Gold and the ’Flations

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The rule-of-thumb goes that gold will appreciate during an inflation and lose value in a deflation. Empirical evidence shows quite the opposite — but the problem may lie in the question being answered. Is the question one of absolute return, or of the purchasing power of the metal over a period of ’flation? Absolute return does not exist. We quote the price of gold against dollars or Euros or Yen. Yet a portfolio manager, or even Aunt Matilda, is likely to consider its potential absolute contribution —“What will it contribute to my total return?” — some mixture of stocks, bonds, real estate, livestock, and gold. The manager is likely to concentrate on his portfolio return during 2005 (and on outperforming a relative benchmark, but that’s a different topic). If inflation races out of control, gold is probably the place to be. In a deflation this may not be the time to own gold, if for no other reason than everyone else who is buying and selling knows the price of gold collapses in a deflation (and that it goes up in an inflation).

But life continues after Morningstar calculates the winners and losers. In the end, money’s presence is only useful to numismatists and cashiers. This is not so apparent now in an age of credit and asset inflation. It becomes acutely obvious when the standard measurement for buying and selling the world’s wares — oh, let’s call it the US dollar — either challenges the 1923 Reichmark for the world championship in redundancy (i.e., prolonged inflation) or when wages slip, debts rise, and prices of goods fall (i.e., prolonged deflation).One historical study stands tall. Roy Jastram spent many years collecting and interpreting data of the historical relationship between gold and prices in England and the United States. Elaboration shall follow the distillation of his labor:

England, inflationary periods— the purchasing power of gold:1623–1658: –34%, 1675–1695:–21%, 1702–1723: –22%, 1752–1776: –21%, 1793–1813: –27%,1897–1920: –67%, 1933–1975:–25%.•
England, deflationary periods— the purchasing power of gold:1658–1669: +42%, 1813–1851:+70%, 1873–1896: +82%, 1920–1933: +251%

The raw numbers are not worth much, to the investor or to the preserver of capital. Gold has been a much better hedge against inflation than is shown above. For instance, during the inflationary period of1933–1976, gold lost 25% of its purchasing power but prices rose 1,434%. (As to what might have kept pace with inflation, “crime” comes to mind, which was the conclusion of many a corporate boardroom and trading desk.) Jastram produced two historical studies of the monetary desks sitting at the periodic table, Silver: The Restless Metal (1981) and The Golden Constant (1978). The methodology employed was identical, as was the purpose. They are “quantitative stud[ies] of the economic history of England [1560–1976] and the United States [1800–1976].” He approached this excursion into economic history as a statistician: “I do not presume to take on the role of an economic historian or a monetary economist as well.” (He was an economics professor at the University of California, Berkeley.) Nonetheless, patterns of monetary behavior under analogous historical events do repeat themselves. The purpose here is not to prophesize the continued relationships between gold and the ’flations, but to establish its historical existence, to apply as one sees fit to our circumstances as they unfold.

Jastram spends a good portion of the book explaining how he constructed his price tables. His purpose for doing so follows:
To construct a unified series of the price of gold since 1560 utilizing market prices, Bank of England buying prices, and Mint prices.

To construct a unified series representing the level of wholesale commodity prices in every year since 1560. [Jastram devotes chapters to explaining the full list of sources for prices, for classification of specific years when business expanded or contracted, and the methodology he employed.]

To determine the statistical relationship between the first two series in such a way as to measure the purchasing power of gold (operational wealth) since 1560.

To discover the behavior of the purchasing power of gold in the periods of inflation and deflation. [Deflationary periods were not so hard to come by as recent experience might lead us to believe. For instance, in England there were 74 years of deflation and 78 years of inflation after 1800.]

To judge the extent to which gold has served as an inflationary hedge in history and a conservator of operational wealth in periods of price recession. [On the term" operational wealth": Jastram steers clear of "real wealth" and "real income" because "the opportunities for confusion are too great for those readers who may consider gold to be the only real wealth, in contrast to paper money."]

