

John Williams'
Shadow Government Statistics
Analysis Behind and Beyond Government Economic Reporting

COMMENTARY NUMBER 428
March CPI and PPI, February Trade Balance
April 13, 2012

CPI Headline Inflation of 0.3% Was 0.8% Not Seasonally Adjusted

March Year-to-Year Inflation: 2.7% (CPI-U), 2.9% (CPI-W), 10.3% (SGS)

Broad-Based Inflation Reflected in Stronger “Core” Inflation

February Trade Improvement Should Boost GDP Expectations

PLEASE NOTE: The next regular Commentary is scheduled for Monday, April 16th, covering March 2012 retail sales, with a subsequent Commentary on Tuesday, April 17th, covering March industrial production and housing starts.

Best wishes to all — John Williams

Opening Comments and Executive Summary. There is something to be said for looking at not-seasonally-adjusted data, where the unadjusted reporting more closely reflects real world activity. The case for considering the unadjusted numbers is even stronger, when adjusted reporting is of questionable reliability and significance, as in the present circumstance. Consider today’s release of the March CPI-U, which showed an adjusted monthly increase of 0.3%. Unadjusted, the increase was 0.8%, reflecting a sharp increase in gasoline prices that otherwise was muted by seasonal adjustments. For the consumer who pays to fuel his or her automobile with gasoline, the 0.8% inflation rate is more meaningful, unless

the gas prices are in seasonally-adjusted dollars. In like manner, ignoring broader unemployment measures for the moment, an individual currently counted in the headline unemployment rate would consider the unadjusted 8.4% more relevant than the adjusted 8.2% rate published for March. There is no reality in being employed in a nonexistent seasonally-adjusted job.

When seasonal adjustments are working properly, they serve a useful purpose, where adjusted month-to-month reporting should give a meaningful sense of underlying shifts in economic or inflation activity. Adjusted data are net of regular seasonal fluctuations tied to such factors as the school year or holiday shopping season. As discussed frequently in these *Commentaries*, however, the traditional seasonal-adjustment process for economic data has been severely distorted by the economic collapse of the last six years. Regular seasonal patterns of business activity were overwhelmed and masked by the severity and the extreme duration of the economic downturn, with the result that the seasonal-adjustment models created less-reliable and less-stable seasonal patterns. Accordingly, current adjustments no longer are stable and produce unreliable indications of month-to-month activity.

The same case can be made for seasonal adjustments to inflation data, where oil and related price swings have been so extreme in magnitude and irregular in pattern during the economic, financial and systemic-solvency crises of the last six years or so.

Consider gasoline prices in the more-stable environment of March 2006. An unadjusted monthly gain of 3.9% in gasoline prices was reduced to a gain of 3.6%, after seasonal adjustment. Further, in March of 2005, an unadjusted monthly gain of 7.1% in gasoline prices was increased to a gain of 8.0%, after seasonal adjustment. These data are from the original press releases.

In the unstable and ongoing-crisis environment of March 2012, though, seasonal adjustments suppressed gasoline price inflation severely, reducing an unadjusted 8.1% monthly gain in gasoline to a seasonally-adjusted 1.7% increase. The change here largely reflected the inability of the seasonal-adjustment modeling process to handle the extreme, irregular and protracted instabilities in oil and gasoline prices of recent years. The Bureau of Labor Statistics (BLS) has an “Intervention Analysis” process that could be used to correct these issues. That was used to alter seasonal-adjustment factors for gasoline prices, so as to eliminate distortions from the effects of Hurricane Katrina (August/September 2005); yet, successful use of the process has not been evident during the current crises.

