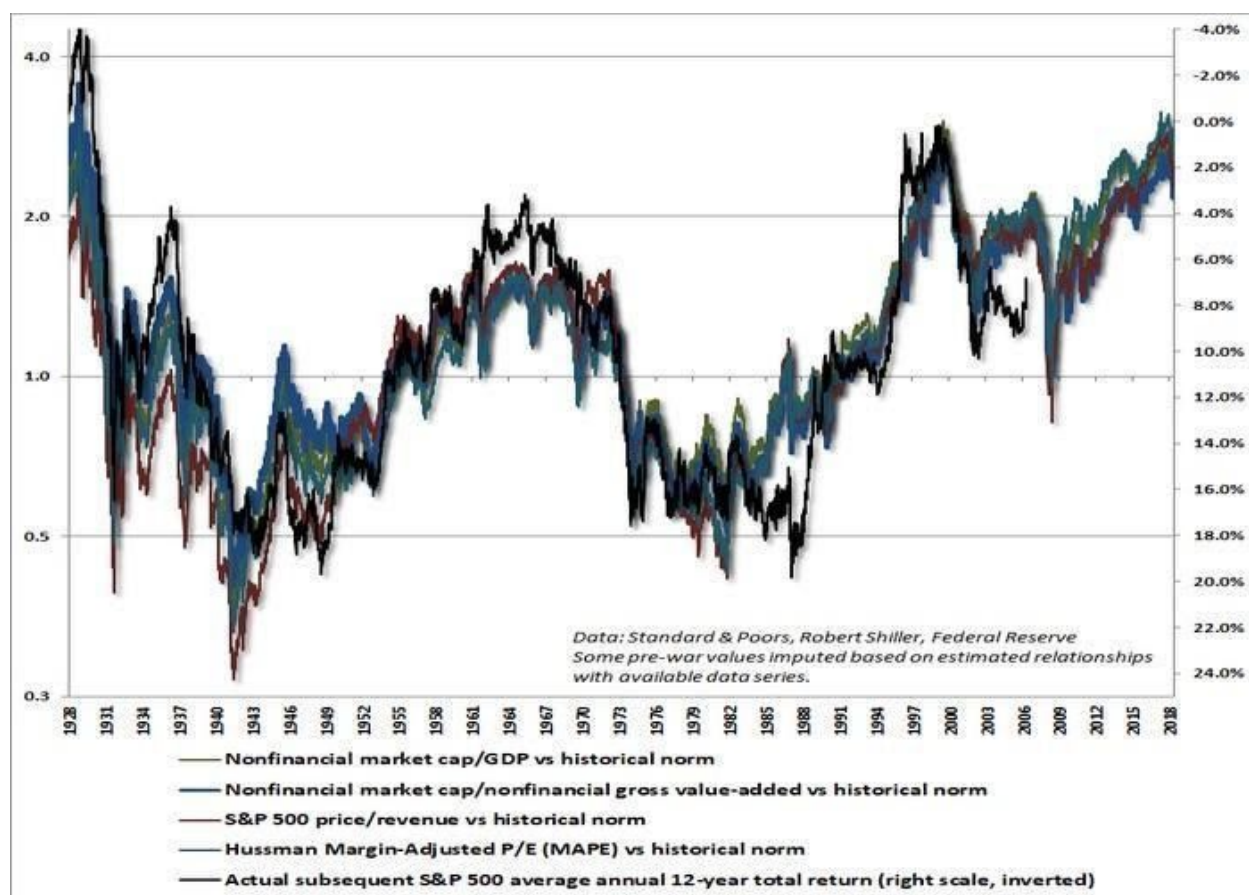
In the first edition of this book in 2015, we wrote that US equities were a long-term sell and would only be a buy after a bear market. The S&P 500 declined 20%, but that wasn't quite the bear market we were anticipating. In the fourth quarter of 2018, the S&P 500 again corrected nearly 20%, but since then, US equities have recovered.

We have already discussed the relationship between the stock market and precious metals and the need for precious metals to regain outperformance against stocks. If the long-term outlook for precious metals is very favorable, then what does that mean for the outlook for US stocks? It is less than desirable.

Although the stock market has excellent long-term momentum, its valuation is in the historically extreme territory, and this argues that future returns are going to be very low. Let me present to you several data-based projections for future returns.

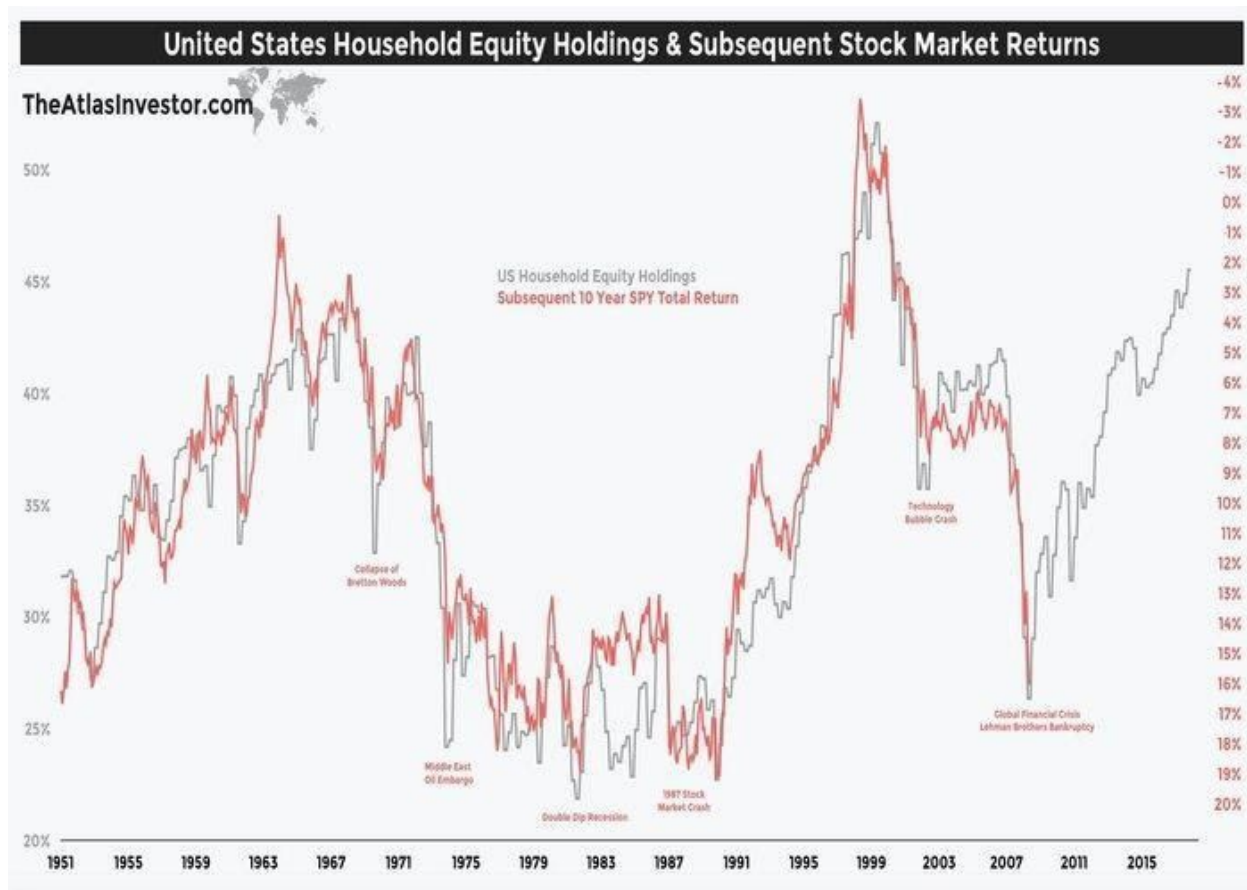
John Hussman's projection is shown in figure 6.1. He is a noted "perma-bear," which means he is almost always bearish on the stock market. His forecast incorporates multiple sets of data. Note that returns undershot the estimate in 1937 and the 1960s and then overshot the estimates in the late 1980s and early 2000s. The current projection shows a range of 0% to 3% nominal return per year for the next 12 years.

Figure 6.1: John Hussman Projection



Next is a look at future returns based on to what degree American households are invested in the market. Figure 6.2 is courtesy of TheAtlasInvestor and Tiho Brkan. The more that households are invested in the equity market, the lower future returns tend to be. These data series are roughly 90% inversely correlated. The data projects a total return (including dividends) of +2% per year for the next ten years. Note that the projection was as of December 2019 while the market was near its peak.

Figure 6.2: Household Equity Holdings & Subsequent Stock Market Returns



The most optimistic projection I've found is from a blog known as Philosophical Economics. The author calculates what he calls the best-case scenario. For this, he assumes that the current high valuation of the stock market remains high. He comes up with a projected real return of 3.8% per year for the next ten years. If we assume that dividends and the proceeds from their reinvestment will equal inflation, then the projection equates to a nominal return of 3.8% per year for the next ten years.

If the S&P 500 generated a 2% return per year over the next ten years, then it would be trading above 3400 by 2030. The stock market could make marginal new highs but would not continue to surge higher in the fashion it did in the 1920s, 1950s, or 1990s.

The price action of the market, its current valuation and expected returns suggest a historical comparison to the early 1900s or the 1960s. In figure 6.3, we plot the S&P 500 and the CAPE ratio.

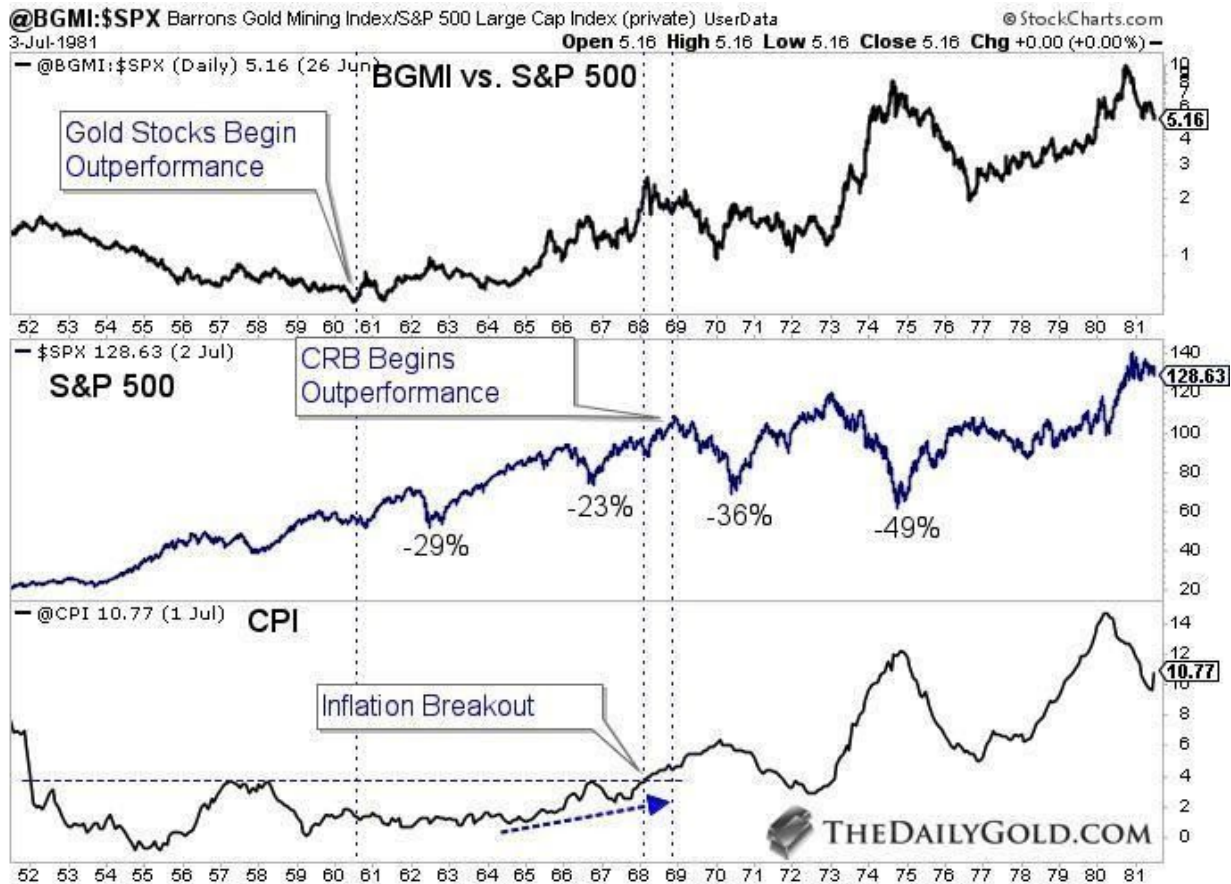
Figure 6.3: S&P 500 & CAPE Ratio



There are a few crucial points to make. First, note how the S&P 500 continued to make slightly higher highs after the valuation peaks (VP1, VP2) in 1900 and 1965. It is possible the late 2018 peak in the CAPE was VP3. Second, the breakout to new all-time highs within BO 2 occurred in 1954, while within BO 3, it happened in 2013. It was only six years after the S&P 500's major breakout in 1954 when gold stocks would begin to outperform the stock market.

Figure 6.4 illustrates this alongside a chart of the S&P 500 and the consumer price index (CPI).

Figure 6.4: Barron's Gold Mining Index vs. S&P 500



Gold stocks began their outperformance of the stock market well before anything else in the hard assets group. Silver relative to the stock market bottomed in 1962 but did not enjoy strong outperformance until the late 1960s and early 1970s. Commodities, as depicted by the CRB index, began their outperformance in late 1968. Not surprisingly, the rate of inflation surged to a 17-year high in 1968, and that was when the bull market in equities ended in real terms.

Aside from the stock market lows in late 1962 to the peak in late 1972, the 10-year returns in stocks throughout the 1960s resemble the expectations of today. Here are some examples. From early 1962 to early 1972, the 10-year return was 2.4% per year. From 1964 to 1974, the 10-year return was 2.3% per year. After 1964 the 10-year return did not improve until the early 1970s. The reason for that is the rate of inflation began its steady and consistent rise in 1964. It increased from 1% to 6% by the start of 1970.

As we noted in the previous chapter, the rate of inflation could become a problem during the next expansion and perhaps in three to five years. In the late 1960s, inflation reached a 17-year high when the CPI pushed above 3.75%, and that brought about problems for the stock market. At present, a rise in the CPI above 3.0% would break the downtrend that has been in place for 30 years and likely mark an end to the equity bull market in real terms.

As we conclude this chapter, we want to summarize the important points. First, US equities are likely to generate only 2%-3% per year over the next ten years, and the bull market in real terms could end during the next expansion when the CPI reaches 3% or slightly higher. Then, hard assets should outperform. We expect gold stocks and emerging market stocks will perform best over the next ten years.

Chapter 7

About Gold Mining Stocks

There are a handful of reasons why gold mining is a very tricky business that produces inconsistent and varied returns over long-term cycles.

First and foremost, the mining companies consume their end product or asset, which is a finite resource. They need to grow to get back to where they were. If they aren't growing, they are dying. In a way, its a Ponzi scheme.

Second, the business is extremely capital intensive. New mines for the large companies require hundreds of millions of dollars of capital investment. Operating mines require sustaining capital investment. Companies rely on the ability to raise capital by selling equity, debt, or a royalty. In most cases, equity and debt tend to be dilutive to shareholders.

Geology and politics also play a role. Over time, it is more difficult and more costly for companies to find the deposits to replace production and reserves and support future growth. Meanwhile, politics can present an obstacle. National and local governments can change policies and laws which can circumvent recent and existing investments made by companies.

We have yet to mention the constant volatility in the price of the companies' product: Gold. Companies have to plan for the future, but they have no idea where the price of Gold will be in the future or what its trend will be. The volatility in the Gold price affects a company's margins and the terms at which it has to raise capital.

All of these reasons help explain why the gold mining sector as a whole does not outperform the Gold price over long periods and why the gold stocks (as per the S&P TSX Gold Index) have endured on average a bear market of 65% every +6 years over the past 50 years. Even during multi-year bull markets, the gold stocks will correct 20% multiple times per year, with corrections often reaching 30% or higher.

Figure 7.1 plots the S&P TSX Gold Index and the price of Gold. Note the sharp ups and downs as well as their frequency.

