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

# **COMMENTARY NUMBER 339 November Inflation, Retail Sales, Production**

**December 15, 2010** 

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**Beware Unstable Economic Reporting!** 

**Inconsistent Seasonal Factors Depressed CPI** 

**Bulk of Gain in November Retail Sales Was from Higher Prices** 

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PLEASE NOTE: The U.S. Treasury has delayed release of the U.S. government's 2010 GAAP-Based financial reporting, until Tuesday, December 21st (tentative), from what was scheduled for today (December 15th). The decision to delay the release apparently was made Monday afternoon (December13th). Since the statements likely already were set at that point, one has to wonder if there is any political timing at work here. An initial assessment of the financial statements will be made in a Special Commentary, at such time as the data are published.

Otherwise, the next regular Commentary will be on Thursday, December 23rd, following release of November's New Orders for Durable Goods, along with assessments of the November housing and home sales numbers, and the third-estimate of third-quarter GDP.

-- Best wishes to all for a most joyous holiday season! -- John Williams

Unstable Economic Reporting Misleads the Public and the Markets. Picking up on a theme discussed in <u>Commentary No. 337</u>, the severity of the current economic contraction -- both in duration and depth -- largely has destroyed the usefulness of current, seasonally-adjusted monthly economic data. The reasoning behind the seasonal adjustment of data was to remove regularly-repeating patterns of activity from a series (such as the regular boost to retail sales from holiday-season shopping), so that month-to-month comparisons of the data would tend to reflect changes in economic activity, not the recurring patterns. The concept worked reasonably well in normal economic times. Yet, regularly recurring patterns of activity, used as the basis for the seasonal adjustments, have been shattered in recent years, as business activity plunged and bottom-bounced, as the housing market collapsed, as the auto industry and production patterns were disrupted by bankruptcies, as short-lived stimulus factors altered consumption patterns, as financial panic and gyrations in the exchange rate of the U.S. dollar were reflected in extreme and non-seasonal movement in oil prices, etc.

By their nature, seasonal-factor patterns should be stable over time. This is true, particularly, of the concurrent seasonal-adjustment patterns used in series such as nonfarm payrolls and retail sales. If the monthly seasonal patterns -- as already established with the prior month's reporting -- gyrate wildly with each new monthly recalculation, the reported series is unstable. Further, publication of only the last two months of revised seasonally-adjusted data on this basis is misleading in the extreme, where sharply revised seasonal patterns, each month, can yield reported month-to-month changes that reflect nothing more than the shifting of previously-reported adjusted data to or from the current month, versus a prior month where the related revisions are not being published for public consumption.

*Payrolls, Retail Sales and CPI Inflation Are Warped.* These distortions have been seen recently with reported nonfarm payrolls (see *No. 337* cited above), as well with the retail sales and CPI reporting of this week. A look at the retail sales reporting, for example, shows a good gain in November and a sharp upside revision to the October data, enhanced meaningfully by shifting seasonal factors.

This morning's CPI came in below expectations, thanks partially to gasoline inflation that was reduced by seasonal adjustment (concurrent adjustment is not used here, but "intervention analysis" is). The issue here is that in November 2009, gasoline inflation was boosted by seasonal adjustments, but it was reduced in November 2010. Specifically, a not-seasonally-adjusted 4.1% monthly gain in November 2009 gasoline prices ended up as a seasonally-adjusted gain of 6.4%. In contrast, a not-seasonally-adjusted 2.0% monthly gain in November 2010 gasoline prices ended as a seasonally-adjusted gain of 0.7%. There is no consistency or stability suggested in those patterns.

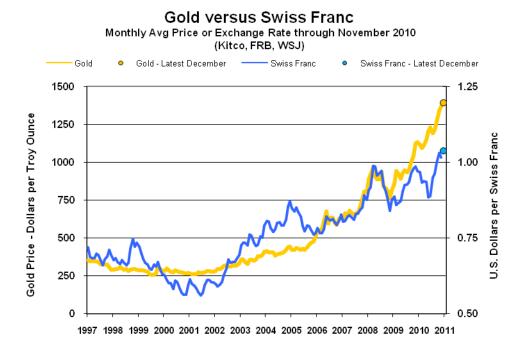
**Broad Economic, Inflation, Systemic and Market Outlooks Have Not Changed.** Reflected in monthly retail sales and PPI reporting, but not yet in CPI reporting, consumer inflation is on the rise. Mr. Bernanke's efforts at debasing the U.S. dollar and stimulating inflation have met with some success, already, in terms of a weaker U.S. currency and related increases in dollar-denominated commodity prices, particularly oil.