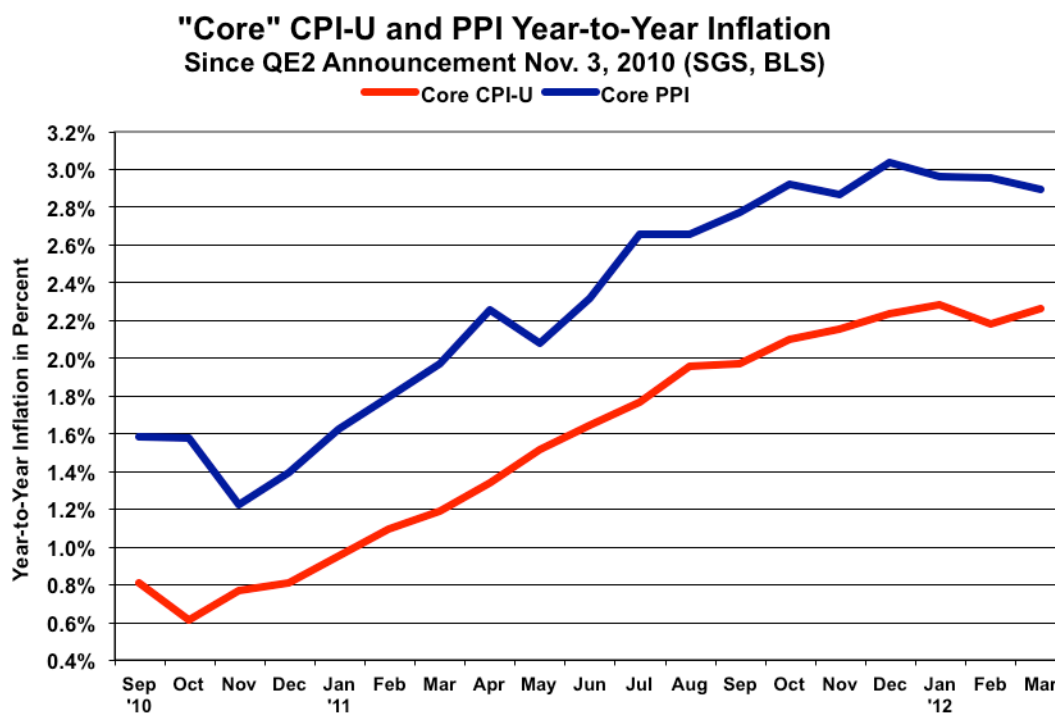
CPI and PPI. While monthly reporting of both headline CPI and PPI inflation reflected seasonal-adjustment suppression of energy inflation, unadjusted year-to-year inflation weakened for both series. Adjusted March CPI-U inflation was 0.3% for the month, down from 0.4% in February, with unadjusted year-to-year inflation at 2.7% in March, versus 2.9% in February.

Adjusted March PPI finished goods inflation was 0.0% for the month, down from 0.4% in February, with unadjusted year-to-year inflation at 2.8% in March, versus 3.3% in February.

The softening annual inflation here is going against the initial QE2 inflation surge of a year ago.

That said, more complete effects of higher oil, gasoline and other energy-related prices will be picked up as the relevant seasonal factors reverse direction in the second-half of 2012. More importantly, March inflation was seen across broad sectors of the economy, with the “core” CPI-U inflation picking up, again.

PPI “core” inflation also remains strong. The effects of high oil prices keep spreading through all sectors of economic activity, as reflected in the following graph.