Figure 7.1: Gold Stocks History



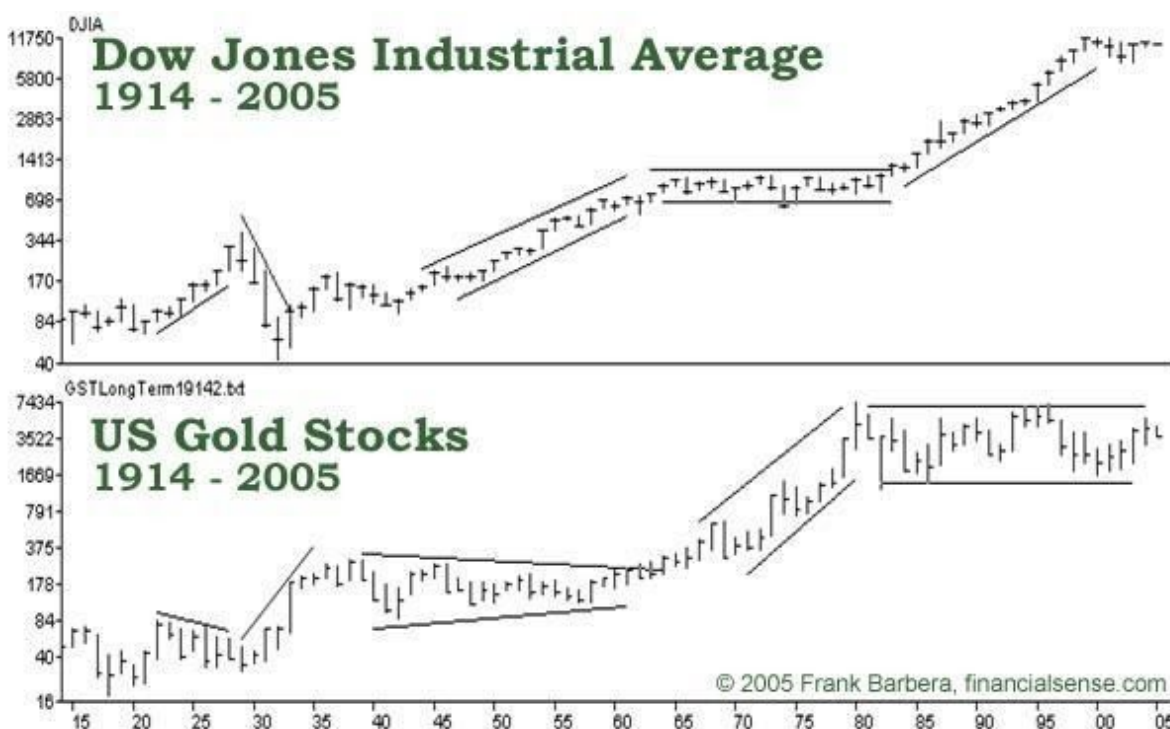
One of the periods gold stocks did outperform Gold was during the mid-1980s through the mid-1990s, and there were a few reasons why. First, heap leach mining (using cyanide to separate the ore from rock) exploded in the 1980s. It allows lower grade ore to be processed economically. According to IntelligenceMine, the number of operating heap leach mines exploded from only five in 1980 to 56 by 1990. Second, the fall of communism resulted in many parts of the world, opening up for mineral exploration. Suddenly there was quite a bit of low-hanging fruit (in terms of high potential mineral deposits).

For a pre-1930 look at the gold stocks, consider figure 7.2. The chart is from Frank Barbera, a fund manager and authority on gold stocks who has written a gold-stock focused newsletter for the better part of the past 30 years.

During the periods the gold price was fixed, the gold miners performed very well in times of deflation or falling commodity prices. For example, gold stocks performed well after the peak in commodity prices in 1920. Gold stocks performed fantastically well

in the early 1930s as mining costs initially plunged. That continued when, in January 1934, the Gold Reserve Act raised the price of Gold by 70% from \$20.67/oz to \$35/oz.

Figure 7.2: Gold Stocks History



The profitability of gold mining companies is driven by the Gold price but also by changes in margins. One way to track the potential profitability of gold mining companies is to follow the ratio of Gold to commodity prices, which is shown in figure 7.3 (source: Nick Laird). Energy, steel, and other materials used in heavy industry are input costs in mining. Commodity prices, on the whole, can be a proxy for those costs.

Sustained increases in the Gold/CRB ratio correlate reasonably well with bull markets in gold stocks. Note how the ratio surged in the early 1920s, 1929 to 1935, the 1960s and 1970s, and increased steadily in the 2000s.

Figure 7.3: Gold vs. Commodity Prices



The most substantial gains in the gold miners occur when the Gold price is rising in both nominal and real terms. The best example is the 1976 to 1980 period when Gold went parabolic in both nominal and real terms. The increase in commodity prices (excluding Gold) was more significant in the first half of the 1970s and not as significant during the back half of the decade. In recent years the Gold to CRB ratio has continued to grind higher and make higher highs. However, Gold in nominal terms has traded sideways.

The 2007 to 2008 period was a time when the opposite happened. Gold was rising in nominal terms but not in real terms. From the summer of 2007 through March 2008, Gold surged by over 50% while the gold mining indices gained the same amount. The problem was mining costs (and especially energy-related costs) were rising.

An important factor in the margins of individual gold mining companies is the local jurisdiction in which they operate and the impact on labor costs. In recent years, Gold producers working out of Australia and Canada have fared much better than those

operating in the United States. The Gold price denominated in those currencies is near or at all-time highs, which reflects the weakness in those currencies. It has been far more profitable to operate in those jurisdictions. However, should the US Dollar begin a multi-year bear market, then investors would want to focus on miners working in the United States and jurisdictions that use the US Dollar as their local currency.

The real big money is made (and lost) in the very high-risk junior mining sector, which mainly includes small and tiny companies involved in the exploration or development of an asset. If these companies are successful, they can either be acquired by a larger company or build the mine themselves. In the latter case, they could be acquired at a later time or develop a second mine. The junior sector is essentially the research and development department for the broader mining industry.

The junior sector has experienced some spectacular bull markets. The 1970s bull market in Gold ended in a full-blown mania in the junior industry. Nick Laird has the data and charts for hundreds of juniors that traded in the late 1970s. Within the final two years, a total of 160 juniors appreciated at least 30-fold, with 80 juniors gaining at least 60-fold. Juniors also performed exceedingly well from 2002 through 2006 and 2009 through 2010.

Major exploration success triggered an absolute frenzy in junior explorers in the mid-1990s. Some stocks experienced spectacular gains during a short-lived bubble that ended as commodity prices peaked, and the Bre-X fraud was exposed.

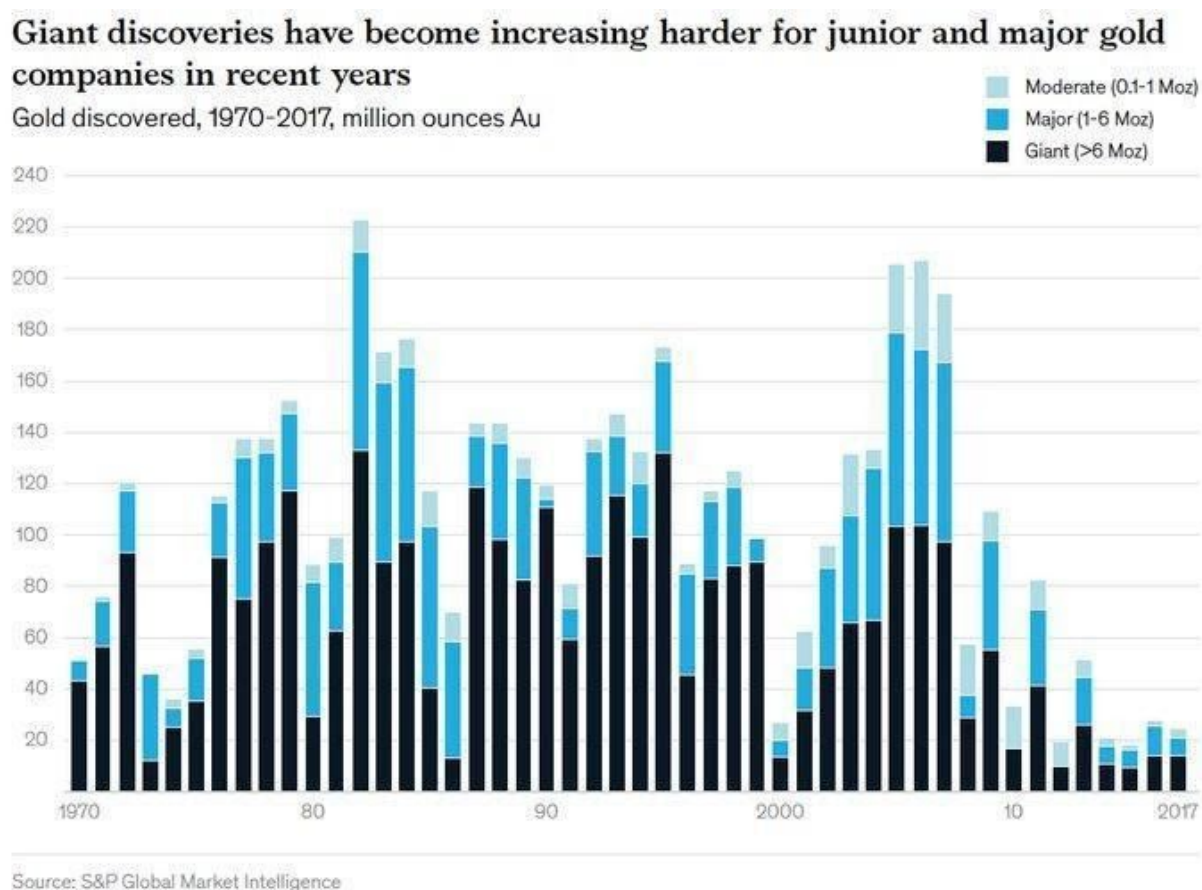
Circling back to today, we find that the preconditions are in place for a future bubble in the junior sector in the not too distant future. Those conditions are record low valuations for the gold mining stocks, a fundamental supply and demand imbalance in terms of finding new economic deposits, declining investment in exploration, and of course, the potential for significantly higher Gold prices over the years ahead.

The sustained advance in the Gold price for 12 consecutive years (2000-2012) contributed to great excesses from all sides. The senior miners turned their focus to growth and invested in and acquired deposits that proved to be woefully uneconomic in a much lower gold price environment. Predictably, the junior sector exploded with the creation of many new companies. However, the vast majority of these companies allocated capital towards projects and deposits that had minimal viability outside of a bull market.

As an aside, these factors, which often are overlooked, contributed significantly to the poor performance of gold stocks relative to Gold. There were too many companies chasing low-quality assets that received too much capital. If the pool of money is somewhat limited, then it can be significantly diluted by an explosion in the number of companies. It is ironic, but the sustained rise in the price of Gold catalyzed poor performance in the sector and abysmal performance relative to the increase in the Gold price.

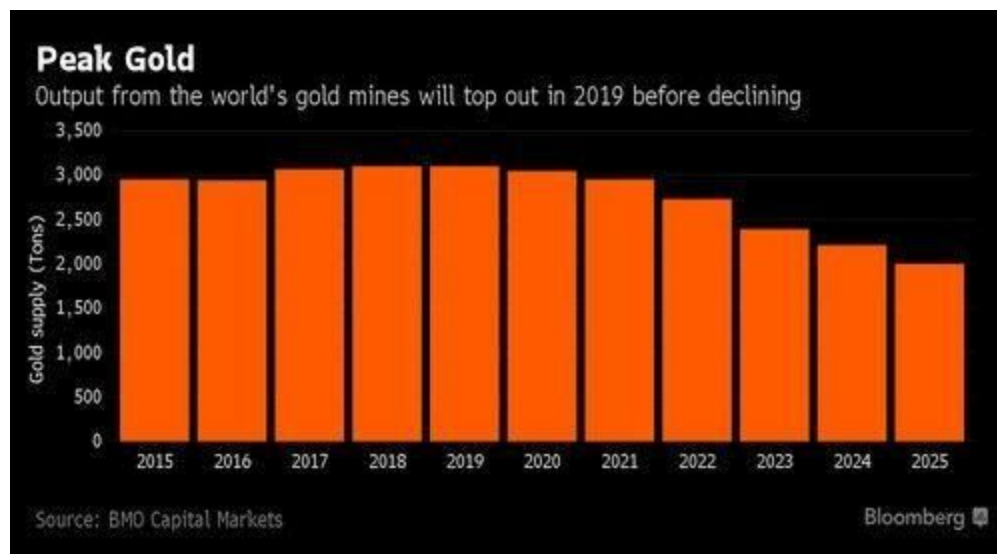
Also, the sustained rise in the Gold price did not lead to an exploration boom. Figure 7.4 shows the cumulative amount of gold discovered annually dating back almost 50 years. Note that over the past 20 years, annual world production (of Gold) has hovered from 75 to 82 million ounces. In only 7 of the past 20 years has enough Gold been discovered to meet the level of annual production.

Figure 7.4: Gold Discoveries



The effect of decreasing exploration success is global production is expected to decline considerably at the start of the next decade. Figure 7.5 from BMO Capital Markets plots the outlook for gold production over the coming years. It is forecasted to decline by 40% over the next six years.

Figure 7.5: Global Production Outlook



This setup has extremely bullish implications for 1) the juniors that own and add value to low cost and high margin potential deposits and 2) the juniors that make discoveries of high margin potential deposits. Such deposits are scarce, and that is why the industry and market are focused on identifying discoveries that signal high margin potential. Investment Capital is concentrating on the companies that have made a discovery or are adding value to an existing discovery.

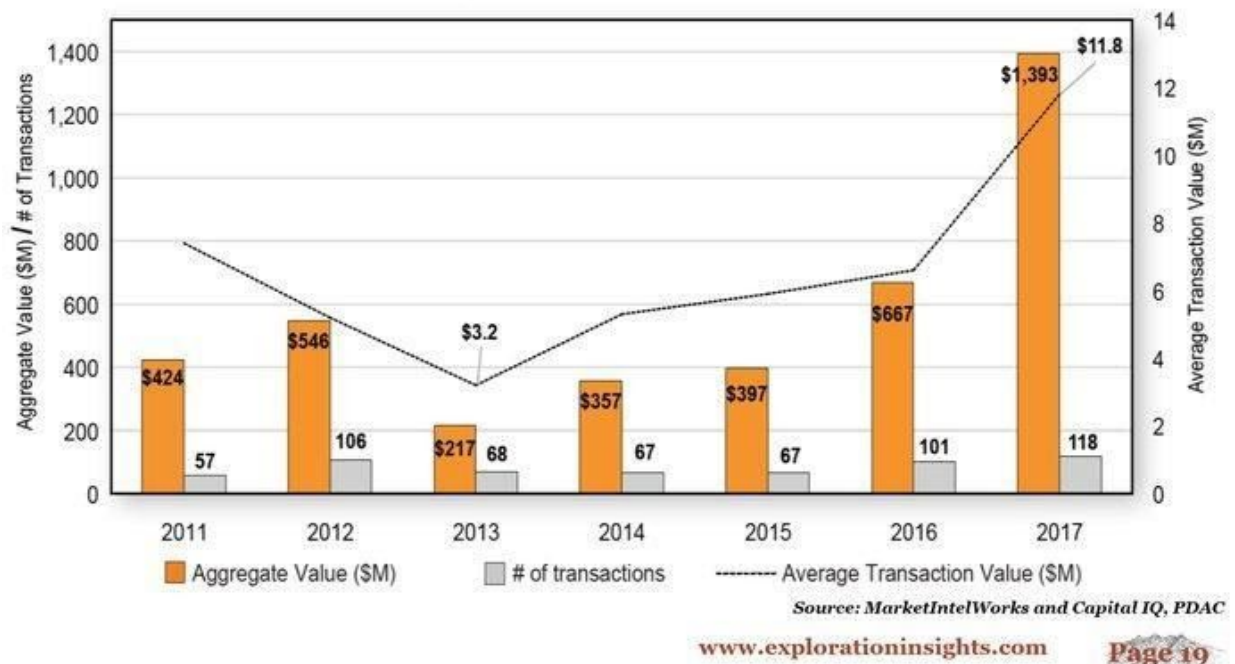
The market is focused on potential new economic discoveries, but so too are the senior gold mining companies. The projected decline in production shown in figure 7.5 reflects the projected production declines from the largest gold miners. The largest producers are badly in need of new, economic deposits to replace existing production but also to beef up expected production shortfalls in the years ahead.

The senior gold miners are trying to get a foothold in potential future discoveries by directly investing in the juniors. Figure 7.6 is from Joe Mazumdar, who co-edits the

highly regarded *Exploration Insights* newsletter. The chart details how investment into junior exploration companies has exploded in recent years. Expect this trend to continue as long as the Gold remains stable or rises.