To read Jastram today is to first acknowledge that his time series ceases when we tottered on the precipice of the most disruptive price fluctuations in Western history. On the other hand, the gold standard had been abandoned a half-decade back (and only half-heartedly supported during wars and various monarchical and republican escapades). The last few years of his study was the most chaotic period of monetary mayhem — until the period that followed his study. (It is worth considering the four-century chart. Note that, prior to the 20th century, through continental wars; periods of fiat, printing-press currency; revolutions and of deep deflations — how comparatively mild were the oscillations around the mean. If it weren't for the last quarter century of this 416-year chart, there would be no need for a logarithmic scale. As it is, gold and commodity prices shoot off the top of the chart in the early 1970s. It is during the 20th century, and on into the 21st, that we see the portrait of modern anxiety, angst, alienation, social destruction and dislocation; a neurological chart of man's "progress" from an agricultural economy through an industrial period on into the current financial economy in which our bearings are as loosely anchored as is the construction of the latest "Russian doll" CDO tethered to its funeral-home receivables. Contemporary artists, please note.)

Jastram certainly had a taste of what was to come but his conclusions could not have anticipated a world with $250 trillion in derivative contracts; a coordinated, world wide land and house inflation; the ability of the US to amass a trade deficit that was financed, in 2004, by sucking in 80% of the world's savings; and the Euro and its potential to unseat the dollar as the reserve currency. Yet, the country is still considered (for the most part) the model of productivity, prosperity, and getting what you want.

Jastram chose "England [as] a country for which data are available over unusually long spans of time. She represents an economy with constant political boundaries for many centuries [not true of Germany, Italy and France]. England has not been invaded by a foreign power since 1066…. From the Norman Conquest until the change to decimal coinage in 1971, English money has consisted of pounds, shillings, and pence, always with 20 shillings to the pound and 12 pence to the shilling.

For about 700 years, there was no break between the money of one year to the next. The coinage and the money of account never parted company." Conveniently, "the English are a nation of record keepers." This includes Prices and Wages in England from the Twelfth to the Twentieth Century, published in 1939. Jastram "cannot recommend too highly this remarkable achievement".

He recognizes that the United States cannot "match all of the attributes cited earlier for the choice of England" but "it is fully justified by its great importance both as a national economy and as an economic influence on the rest of the world". Also, "economic institutions are common to the two and similar motivations and traditions influence their commerce and finance".

To definitions: Jastram describes inflation and deflation as "any period of rapidly rising [or falling] prices". The author knows that he cannot define such subjective opinions as to "how fast is rapid; how precipitous is swift?" And, "this open question has to be related to the length of the time period which is descriptively designated as inflationary or deflationary." Since Jastram cannot satisfy everyone, he simplifies matters by satisfying himself: "I simply adopt an arbitrary schema and state my considered selection of terminal dates for periods of inflation or deflation."

To convention: Jastram sets 1930 as the starting point. Gold, the consumer price index, and the purchasing power of gold equal 100 in that year. For example: the purchasing power of gold in 1650 is 97.6, meaning the same amount of gold would buy 97.6 pots in 1650 and 100 pots in 1930.Jastram is not interested in "transient swings" but with "fundamental changes in price levels over substantial durations”. Periods of 20 to 30 years are more useful than longer periods. The composition of prices is relatively closer, as is the quality of the goods.

Jastram’s conclusions:
• Gold is a poor hedge against major inflations.
• Gold appreciates in operational wealth in major deflations.
• Gold is an ineffective hedge against yearly commodity price increases.
• Gold does maintain its purchasing power over long periods of time.
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• Gold does maintain its purchasing power over long periods of time “The intriguing aspect of this conclusion is that it is not because gold moves towards commodity prices but because commodity prices return to gold. ”[Jastram’s emphasis, as are all future italicized words in quotations.]