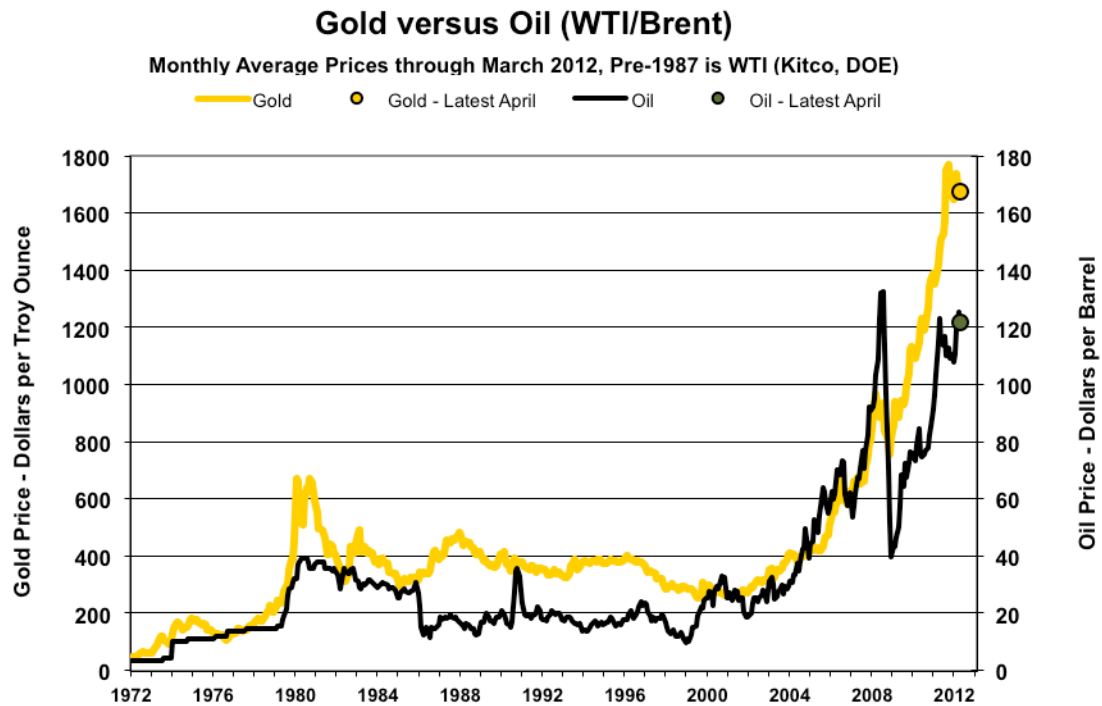
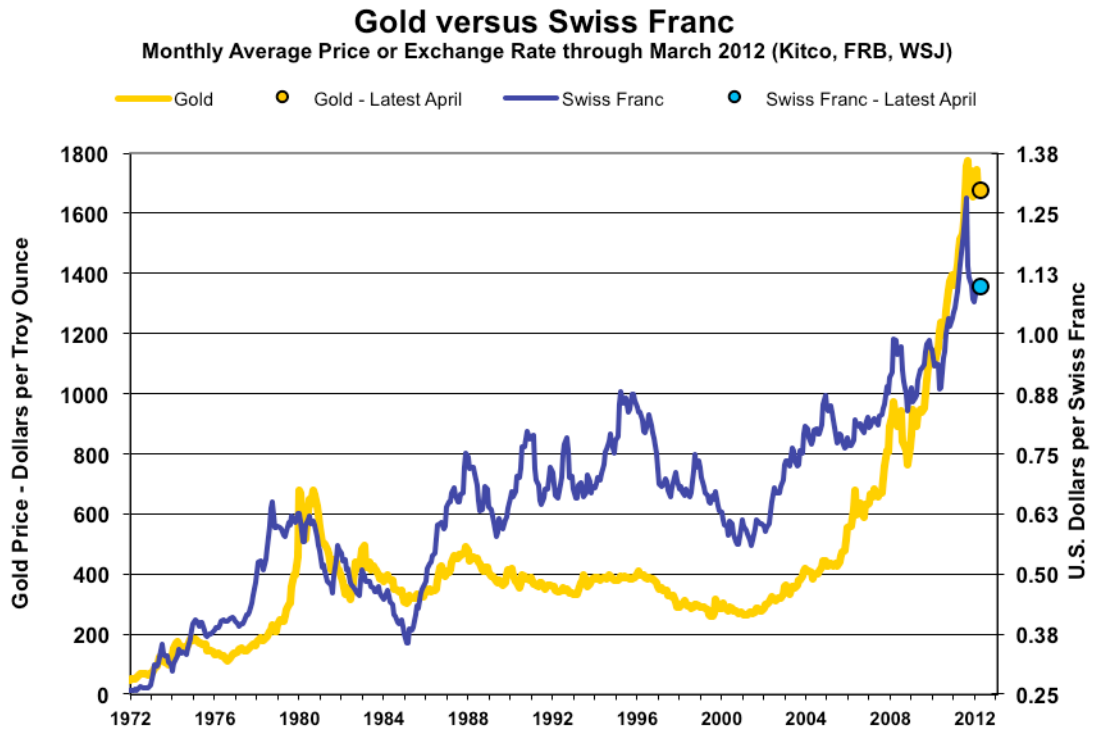


