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The Challenge Of Valuing Gold

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The challenge of valuing gold

- Gold is the ultimate "scarcity asset". Its value is determined neither by its utility nor an ability to generate cash flows, but because it is rare.
- Valuing scarcity assets is challenging as there is no "underlying value" to reference. Prices are driven by the immediate supply and demand situation. Not being able to determine a "fair value" may explain why gold is an unpopular asset class among institutional investors.
- Yet, in periods when both budget deficits and monetary aggregates have rapidly grown, gold has historically outperformed—and it is doing so now. At such times, gold also adds diversification benefits to portfolios.
- Over the past few years, we have argued in numerous pieces that gold has started a bull run. And once they start, gold bull markets tend to run until either the US dollar strengthens meaningfully, and/or the Federal Reserve tightens monetary policy. Right now, neither of these two outcomes is likely. Hence, the gold bull market looks set to continue.

An additional challenge: gold is many things at once

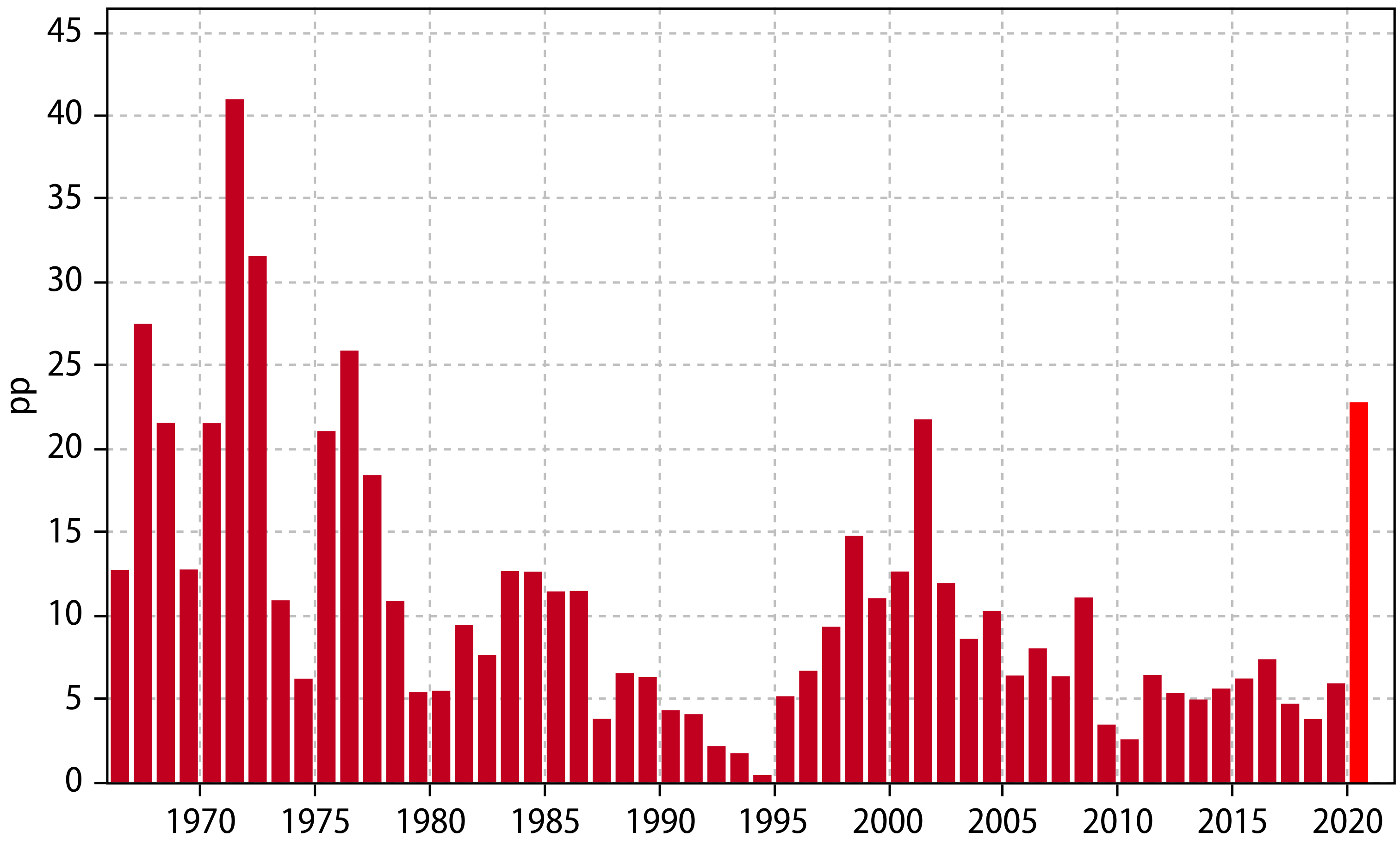
- An additional challenge, when looking at gold, is that it is many things at once, or even different things to different people. After all, through history, gold has been:
  - **Money/currency**
  - **A commodity**
  - **An asset**
  - **A jewelry/consumption good**
- In the following pages, we propose to look at gold through these four different prisms to see where it stands today.

Gold as money

Gold and broad US money growth

An explosion in M2 relative to gold production

Annual rise in US M2 vs annual rise in global gold production in US$



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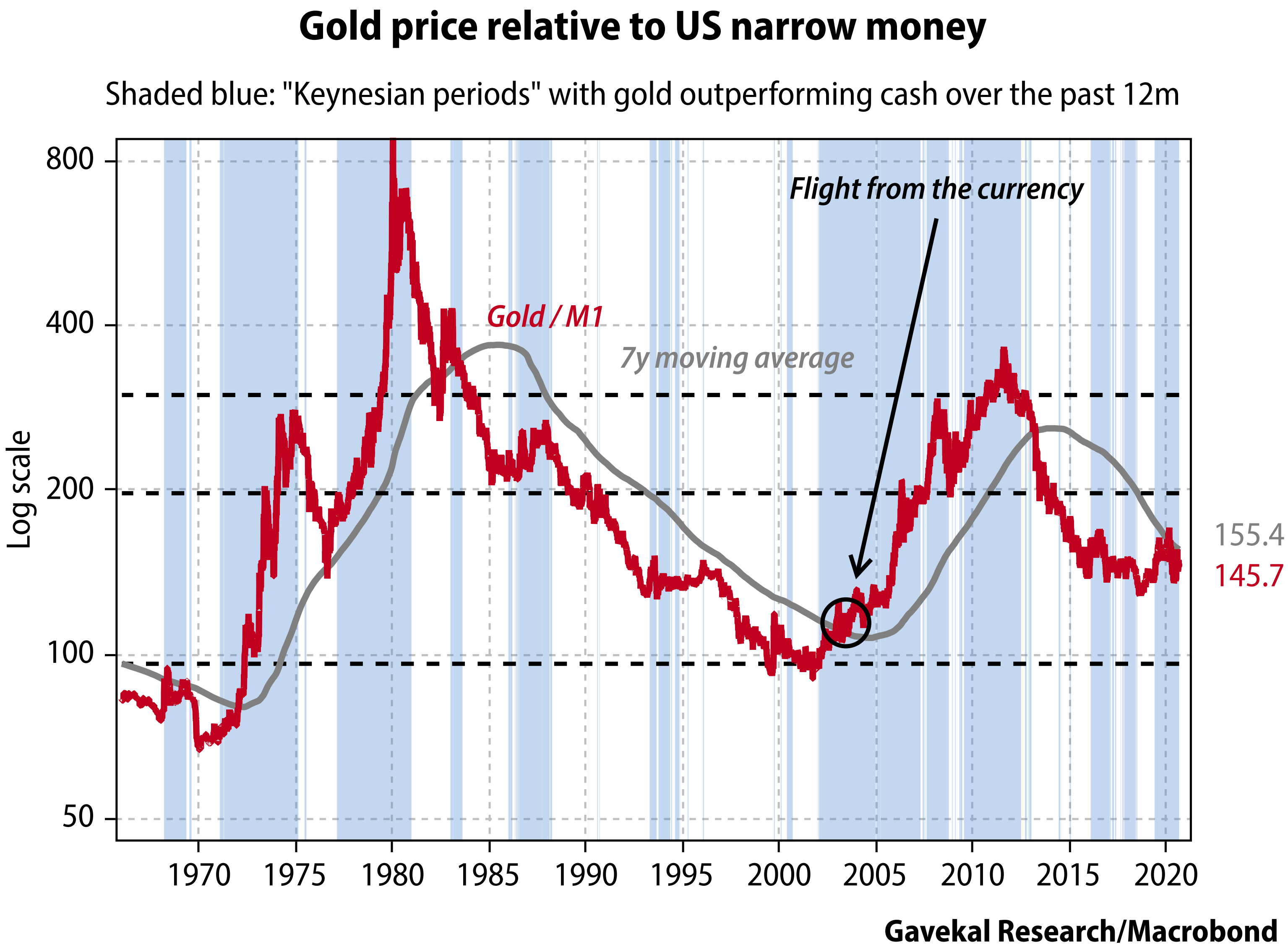
If gold miners in 2020 produce as much gold as they did in 2019 (a generous assumption given Covid-related mine shutdowns), this year's likely rise in US broad money will be 23x that of the world's gold stock.