I add two more summations:(1) forget about the ’flations, gold has conserved operational wealth during periods of currency destruction; and(2) nobody has pursued Jastram’s work after 1976, but, to the extent the “retrieval phenomenon” (as Jastram calls it) is still valid, the surge in gold will chase the Dow Jones Industrial Average for best in show. On the first, Jastram only devotes one page to what he calls “The Attila Effect”. That is: “…historically, gold has served as a financial refuge in political, economic, and personal catastrophes…. [E]xamples are legion.” Jastram apologizes for what he considers the liberty of stating this. His intention was to record the history of gold’s relationship with purchasing power. He did not study the change in gold’s value when Attila showed up in the pantry. In response to that question he would probably say “priceless”. He did write: “Anyone who fears the collapse of his country’s currency is acting rationally when he shelters his assets in gold. ”Why bother with a quantitative study to describe that?

The retrieval phenomenon has demonstrated consistency. Examples include “three distinct cycles of the commodity price level between the beginning and the end. These were, bottom to bottom, 1700 to 1737, 1737 to 1752, and 1752 to 1779….The amazing feature of these three cycles is that at the midpoints of each the three statistical series involved converged on each other at a value they were to attain again almost 200 years later, in 1930.

”With book in hand, the reader can better judge the suitability of Jastram’s research in different circumstances. Without the reference, we will make do with Jastram’s verbal description of this chase across the centuries:

As early as 1650, commodity prices had risen to equate with gold. They passed down through the gold parity level in 1660 and lay below that line until they rose to touch gold again in 1695.

Again, commodity prices dipped below gold, until in 1710 commodity prices moved up to meet the more stable gold price index. They remained in constant relation to each other until 1720 when commodity prices fell sharply away from gold, not to return until 1740.

The next disparity developed shortly after 1745, when commodity prices again fell away from gold levels, always the more stable of the two. But by 1765 the retrieval phenomenon had reasserted itself, and commodity prices rose to meet the level of gold.

Between 1765 and 1793commodity prices again fell generally below gold levels but (to put it anthropologically) seemed to be striving constantly up to reach gold, witness 1771, 1776,1782, 1790. Commodity prices broke through the gold level in1793 and stayed above until they fell back down to meet gold in1815.

After the Napoleonic disturbance, gold resumed its prewar index level in 1820 and commodity prices fell to join it in1822. Thereafter through 1875commodity prices arced above and below the constant level of gold but always returned to the latter.

After 1875 (when they stood at 99.0 and 99.8, respectively) a divergence developed until 1915, when characteristically, commodity prices finally moved upward to meet gold. Commodity prices continued to climb past gold until they peaked in 1920. In the decline that followed they homed in again on gold until the two index numbers necessarily were equated in the common base year 1930 = 100. [In other words, all of the price changes through the entire period needed to start together at a certain point. Jastram chose 1930.]

The imagery here is that for nearly three centuries the level of gold was the loadstone for commodity prices. The latter traced a pattern falling and rising around the gold price level but always returning to it before wandering off again.

Why might this be? Jastram suggests:

If it is settled national policy that the price of gold will be constant, then there will be times when, for various reasons, commodity prices will fall below or above the constant level. When either of these swings becomes severe enough, monetary authorities will intervene and adjust the monetary supply to reverse the process. This will tend to return the commodity price level toward the constant price of gold. Not primarily because it is gold, but because it is constant

Why, then, are “gold” and “inflation hedge” so bound together? Probably because that is what we remember. The only exception, in which gold chased commodity prices, was in the United States between 1951 and 1976. Jastram postulates this was due to the price fixing of gold before the London Gold Pool fell apart in 1968. We may, or may not, live amidst similar price suppression today. (Similar or dissimilar — in the sense of whether the unwinding will chase the same path today.) England, by the way, would have joined the US as an exception during its final leg (1933–1976), if not for poor timing. Through 1974, gold stood at a 1.5% advantage to prices. After 1976, only two years later, gold had lost 25% of its operational wealth since 1933, a 44-year period.