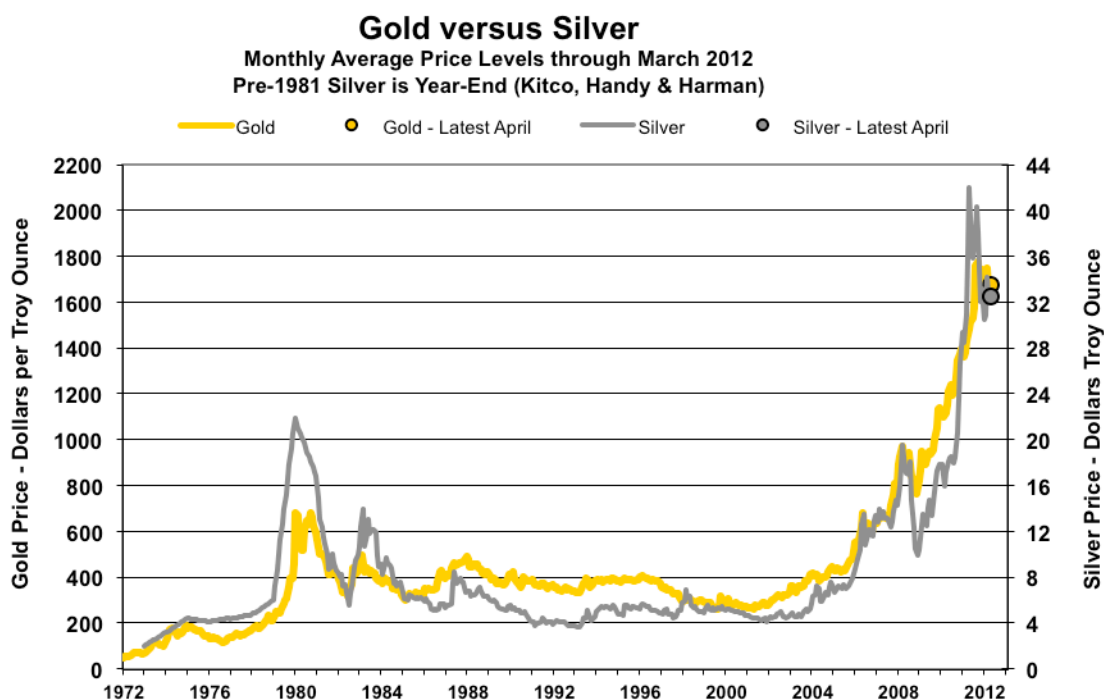
The effects of inflation on consumer income and spending will be reviewed in the next *Commentary* on Monday, April 16th, along with the detail of March retail sales.

Trade Deficit. The February 2012 trade deficit narrowed sharply from January, both in nominal and real (unadjusted- and adjusted-for-inflation) terms. As a result, consensus forecasts should be upped for the pending initial estimate of first-quarter 2012 GDP on April 27th. The deficit likely will widen again in March, with the effect of causing a downside revision to the second estimate of GDP on May 31st.

Hyperinflation Watch. In the context of the updated economic background published in [Commentary No. 426](#), and with full consideration to intervening economic, inflation and financial-market developments since the January 25, 2012 publication of the hyperinflation report, the broad economic, inflation and hyperinflation outlooks discussed in [Hyperinflation 2012](#) have not changed.

Following are the graphs of the price of gold versus the Swiss franc, oil and silver that usually are published in the *Commentary* covering the CPI release. Market volatility remains high, with oil prices reflecting pressures from continued political tensions in the Middle East, on top of lingering pressures from the Fed’s dollar debasement policies. The Swiss franc reflects its continuing quasi-peg to the euro, a relationship that should prove to be short-lived against countervailing market pressures.





REPORTING DETAIL

CONSUMER PRICE INDEX—CPI (March 2012)

Gasoline Price Inflation Crushed by Seasonal Adjustments. As discussed in the *Opening Comments and Executive Summary*, the 0.3% headline March CPI-U inflation was 0.8% before seasonal adjustments, with the difference due largely to suppressing nature of the adjustments made to rapidly rising gasoline prices. Inflationary pressures were spread broadly across the economy, with a renewed increase in the annual “core” CPI-U inflation to 2.3% in March, up from 2.2% in February. Nonetheless, unadjusted year-to-year aggregate CPI-U inflation in March slowed to 2.7% from 2.9% in February.