Figure 7.6: Major Miners Investment in Junior Companies

- The average amount invested per transaction by a major mining company into a junior was as low as C\$3.2 M in 2013
- It has since grown by ~3.5x as industry players invested C\$1.4 B into junior companies predominantly exploring for gold
- Financings tend to be at a premium to market with no warrants = less dilution



It's important to note that the forecasted lower production in the years ahead is not bullish for the Gold price but bullish for the juniors as mentioned earlier that make a discovery or are having exploration success. Gold is not driven by supply and demand. Its supply grows in perpetuity because Gold is not consumed. Hence, Gold is a currency, not a commodity. We explained this in Chapter 1. Nevertheless, lower production and dwindling pipelines of the senior gold miners bode exceptionally well for the juniors who can discover and/or grow a deposit with high margin potential.

The ingredients for a future bubble in the junior exploration companies are in place. What is missing is a bull market in Gold. A rising Gold price that is sustained for several years and surpasses \$2,000/oz could be the catalyst for that future bubble.

Chapter 8

Criteria for Selecting Juniors

Before we get to the criteria, we should define what a junior resource company is. A junior resource company is a small company that is in search of or is developing a new deposit that, in the future, can become a producing mine. These are venture companies that, while extremely risky, serve as the research and development arm of the mining industry.

There are three types of or stages of junior mining companies.

Most juniors are junior exploration companies. These companies are in search of a new deposit and are drilling in hopes of discovering one. Some companies may have defined a resource already while some are just getting started. Once the company has published several resource estimates and economic studies, then it can be on the road to becoming a development company.

Juniors at this stage, prepare the deposit to become a mine. This stage entails mostly infill drilling (filling in the areas that have not been drilled), permitting, and a final feasibility study. The development stage can be quite long for some companies but not as long for others.

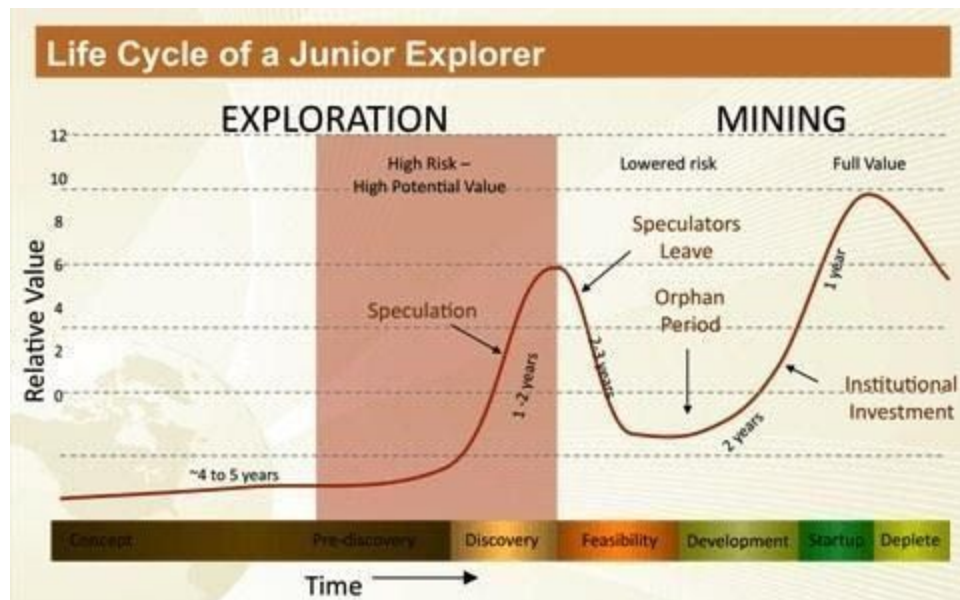
Finally, the third stage is production. These companies are categorized as junior miners or junior producers.

The size of a typical junior varies depending on your perspective as well as the current stage of the company. Canada is home to the junior resource industry, and they tend to view "junior" as anything up to \$100 Million in market capitalization. Given the size, the majority of those companies tend to be exploration stage companies.

US traders and investors view juniors through the GDXJ ETF. That is the most widely followed and liquid ETF for trading the juniors. In recent years GDXJ has been rebalanced and contains fewer actual juniors. Even before the rebalancing, there were plenty of companies with a market cap in the \$500 Million to \$1 Billion range. The vast majority of companies held in the ETF are production stage companies.

Before we explain our criteria, we first should mention the typical life cycle of a junior exploration company, as beautifully illustrated in figure 8.1 from Brent Cook of *Exploration Insights*.

Figure 8.1: Life Cycle of a Junior Resource Company



The major takeaway for investors is that there are two buy points and one sell point. The best times to buy are before the company makes a legitimate discovery (or as it makes the discovery that could occur over more than one drill program) or during the months leading up to initial production. The major sell point is between those two stages when the company enters the development phase and has to raise capital to advance and develop the discovery.

Essentially, you want to own exploration companies early in their cycle, and development plays later in their cycle. A successful exploration company will either be acquired or successfully develop the asset on its own. A successful development company will be fully financed and ready for production. Acquisitions occur most often at that stage because the project has been fully de-risked. We should also note that the best time to buy an existing producer that is building another mine is in the months leading up to initial production.

Here are the criteria, divided into six points.

Capital Structure

Capital structure refers to the company's share structure and cash and debt levels. Juniors can raise capital in several ways, but the most common is via equity. If a junior does not find some success within a few years, then there is a risk of severe dilution to shareholders. Hence, the company must add value after each equity raise. In other words, it needs to use its cash well. If it does not use the money wisely, then its share structure grows, but the stock price moves lower, which makes it increasingly difficult to raise capital without severe dilution.

It's also important to consider the options and warrants in a company's share structure. Equity financings usually contain warrants, and insiders will own options. It's essential to consider the exercise price of the options and warrants as that can impact the overall stock price.

A junior can manage its capital structure by raising capital at the right times and also utilizing joint ventures and/or selling a royalty if they are very close to production.

While market cap is what matters, the optics of a bloated share structure and a meager stock price are not favorable.

Management

When evaluating junior producers or juniors which intend to become a producer, management must have a track record of running and operating mines. Have they put a mine into production? Have they worked in operations for a senior producer? It's not a deal-breaker if the team hasn't done so. It means more risk but more reward.

We should also consider the board of directors. It gives us a more in-depth view of the people involved. Was the company able to attract credible industry folk?

Concerning juniors focused on exploration, we should also evaluate the resume of the head geologist or VP of Exploration. Here are a few questions to ask and answer. Does he have experience working for a major company? Did he work for a successful junior? Was he involved in a discovery?

It's important to note that success in exploration can be quite elusive. People you have not heard of will make tremendous discoveries while those that have done so in the past may not necessarily find success in the future. This isn't to dissuade anyone from valuing a track record. Just don't overvalue it. Note that the biggest names in the

industry don't have a bulletproof track record, and their companies will command a premium.

Project(s) & Project Pipeline

In the mining business, if you aren't growing, then you are dying. If a junior producer has a project or two in the pipeline with production potential within a few years, then the company boasts strong growth prospects and can trade at a stronger valuation. If the company is a single mine company, then its mine needs to have expansion potential. Sometimes, a junior producer will begin production at a small scale with the intent to expand the mine. That is growth.

For existing producers, successful exploration can lead to organic production growth. The producers that have performed the best over the past few years are the ones who have had material exploration success that has led to stronger cash flow, higher margins, and higher production levels. We want to seek out these producers.

In regards to mature exploration companies, we seek companies that have assets that show high margin potential. That means assets that can earn an after-tax internal rate of return of at least 20% at \$1150-\$1200 Gold. Usually, that requires good grade and scale. By scale, the threshold is a project capable of producing at least 100K oz Au per annum with a resource of +2M oz Au that has further upside.

Trying to identify those potential projects before they fulfill that potential is challenging, but there is a way to give yourself a head start. Focus on companies that have already made a small discovery that has the potential to grow into something much more significant. Indications of much more substantial potential can come from things such as historical production statistics, the size of the land package, soil samples, and geophysical work.

Jurisdiction

Jurisdiction as a criteria point can be overpromoted and overemphasized by many analysts. Some jurisdictions should be avoided altogether as they are hostile to mining and foreign companies. Nevertheless, I'd much instead invest in the best project which happens to be in an average jurisdiction than an average project in the best

jurisdiction. That "best project" is far more likely to become a mine given the state of the industry.

Major mining companies operate and invest in jurisdictions all around the world. That includes Nevada, Canada, Mexico, parts of South America, Australia, and Africa. Do note that specific locales within mining-friendly countries can be hostile to mining. It's not just the country that matters. It's also the province or state.

The Fraser Institute surveys mining companies annually and rates jurisdictions based on best practices mineral potential and policy perception. The survey is publicly available at fraserinstitute.org.

Companies operating in the best and highest rated jurisdictions will tend to trade at higher valuations than companies operating in the more difficult jurisdictions. However, that can create an opportunity if a quality deposit in a somewhat tricky jurisdiction is discounted excessively.

Insider & Institutional Ownership

A junior is a riskier proposition if institutions are not invested, and insiders (management and the board) don't own at least a small piece of the company. Institutions can also include larger mining companies. Industry sponsorship is a bonus. If big money is on board with a junior explorer, then we know that the company (and management) command respect in higher circles.

Insider and institutional ownership are also vital because it reduces the retail float, which is the percentage of stock that is in retail hands. A lower percentage indicates a tighter float, which means the stock can move up (or down) more swiftly. If a stock has a bloated share structure with a large retail float, then it will require quite a bit of buying for the price to move higher. On the other hand, stocks with a tight retail float will have an easier time rising.

Generally, we like to see a retail float of no more than 50%. This requires the combined ownership from insiders, institutions, and major mining companies to be at least 50%.

Value & Potential

There are three drivers of price appreciation in junior producers: production growth, valuation, and margins. The ideal situation is to find a junior producer with production growth potential and the potential to trade at a higher valuation when the production growth is attained. A rise in the Gold price in most cases will result in stronger margins. Those three things can result in massive appreciation over a few years.

We can measure value in terms of cash flow and reserves or in-ground resources. If a company is fairly valued already, then it should have strong production growth potential, which could potentially raise its valuation. If a company is undervalued, then it needs to have some catalyst to increase that valuation. That could be production growth or a corporate turnaround.

A good rule of thumb is a company will trade at a price to cash flow valuation that is close to the mine life of its project or projects. Also, smaller junior producers can trade at 4x-6x cash flow while larger, successful junior producers can trade at 8x-10x cash flow. The critical production threshold between small and large tends to be 100K oz Au per annum.

Exploration companies are very volatile, and they can often swing between trading like a value (when no potential is priced in) or trading on potential (when too much potential is discounted). Investors need to weigh the potential against how much potential is priced in.

Other than the Gold price and sentiment towards the sector, the growth potential of deposits can contribute to their future value and potential. This is something that has to be assessed on a case-by-case basis. Try to make the distinction between exploration and development. If a company has already produced several resource estimates and economic studies, then it won't have the same degree of exploration upside as a company that made a recent discovery and is growing the resource.

Assessing potential value on an economic basis is difficult. Still, we project based on fluctuating Gold prices and the figures in economic studies, which include preliminary economic assessments, pre-feasibility studies, and feasibility studies.

Criteria for Optionality Plays

An optionality play is a company that owns a large deposit that is not economic at current metals prices but like an option, could have quite a bit more value in the future at higher metals prices. Thus, these companies are like options on the Gold and/or Silver price.

During the 2000-2012 period, the market valued ounces more so than quality ounces. Hence, many companies opted to drill to add ounces rather than drill to add quality ounces. As a result, companies with large, uneconomic deposits became optionality plays for this new period.

The critical factors for optionality plays are a tight capital structure and retail float and working or exploring in a favorable jurisdiction. A tight capital structure with a healthy amount of cash will keep the optionality play alive without the threat of too much dilution to existing shareholders. A tight retail float means the stock can rise quickly. When Gold and Silver trend higher, generalist money comes into the sector, and it will focus on optionality plays located in a top jurisdiction that also boasts a US listing on a major exchange.

Chapter 9

Trading Rules

In this chapter, I will list and analyze ten essential rules for trading individual junior companies and managing a portfolio of junior companies. I have developed these rules after trading and investing in the junior sector for 15 years. Had I followed these rules, to begin with, I would have taken fewer and smaller losses, and I would have secured higher profits along the way.

Sell a Position That is Down 20% From your Entry Point

If a position drops 20% below your buy price, you should sell. A 20% loss on a 5% position limits your portfolio risk to 1%. Cutting losses is a vital piece of wisdom that has been passed down for decades and from generation to generation.

This is even more critical in the junior mining sector as 20% losses can often become 50% losses, which can become 70% losses. Many of these companies do not have value to fall back on. Most do not earn money or even generate revenue, and therefore value is subjective, and the market's perception can change quickly.

The only time this rule will hurt you is when you buy something a little too early before a major bottom. That happened to us in December 2015. We were stopped out of a position that would decline another 30%. But then it almost quadrupled.

The other time this rule could fail you is if you have a bad entry point during a bull market. You could buy something at the wrong time, and it could correct 25%-30% before resuming its uptrend. One way to prevent this is to ask yourself if the stock in question could conceivably drop 20% from where it is. If that's the case, then you should probably wait to buy a full position (5%-6%). You could initiate a half position instead of a full position.

Overall, I'd put the success rate of this rule at well over 90%. It works because it keeps losses small and protects against small losses becoming much more substantial, which, in relative terms, will happen far more often in this sector than you think.

Trim a Position if it Becomes too Large as a Percentage of your Portfolio or too Extended

In short, trim your big winners.

Knowing when to sell is one of the most challenging parts of trading and investing. There is no single specific answer, but concerning a diversified junior portfolio, we have an answer. If a stock becomes too large (as a percentage of your portfolio), then you should sell one-third or half of the position. This is called trimming. It allows you to lock in some profit and reduce risk, yet still, partake in the potential additional upside.

Many variables should be considered when judging how much of the position to trim and when you should cut. Those variables include the company itself, its fundamental value, how much profit you have, and how much upside potential the company has.

For example, if something has 300% to 400% upside potential, then I would not sell half of the position after a 100% gain. In that case, I'd sell one third. However, if something only has 150% to 200% upside and it rises 100%, then I'd sell half.

This rule is particularly important for exploration companies because they often make vertical moves. Some believe that for "drill plays" (a company with no deposit but is drilling to try and make a discovery), you should sell half after a double. It depends on the cause of the double in the stock. If it's mostly fundamentally related, then I'd hold at least two-thirds of the position. If the stock doubled mostly because of speculation, then you should sell half because of the risk of a substantial retracement of that gain.

I learned this during the 2016 to 2018 period. In 2016 and 2017, I was slow to trim more than a handful of positions that were up over 100% at one point. In 2018 I was able to trim a few positions successfully, but I did not trim enough.

Note that if you are not confident in the sector trend, then you should probably err on the side of trimming by one half. During a bull market, it generally makes sense to trim by one third rather than by one half.

Be sure to keep in mind the type of company and its prospects. This rule applies more so to junior explorers than junior producers. Explorers are more volatile and can move more quickly.

Sell if your Reason for Buying Changes or the Fundamentals Change

An obvious example is if you bought a stock as an optionality play, meaning you anticipated an immediate rise in metals prices, but your expectation changes. The original reason you bought that stock is no longer valid. Therefore, do not justify holding the stock by trying to create a new reason.

Concerning an exploration company, an example could be you bought a stock because you anticipated great drill results from that company or perhaps a much larger resource estimate.

Concerning an advanced exploration company or a development company, an example could be you anticipated specific numbers from an economic study that were not hit.

When the company failed to meet your expectations, the story has changed, and you should sell and move on.

Be Wary of Roundtrips (Pop & Drop)

The pop and drop is when a stock pops 40% or 50% but then retraces the entire gain. If you have a good entry point on something and it pops, it is not a good sign if the stock does a roundtrip and loses those gains. Stocks will always correct, but juniors that are destined for three-figure gains (i.e., 100%, 200%) should, for the most part, hold most of those profits when they correct. This is especially true in a bull market.

You can implement a stop-loss and put one in place after a position goes profitable, but you have to be careful not to use it too soon. Once a stock reaches that 40%-50% gain, you should never let it become a roundtrip without booking some profit.

Following this rule does entail a proper evaluation. We don't want to be too quick to give up on something that has a great shot, nor do we want to panic out of something if it is merely retracing part of the pop.

Buy Value with a Catalyst

We want to assess the company's current enterprise value against its project or assets and then consider the potential upside in those assets as is and as could be at possible future Gold prices.