In the past, any move in this ratio above 20x triggered a lasting gold bull market.

After all, if only a small portion of the newly minted cash in the US heads into gold, the price of the shiny metal will skyrocket.

Gold and narrow US money growth

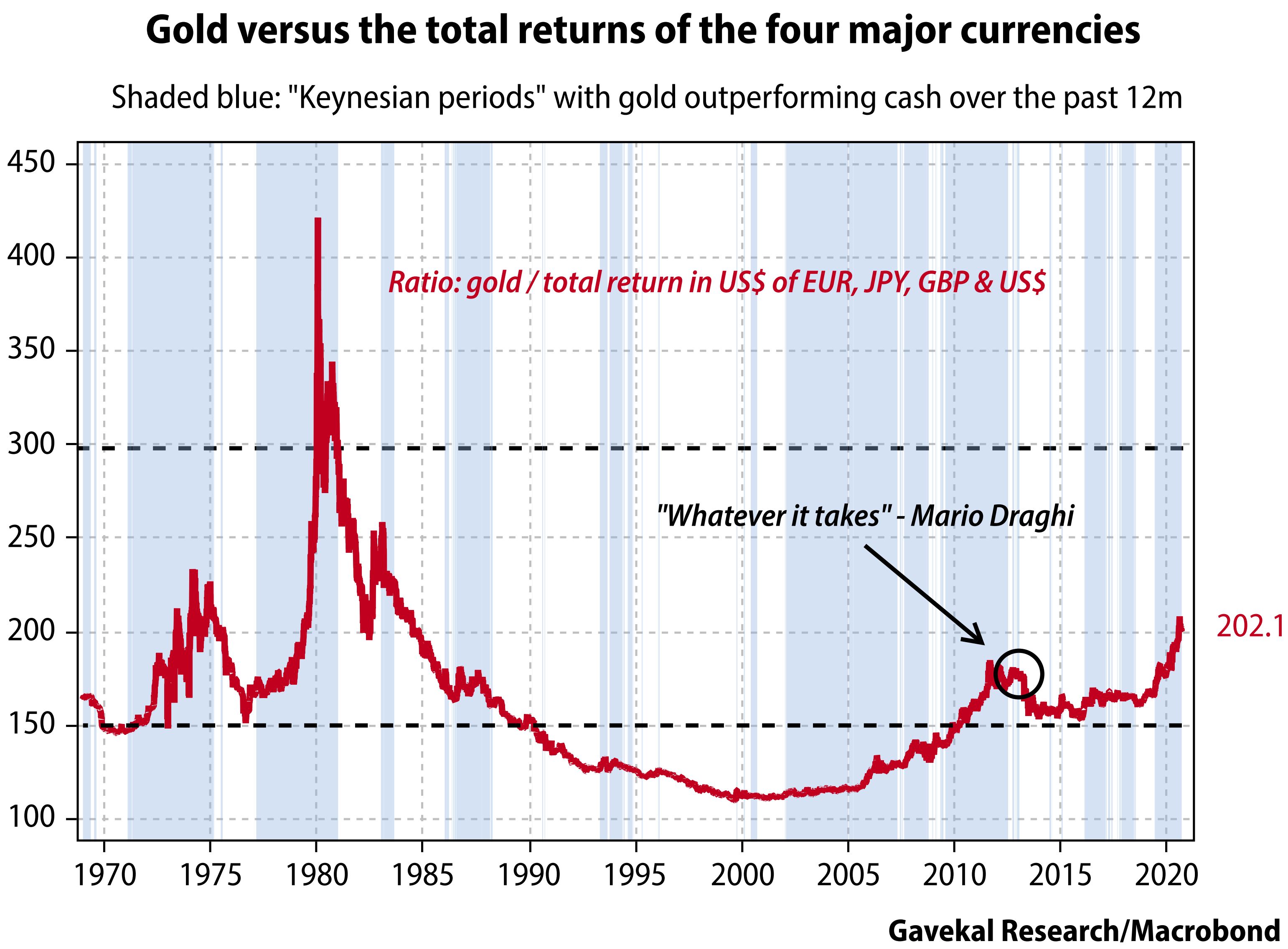


In this chart, the shaded area shows periods when the appreciation of gold prices outpaced that of T-bills over the past 12 months. We label such periods "Keynesian" and they tend to broadly favor gold (see **Managing Money In A Keynesian Environment**).

The red line shows the ratio of the gold price to M1 growth. When the gold price is rising faster than M1, this signals a flight from the fiat currency.

We are not there yet…

Gold outperforms major currencies but there's no killer wave yet



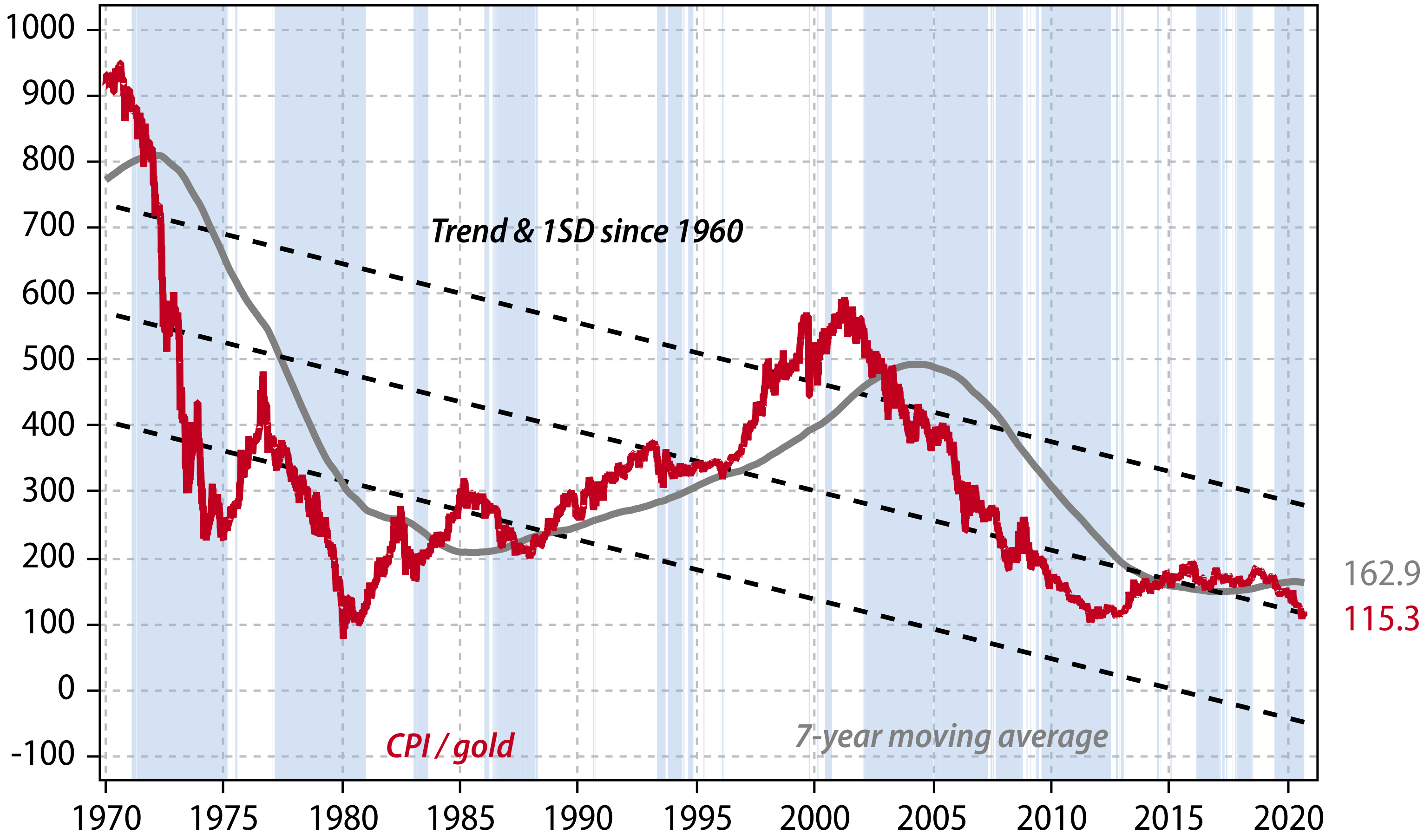
The red line in this chart shows gold's total return against an equally-weighted index of the world's four major currencies, with compounding short term interest rates.