Notes on Different Measures of the Consumer Price Index

The Consumer Price Index (CPI) is the broadest inflation measure published by the U.S. Government, through the Bureau of Labor Statistics (BLS), Department of Labor:

*The **CPI-U (Consumer Price Index for All Urban Consumers)** is the monthly headline inflation number (seasonally adjusted) and is the broadest in its coverage, representing the buying patterns of all urban consumers. Its standard measure is not seasonally adjusted, and it never is revised on that basis except for outright errors.*

*The **CPI-W (CPI for Urban Wage Earners and Clerical Workers)** covers the more-narrow universe of urban wage earners and clerical workers and is used in determining cost of living adjustments in government programs such as Social Security. Otherwise its background is the same as the CPI-U.*

*The **C-CPI-U (Chain-Weighted CPI-U)** is an experimental measure, where the weighting of components is fully substitution based. It generally shows lower annual inflation rate than the CPI-U and CPI-W. The latter two measures once had fixed weightings—so as to measure the cost of living of maintaining a constant standard of living—but now are quasi-substitution-based.*

*The **SGS Alternative CPI-U Measures** are attempts at adjusting reported CPI-U inflation for the impact of methodological change of recent decades designed to move the concept of the CPI away from being a measure of the cost of living needed to maintain a constant standard of living.*

CPI-U. The BLS reported today (April 13th) that the headline, seasonally-adjusted CPI-U for March 2012 rose by 0.29% (up by 0.76% unadjusted) for the month. That followed a monthly gain of 0.41% (up by 0.44% unadjusted) in February.

The BLS reported a not-seasonally-adjusted 8.1% monthly gain in March gasoline prices, versus a 7.3% monthly gain indicated by the more comprehensive surveying of the DOE. The difference was in the BLS catching up with its underreporting of February prices. Seasonal adjustments in March depressed gasoline price inflation, turning an unadjusted 8.1% monthly gain in gasoline into a seasonally-adjusted 1.7% increase.

After 15 straight months of rising “core” CPI-U inflation (net of food and energy inflation), through January 2012, the February annual CPI-U core inflation notched lower on an annual basis to 2.18% from 2.28%. In March, however, the core rate turned higher, once again, to 2.26%. That remained well above the core inflation of 0.61%, in November 2010, when Mr. Bernanke introduced QE2 in a successful effort to debase the dollar, with the effect of spiking oil prices. The core annual inflation numbers for both the CPI-U and PPI reflect the ongoing impact of higher energy prices in the broad economy (see the graph and comments in the *Opening Comments and Executive Summary*).

March 2012 unadjusted year-to-year CPI-U inflation eased to 2.65%, from 2.87% in February.

Year-to-year total CPI-U inflation would increase or decrease in next month’s April 2012 reporting, dependent on the seasonally-adjusted monthly change, versus the 0.38% gain in the adjusted monthly level reported for April 2011. I use the adjusted change here, since that is how consensus expectations are

expressed. To approximate the annual unadjusted inflation rate for April 2012, the difference in April's headline monthly change (or forecast of same) versus the year-ago monthly change should be added to or subtracted directly from the March 2012 annual inflation rate of 2.65%.

CPI-W. The narrower, seasonally-adjusted CPI-W, which has greater weighting for gasoline than does the CPI-U, rose by 0.33% (up by 0.89% unadjusted) in March 2012, versus a gain of 0.49% (up by 0.49% unadjusted) in February.

Unadjusted, March 2012 year-to-year CPI-W inflation was 2.85%, down from 3.12% in February.

C-CPI-U. Year-to-year inflation in the March 2012 C-CPI-U eased to 2.36%, from 2.58% in February.

The chain-weighted CPI-U is the fully substitution-based series that gets touted as a CPI replacement by inflation apologists and by those who oppose use of the existing CPI-U and CPI-W, including a number of politicians looking to cut deficit spending by using the C-CPI-U to reduce Social Security annual cost of living (COLA) adjustments artificially. The series is reported only on an unadjusted basis and is revised annually for the prior two years, unlike the unadjusted CPI-U, which never is revised, except for outright calculation errors.

Alternate Consumer Inflation Measures. Adjusted to pre-Clinton (1990) methodology, annual CPI inflation was roughly 6.0% in March 2012, versus 6.2% in February. The SGS-Alternate Consumer Inflation Measure, which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was about 10.3% (10.28% for those using the extra digit) in March 2012, against February's 10.5%.