This is an example of how the 20th century stands apart in his study. Violent movements of price changes are concentrated in the last three generations. This observation comes up time and again: “[T]he annual rates of inflation were not at all severe until the twentieth century.” Regarding English deflations: “The most recent deflation [1930–1933] was by far the worst.”

Gold’s ability to hedge during deflations begs to be charted in the New Era. As Jastram states: “[T]he historical capacity of gold as a hedge against deflation may be contingent on the willingness of government to maintain a stable gold price.” The government’s willingness to maintain a stable anything in troubled times is always suspect; today it is certainly absent. But then, the alternative (chaotic, bombastic pontificating on a difficult subject which not five legislators in Washington possess the capacity to understand) may be money madness, a good time to stuff something solid into the safe.

ORGANIC CURRENCIES

It may be useful to apply The Golden Constant to a pair of contemporary topics — the future of the Euro and the reintroduction of a gold standard. The gestation of a currency was described by Carl Menger as a “medium of exchange. It is something that men acquire as a means of acquiring something else. It enables people to avoid the inconvenience of direct exchange, or barter, and engage in a more convenient indirect exchange.” Money “is a social institution, the unintended result, the unplanned outcome, of individual efforts of members of a society”.

The slow evolution of gold as an accepted means of exchange fills this description. It is commonly assumed that the gold standard was a law of the land, of many lands, decreed from on high. In both countries under discussion, the gold standard was accepted “as a social institution” long before it was written into law. Jastram notes: “The remedy [to hyper-irresponsibility] was the prevalent silver coins of those days [circa 1717] and was not made to apply to the rarer gold…. The odd thing is that England did not establish the gold standard by any design or deliberate act. The proclamation of 1717 brought the golden guinea down to 21 shillings. [Shillings were silver pieces.] The 1717 Act made the value of 21 shillings in money tied to the value of gold in a guinea and not to the value of silver in 21 shilling pieces.” It was only at the conclusion of the Napoleonic Wars, in 1816,“with Lord Liverpool’s Act [that established] gold as the sole standard. But a full century earlier one of the greatest currencies of all time had quietly eased onto the gold standard at a price of 3 pounds, 17 shillings, 10.5 pence per standard ounce. ”Through the 19th century, other countries locked their currencies in terms of fixed quantities of gold. This was quite unlike the wholesale European conversion into the Euro a couple of years back.

The US established a bimetallic system in 1792. “It worked reasonably well” until its suspension on December 30, 1861. The government printing presses issued “legal-tender notes” (no backing other than the government’s good word, which was not good enough to forestall an immediate inflation.) Specie payment was not resumed until 1879 when the US reverted to a specie standard, that standard being gold. According to Jastram, silver was discarded by oversight in legislation (in 1873), though he mentions opposing views of those who believe the act was more than absent-mindedness. In any case, there was no meaningful debate about the adoption of gold (as the sole standard) in Congress or the Senate, buffering his contention that the US eased its way on to the gold standard. Even then, it was the Gold Standard Act of 1900 “which provided legal recognition of what had been in operation since January 1, 1879”.

We have the Euro today. It came into being as a negotiated piece of legislation. It is a paper currency that is not convertible. It is certainly giving the dollar its comeuppance, but it has not been tested by plague, war, famine, or a 20% unemployment rate.

Proponents of a new gold standard may find that a widespread institution of such is not the best route even if the world’s financial architecture crumbles (besides the practical problem of nobody speaking to one another). An analogy might be to the League of Nations or the United Nations. Both operations were launched with great fanfare and promise. The first disappeared, and the second is an incoherent mess, 60 years after its launch. Maybe they promised too much or maybe they were always castles in the sky. Maybe the United Nations could have made practical contributions if it had restricted membership to a dozen countries. Whatever the case, a couple of hundred voting countries is an impossible collage of interests and any future monetary standard with teeth should start out as a small, natural evolution.