We should consider the potential for a project or assets as operating mines either at present or in the future. We look at grade, recovery, political implications, financing, etc. All of these factors influence the present and future worth of assets.

A catalyst is something that has the potential to create or add more value to a company and/or its project or assets. It could be drill results. It could be an expansion in the resource. It could be a forthcoming economic study. We are anticipating something that can tell the market, "this project is more valuable."

A catalyst can also be a rise in metals prices. This is where optionality plays, and to a lesser degree, growth-oriented producers come in.

In short, we want to buy situations where the company has essential news coming (drill results, a resource update, economic study, etc.), but the stock hasn't priced in anything. This is when the odds are in your favor.

We also want to be very careful about the reverse. That is when a stock has performed quite well ahead of the news. In other words, the market is already anticipating good news, which means the stock would be quite vulnerable to the news that does not meet expectations.

Buy When the Technicals are Conducive to a Move Higher

First, note that technicals are a context, not a catalyst. Technical analysts will argue against that, but it's a fact. In any case, we want to buy when the context (technicals) is favorable.

One example of a favorable context is a stock that has traded in a range for an extended period. If the fundamentals are there to drive buying, then the stock can break out of that range and move quite a bit higher. The trading range also informs us as to technical support and, therefore, the downside potential. A bounce off technical support is also conducive.

Another example of a favorable context would be buying when the sector is oversold and at technical support. A bounce is predictable. Note that we are referring to the sector being oversold and not an individual company. When targeting individual companies that are very oversold, we want to confirm that they are not declining because of a serious fundamental issue.

If metals move into a new bull market, then we are unlikely to see the kind of oversold conditions of recent years. In that case, we want to buy stocks with healthy technicals that are not too overbought. Moreover, buying breakouts and chasing strength can work in a bull market.

Overweight the Companies you Have the Most Confidence in

The most significant and largest positions in your portfolio should be the companies you have the most confidence in or the ones that you think are most likely to be successful.

In a fully invested, diversified portfolio, overweight positions can be in the 8% to 10% range. The average weight would be 5% to 7%. We usually open a new position with a 4%-5% buy. If we are confident it will continue to perform, then we will add to the position.

Underweight the Riskiest Positions with the Most Potential

The riskiest positions are usually nano-cap juniors, which we define as anything under a market cap of US \$20 Million. We typically make these positions 2.5% to 3.5% of the portfolio to start. They have outsized potential and can positively impact the portfolio even as a small position to start. The small position size limits risk to the overall portfolio in absolute terms and liquidity terms. These companies are illiquid and can be quite volatile day to day.

Add to Winners & Layer into Momentum Plays

For the most part, you should add only to winning positions. Rarely, if ever, should you add to losing positions that are (+5% of the portfolio). When a position performs well, and the outlook continues to look healthy, consider adding to that position.

Regarding momentum plays, it is best to layer into positions with multiple buys. In other words, if there is some risk of a 20% drop, but there's also risk the stock could continue to run, its best to start small. Don't buy a 5%-6% right away. Start with 2%-3%. That way, if it corrects, you could add to it at a lower price. If it keeps rising, you have a position, and you've made a profit.

Periodically Review Your Portfolio

You should periodically review your portfolio to ensure that your companies are performing as expected. You should also consider cutting the laggards and poor performers. If you find a replacement that has better prospects than something you own, you should make that swap.

One way to judge performance is by relative performance. You can chart the stock against Gold or GDX/GDXJ. In addition to relative weakness, a stock that is weakening may lose support levels like the 200-day moving average and 400-day moving average. On the other hand, stocks that hold up well during a sector correction will be leaders during the next advance.

Chapter 10

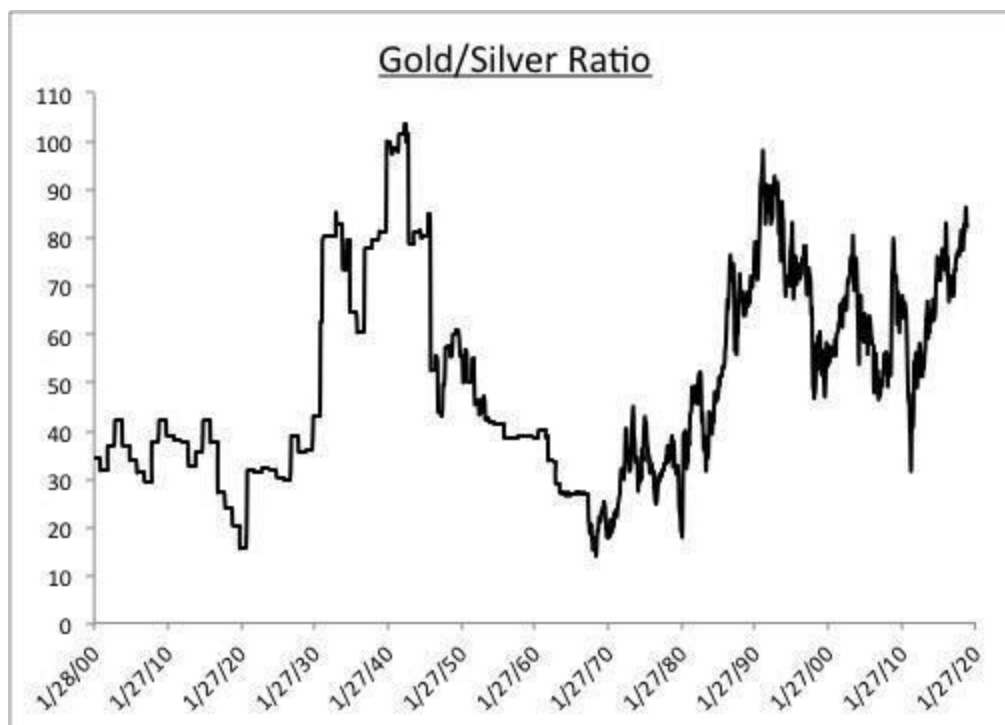
Silver

Silver is essentially a leveraged bet on Gold or a call option on Gold. When Gold rises, Silver tends to increase more. When Gold falls, Silver usually falls harder and faster. That is simple enough, but to better understand Silver, we should review some history and how its value came to be.

Most of the world (including the United States) was actually on a silver standard until the beginning of Reconstruction after the 1860s, when a gold standard replaced the silver standard. That, along with the Industrial Revolution, substantially devalued Silver relative to Gold. The Gold to Silver ratio traded around 16 until the Industrial Revolution and the advent of many uses for Silver. Silver was essentially money, and then it became a commodity.

As figure 10.1 shows, the Gold to Silver ratio has reached 20 only a few times over the past century. Those times were during significant commodity peaks in 1920 and 1980 as well as in the late 1960s when the Gold price was fixed and thus artificially low.

Figure 10.1: Gold to Silver Ratio



There is a healthy amount of investment demand for Silver (like there is for Gold), but the main difference between the two metals is a large amount of Silver is consumed. As we mentioned in Chapter 1, the investment demand for Gold currently comprises roughly 20% of total demand. According to the Silver Institute, investment demand for Silver comprised 16% of the aggregate demand in 2018. Here is the crucial difference. Almost no Gold is consumed, while nearly 60% of the demand for Silver is consumed in industrial applications.

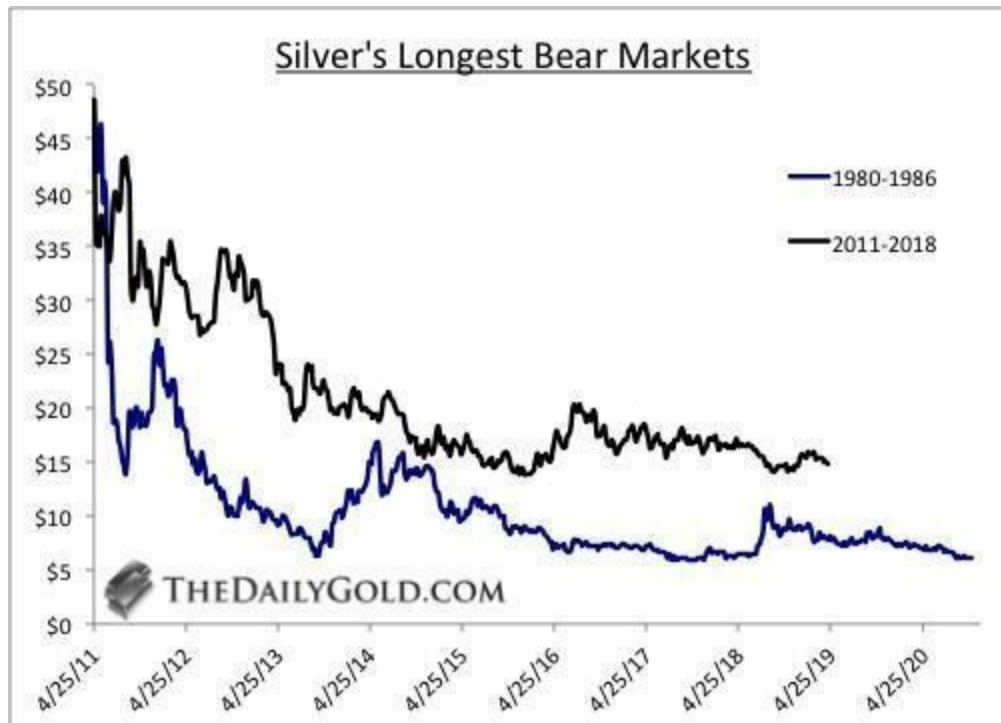
Jewelry demand is another characteristic both metals share. Jewelry demand for Gold comprises approximately 50% of total demand, while for Silver, that figure was only 21% in 2018.

Gold and commodities have performed poorly since the 2011 peak, and therefore given Silver's nature as a commodity and leveraged bet on Gold; it should be no surprise it has performed worse than Gold.

Like the gold stocks, Silver is historically cheap, and it's arguably even more oversold on a long-term basis. Note that Silver's bottom in late 2018 occurred very close to its low at the end of 2015. Gold, of course, is nowhere near to its low of \$1045/oz, and the same is true for the various gold stock indices. In that respect, Silver could be the cheapest part of the precious metals sector.

Figure 10.2 shows Silver's performance following its 1980 high and 2011 high. By this point after its 1980 peak, Silver had already rebounded three times. There was an immediate rebound after the initial crash and then a rebound after the first significant low. The third rebound began four years after the second low. By that scale, the next bounce would start in December 2019.

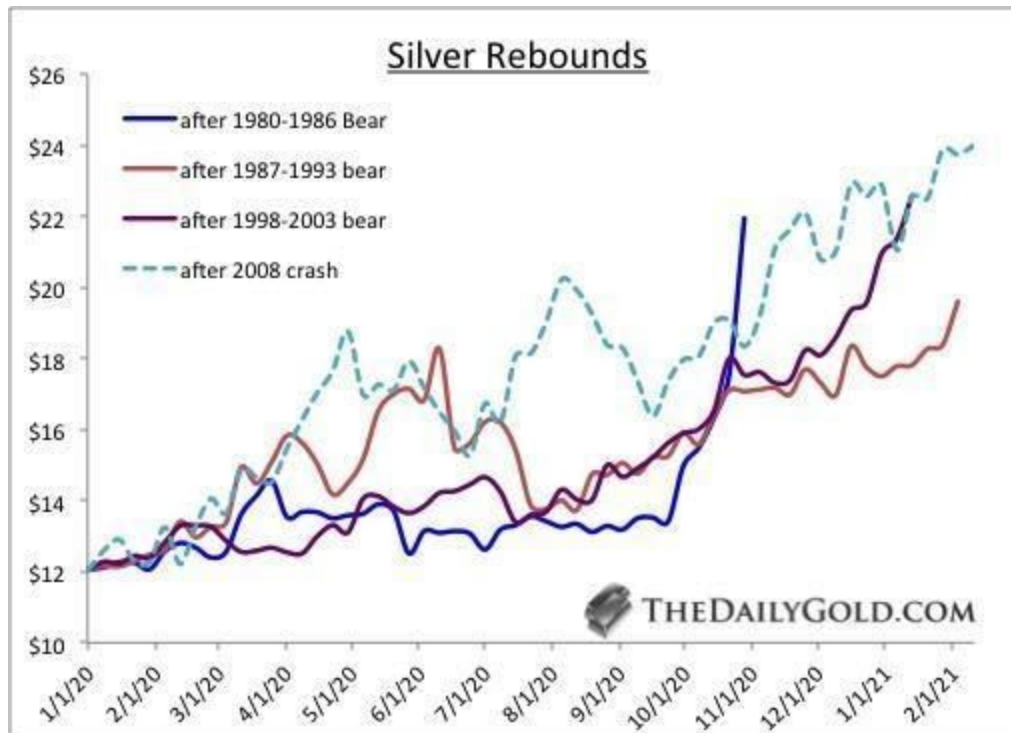
Figure 10.2: Silver Bear Comparison



Let's compare the performance following the 1980 and 2011 highs with some numbers. Following the 1980 peak, Silver declined 89% over the next nearly two and a half years. Then it rebounded 196% over eight months. That was followed by a 67% decline over three years and four months. Then it rallied 94% over the next 12 months. After its 2011 peak, Silver declined 72% over four years and eight months. Then it rebounded by 52% over seven months. Since the 2016 peak, another two years and nine months have passed, and Silver has declined another 32%.

The analog to the 1980s and Silver's tendency to rebound strongly after years of poor performance argues that Silver is ripe for a strong rebound. In figure 10.3, we plot the rebounds in Silver following its bear markets from 1980-1986, 1987-1993, and 1998-2003. We include its bounce following the 2008 crash.

Figure 10.3: Silver Rebounds



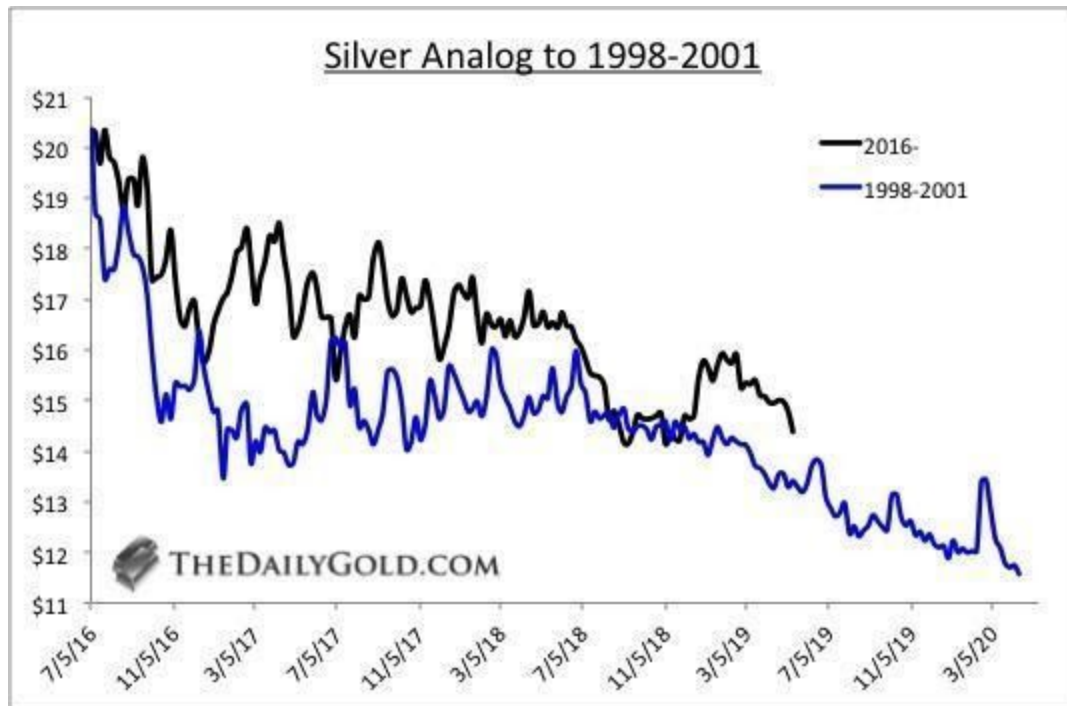
The price action of Silver over the past few years compares strongly to that of 1998 to 2001. We compare the two in figure 10.4. There are four parts to the comparison. First, Silver surged higher. Then it corrected hard. Then it consolidated in a triangle for a while. Then it broke lower and trended down towards a significant low. At present, Silver is trending down towards a significant low phase. In figure 10.3, we used \$12/oz as the price low. Figure 10.4 shows how \$12/oz could be a significant low.

Figure 10.4: Silver Weekly Line Chart



In figure 10.5, we put the comparison on the same scale.