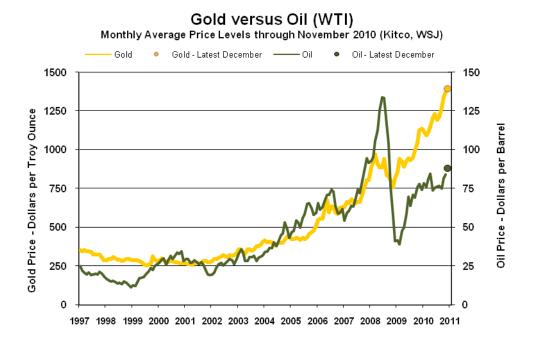
The general outlook as discussed in <u>Special Commentary No. 333</u> has not changed. Currency values and precious metals prices can be volatile, but the long-term weakness in the U.S. dollar and relative purchasing-power-preservation attributes of gold and silver, and the stronger currencies outside the dollar, remain in place. As with systemic risks in the United States, risks in other areas of the world -- such as

among the countries using the euro -- likely will be addressed by the spending or creation of whatever money is needed (indications of any needed U.S. backing are in place) in order to prevent systemic failure. Keep in mind that the U.S. remains the proverbial elephant in the bathtub in terms of pending effective sovereign bankruptcies.

The various European crises remain an intermittent foil for the U.S. dollar, pulling market attention away from the unfolding solvency crisis in the United States and a likely move to massive selling against the U.S. currency. Accordingly, high risk of the early stages of a hyperinflation (see <u>Hyperinflation Special</u> <u>Report</u>) beginning to unfold by mid-2011 continues.

The regular graphs of gold, silver and oil prices, and the U.S. dollar exchange rate versus the Swiss franc, are shown below. Based on market reactions, the dollar-debasement efforts appear to be progressing along the lines desired by the Fed.









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### Notes on Different Measures of the Consumer Price Index

The Consumer Price Index (CPI) is the broadest inflation measure published by 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.

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Softer-Than-Expected November CPI Was Dominated by Inconsistent Seasonal Adjustments. As discussed in the opening comments, inconsistent seasonal-adjustments helped to reduce reported gasoline inflation in this morning's CPI report. The CPI reporting also ran counter to the inflation pressures reflected in the November retail sales report and in the November PPI. Both seasonally-adjusted and unadjusted CPI inflation reporting are due for some catch-up in the months ahead. Rising inflation should become increasingly broad, reflecting an increasingly serious problem in the first-half of 2011.

*CPI-U*. The Bureau of Labor Statistics (BLS) reported this morning (December 15th) that the seasonally-adjusted November 2010 CPI-U rose for the month by 0.12% (up by a statistically-insignificant 0.01%, unadjusted) +/- 0.12% (95% confidence interval, not seasonally adjusted). Such followed a 0.23% gain (up 0.12% unadjusted) in October. Unadjusted, November's year-to-year inflation was 1.14% +/- 0.20% (95% confidence interval) against a 1.17% annual increase in October.

Year-to-year inflation would increase or decrease in next month's December 2010 reporting, dependent on the seasonally-adjusted monthly change, versus the 0.17% adjusted monthly gain seen in December 2009. I use the adjusted change here, since that is how consensus expectations are expressed. To approximate the annual inflation rate for December 2010, the difference in December's headline monthly

change (or forecast of same) versus the year-ago monthly change should be added to or subtracted directly from November 2010's reported annual inflation rate of 1.14%.

*CPI-W*. The narrower, seasonally-adjusted November CPI-W, which has greater weighting for gasoline than does the CPI-U, rose by 0.04% (up 0.06% unadjusted) for the month, following a gain of 0.31% (up 0.15% unadjusted) in October. Unadjusted year-to-year CPI-W inflation rose by 1.30% in November, versus a 1.45% October increase.

*C-CPI-U*. The Chain-Weighted CPI-U -- the fully substitution-based series that gets touted by CPI opponents and inflation apologists, including the recent presidential deficit commission, as the replacement for the CPI -- is reported only on an unadjusted basis. C-CPI-U year-to-year inflation eased to 0.96% in November 2010, from 1.00% in October.