THE GOLDEN CONSTANT:POST-JASTRAM

Jastram’s work moves across time from an agricultural economy and into the industrial age. The final 25 years of his study gestated the financial economy, but finance did not control economic activity until well after Jastram’s time. Nor did he witness the worldwide asset inflation propagated by the US central bank. He tracked consumer prices, not financial assets. How to incorporate this change into an extrapolated study is for a better mind: How does one adjust Jastram’s calculations of relative prices during a period in which billions of dollars worth of US home mortgages are being bought by the Chinese central bank and recycled (thus inflating) the Chinese economy? The researcher who relies on the methods that produced Prices and Wages in England from the Twelfth to the Twentieth Century may fall short.

On the other hand, the shift from an agricultural to an industrial economy altered the role of finance in a way that touched every hearth and home:

There were bad times and good as long as economic history has been set down…. But until the nineteenth century, these events were largely accounted for by crop failures, epidemics, wars, civil disorders, political struggles, deviant fiscal finances…in respect to crises and depression, and by good harvests, prolonged peace, enlightened rule on the side of revival and prosperity…. It was not until a large part of the populace was receiving and spending money incomes, producing goods for large markets, organizing enterprises with few employers and many employees, and using credit instruments in support of all this that economic fluctuations took on the character of business cycles.

This economic change swept large portions of the population into a consciousness of money. That Jastram's study applied equally well on either side of that divide may foreshadow the financialisation of the American mind as equally inconsequential to future patterns. (One sign of that mind: In a 1979 poll, fewer than 10% of Americans knew who the Federal Reserve chairman was. Today, the percentage would be higher in Zanzibar.)

Another critical distinction that crept up and then pounced on Jastram's back is the era of democracy for all, liberty for none. Without democratic pressures, would the US have jettisoned the gold (demi)-standard in 1971? The Johnson and Nixon administrations were afraid to do what governments from centuries past had been forced to exact —tribute from the people when fighting a war. The current Bush administration is equally neglectful (and queasy) in this regard. Looking at the current Chinese government's thwarted efforts to rein in a recklessly credit-defaulting society, the era of mass democracy can be just as exacting in a communist country. Twenty million Chinese, wandering from country to city — and often back again — looking for a wage-earning position, leave this communist government in a position somewhat analogous to the court of Louis XVI. We could bounce conjectures against theories and tackle the empiricists as to whether the leaders of the communist country mentioned have fallen prey to the unlimited credit pouring out of democracies, or whether China's recycling of redundant dollars into bad credit is a product of its participation in globalization. There are several modern tendencies that have swept the two forms of government into similar dilemmas (one of which is that they are not so different as the categorization suggests).

Anyone who knows anything worth knowing understands that the financial economy will come a cropper. The proportion of profits from financial operations at Ford, General Motors, and the industrial heavies does not make for a functioning economy. What comes next? The industrial age is gone. Given the rising overcapacity in Asia, it might not last long there, either. We had a run at "the service economy", and it was anything but. Jastram's successor has his hands full, not to mention the rest of us along for the ride. An initial recognition might be the consistency of the golden constant over 400 years, and that, during the waning days of Jastram's study, gold and commodities were racing off the chart, in alternate sequence (England vs. the US), but nonetheless, both heading in the same, near-vertical trajectory. A final question: Was the1980 spike in gold to US$850 an ounce a demonstration of Jastramian wandering, which called for the long, bear market in gold?

About the book:
The Golden Constant is not easy to find. Reg Howe and Bob Landis, custodians and editors of the Golden Sextant website (http://www.goldensextant.com), have posted the tables and charts referred to above. For the charts, go to "Library", then see "Roy W. Jastram: 'Remarks to the Securities Analysts Society of San Francisco'". The charts are at the end of the speech. For the tables, go to "Speeches", and then see "Gold is Money, Deal with It!" by Bob Landis (RKL). The tables are set out in footnotes7 through 9. Landis briefly discusses the book in the text accompanying the footnotes.