Figure 10.5: Silver Comparison to 1998-2001



The longer-term chart of Silver (and we are talking very long-term) has formed a textbook pattern in technical analysis known as a cup and handle pattern. After a market makes a high, it forms a large cup pattern that resembles a cup or a "U." That is followed by a correction and consolidation which can resemble the handle of a coffee cup.

The cup and handle pattern is considered very bullish, and in Silver's case, it will appear that way when Silver exceeds resistance at \$20/oz and ultimately approaches the 1980 and 2011 peaks at \$50/oz. Upon a clear break above \$50/oz, Silver has a measured upside target of approximately \$95/oz. Figure 10.6 shows the chart of Silver since 1900 and the giant cup and handle pattern taking shape.

Figure 10.6: Silver Cup & Handle



Concerning the very long-term price outlook, something else to consider is the powerful 60-year cycle in commodity prices and the US stock market. Some examples include major peaks in US stocks in 1906 and then 1966 and significant lows in 1921 and 1982. Also, significant lows in US stocks in 1949 and 2009 were followed by the strongest performance ever over an eight to ten year period. Furthermore, the 1987 crash occurred nearly 60 years after the 1929 crash.

Believe it or not, the 60-year cycle is even stronger in Silver and commodity prices, as shown in figure 10.6. Since the Civil War, the price of Silver has made a historically significant peak roughly every 60 years. Those peaks were in 1864, 1920 and 1980. Furthermore, the most significant bottoms in Silver (1933 and 1963) were 60 years apart. The secondary lows to those lows (1942 and 2001) occurred 59 years apart.

Figure 10.7: Silver 60-Year Cycle



There is also a 30-year cycle, as evidenced by the peaks in 1951 and 2011 and even 1890. Both the 30-year and 60-year cycle suggest a historic top in Silver (and likely commodity prices) in 2040.

Chapter 11

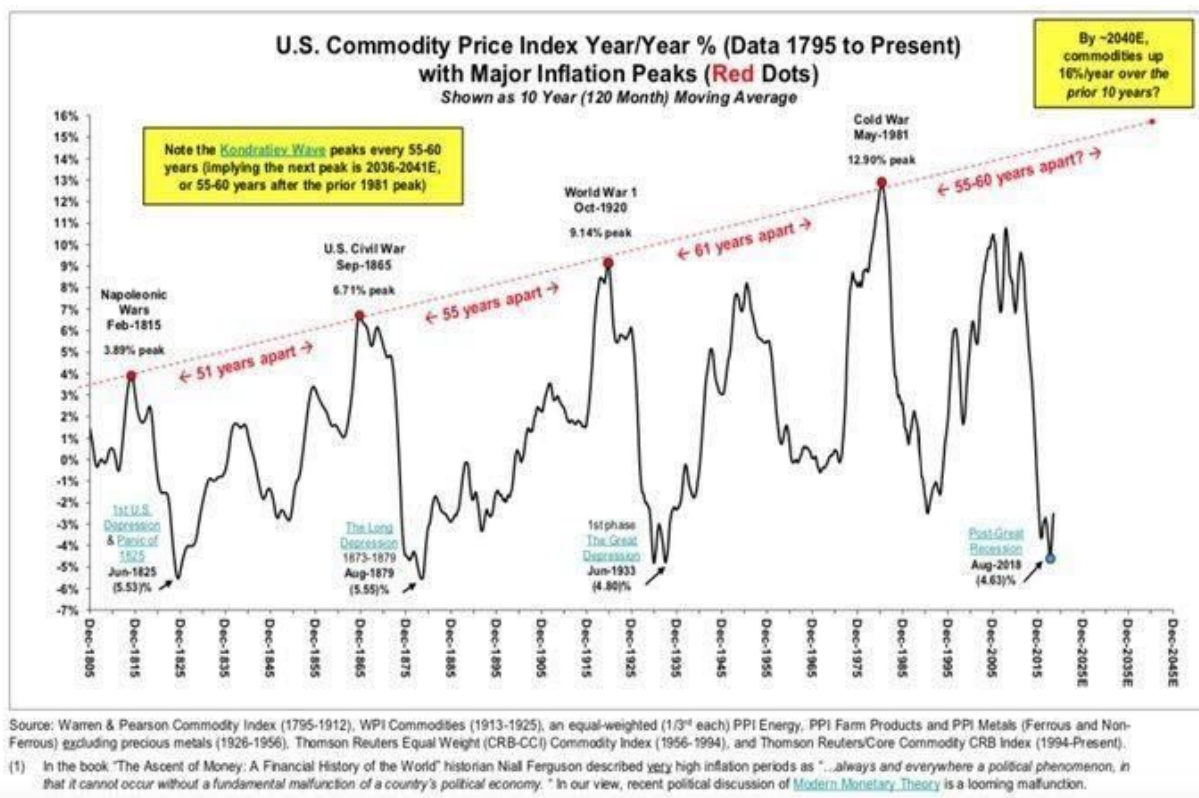
Long-Term Projections

First, let's focus on the timing aspect of the next major peak in Gold and Silver.

As we noted in the previous chapter, there is a powerful 60-year cycle in commodity prices and Silver especially. That, as well as the 30-year cycle, portend to a significant peak in Silver and commodity prices around 2040. Gold should also peak around that time, and if not, then sooner.

Figure 11.1, courtesy of Barry Bannister of Stifel Nicolaus, supports this view. Bannister has been one of the most accurate macro analysts over the past 15 years. He was an early bull on commodities in the 2000s and by 2013 had turned bearish on commodities but bullish on the equity market. Figure 11.1 plots the 10-year moving average of commodity prices and highlights that peaks in commodity prices tend to be 55 to 60 years apart.

Figure 11.1: 10-Year Moving Average of Commodity Prices



The chart projects that the next peak in commodity prices could be in the 2036 to 2041 range with commodity prices reaching a peak of 16% compounded annual growth over the preceding ten years. That amounts to almost a 350% increase in commodity prices from the 2026 to 2031 range over the next ten years.

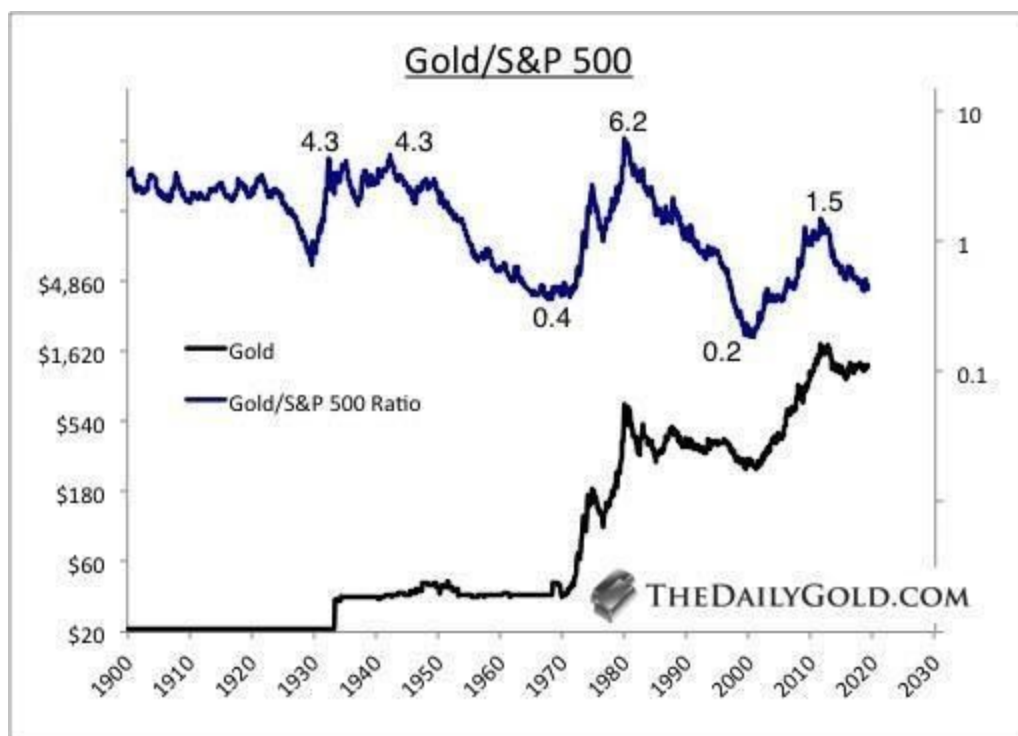
The next commodity bull should begin in earnest around the middle of the next decade. Note that the preceding three commodity bulls started in earnest when Figure 11.1 had cleared 1%. That means the 10-year moving average of commodity prices surpassed 1%. The low for commodity prices occurred around late 2015 to the start of 2016. Since then, commodity prices have moved only modestly above those lows. Statistically speaking, it's most feasible to see the 10-year moving average rising above 1% by the 2025-2029 period.

We have to keep in mind that economic expansions tend to be longer now and that statistical inflation, (which reflects commodity prices and not the cost of living) is more likely to build over time then suddenly shoot up to double digits. If the next recession occurs in the next few years, then the next expansion may not have an inflation problem (+4%) until the middle or even late 2020s. The recession that follows, coupled with the subsequent recovery, would likely take us into the 2030s. Then 2040 doesn't seem so far away.

Moving on from the time frame, let's turn to the price estimate for Gold and Silver. There are two charts from Chapter 3, which can help us hazard a guess.

The first is the Gold to S&P 500 ratio, which made historical monthly price peaks at 4.3 and 6.2.

Figure 3.1: Gold vs. S&P 500



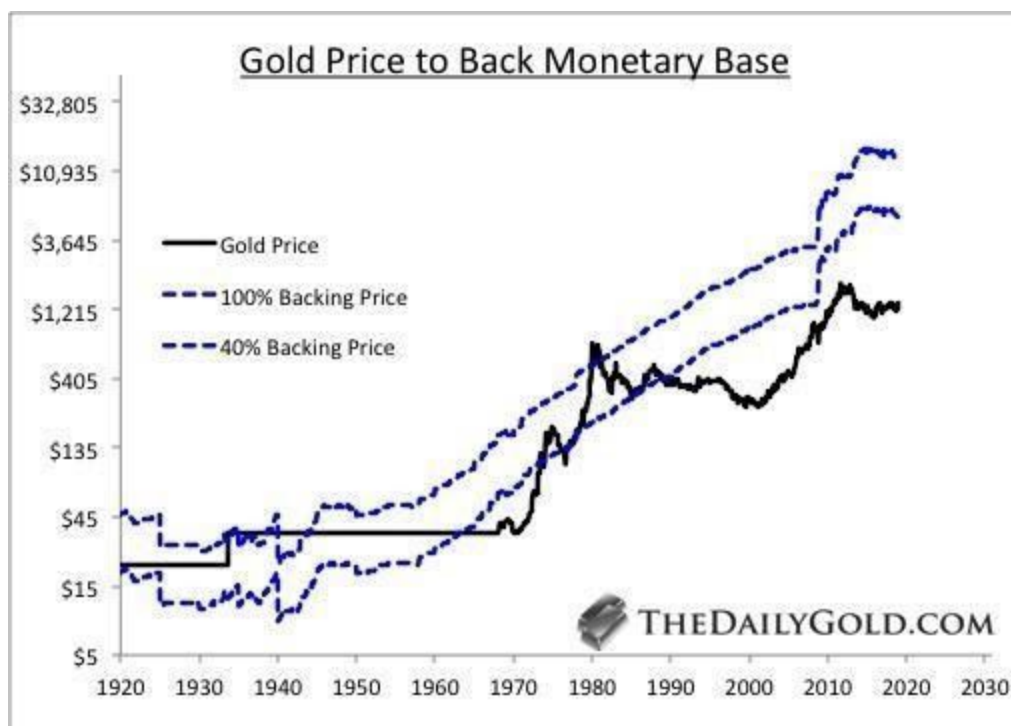
To project a future Gold price peak from that ratio, we need to project an S&P 500 price. In Chapter 6, we used the projection of a 2% rate of return over the next decade to get an S&P price target of +3,400 in 2030.

When Gold went parabolic into January 1980, the S&P 500 was trading around 100. In the 11 years before the 1980 peak in Gold, the S&P 500 crossed above or below 100 on average once per year. Considering the same analogy, we will keep things simple and use 3,500 as the S&P 500 target.

Multiply that by 4.3 and 6.2, and we get potential Gold targets of \$15,000/oz and \$21,700/oz.

The next chart is the Gold price required to back the monetary base by 40% and 100%. At present, 40% backing would require a Gold price of \$5,400/oz, and 100% backing would require a Gold price of nearly \$14,000/oz. Note that in the first quarter of 2008, the market value of Gold did back 29.7% of the monetary base.

Figure 3.3: Gold Price to Back Monetary Base



It's important to note that the monetary base is likely to grow in the years ahead and will be much larger by 2040. Consider these figures from the past. From 1950 to 2000, the monetary base grew by 52-fold. From 1960 to 1980, the monetary base grew 7-fold. Over the past 100 years, it grew by over 300-fold. Even if it were to only grow by 3-fold in the next 20 years, then the Gold prices for 40% and 100% backing would be \$16,000/oz and \$40,000/oz. A 7-fold increase in the monetary base (the same jump from 1960 to 1980) equates to a Gold price of over \$35,000/oz to back 40% of the monetary base.

Now consider the history of the Gold to Silver ratio. The significant lows in 1920 and 1980 were below 20. (The low in 1970 was below 20, but that was because the Gold price was fixed and artificially low at the time).

If you take the price targets as mentioned above levels for Gold and the previous historic lows in the Gold to Silver ratio, then you are looking at a minimum peak price in Silver of nearly \$1000/oz. Even if you only take \$10,000 Gold and a Gold to Silver ratio of 30 (the 2011 low), you get a Silver price of \$330/oz.

From its low of \$0.25 in the early 1940s, Silver advanced roughly 200-fold to its \$50 peak in 1980. A 200-fold move from its 2001 low of \$4/oz equates to a price target of \$800/oz.

These figures sound extreme, but there are several things to keep in mind. First, we are looking at approximately 20 years into the future. Second, we are merely using historical markers to project forward. Third, the cumulative inflation from 1960 to 1980 as per the consumer price index was 178%. A portion of the expected gains would be caused by cumulative inflation over the next 20 years.

Moreover, consider Gold's compounded annual return from 1961 to 2011. The Gold price was fixed until 1971, but the colossal move it made in the early 1970s would have likely started in the early 1960s if it were freely traded then. Over those 50 years, Gold returned 8.33% on a compounded annual basis. If we project the same return to 2040, then we get a value of \$19,500/oz.

Finally, consider that the price peaks mark the peak of a mania, which implies a vertical price increase in the months and quarters leading up to the final peak. In a little over a year before the mania peak in January 1980, Gold had risen roughly four-fold and Silver by approximately six-fold. Factor that into our 2040 price targets, and they appear quite less unreasonable.

The key trigger for accelerated upside in Gold and Silver could be a break higher in the rate of inflation. In Chapter 6 and with figure 6.4, we noted how the CPI broke to a 17-year high in 1968, and that was when commodities began to outperform stocks. In Chapter 4, we said that if the CPI went above 3.0%, it would break a downtrend that has been in place for nearly 30 years.

That break will be significant because it will put upward pressure on interest rates and borrowing costs, and the interest on the debt would explode higher. At that point, the US would have to manage interest rates as it did in the 1940s and tolerate much higher inflation so that the debt gets inflated away. I don't expect that break to happen until the middle of the next expansion, which could be around the middle of the next decade. That break could be the catalyst for Gold to break above \$2000/oz or Silver to break past \$50/oz.

