

Michael S. (Mickey) Fulp M.Sc., C.P.G.

MercenaryGeologist.com contact@mercenarygeologist.com

The History of Gold-Oil Ratios: 1946-1969

A Monday Morning Musing from Mickey the Mercenary Geologist

Contact@MercenaryGeologist.com

August 27, 2018

Price ratios determine the relative value of commodities and are useful parameters to determine if a particular commodity is fairly valued, oversold, or overbought.

Ratios can give insight into potentially profitable speculations. These include the commodity itself, market derivatives, and equities and/or businesses in the supply chain from exploration, extraction, processing, refining, and sales to the manufactured products that contain said material.

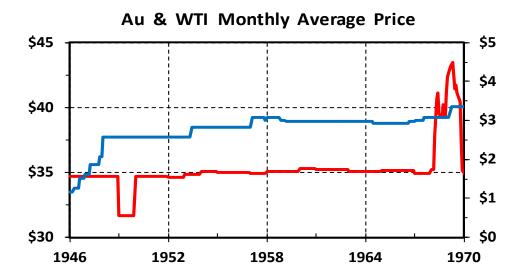
In previous efforts, I documented the history of gold-silver, platinum-gold, and platinum-palladium ratios from the United States' abandonment of the gold standard in 1971 to the present (**Mercenary Musings: May 9, 2016**; **February 6, 2017**; **January 15, 2018**). Today, the subject is gold and oil prices and their ratios.

Our data set consists of monthly average London gold prices provided by Kitco.com and monthly average oil prices for West Texas Intermediate Crude (WTI) sourced from the United States Energy Information Administration (EIA).

Note that we obtained yearly averages only for gold from 1946-1967 so extrapolated those values over the 12 months of any given year.

In the first of a two part analysis, I review prices and ratios of gold and oil from the end of World War II to about a year and a half before severing of the gold-dollar relationship in August 1971. Both commodities were fixed in United States dollars during this period.

Gold (red) and oil (blue) prices from 1946 to 1969 are shown on the following chart:



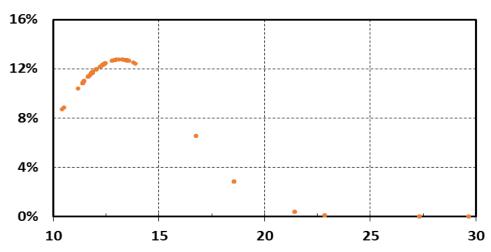
Since prices were fixed over this time frame, our treatment groups the common ratios within a narrow range that includes minor perturbations in the price of gold and periodic increases in the price of oil.

The resulting distribution table and bell curve illustrates this narrow range and the small percentages of outlying ratios that comprise only 28 of the 288 months:

Distribution of Au-WTI Ratios: 1946-1969

| Ratio | % of Months |
|-----------|-------------|
| < 11.4 | 0.7% |
| 11.4-13.6 | 90.3% |
| > 13.6 | 9.0% |

Au: WTI Ratio Distribution 1946 - 1969



Most of the 28 outliers to the largely fixed range occurred from January 1946 to December 1948 when the ratio was anomalously high due to low post-war oil prices. The ratio dropped systematically from 29.7 to 16.8 over 24 months as WTI rose from \$1.17 to \$2.57 per barrel.

There were four outliers in 1969 as the US attempted to preserve its gold reserves at Fort Knox by devaluing the dollar while still participating in the Bretton Woods agreement that allowed foreign countries to convert their US dollar reserves into gold.

High-side outliers occurred in January (13.8) and February (13.9) with low outliers in November (11.2) and December (10.5). Gold price volatility produced these anomalies with a peak at \$43.46 in May and a collapse back to \$35.17 in December.

For 1949, our Kitco data source shows that gold averaged \$31.69 with a ratio to WTI of 12.3. We researched this anomaly but were unable to find accounts of a discounted gold price and cannot assess or corroborate its veracity.

From our analysis I glean the following:

The period from 1946 to 1969 constitutes 24 of the 28 years of United States participation in the Bretton Woods agreement when the US dollar was tied to gold at \$35.00 an ounce. In reality, the gold price fluctuated around this official benchmark, ranging from a low of \$31.69/oz in 1949 to a high of \$43.46/oz in mid-1969.

In turn, the benchmark oil price represented by WTI was fixed by a consortium of the five largest US oil companies. Oil was generally moved upward in a series of incremental steps over the 24 years, from \$1.17/bbl in early 1946 to \$3.35/bbl in 1969.

The very low price for oil immediately following WWII produced a gold-oil ratio of nearly 30. This ratio dropped precipitously over the next two years as the United States entered its remarkable post-war economic boom and demand for oil soared.

At the end of the war, the US supplied two-thirds of world needs from its domestic oil fields and was self-sufficient until the mid-1950s. But with a growing economy and burgeoning demand for fuel, power, heating, and chemicals, the US was importing almost a million barrels of oil per day in the late 1950s, mostly from Venezuela and Canada.

President Dwight D. Eisenhower enacted import quotas in 1959 to reduce the influence of cheap foreign oil, mainly from the Middle East, on higher cost domestic extraction; these were in place until 1973.

This action produced serious consequences as increasing oil imports and unfunded costs from the Vietnam War and Johnson's social programs fueled inflation during the mid- to late 1960s. Quotas also caused accelerated depletion of America's giant oil fields and resulted in a severe decline in domestic production in the early 1970s.

Finally in 1968-1969, the US attempted to prevent foreign countries, and in particular France, from continuing to deplete its gold reserves. In a failed attempt to devalue the currency, the price of gold was increased from \$34.95 in December 1967 to as high as \$43.46 in the spring of 1969. But by January 1970, gold had reverted back to \$34.95.

This ill-conceived effort was a precursor to the United States' free floating of the dollar against gold in a series of three steps in the early 1970s. Nixon's "closing of the gold window" in August 1971 was essentially a unilateral withdrawal of the US from the Bretton Woods agreement.

All told, world governments' pegging of the dollar to gold and big oil's fixing of the North American benchmark price resulted in a narrow and stable range of gold to oil for 22 years.

The gist is this: An ounce of gold would buy you about 13 barrels of crude oil from 1948 to 1969.

However, government and industry manipulation of the free marketplace with what amounted to price controls had dire economic consequences for the United States of America over the next 48 years.

I will discuss the ramifications of these policies in part two of my analysis on the history of gold-oil ratios.

Ciao for now,

Mickey Fulp Mercenary Geologist



Acknowledgment: Troy McIntyre is the research assistant for Mercenary Geologist.com.

The Mercenary Geologist Michael S. "Mickey" Fulp is a Certified Professional Geologist with a B.Sc. Earth Sciences with honor from the University of Tulsa, and M.Sc. Geology from the University of New Mexico. Mickey has 35 years experience as an exploration geologist and analyst searching for economic deposits of base and precious metals, industrial minerals, uranium, coal, oil and gas, and water in North and South America, Europe, and Asia.

Mickey worked for junior explorers, major mining companies, private companies, and investors as a consulting economic geologist for over 20 years, specializing in geological mapping, property evaluation, and business development. In addition to Mickey's professional credentials and experience, he is high-altitude proficient, and is bilingual in English and Spanish. From 2003 to 2006, he made four outcrop ore discoveries in Peru, Nevada, Chile, and British Columbia.

Mickey is well-known and highly respected throughout the mining and exploration community due to his ongoing work as an analyst, writer, and speaker.

Contact: Contact@MercenaryGeologist.com

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