The SGS-Alternate Consumer Inflation Measure adjusts on an additive basis for the cumulative impact on the annual inflation rate of various methodological changes made by the BLS (the series is not recalculated). Over the decades, the BLS has altered the meaning of the CPI from being a measure of the cost of living needed to maintain a constant standard of living, to something that neither reflects the constant-standard-of-living concept nor measures adequately most of what consumers view as out-of-pocket expenditures. Roughly five percentage points of the additive SGS adjustment reflect the BLS's formal estimate of the annual impact of methodological changes; roughly two percentage points reflect changes by the BLS, where SGS has estimated the impact not otherwise published by the BLS.

Gold and Silver Highs Adjusted for CPI-U/SGS Inflation. Despite the September 5, 2011 historic-high gold price of \$1,895.00 per troy ounce (London afternoon fix), and despite the multi-decade-high silver price of \$48.70 per troy ounce (London fix of April 28, 2011), gold and silver prices have yet to re-hit their 1980 historic levels, adjusted for inflation. The earlier all-time high of \$850.00 (London afternoon fix, per Kitco.com) of January 21, 1980 would be \$2,506 per troy ounce, based on March 2012 CPI-U-adjusted dollars, \$9,187 per troy ounce based on SGS-Alternate-CPI-adjusted dollars (all series not seasonally adjusted).

In like manner, the all-time high price for silver in January 1980 of \$49.45 per troy ounce (London afternoon fix, per silverinstitute.org), although approached in 2011, still has not been hit since 1980, including in terms of inflation-adjusted dollars. Based on March 2012 CPI-U inflation, the 1980 silver price peak would be \$146 per troy ounce and would be \$534 per troy ounce in terms of SGS-Alternate-CPI-adjusted dollars (again, all series not seasonally adjusted).

Number of Federal Reserve Paper Dollars per Troy Ounce of Gold

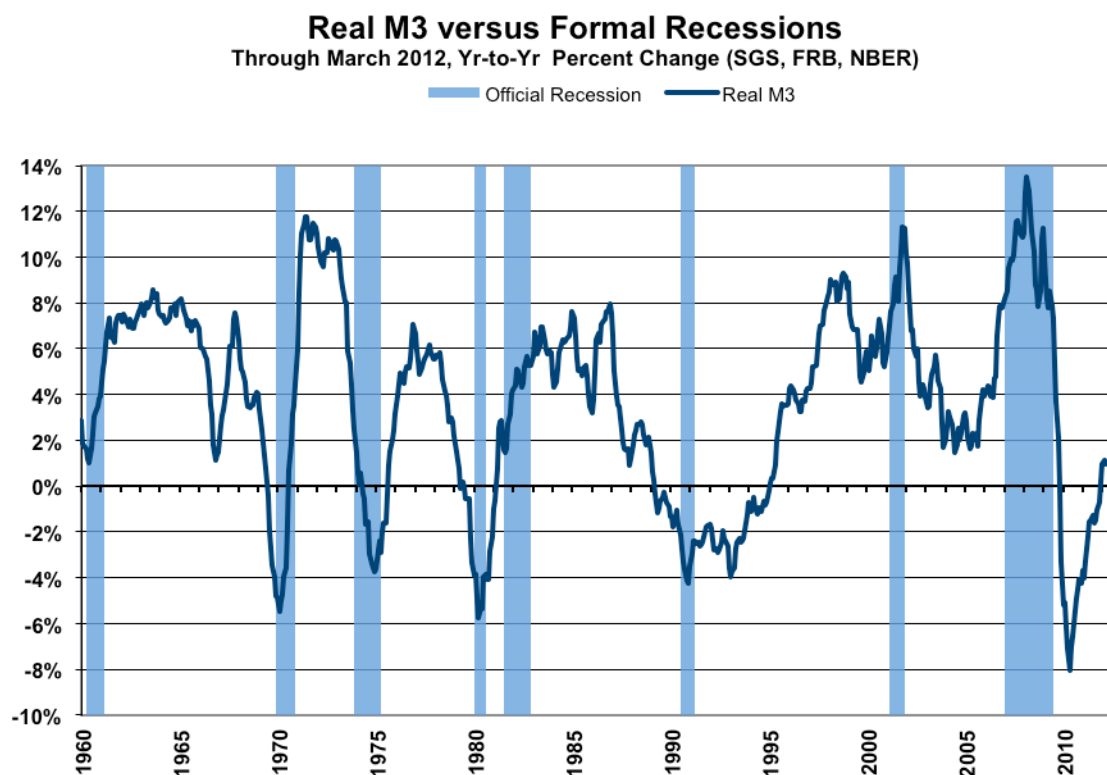
Monthly Average through March 2012 (Kitco)



As shown in Table 1 on page 50 of [Hyperinflation 2012](#), over the decades, the increases in gold and silver prices have compensated for more than the loss of the purchasing power of the U.S. dollar as reflected by CPI inflation, while they effectively have compensated fully for the loss of purchasing power of the dollar based on the SGS-Alternate Consumer Price Measure (1980 Methodologies Base).