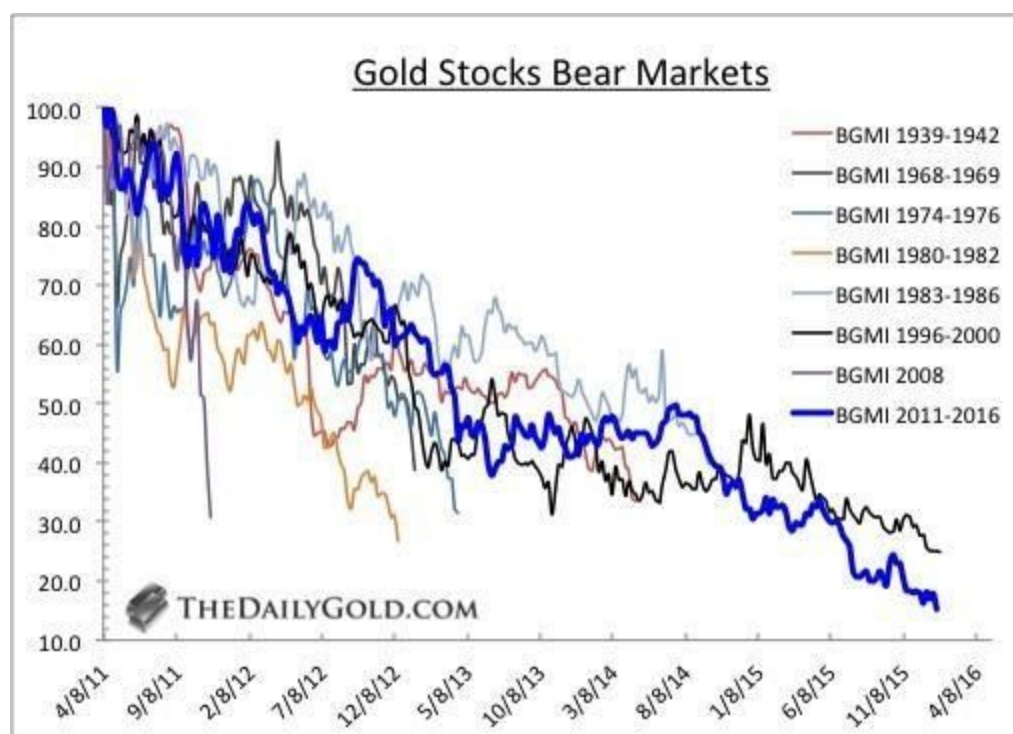
Bonus Chapter 1

Gold Stocks are Following Historical Recovery Template

In the first edition of this book in the middle of 2015, we argued that gold stocks then were likely the cheapest they have ever been and also the most oversold they had ever been on several different time frames.

Throughout 2015 we published one chart repeatedly and continued to point to it after the gold stocks had bottomed in January 2016. Bonus Figure 1 plots all of the bear markets in the Barron's Gold Mining Index over the past 80 years. As you can see, the 2011-2016 bear market was the worst ever in terms of time and price. It just edged out the 1996-2000 bear market.

Bonus Figure 1: Bear Markets in Gold Stocks (Barron's Gold Mining Index)



As we know, the 1996-2000 bear market gave way to a tremendous bull market that caught fire right out of the gate. The most popular gold index then, the HUI Gold Bugs Index rocketed higher by over 300% in a little over 18 months.

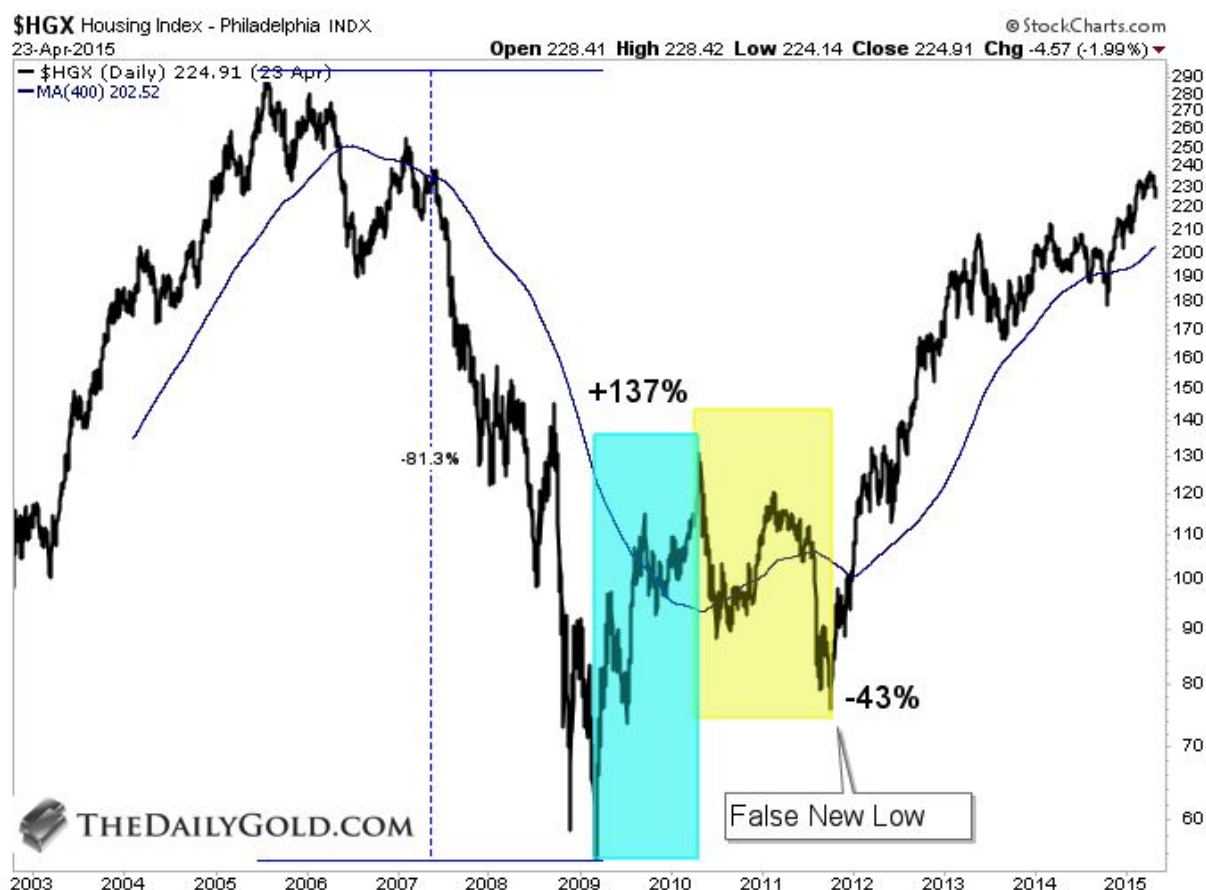
Surely, the gold stocks could repeat that feat after enduring a very similar bear market from 2011 to 2016. In 2016 the HUI exploded by 180% in only seven months.

But that was it. The HUI then corrected 43% over the months ahead, and it never regained those levels in 2017 and 2018.

To find a historical comparison for the gold stocks forced us to look outside of the precious metals space. We were looking for stock markets or sectors that experienced the following: a bear market of nearly three years or more and over 80% decline followed by a sharp rebound but then a more extended correction. We found several examples and three excellent comparisons for the gold stocks.

The first example is the housing sector, which endured a vicious bear market during the housing bust. See Bonus Figure 2. Housing stocks declined 81% over a three year and an eight-month-long bear market. Then they surged 137% before correcting 43%. Note how the housing stocks broke to a new low in 2011 before reversing course and starting a sustained bull move.

Bonus Figure 2: Housing Stocks 2005-2009



The next example is the US stock market during the Great Depression, as shown in Bonus Figure 3. The S&P 500 declined 87% over nearly three years. A sharp rebound of 177% followed that. Like the housing stocks, the S&P 500 then corrected. The S&P 500 lost 34% over one year and eight months. The market also made a false new low before embarking on a robust recovery.

Bonus Figure 3: S&P 500 1929-1932

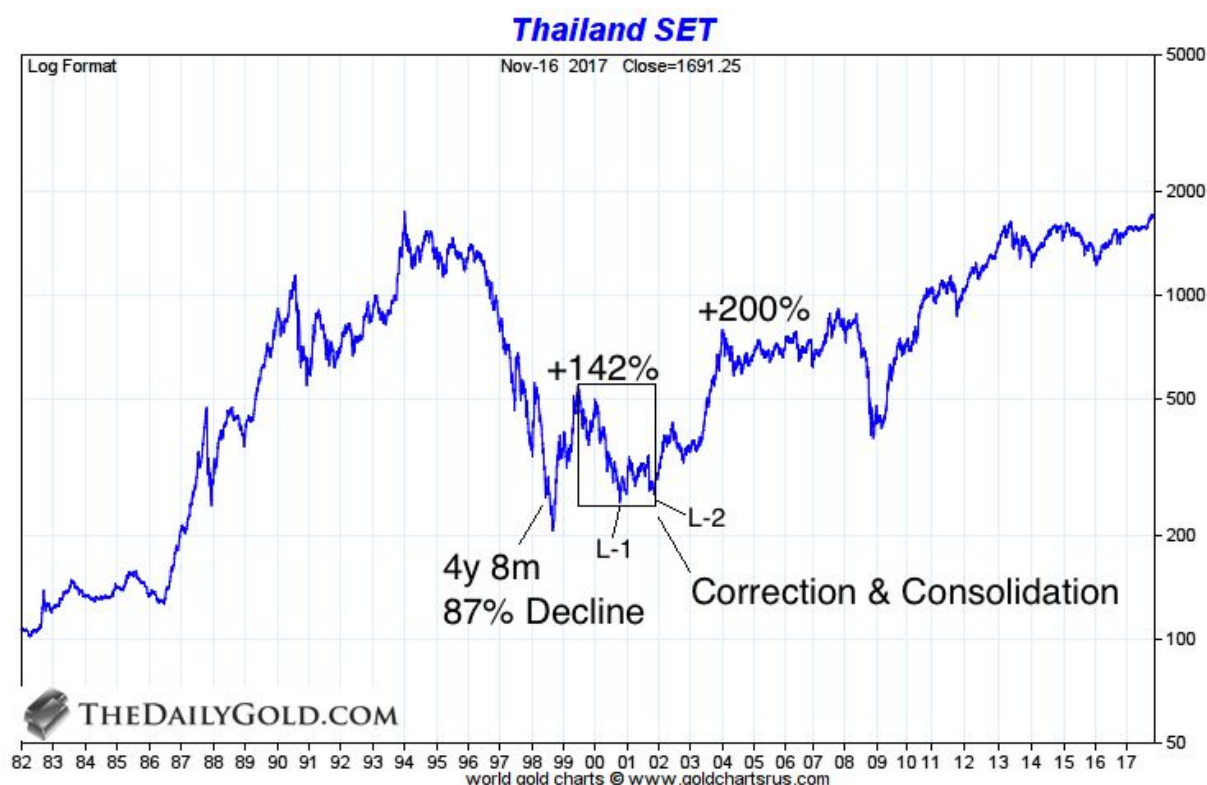


The next example is the Thailand stock market, which endured an epic bust during the mid to late 1990s. The Thai stock market lost 87% over a four year and an eight-month-long bear market. (These figures are almost identical to GDXJ). The market then rebounded 142% before plunging 54%. Unlike the previous two examples, the Thai

stock market did not form a false new low before it recovered for good. Note how L2 is slightly higher than L1.

Thailand's correction was deeper and ultimately longer (two years and five months), but it was worth the wait. From L2, the market gained 200% in roughly two years.

Bonus Figure 4: Thailand Stock Market (1994-1998)



It appears that bear markets of nearly three years and over 80% can follow a particular template after the initial low. That template essentially includes two main parts. The first is a sharp rebound that does not last much longer than six months. The second part is a more extended correction of at least 18 months that can end in a false new low.

In Bonus Figure 5, we present the data which includes the Mortgage sector (which fits the criteria) as well as the GDX and GDXJ exchange-traded funds, which

represent the gold stocks and junior gold stocks. Overall, the gold stocks and junior gold stocks fit the template quite well.

Bonus Figure 5: Recoveries from Mega-Bear Markets

Market	Bear Market	Rebound	Correction	1st Low to 2nd	Next Leg Up
GDX (2011-2016)	-81%, 4y 4m	151%	-43%, 2y 1m	2y 8m	????
GDXJ (2011-2016)	-89%, 4y 9m	202%	-47%, 2y 3m	2y 10m	????
S&P 500 (1929-1932)	-87%, 2y 9m	177%	-34%, 1y 8m	2y 9m	132%, 2y
Housing (2005-2009)	-81%, 3y 8m	137%	-42%, 1y 6m	2y 7m	177%, 1y 6m
Thailand (1994-1998)	-88%, 4y 8m	165%	-54%, 2y 5m	3y	200%, 2y 2m
Mortgage (2005-2009)	-98%, 3y 11m	194%	-49%, 2y 4m	2y 9m	194%, 2y 5m
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Note that the markets that endured the most robust bears and corrections then had the strongest next leg up. Thailand declined by 88% during its bear market, and following a 165% rebound had a 54% correction. Then it gained 200%. GDXJ's numbers are very similar to Thailand's.

In Bonus Figure 6, we plot GDX and GDXJ so that one can make a visual comparison.

Bonus Figure 6: GDX & GDXJ



Since the low in late 2018 (which was a false low), both GDX and GDXJ have rebounded and maintained those gains. As we go to press, the Federal Reserve seems intent on cutting interest rates, and Gold could be on the cusp of a significant breakout through the wall of resistance at \$1375/oz. If both events come to pass, then look for GDX and GDXJ to make powerful, triple-digit moves over the next 12 to 18 months.

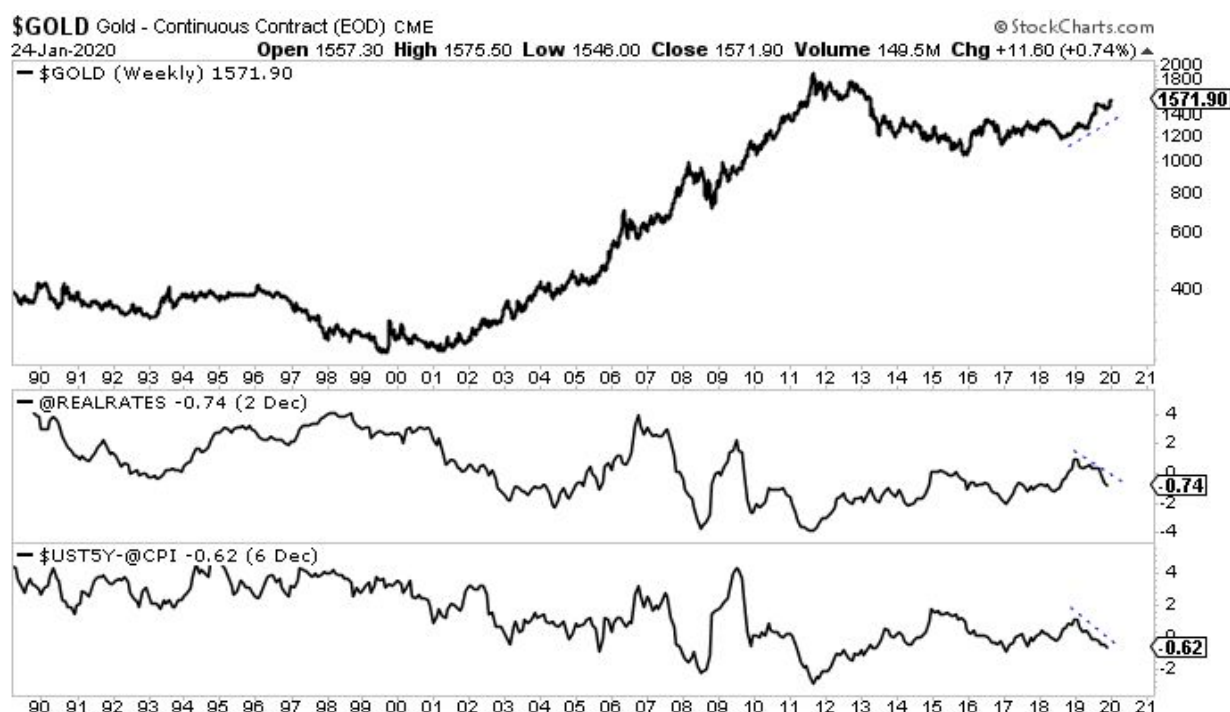
Bonus Chapter 2

Update & 2020 Outlook

The second half of 2019 was memorable for precious metals. In June 2019, just a month after we published the second edition of this book, the Federal Reserve completed its shift in policy and cut interest rates for the first time in many years. That precipitated Gold breaking past significant resistance at \$1,375/oz and reaching \$1,560/oz, a six-year high. Gold mining stocks, as well as Silver, also launched higher.

As predicted in Chapter 4, the shift in Federal Reserve policy and the start of a new rate cut cycle would lead to strong performance in precious metals. Fed rate cuts almost always cause a decline in real interest rates. Bonus Figure 2.1 shows Gold, the real Fed Funds rate, and the real 5-year yield.