Gold has outperformed these four currencies to a meaningful degree in the past two years, but there is no sign yet of the "killer wave" as seen in the late 1970s.

Gold is reasonably valued against inflation

US CPI (as a proxy for the cost of living) deflated by gold

Shaded blue: "Keynesian periods" with gold outperforming cash over the past 12m



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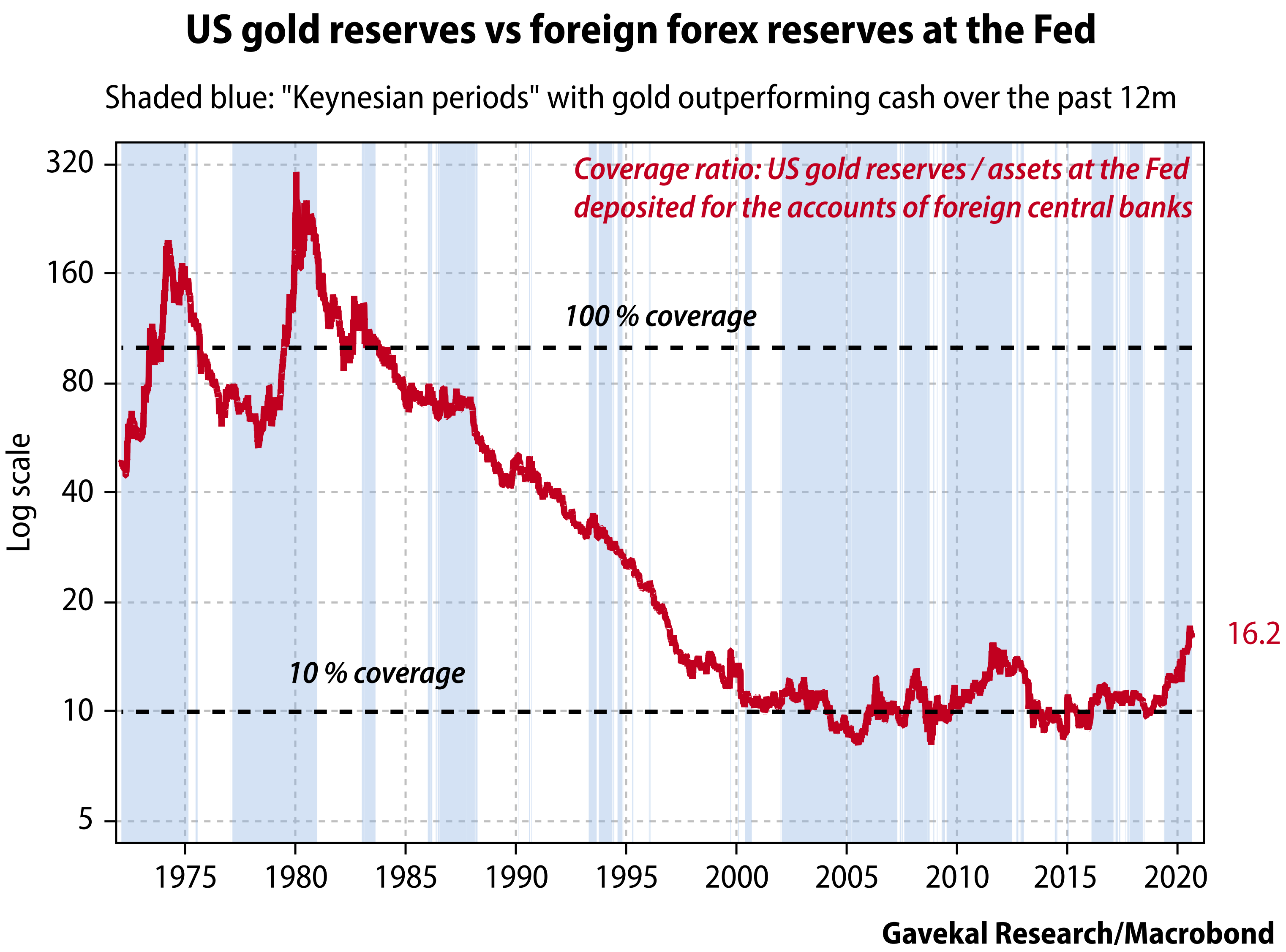
Gold can be considered to be "overvalued" or "undervalued" when compared to inflation. This relationship is illustrated in the chart by deflating US CPI against the gold price, rebased to 1980.

On this basis, the pricing of gold does not seem to be extreme. We are, in fact, smack in the middle of the range that has prevailed for the last 40 years.

Central banks may be buying gold rather than placing dollars at the Fed



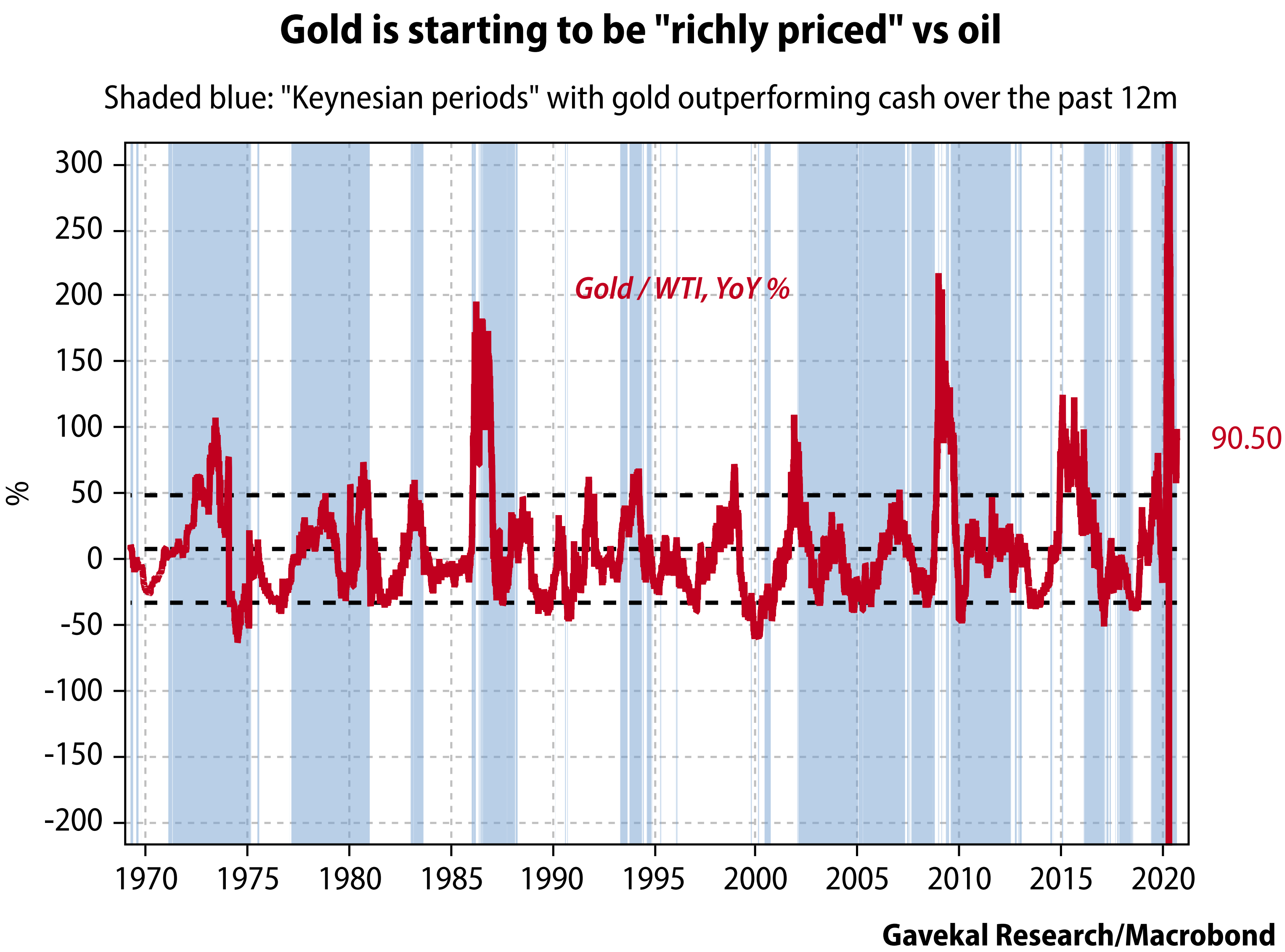
In the past couple of years, central banks as a group have moved from being net sellers of gold, to net buyers. At the same time, their reserves deposited at the Fed have stopped growing. The coverage of these reserves by gold fell from 100%+ in the 1980s to less than 10% just three years ago.