Alternate Consumer Inflation Measures. Adjusted to pre-Clinton (1990) methodology, annual CPI inflation was roughly 4.4% in November 2010, down a notch from 4.5% in October, while the SGS-Alternate Consumer Inflation Measure, which reverses gimmicked changes to official CPI reporting methodologies back to 1980, continued to hold at about 8.5% (8.54% for those using the extra digit) in November, as seen in October and September.

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 no longer reflects the constant-standard-of-living concept. 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.

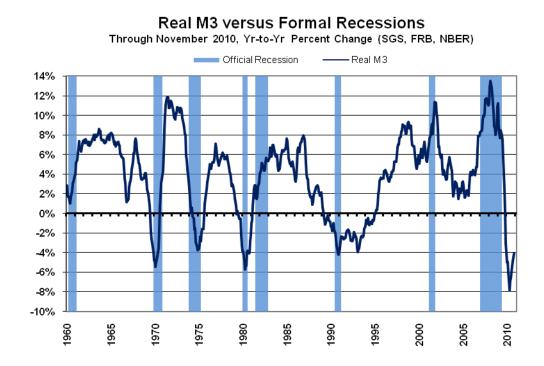
Gold and Silver Highs Adjusted for CPI-U/SGS Inflation. Despite November 9th's historic high gold price of \$1,421.00 per troy ounce (London afternoon fix) and the multi-decade high silver price of \$30.50 per troy ounce (London fix) on December 7th, gold and silver prices have yet to approach their historic high levels, adjusted for inflation. The earlier all-time high of \$850.00 (London afternoon fix, per Kitco.com) of January 21, 1980 would be \$2,391 per troy ounce, based on November 2010 CPI-U-adjusted dollars, and would be \$7,840 per troy ounce in terms of 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) has not been hit since, including in terms of inflation-adjusted dollars. Based on November 2010 CPI-U inflation, the 1980 silver price peak would be \$139 per troy ounce and would be \$456 per troy ounce in terms of SGS-Alternate-CPI-adjusted dollars (again, all series not seasonally adjusted).

As shown on page 22 in the <u>Hyperinflation</u> report, over the decades, the price of gold has compensated for more than the loss of the purchasing power of the U.S. dollar as reflected by CPI-U inflation, while it has effectively fully compensated for the loss of purchasing power of the U.S. dollar based on the SGS-Alternate CPI.

*Real Money Supply M3.* The signal of the still unfolding double-dip recession, based on annual contraction in the real (inflation-adjusted) broad money supply (M3), most recently was discussed graphed in *Special Commentary No. 333*, continues and is graphed below. Based on today's CPI-U report and the latest estimate on the November SGS-Ongoing M3 Estimate, that annual contraction in November 2010 was 4.0%, narrower than October's 4.5% contraction, and May's post-World War II record annual decline of 7.9%.

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. 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, as has appeared to have started in recent months, with flat-to-down nonfarm payrolls (with pending benchmark revisions), flattening industrial production, and renewed contraction in the already severely-constrained real estate market. New weakness in a number of series should become evident as annual numbers get locked-in and concurrent seasonally-adjusted series get fully published with updated as "revised" data. Such eventually will lead to recognition of a double-dip recession.



November PPI Inflation Jump Reflected QE2-Stimulated Food and Energy Prices -- with Other Prices Rising, Too. As reported yesterday (December 14th) by the Bureau of Labor Statistics (BLS), the regularly-volatile, seasonally-adjusted finished-goods producer price index (PPI) in November 2010 rose

by 0.8% (up by 0.4% before seasonal adjustment) month-to-month, following a 0.4% (0.6% unadjusted) monthly gain in October. The annualized, seasonally-adjusted PPI inflation over the last three months has been 6.6%, up from a revised 5.3% (was 4.9%) in October. Unadjusted and year-to-year, November's annual PPI inflation was up 3.5% from November 2010, versus a 4.3% annual inflation rate in October.

The reported seasonally-adjusted 0.8% monthly gain in November encompassed more than headlined inflation in oil and food prices boosted by the weaker U.S. dollar that was engendered by the Federal Reserve's jawboning and early stages of Treasury-debt monetization. Notable outside of food and energy, Automobile prices rose by 1.7% seasonally adjusted in the month.