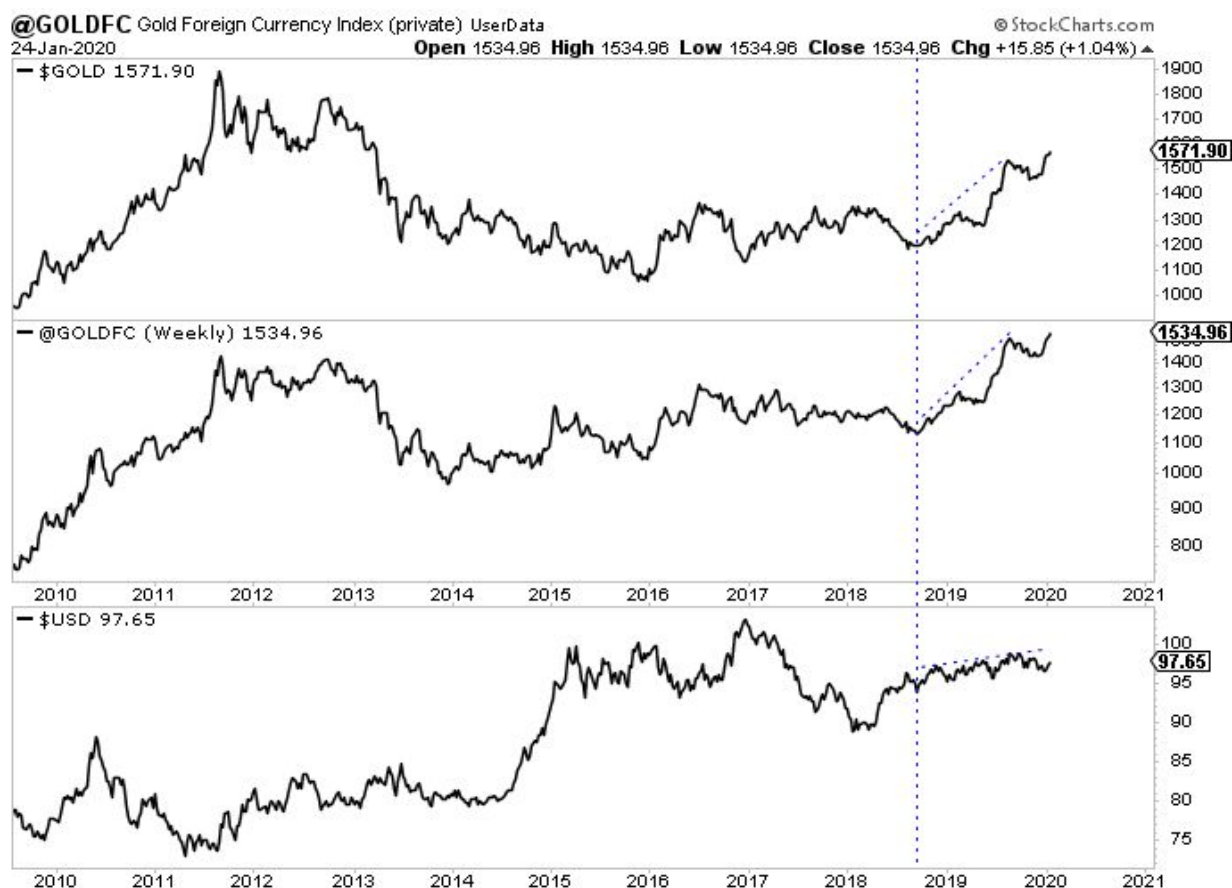
Bonus Figure 2.1: Gold & Real Interest Rates



Tremendous strength in Gold against foreign currencies (Gold/FC) rather than weakness in the US Dollar precipitated the advance in Gold. Gold/FC made a new all-time high (surpassing the 2011 peak) while the US Dollar appreciated slightly in the second half of 2019. Bonus Figure 2.2 plots Gold, Gold/FC, and the US Dollar.

The strength in Gold against foreign currencies is particularly essential, considering Gold/FC did not make an all-time high in the 1980s and 1990s. That invalidates some of the bearish arguments that Gold is repeating its performance from the 1980s and 1990s.

Bonus Figure 2.2: Gold, Gold/FC, & US Dollar



With that said, the lingering issue for precious metals is Gold has yet to outperform the stock market. In Chapter 5 (and often in our work), we have noted that aside from 1985-1987, Gold has never enjoyed a sustained bull market without outperforming the stock market.

As you can see from Bonus Figure 2.3, the Gold to S&P 500 ratio has yet to break to the upside. If and when it can break above that red line, it will signal the start of a sustained bull market in Gold.

Bonus Figure 2.3: Gold vs. S&P 500



Fundamental developments, which revolve around Fed policy, interest rates, bond yields, and inflation, will determine if the strength in Gold continues or if it will peter out like it did in 1996 or 1998.

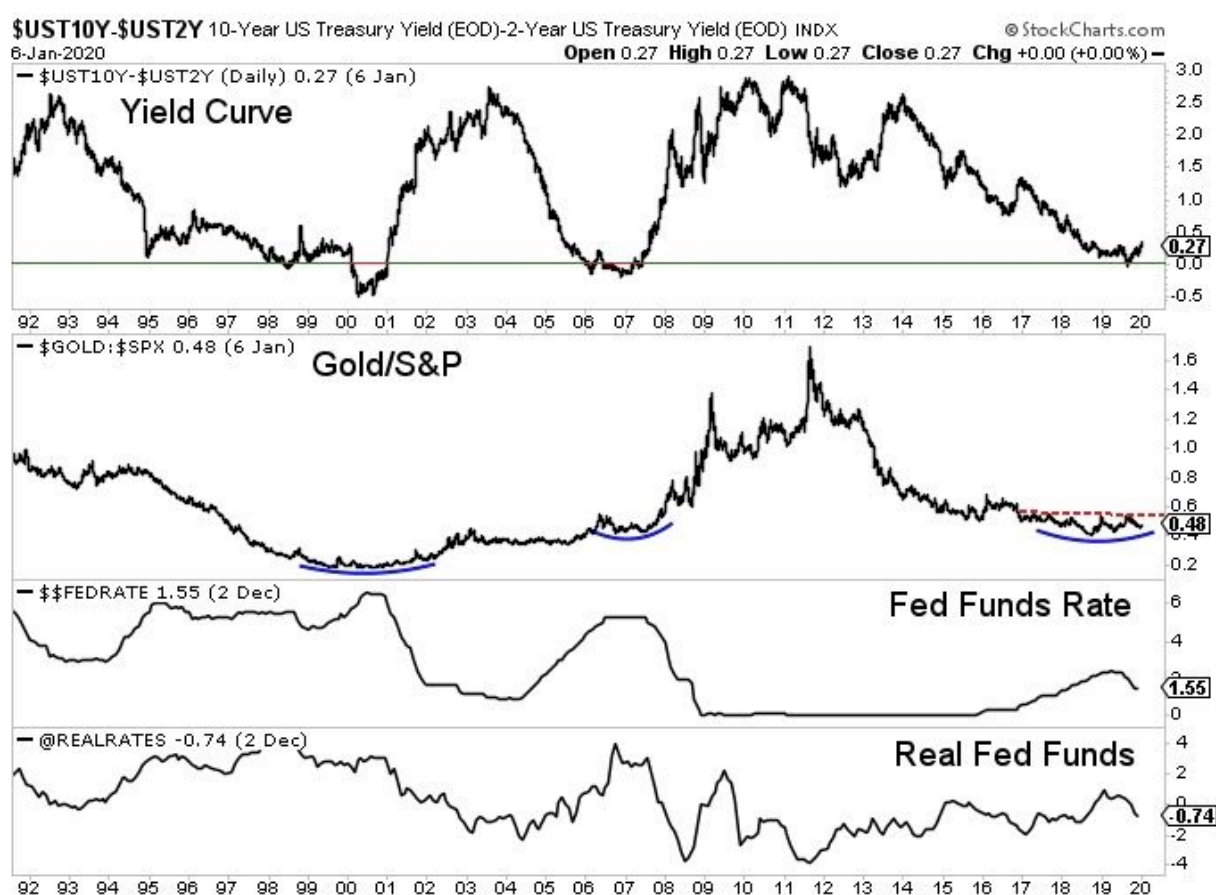
There are three potential scenarios in 2020, and two of the three will support continued strength in Gold and precious metals. The bearish scenario entails a genuine economic recovery and the Fed going back to rate hikes. One bullish scenario is the Fed continues to cut interest rates as the economy drifts towards recession. The other bullish scenario is inflation, and inflation expectations rise, but the Fed does not hike interest rates like it did in 2017 and 2018.

Let me explain from the perspective of the yield curve, as it is easy to understand. Bonus Figure 2.4 plots the Yield Curve (YC), the Gold to S&P 500 ratio, the Fed Funds rate (FFR), and the real Fed Funds rate (real FFR).

Gold outperforms when the YC steepens. That happened after 2000 and 2007. Fed rate cuts or increasing inflation and inflation expectations cause the YC to steepen. The steepening continues until those things end.

The steepening of the yield curve ended and reversed course in early 1996 and late 1998 because, at those points, the Fed had made its last rate cut. Growth rebounded and was strong alongside real interest rates, which were +3%. It was nothing like today when real interest rates are negative and the Federal Reserve is not even close to considering raising interest rates.

Bonus Figure 2.4: Yield Curve



It is important to note and understand that the Federal Reserve at present wants higher inflation. After the Fed meeting and rate cut in October 2019, chairman Jerome Powell indicated as much. He said:

“So I think we would need to see a really significant move up in inflation that’s persistent before we would consider raising rates to address inflation concerns.”

Note the phrase “significant move up” and “persistent.” Then note “before we would consider raising.”

The consumer price at the end of October 2019 was 1.75%.

It sounds as if they won't begin to consider raising rates until inflation is at least 1% or more than 1% higher. That means the CPI could reach 3% before they "consider raising."

Also, the Fed is considering adopting "average inflation targeting." The Fed is currently targeting a 2% rate of inflation in their preferred metric, personal consumption expenditures (PCE). In December 2019, PCE was 1.5%. Under "average inflation targeting," the Fed would aim for the PCE to be above 2% to offset periods of undershooting the target.

If inflation were to rise another 1% before the Fed considered raising rates, then real interest rates would continue their decline, and the Yield Curve would steepen. The long end of the curve would rise to reflect increasing inflation and increasing inflation expectations while the short end (which the Fed controls) would remain at current levels or perhaps rise ever so slightly.

If inflation and growth do not pick up, then the Fed would likely resume its rate cuts. That is very bullish for Gold.

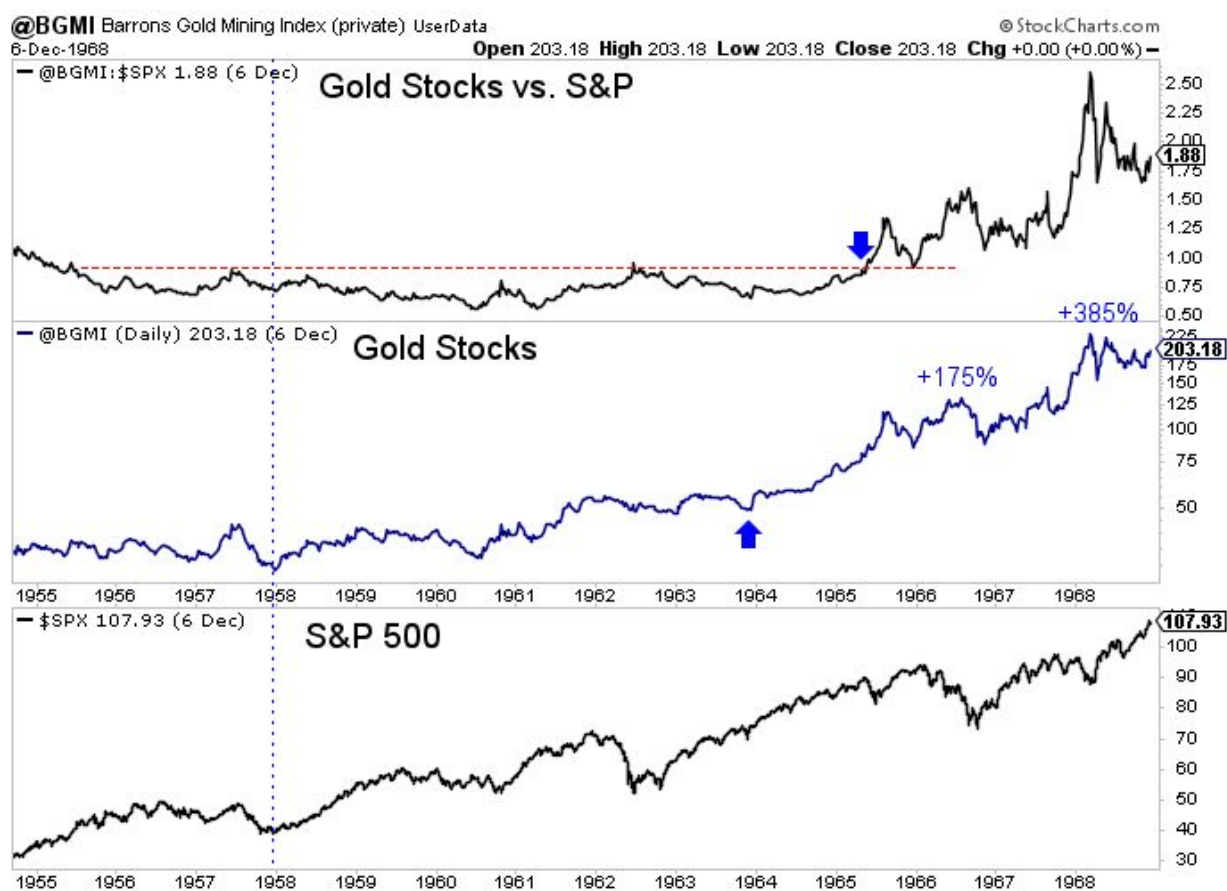
Either scenario is bullish for Gold and precious metals, and if the Yield Curve steepens considerably, then Gold should finally outperform the S&P 500 in a sustained fashion.

In looking at history, it is essential to note there was a time when the stock market and the gold stocks mostly trended together. That happens to be from a macro-market standpoint the same historical comparison to today: the 1960s. Our statement about the Gold price needing to outperform the S&P 500 remains valid, but the Gold price was fixed before 1971!

Bonus Figure 2.5 highlights the performance of the gold stocks (courtesy of the Barron's Gold Mining Index) and stock market while including a ratio between the two. The gold stocks made a historically significant low at the end of 1957 and surged over 700% over the next ten years. The stock market climbed alongside, gaining 120%.

The gold stocks relative to the S&P 500 bottomed in 1960, and their outperformance accelerated in 1964 as inflation crept higher for the first time in years. The Barron's Gold Mining Index to S&P 500 ratio broke to a fresh 10-year high in 1965.

Bonus Figure 2.5: Gold Stocks & S&P 500 in the 1960s



This leads us to the most important chart for precious metals in 2020. Gold stocks are on the cusp of a very significant breakout, which you can see in Bonus Figure 2.7, but are unlikely to make that move if they cannot outperform the stock market. Bonus Figure 2.6 plots GDX against the S&P 500.

Whether we use GDX or historical indices such as the Barron's Gold Mining Index or the S&P TSX Gold Index, we can see a double bottom formation in the ratio. That represents a roughly 90-year low in the value of gold stocks relative to the stock market.

At present, the ratio needs to surpass the resistance at the red line to confirm a significant bottom and new uptrend. It would signal and confirm capital shifting from the stock market to gold stocks. Bonus Figure 2.6 is critical because if gold stocks are outperforming the stock market, then you count on them to make a significant breakout in 2020.

Bonus Figure 2.6: Gold Stocks vs. S&P 500



Bonus Figure 2.7 highlights the nearly seven-year-long bases in GDX and GDXJ. Upon a break past \$31, GDX has a measured upside target of \$50. Upon a break past \$50, GDXJ has a measured upside target of \$84. The gold stocks and junior gold stocks are in an excellent position for explosive moves higher in 2020.