Maybe the central banks of current-account-surplus countries have stopped placing excess US dollars at the Fed and are instead using them to buy gold.

This trend now seems to be accelerating. But we are far from the levels reached in the 1970s.

Gold as a commodity

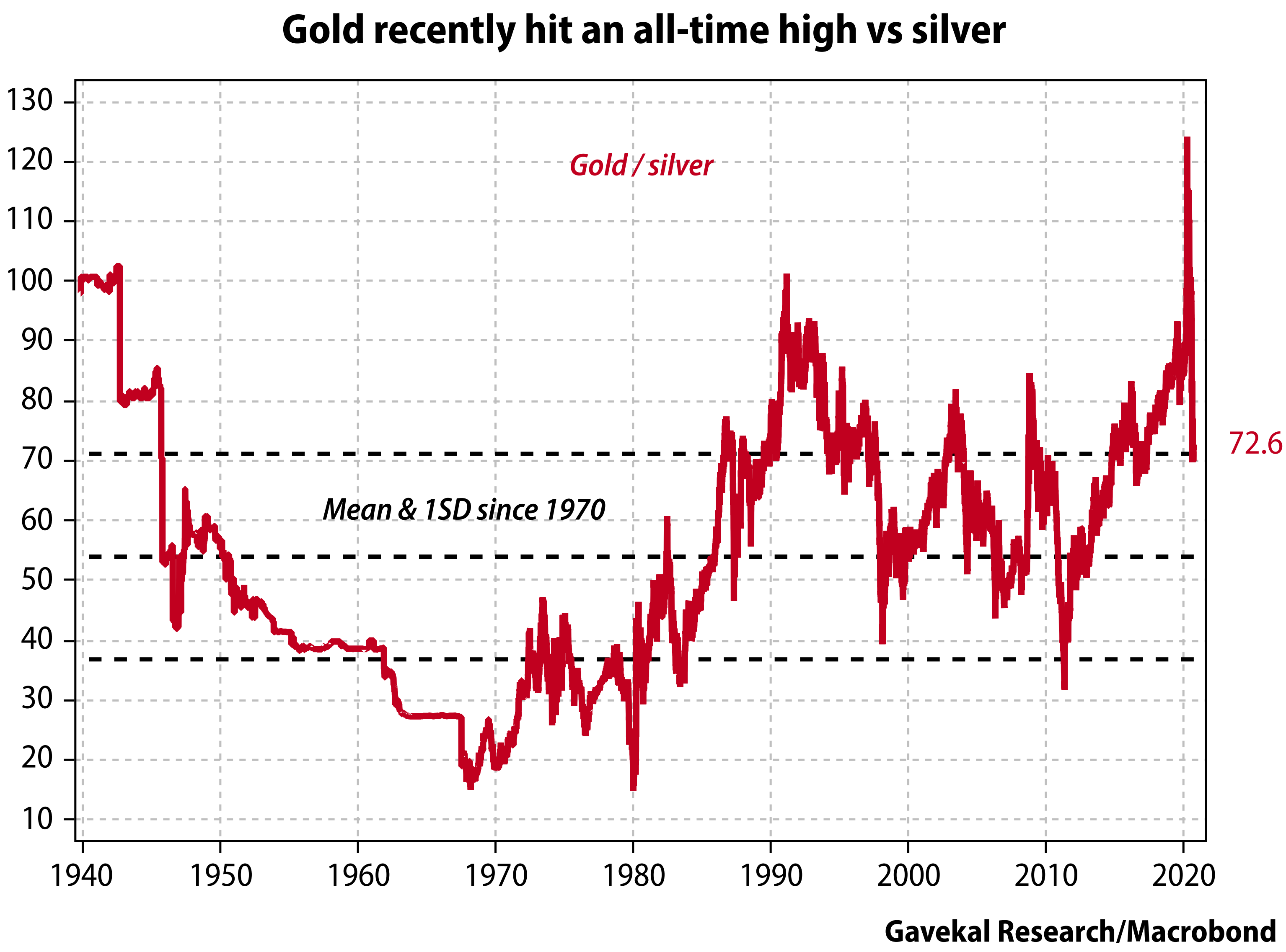
Gold is beginning to get expensive relative to oil



Gold is starting to be "richly priced"" relative to oil (or maybe it's just that oil is too cheap).

Either way, gold does tend to get expensive against oil in "Keynesian periods" which are denoted as blue shaded areas in the chart.

The gold/silver ratio seriously blows out



Gold's surge to a new high relative to silver shows a shift in preferences. It may be down to central bank buying, or possibly changes in the risk weighting that commercial banks apply to gold due to new Bank for International Settlements rules.

Silver plays a smaller role in our economies so many investors holding it as a financial asset have likely switched to gold. As markets are made at the margin, this shift has caused a surge in the gold/silver ratio.