Real Money Supply M3. The signal for a double-dip or ongoing recession, based on annual contraction in the real (inflation-adjusted) broad money supply (M3), discussed in the in [Hyperinflation 2012](#), remains in place and continues, despite real annual M3 growth having turned to the upside. Based on the March 2012 CPI-U report and the latest March SGS-Ongoing M3 Estimate, the annual growth in real M3 for March 2012 was 1.0%, versus a revised 1.1% (previously 1.0%) gain estimated for February. As with the nominal series, the pick-up in annual growth appears to have stalled.

The signal for a downturn or an intensified downturn is generated when annual growth in real M3 first turns negative in a given cycle; the signal is not dependent on the depth of the downturn or its duration. Breaking into positive territory does not generate a meaningful signal one way or the other for the broad economy. The current downturn signal was generated in December 2009. The broad economy tends to follow in downturn or renewed deterioration roughly six-to-nine months after the signal. Weaknesses in a number of series continued in 2011, with some new softness seen in early March 2012 reporting. A renewed downturn in official data should be obvious to most observers by mid-2012—before the election—eventually leading to recognition of a double-dip recession.



PRODUCER PRICE INDEX—PPI (March 2012)

Seasonal Factors Depressed the Monthly March PPI Inflation Rate to Zero. As reported yesterday, April 12th, by the Bureau of Labor Statistics (BLS), the regularly-volatile, seasonally-adjusted finished-goods producer price index (PPI) for March 2012 was unchanged (up by 0.88% unadjusted), versus a gain of 0.36% (up by 0.42% unadjusted) in February. The lack of reported monthly inflation was due fully to seasonal adjustments that turned a month-to-month unadjusted gain of 2.8% in finished energy goods into a 1.0% contraction.

Unadjusted and year-to-year, March's total finished goods PPI inflation eased to 2.80%, from 3.27% in February. The relatively high level of annual PPI inflation generally still reflects ongoing impact of the Fed's dollar-debasement policies, not surging economic demand. Annual changes, however, now are softening some as they go against the year-ago period when Mr. Bernanke was running QE2 and meeting with early success in debasing the U.S. Dollar and generating an increase in oil prices.

The seasonally-adjusted monthly "core" PPI—net of food and energy—increased by 0.28% (by 0.26% unadjusted), up from a 0.17% (0.17% unadjusted) gain in February, reflecting still-spreading impact of higher oil costs throughout the broad economy. Year-to-year core finished goods inflation eased to 2.89% in March, versus 2.95% in February. A comparison of core PPI with core CPI-U is graphed in the *Opening Comments and Executive Summary*.

Intermediate and Crude Goods. On a monthly basis, seasonally-adjusted March intermediate goods prices rose by 0.7%, the same gain as in February, with March crude goods prices down by 2.5%, versus a 0.4% increase in February. Year-to-year inflation in unadjusted March intermediate goods was 2.9%, versus 3.3% in February, with March's annual inflation in crude goods at 0.1%, versus 0.7% in February. As with finished goods, intermediate and crude goods inflation was held in check by negative seasonal adjustments to energy prices.

U.S. TRADE BALANCE (February 2012)

Narrowing of February Trade Deficit Could Boost First-Quarter GDP Expectations. Both adjusted and not adjusted for inflation, the U.S. trade deficit narrowed sharply in February 2012, improving well beyond consensus estimates. Despite a likely corrective deterioration in March, the February estimate is the one used in initial GDP reporting for the quarter. Accordingly, a movement of consensus forecasts towards a previously unexpected quarterly improvement the trade deficit should result in some upside revision to consensus forecasts for headline growth in the “advance” estimate of first-quarter-2012 GDP, on April 27th.

The annual benchmark revisions to the trade series are scheduled for June 8, 2012, and those revamped numbers will help to set what should be a negative tone for the annual GDP benchmark revisions due at the end of July.