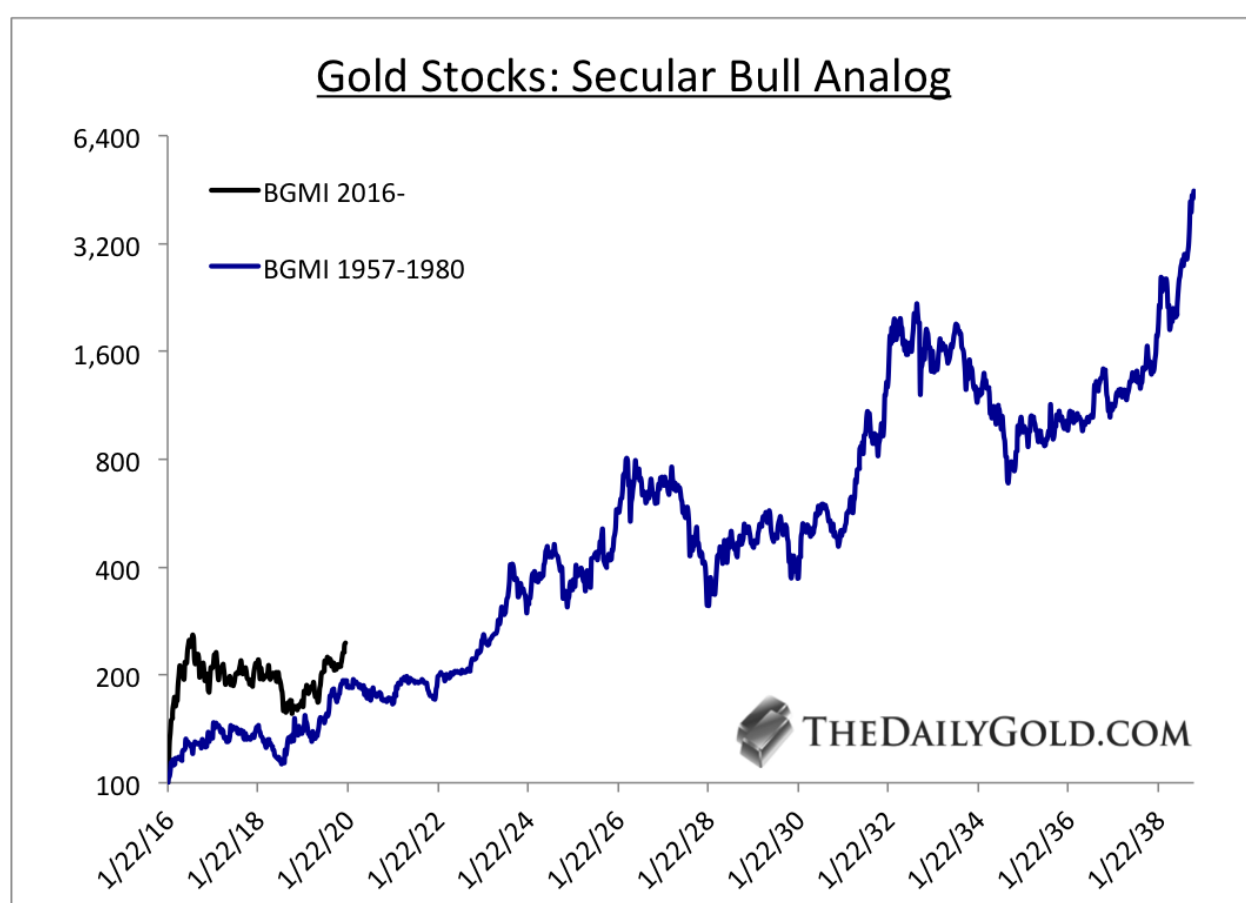
Bonus Figure 2.7: GDX & GDXJ Weekly Bar Charts



Both technicals and fundamentals argue that 2020 could be a very successful year for precious metals investors. Gold has a measured upside target of \$1,700/oz, and that appears to be a very realistic target for 2020. The gold mining stocks and junior gold stocks have an envious technical setup that could lead to massive upside. The potential of precious metals in 2020 is underpinned by likely bullish fundamental developments that we already covered.

From a bird's eye view and secular standpoint, we have argued that the 2016 low in the gold stocks could be similar to the 1957 low. We highlight the reasons which include the macro-market setup, gold stocks historic long-term oversold condition and valuation, and secular low in inflation in greater detail in preceding chapters. From the 1957 low to the 1980 peak, the Barron's Gold Mining Index appreciated nearly 45-fold! There will be downturns along the way, but ultimately the sector is the place to be over the very long-term.

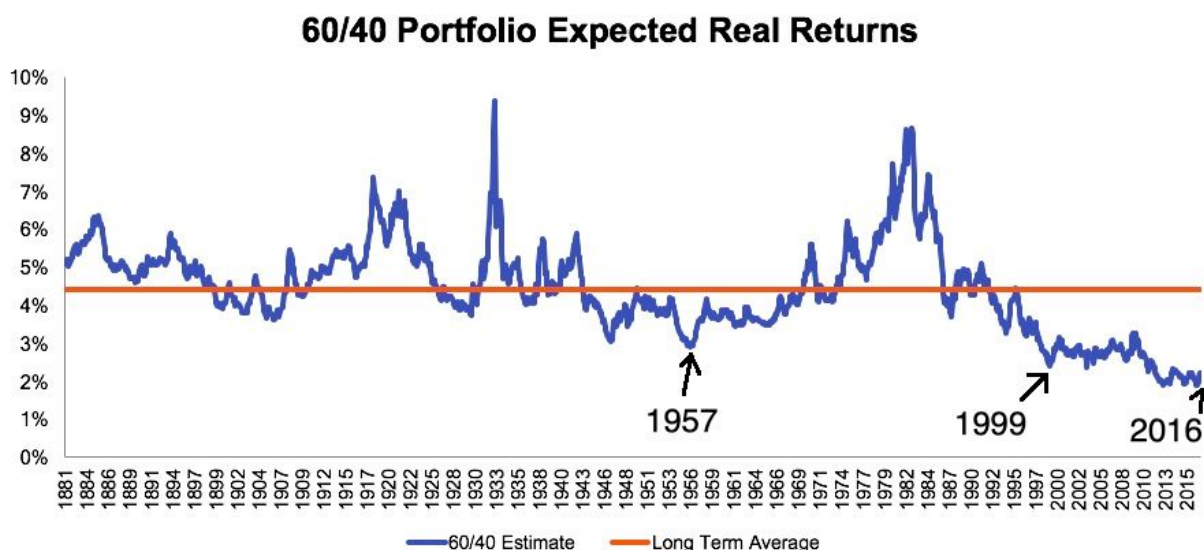
Bonus Figure 2.8: Gold Stock Comparison



Another chart that supports our view that the bottom in gold stocks in 2016 is very similar to the one in 1957, is Bonus Figure 2.9. This chart, which I believe is from John Hussman shows the expected return from the classic, conventional 60/40 portfolio. That entails 60% of the portfolio invested equities with the remaining 40% invested in bonds.

The historical lows in the expected return calculation have coincided with the three most important historical lows in gold mining stocks. Prior to the major breakout in equities in 2013, the two most significant historical lows in the gold stocks were in 1957 and 2000. Those coincide almost perfectly with the two lowest expected returns since 1900. The past five years mark a historical low for expected returns and that looks to have coincided with the recent historical and secular low in the gold mining sector.

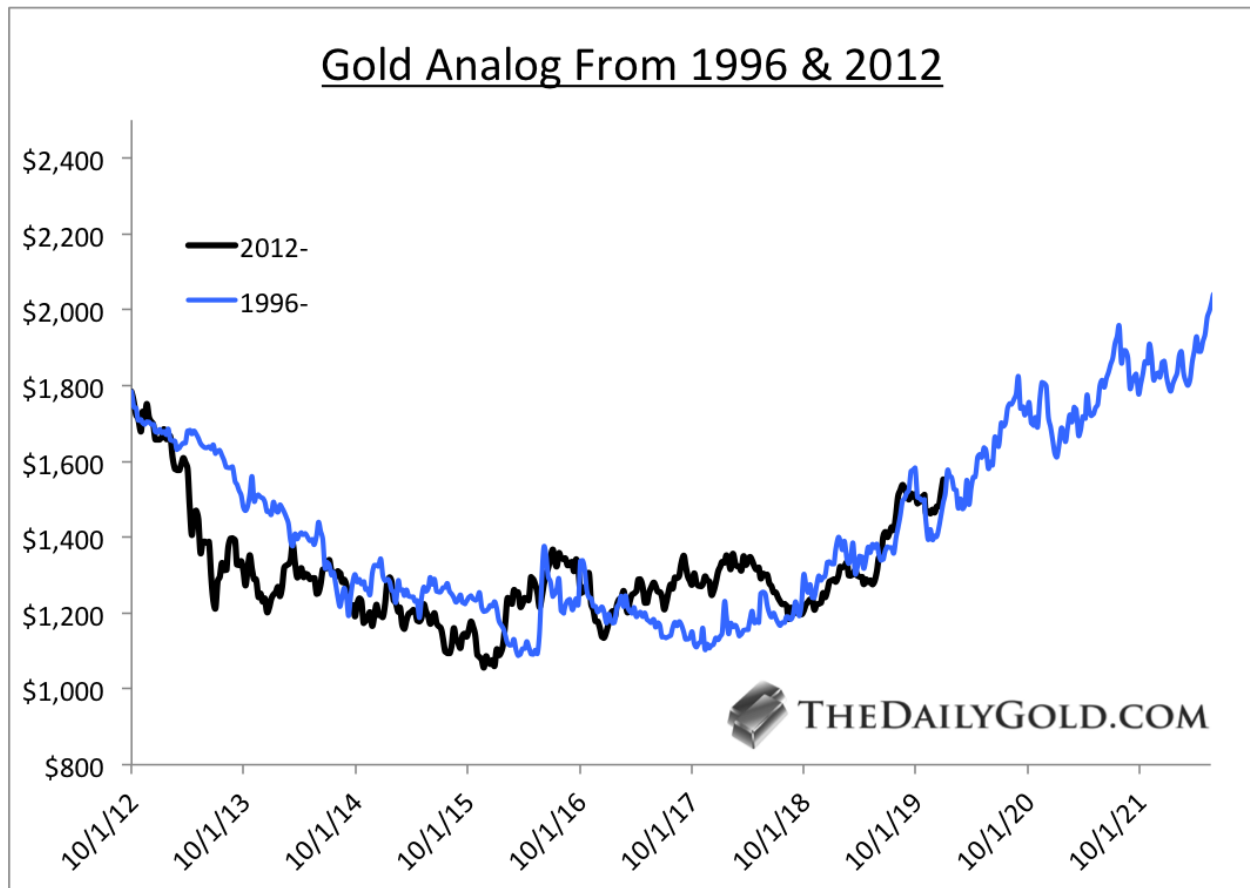
Bonus Figure 2.9: Expected Return From 60/40 Portfolio



We close this chapter with two analog charts which are pertinent to 2020.

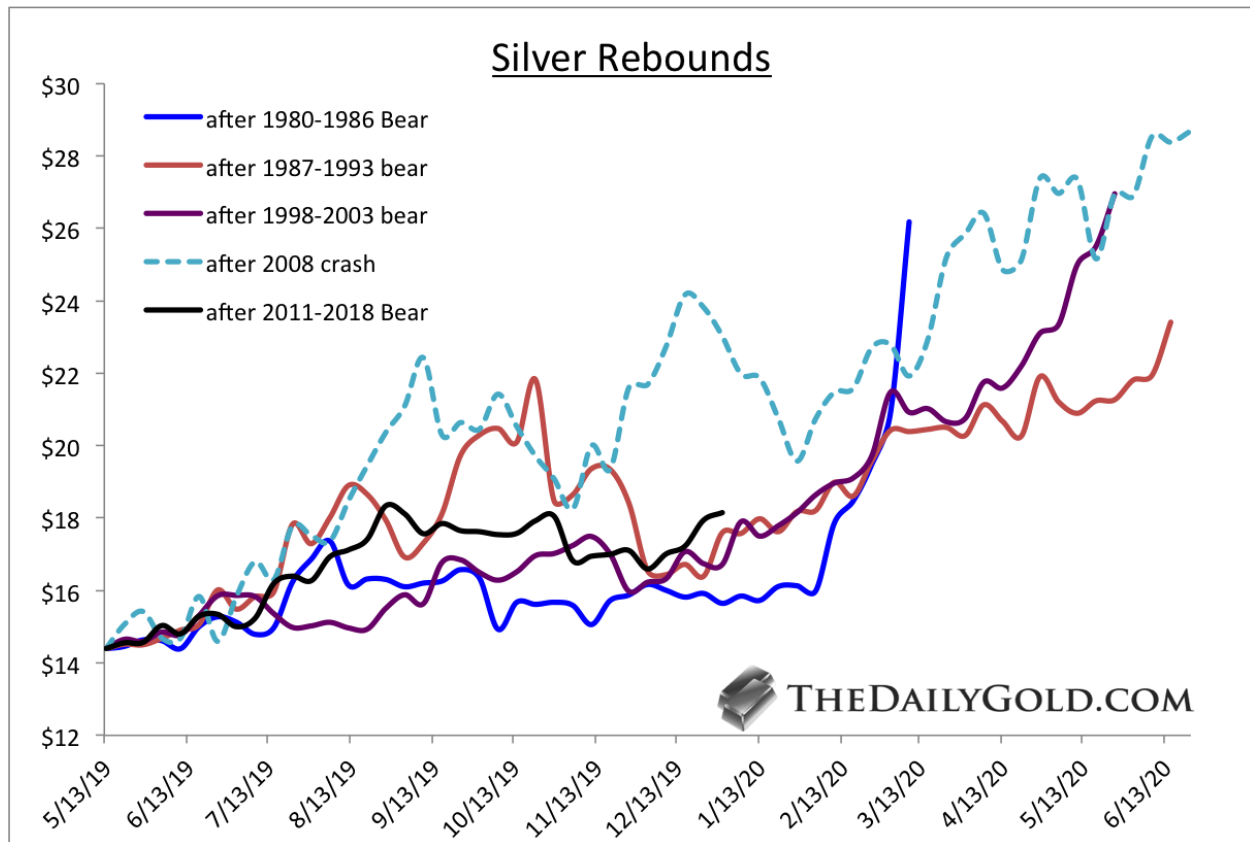
In Bonus Figure 2.10, we compare Gold's secondary peak in 2012 with its peak in 1996. The 1960s is the best comparison to today, but the Gold price was fixed then. Gold's decline in the late 1990s was similar to Gold's decline after 2011, and the recovery since 2015 bears some similarities to the recovery after 1999. Gold broke out to a six-year high in 2003 as well as in 2019. The comparison projects a \$1800/oz target before 2021.

Bonus Figure 2.10: Gold Analog to 1990s & 2000s



The comparison of Silver, today against its rebounds from the past, is our last chart, Bonus Figure 2.11. Three of the four past rebounds reached \$26/oz or higher (on the same scale), while one of the rebounds reached nearly \$24/oz.

Bonus Figure 2.11: Silver Rebounds



In summary, there is a very bullish setup in the precious metals complex as 2020 begins. My upside targets are \$1700 to \$1800/oz for Gold and \$24 to \$27/oz for Silver. The measured upside targets of \$50 for GDX and \$84 for GDXJ are quite aggressive and would likely require more than a year to be reached.

Works Cited

Sourced Material used in this Book

Data was obtained or purchased from the following sources:

Aftab Singh, <http://greshams-law.com>, @Greshamslawcom
Federal Reserve Economic Data, <https://fred.stlouisfed.org>
Nick Laird, <http://www.goldchartsrus.com>
StockCharts, <https://stockcharts.com>, @StockCharts
World Gold Council, <https://www.gold.org> @GoldCouncil
Christopher Chantrell, <https://www.usgovernmentspending.com>, @Chrischantrell
Prof Robert Shiller, <http://www.econ.yale.edu/~shiller/data.htm>, @RobertJShiller
The Balance, <https://www.thebalance.com>
Global Financial Data, <http://www.globalfinancialdata.com>

Sources of a few charts:

CPM Group, <https://www.cpmgroup.com>, @CPMGroupLLC
Metals Focus, <https://www.metalsfocus.com>, @MetalsFocus
Scotiabank, <https://www.scotiabank.com/global/en/global-site.html>, @ScotiaBank
TheAtlasInvestor, <https://theatlasinvestor.com>, @TihoBrkan
ExplorationInsights, <https://www.explorationinsights.com>, @JoeMazumdar
Barry Bannister, @StifelInst

Websites & Articles:

Mining Intelligence, <https://www.miningintelligence.com>, @MiningIntell
Silver Institute, <https://www.silverinstitute.org>, @SilverInstitute
Dr. John Hussman, <http://www.hussmanfoundation.org/research.html>, @hussmanjp

Ray Dalio on Monetary Policy 3,
<https://www.linkedin.com/pulse/what-monetary-policy-3-mp3-look-like-ray-dalio>, @RayDalio

Ben Bernanke on Helicopter Money,
<https://www.brookings.edu/blog/ben-bernanke/2016/04/11/what-tools-does-the-fed-have-left-part-3-helicopter-money/>

Mike Shedlock on Misconceptions About Gold,
<http://globeconomicanalysis.blogspot.com/2007/06/misconceptions-about-gold.html>

Philosophical Economics on Future Equity Returns
<http://www.philosophicaleconomics.com/2018/01/future-u-s-equity-returns-a-best-case-upper-limit/>, @Jesse_Livermore