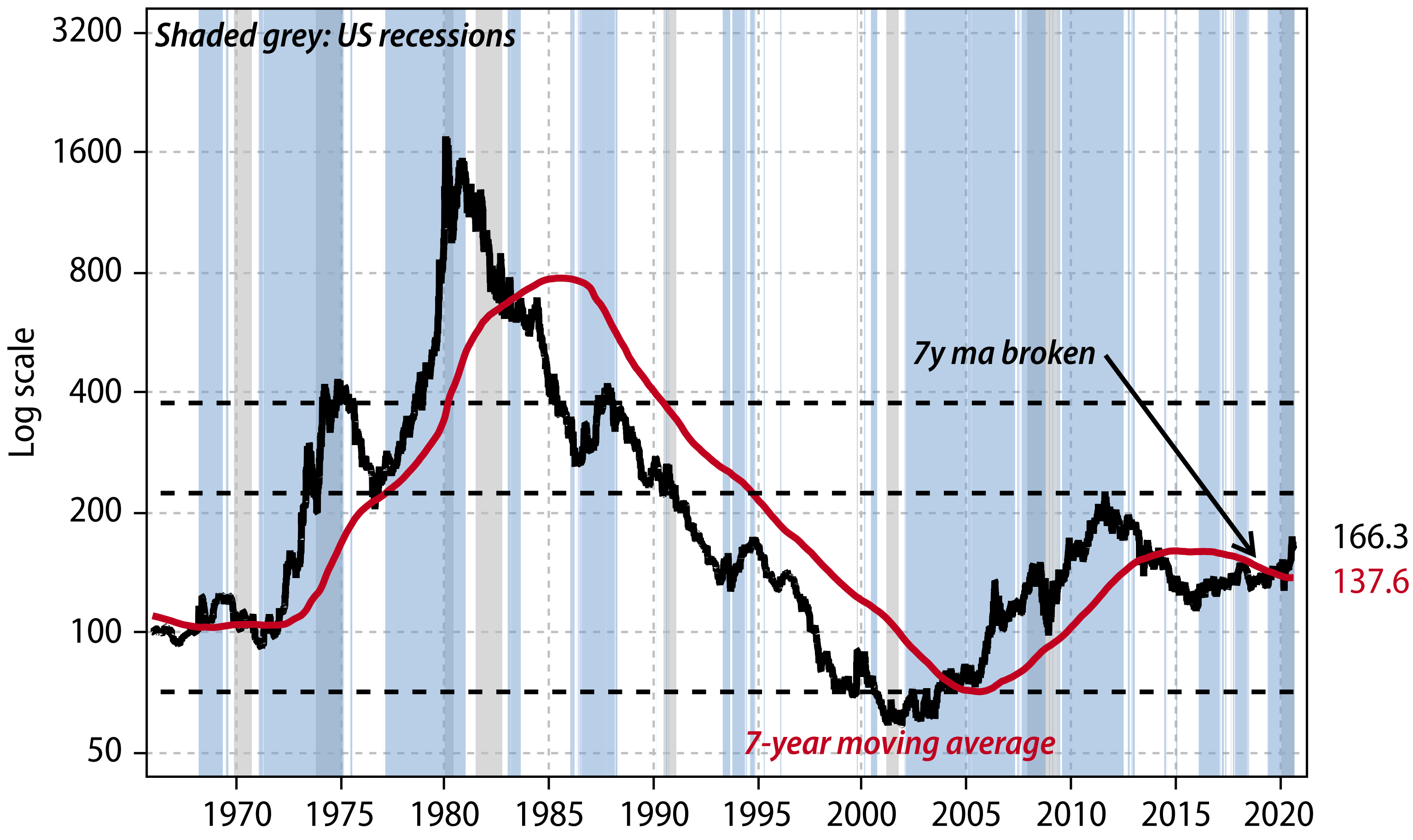
Still, the spread looks fairly extreme and makes gold look overvalued.

Gold as a financial asset

Gold is cheap compared to US long bonds

Keynesian policies in the US and the ratio of returns on gold vs treasuries

Shaded blue: "Keynesian periods" with gold outperforming cash over the past 12m



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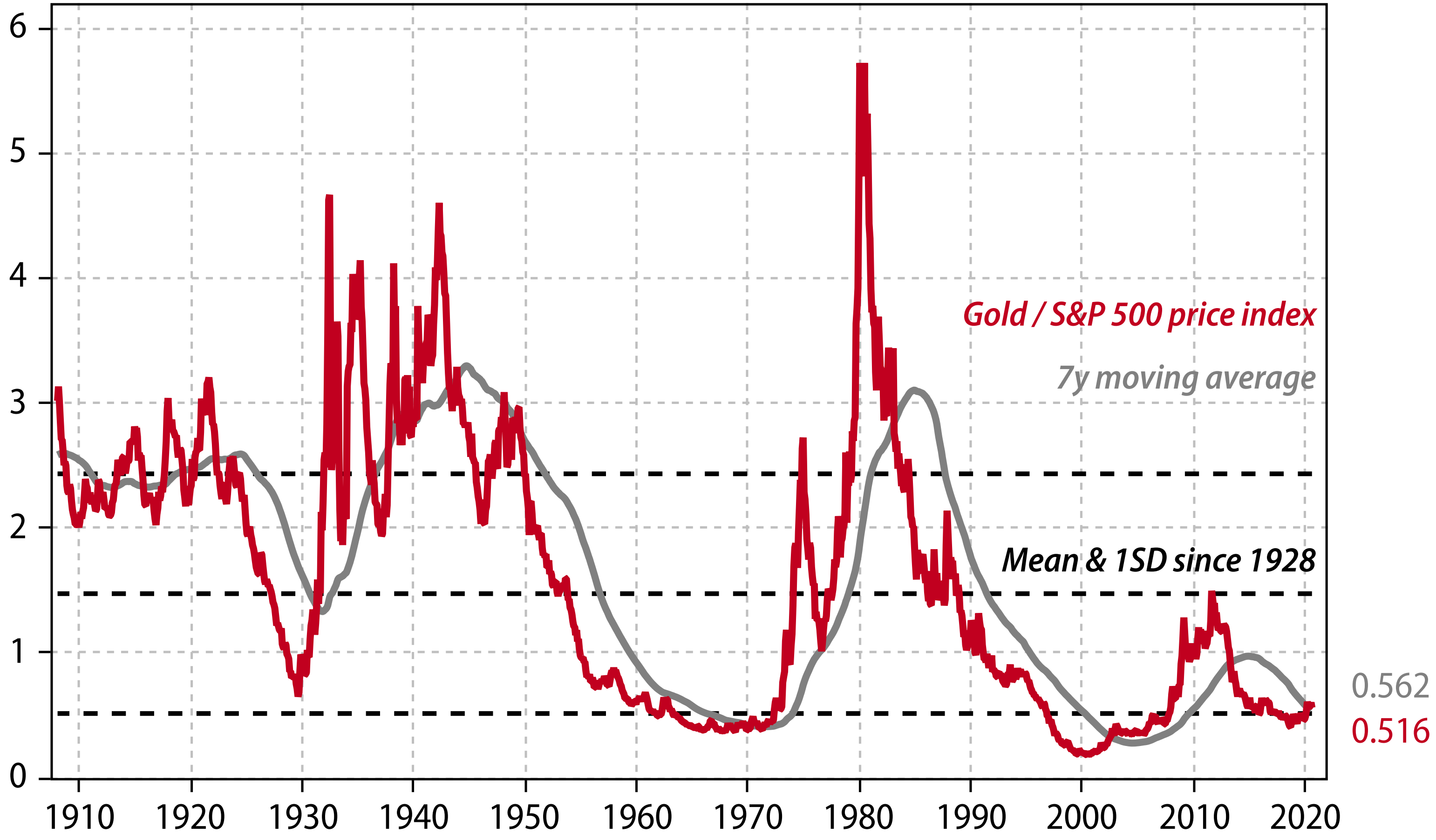
Explosive money supply growth and huge fiscal deficits will ensure that the US stays in a “Keynesian” period. This macro setting is significant since the ratio of gold returns to the total return of treasuries has broken its seven-year moving average.

This is occurring at a point when bonds are hugely overvalued (see **Building A Bond valuation Tool**). Hence, gold is cheap verus the long-bond total return index and this ratio has scope to quadruple in the next few years.