Nominal (Not-Adjusted-for-Inflation) Trade Deficit. The Bureau of Economic Analysis (BEA) and the Census Bureau reported yesterday (April 12th) that the nominal, seasonally-adjusted monthly trade deficit in goods and services for February 2012, on a balance of payments basis, narrowed to \$46.0 billion from a revised \$52.5 billion (previously \$52.6 billion) in January. The February 2012 deficit was slightly wider than the \$45.4 billion shortfall of February 2011.

Against the revised January detail, the seasonally-adjusted February 2012 trade balance reflected a higher level of exports and lower level of imports. Oil prices were flat, but the monthly physical oil import volume was a factor in the import decrease.

Crude Oil and Energy-Related Petroleum Products. For the month of February 2012, the not-seasonally-adjusted average price of imported oil eased to \$103.63 per barrel, from \$103.81 in January 2012, but it was up from \$87.17 in February 2011.

In terms of not-seasonally-adjusted physical oil imports, February 2012 volume averaged 7.783 million barrels per day, down from 8.733 million in January 2012 and down from 8.656 million in February 2011.

Caution on Data Quality. As has become the standard caution here for the monthly detail, heavy distortions likely continued in the seasonal adjustments, much as has been seen in other economic releases, such as retail sales and payrolls, where the headline number reflects month-to-month change. As has been discussed frequently (see [Hyperinflation 2012](#) for example), the extraordinary length and depth of the current business downturn have disrupted regular seasonality patterns. Accordingly, the markets still should not be relying heavily on the accuracy of monthly headline data.

Real (Inflation-Adjusted) Trade Deficit. Adjusted for seasonal factors and net of oil price swings and other inflation (2005 chain-weighted dollars as used in reporting real GDP), the February merchandise trade deficit came in at \$44.1 billion, narrowed versus the unrevised \$49.1 billion reported for January.

Based on today's reporting, the annualized first-quarter 2012 real trade deficit—used as a base for the GDP's net export account—was at a pace of \$559.5 billion, down from the \$589.3 suggested by just the January estimate. That would be slightly narrower than the annualized fourth-quarter 2011 real trade deficit of \$563.7, suggestive of a neutral to slightly positive impact on first-quarter 2012 GDP reporting. Since the numbers were more positive than the consensus expectation, however, expectations for initial GDP reporting should become somewhat more positive.

Week Ahead. Recognition of an intensifying double-dip recession as well as an escalating inflation problem remains sporadic. The political system would like to see the issues disappear until after the election; the media does its best to avoid publicizing unhappy economic news; and the financial markets will do their best to avoid recognition of the problems for as long as possible, problems that have horrendous implications for the markets and for systemic stability.

Until such time as financial-market expectations move to catch up fully with underlying reality, or underlying reality catches up with the markets, reporting generally will continue to show higher-than-expected inflation and weaker-than-expected economic results in the months and year ahead. Increasingly, previously unreported economic weakness should show up in prior-period revisions.

Retail Sales (March 2012). The March retail sales release is scheduled for Monday, April 16th. Given what appears to have been some catch-up from prior poor-quality reporting with the weaker-than-expected March payrolls, a similar pattern could follow in the retail sales estimate. Further, consumer spending remains constrained by structural issues for consumer liquidity, namely lack of real income and debt growth. Accordingly, there is a fair shot of a downside reporting surprise to the consensus outlook (an expected headline gain of 0.4% per MarketWatch.com). That, combined with today's monthly March CPI-U gain of 0.3%, suggests that any gain in real (inflation-adjusted) March retail sales was close to nil.

Industrial Production (March 2012). The release of March industrial production is scheduled for Tuesday, April 17th. Again, given what appears to have been some catch-up from prior poor-quality reporting with weaker-than-expected March payrolls, a similar pattern also could follow in production. Usually, an involuntary build-up in inventories—as seen in recent months—is followed by a corrective pullback in production. Net of any revisions, production should have been close to flat, which would be weaker than consensus expectation.

Residential Construction (March 2012). The March housing starts data are scheduled for release on Tuesday, April 17th. To the extent there is a monthly gain in this highly volatile series, it should not be statistically significant. Bottom-bouncing at historically low levels—the pattern of the last three-plus years—likely will continue.