Also on a monthly basis, seasonally-adjusted November intermediate goods rose by 1.1% (up by 1.2% in October), with November crude goods prices jumping up by 0.6% (up by 4.3% in October). Year-to-year inflation in November intermediate goods was up by 6.3% (a 6.4% gain in October), with November annual inflation in crude goods at 12.8% (up by 17.0% in October).

**November Retail Sales Gain Driven Primarily by Inflation.** On the surface, most of the 0.8% seasonally-adjusted monthly gain in November retail sales was accounted for by higher food and gasoline prices, while food and gas prices -- higher than previously indicated -- also contributed to the upside revisions in reported October sales. With higher automobile prices (PPI), and retail store sales -- where seasonal factors should be muting the inflation impact of regular holiday-season discounting -- November retail sales likely contracted net of the actual inflation effect, although such was not supported by today's CPI report.

As discussed in the opening comments, monthly retail sales reporting reflects distortions from basically the same concurrent seasonal-factor adjustment problems (unprecedented business-cycle effects overwhelming the traditional seasonal patterns of activity) and sampling issues (companies out business that no longer are reporting, but still are being counted with sales or employees on payrolls). Accordingly, even at best, these data have to be viewed as of highly questionable substance.

*Nominal Retail Sales*. Yesterday's (December 14th) November 2010 retail sales report -- issued by the Census Bureau -- indicated a statistically-significant, seasonally-adjusted monthly gain of 0.83% (up 1.50% net of revisions) +/- 0.6% (95% confidence interval), versus a revised 1.66% (initially 1.23%) increase in October.

On a year-to-year basis, November 2010 retail sales were reported up by 7.66% from November 2009, versus a revised annual October gain of 7.96% (previously 7.31%). Annual changes still have been unstable due to year-ago comparisons ranging from a severe trough in activity to last year's cash-for-clunkers stimulus effects. At the same time the Census Bureau still plays games with the monthly seasonal factors and revisions to year-ago data.

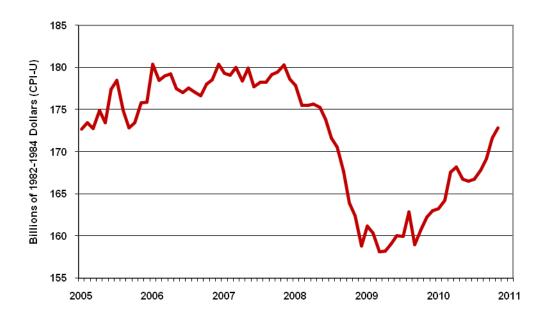
**Real Retail Sales.** Based on the November 2010 CPI-U reporting, inflation- and seasonally-adjusted monthly November retail sales increased by 0.71%, where, before inflation adjustment, the current number was up by 0.83%, versus a revised real monthly gain of 1.42% (was 1.04%) in October.

November real retail sales rose at a year-to-year pace of 6.54%, versus the revised 6.72% (previously 5.92%) annual gain reported for October.

Since November 2008, monthly real retail sales (CPI-U deflated) have been fluctuating around an average of \$163.6 billion (the deflated November number was \$172.8 billion). The graph below reflects the relatively volatile monthly levels of real retail sales, as reported.

## Inflation-Adjusted Retail Sales (Monthly Level)

Through November 2010, Seasonally-Adjusted (SGS, Census, BLS)



Smoothed for the monthly volatility on a six-month moving-average basis, as shown in the second graph, the pattern of activity here has been one of bottom-bouncing in terms of the level of inflation-adjusted sales. The recent bounce/upturn from short-lived stimulus factors and warped-seasonals still lingers in seasonal-adjustment problems, which may await seasonal-factor and benchmark revisions for catch-up. Nonetheless, there has been no change in underlying fundamentals that would support a sustainable turnaround in personal consumption or in general economic activity -- no recovery -- just general bottom-bouncing. Accordingly declining real sales levels remain likely in the months ahead, particularly when the all-crucial December sales are in hand.

#### Inflation-Adjusted Retail Sales (6-Mo Moving Avg)

Through November 2010, Seasonally-Adjusted (SGS, Census, BLS)



*Core Retail Sales*. Assuming that the bulk of non-seasonal variability in food and gasoline sales is in pricing, instead of demand, "core" retail sales -- consistent with the Federal Reserve's predilection for ignoring food and energy prices when "core" inflation is lower than full inflation -- are estimated using two approaches:

*Version I:* November versus October 2010 seasonally-adjusted retail sales -- net of total grocery store and gasoline station revenues -- gained by 0.4% versus the official aggregate gain of 0.8%.