Gold looks cheap compared to the S&P 500

The gold/S&P 500 ratio has made a recent turn

Gold vs S&P 500 price index



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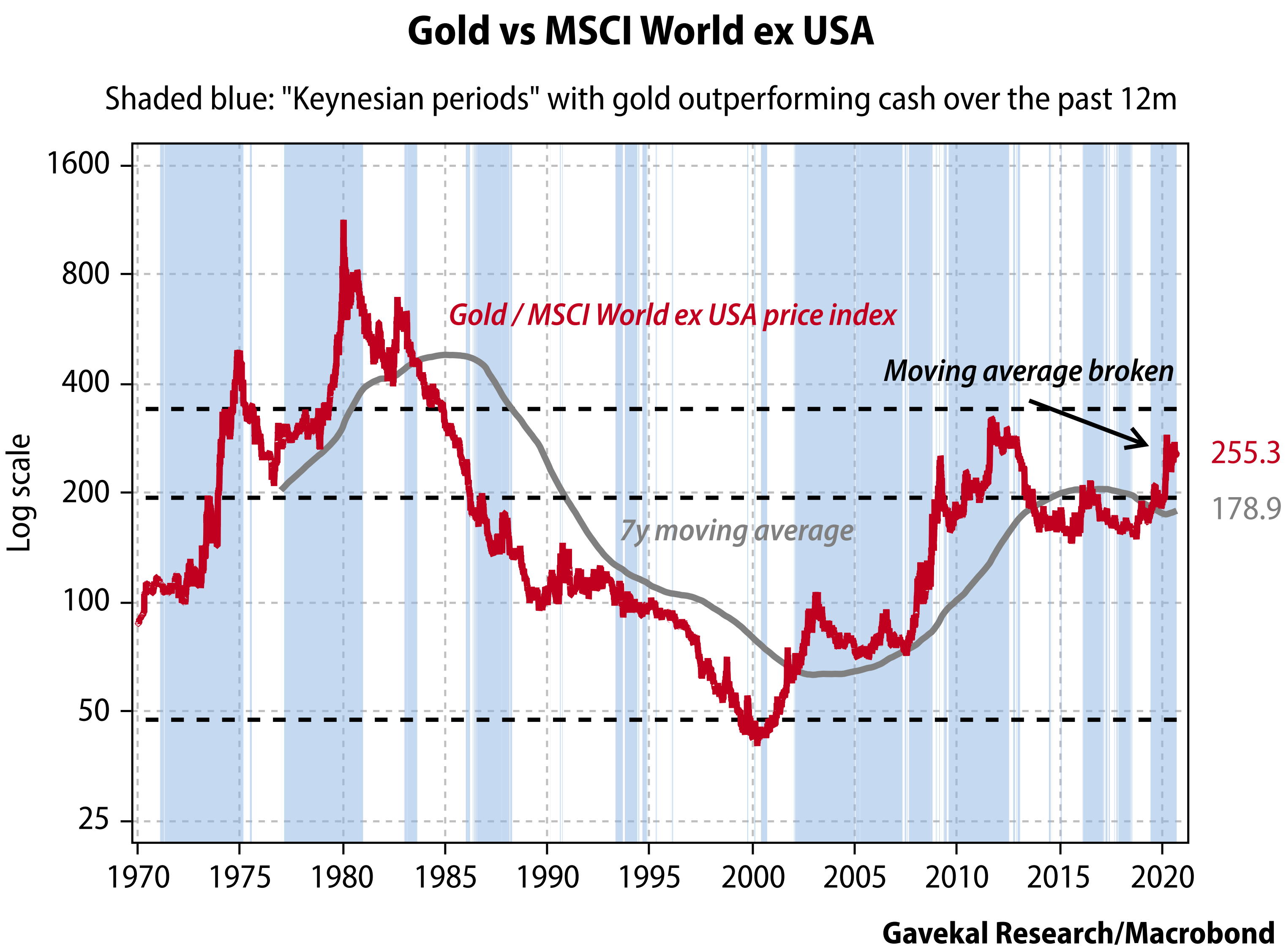
Gold looks very cheap compared to US equities, but may have turned a corner. The ratio of gold to the S&P 500 price index (without dividends) tends to return to a mean of 1.48. The ratio is at a low point, but has just broken up through its seven-year moving average.

Based on the previous counter-trend rallies, gold could more than double versus the S&P 500 by returning to the middle of this trading range over the next decade.

Gold is fairly expensive compared to global (non-US) equities



In contrast to the situation with US equities, gold is no longer cheap compared to global (ex-US) equities.

For gold to move into "overvalued" territory relative to global equities, the ratio would have to rise by a little over 20%.

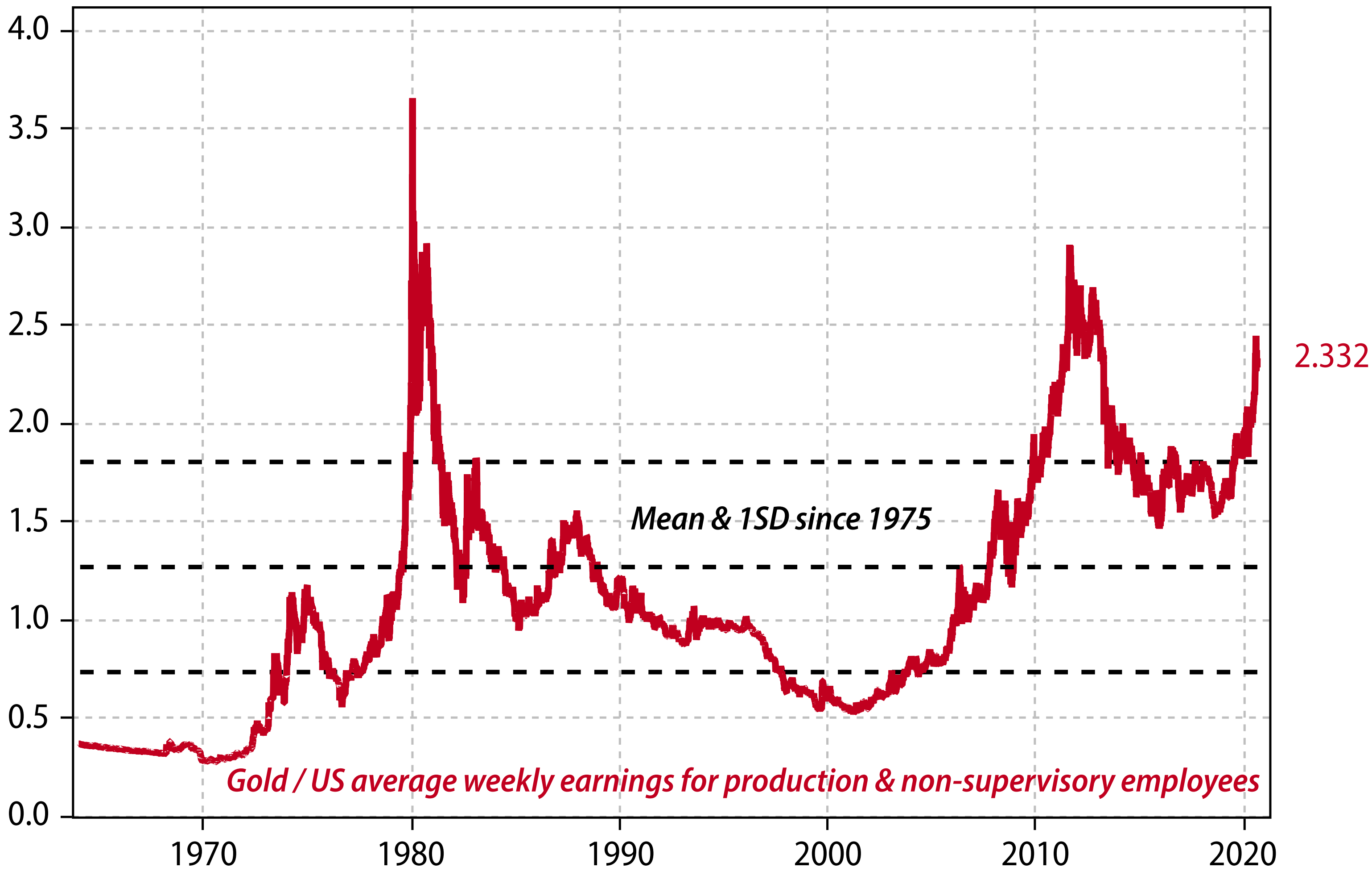
This could take place as a result of the gold price rising, global equities falling or any combination of the two.

The rising trend of this ratio seems set to remain so long as "Keynesian" conditions persist.

Gold as a consumption good

Gold looks expensive relative to US wages

Gold vs average weekly earnings of US non-supervisory employees



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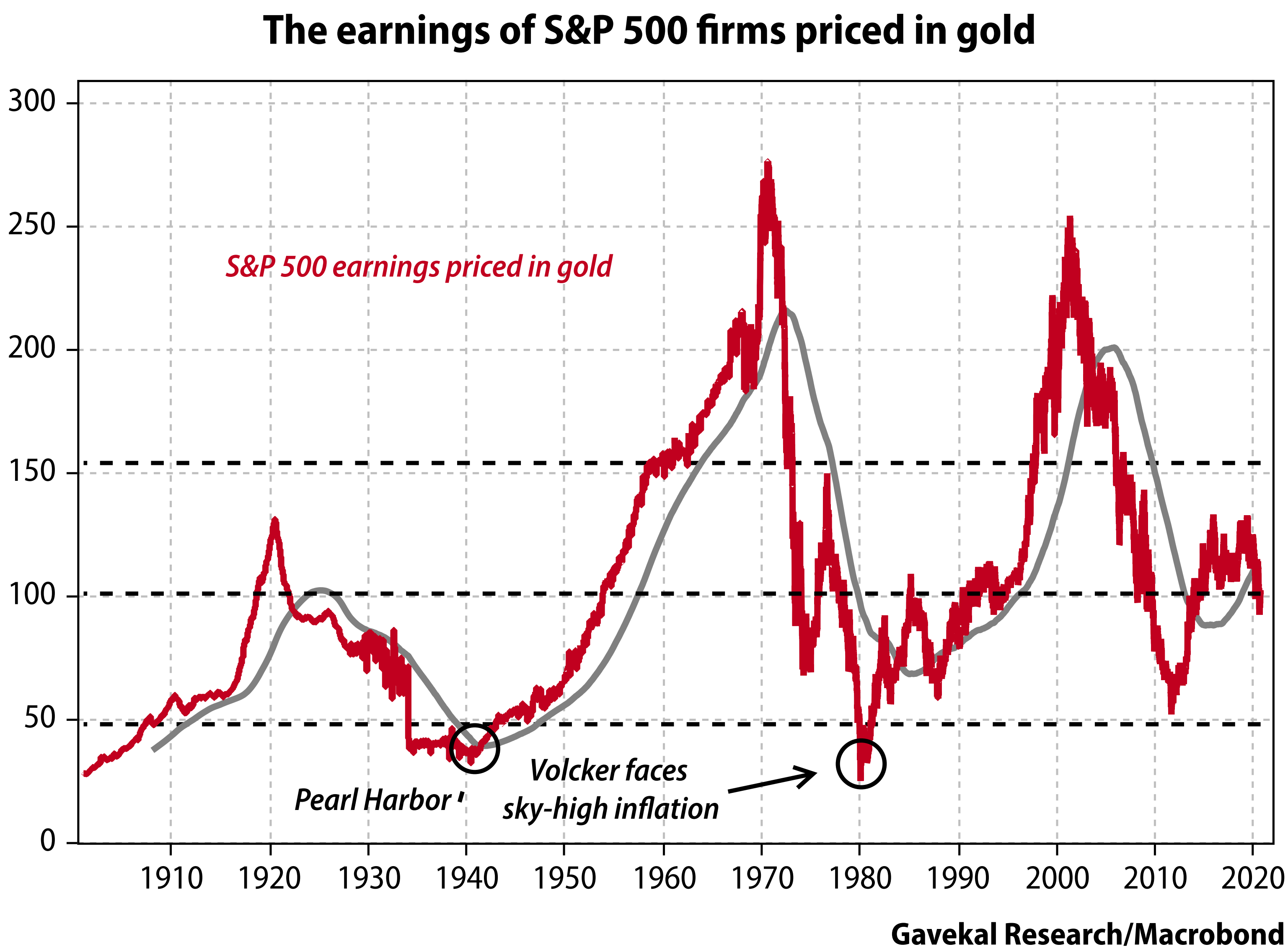
It takes the average US worker a little over two weeks of work to buy one ounce of gold today.

That ratio is historically high and so gold can be considered be overvalued relative to wages.

Will this be solved through rising wages in the future? If so, corporate profits could suffer.

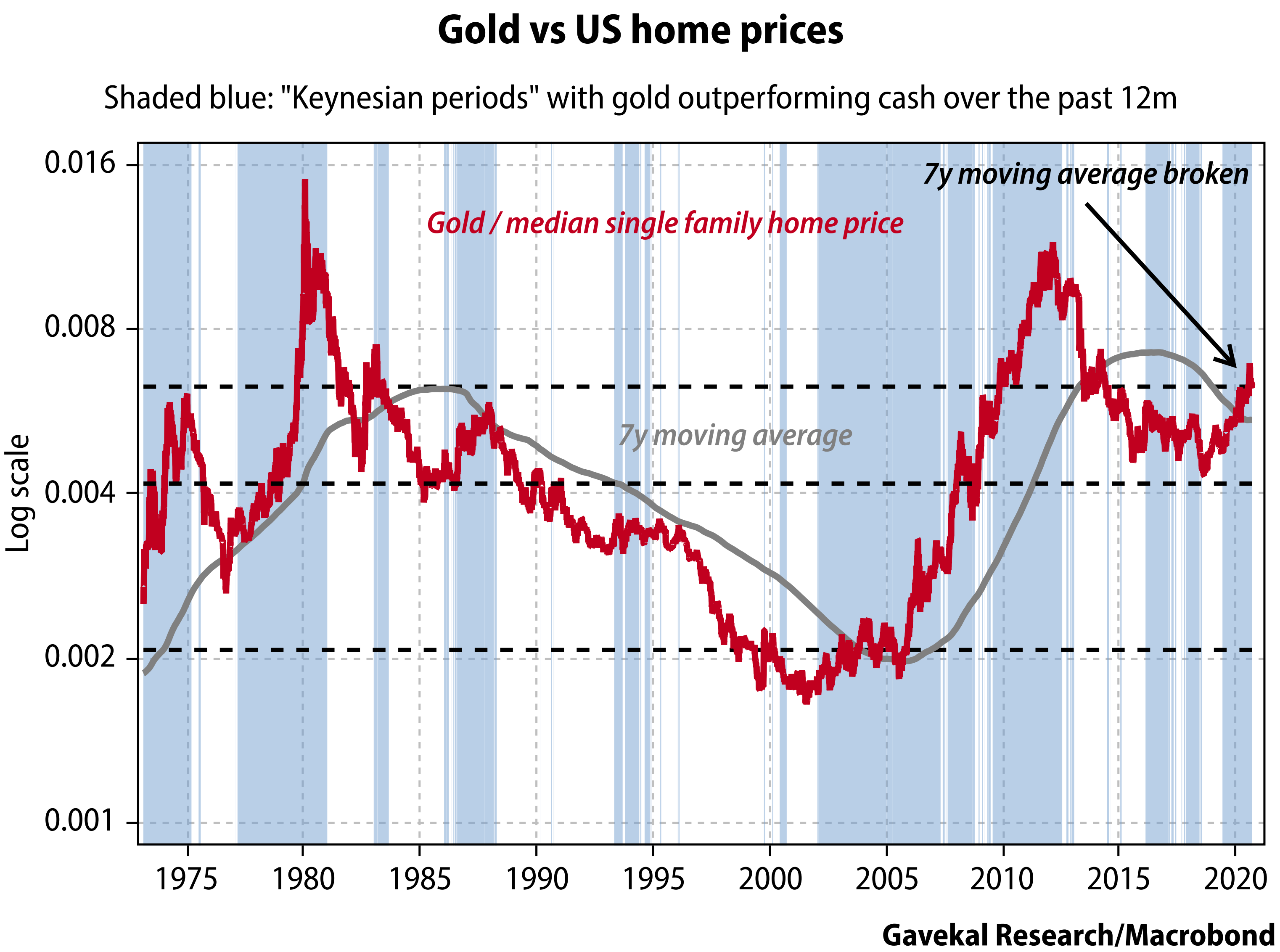
US corporate profits priced in gold are in the middle of the range



The ratio of S&P 500 corporate earnings to gold is close to its historical mean of about 100. In a bad scenario for the US economy, this ratio could fall to 50. In this case it should be noted that each time the ratio has fallen below 50 (1907, 1934 -42, 1980 and 2009), the US has faced a severe crisis.