*Version II:* November versus October 2010 seasonally-adjusted retail sales -- net of the monthly change in revenues for grocery stores and gas stations -- increased by 0.3% versus the aggregate gain of 0.8%.

**Industrial Production Still Seems to Be Topping Out.** With production now reported down in October, with some bounce in November, the peak of monthly industrial production in the current cycle may settle in at October. If not, the peak should be imminent. Auto production was down in November, and the overall index was spiked by unseasonably bad weather having spiked utility usage and related reporting, where certain production is estimated by electricity consumption.

As to the production numbers, the Federal Reserve Board reported today (December 15th) that seasonally-adjusted November 2010 industrial production rose by 0.42% (0.54% before revisions to October's initial reporting, which were in the context of revisions to a number of prior months). October's revised production showed a 0.20% contraction (previously a 0.01% gain).

Year-to-year change in November production eased back to 5.38%, from a revised 5.50% (previously 5.35%) in October, and down from the revised near-term peak of 8.35% (was 8.30%) in June. As with retail sales, the relatively high volatility in annual growth is due largely to the pattern of collapsing activity a year ago (a May 2009 trough), followed by cash-for-clunkers-boosted production. The year-to-year contraction of 12.86% seen in May 2009 was the steepest annual decline in production growth since the shutdown of war-time production following World War II.

# Industrial Production Index (Monthly Level)

Through November 2010, Seasonally-Adjusted (FRB)



The preceding graph shows recent monthly detail, with a fair shot that the October number, after revisions, will have marked the turning point of renewed decline in the production series.

The "recovery" in production is shown in the second graph, where month-to-month volatility is smoothed using a six-month moving average. For the last 23 months, the production index has averaged 89.97, around which the series has been fluctuating, with November's six-month moving average reading at 93.46, versus 93.90 for the single month. Production activity had leveled off at a low-level plateau of activity that effectively wiped out the last eight years of growth in industrial production; the current rally has topped the pre-2001 recession high, reclaiming levels last seen in 2004 (six-month moving average).

Despite the near-term upside gains generated by short-lived stimulus and seasonal-factor distortions, the series likely still is bottom-bouncing and should begin to soften anew, significantly, in the oncoming months. The six-month moving-average series remains 6.88% below its December 2007 historic high.

#### Industrial Production Index 6-Mo Moving Avg

Through November 2010, Seasonally-Adjusted (SGS, FRB)



**Week Ahead.** Given the unfolding reality of an intensifying double-dip recession and more-serious inflation problems than generally are anticipated by the financial markets, risks to reporting will tend towards higher-than-expected inflation and weaker-than-expected economic reporting in the months ahead. Increasingly, previously unreported economic weakness should show up in prior-period revisions.

**Residential Construction** (November 2010). November housing starts are due for release on Thursday, December 16th. Residential construction appears to be turning down anew, following a protracted period of bottom-bouncing at historically-low levels of activity. While the reported monthly change for November likely will not be statistically meaningful, if it is, it more likely will be on the downside than on the upside.

New and Existing Homes Sales (November 2010). November existing home sales (National Association of Realtors) are due for release on Wednesday, December 22nd, followed by new home sales (Census Bureau) on Thursday, December 23rd. As with housing starts, theses volatile series should remain extremely weak, with any monthly change (new homes) again lacking statistical significance. Given the extreme volatility, reporting error and revisions in these series, given the poor-quality seasonal adjustments, given continuing negative anecdotal evidence, and given ongoing massive distortions from increasingly volatile foreclosure activity, the monthly movements in these numbers remain particularly meaningless.

*Gross Domestic Product -- GDP ("Third Estimate" Third-Quarter 2010).* Due for release on Wednesday, December 22nd, the "third" estimate and second revision of third-quarter 2010 annualized real GDP growth is expected to notch higher to 2.6%, from the 2.5% reported in the last revision, per Briefing.com. Any revision likely will be no more than statistical noise.

*New Orders for Durable Goods (November 2010).* Due for release on Thursday, December 23rd, November new orders for durable goods likely will not show meaningful monthly change, even with upside biases built into these numbers in the last benchmark revision. This series remains irregularly volatile.