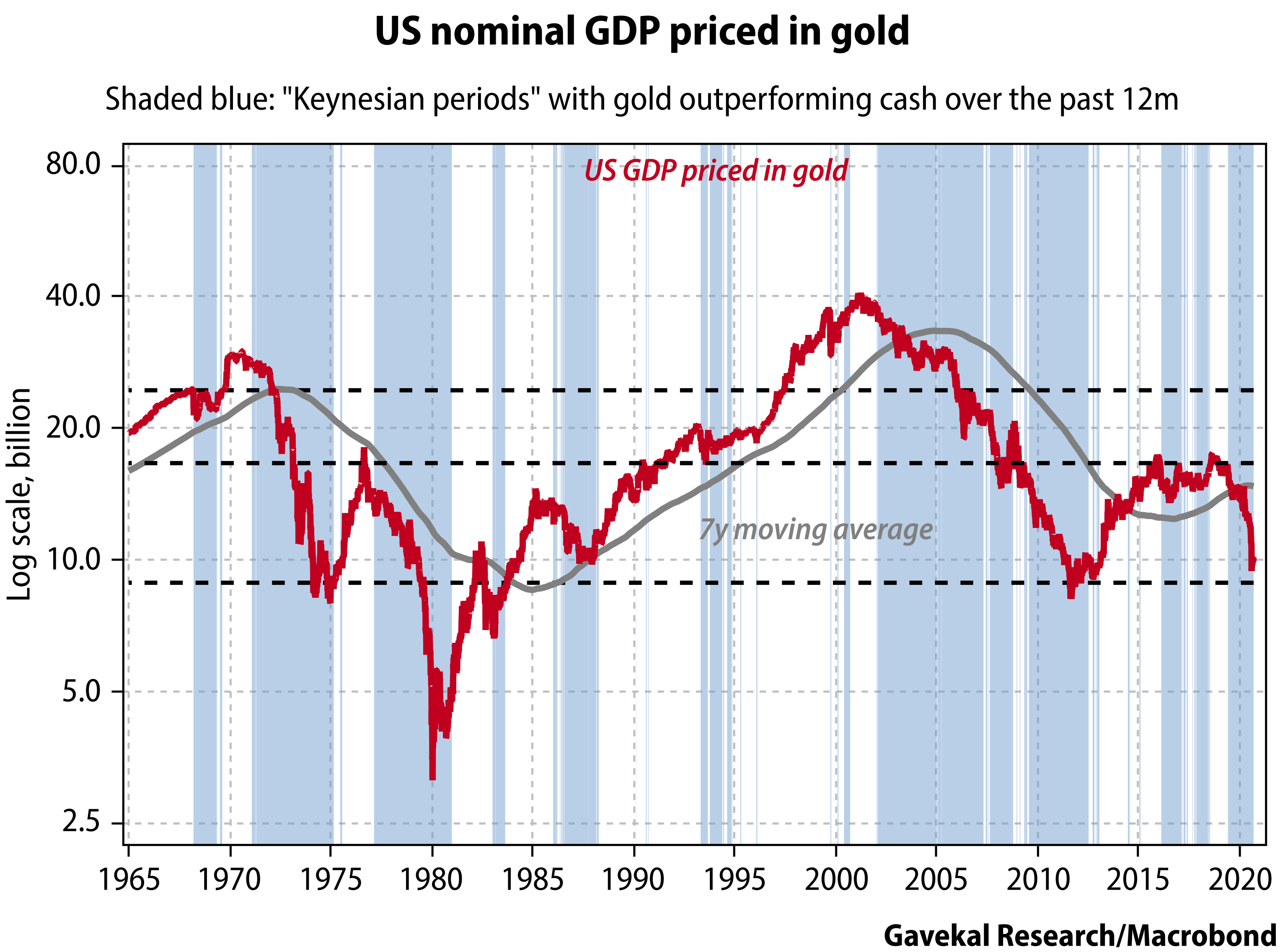
If the ratio falls back below 50, it is likely to be due to the US having endured yet another crisis.

Gold is starting to look expensive relative to US real estate



Gold is starting to look expensive compared to the median house price in the US. In other words, an investor loaded with gold may want to consider diversifying some of this holding into US real estate.

Real output measured in gold terms has taken a dive

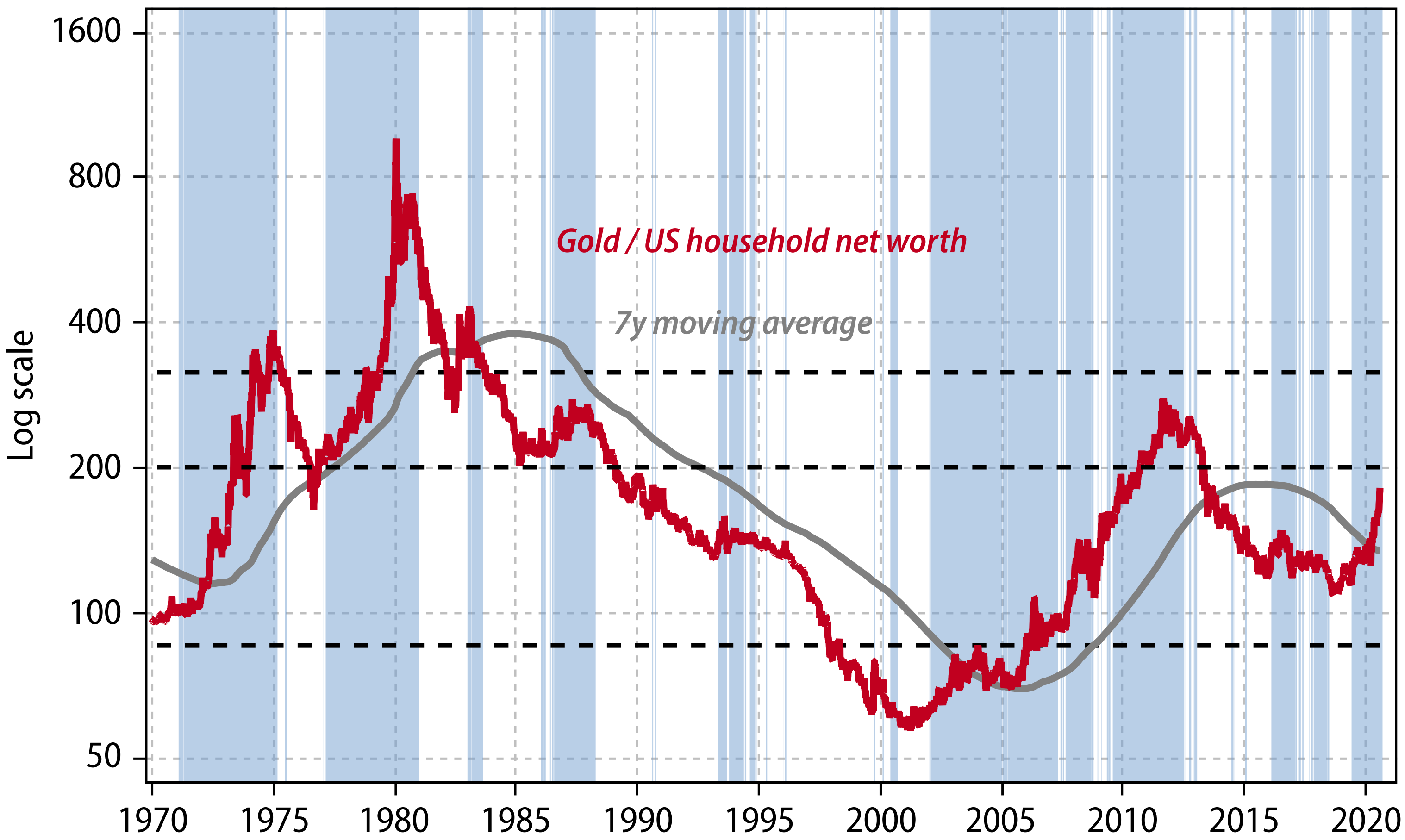


During "Keynesian" times, a big part of the achieved economic growth can be seen to be illusory. In such periods, both output and asset prices can rise in nominal terms but fall when measured against gold. This movement towards relative poverty seems to again be gaining steam today.

And finally, gold versus household net worth in the US

Gold vs US household net worth

Shaded blue: "Keynesian periods" with gold outperforming cash over the past 12m



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Gold's valuation when compared against the net worth of US citizens is not especially high. The implication is that gold is under-represented in US portfolios, as this measure is below its mean.

Gold's relative position on this measurement could easily double in the next ten years.

Conclusions

- **If gold is assessed as "money"**, it is far from looking overvalued or hitting extreme price levels seen at the top of previous gold bull markets.
- **If gold is viewed as a "commodity"**, it looks expensive. However, this may also be a case of the other commodities being too cheap.
- **If gold is treated as a "financial asset"**, it can rise further relative to US equities or treasuries; perhaps not so much against global equities.
- **If gold is considered a "consumption good"**, it looks expensive when compared to the average worker's income but affordable relative to the strength of their balance sheet.
- **The bottom line is that gold has not yet reached the kind of extreme valuations seen at the top of previous bull markets**. Hence, we conclude that there is still gasoline in the tank of this gold bull market.

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