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

COMMENTARY NUMBER 886:
Real Retail Sales and Earnings, Consumer and Producer Prices

May 16, 2017

Annual Real Retail Sales Growth Has Resettled at Recession-Signal Level

First-Quarter Real Average Weekly Earnings Held in Annual Decline,
Along with Back-to-Back Quarterly Contractions; April Detail Was Mixed;
Consumer Liquidity Stresses Continued to Intensify

Headline CPI-U Inflation Rose by 0.17% in April 2017,
Pulling Annual CPI-U Inflation Lower to 2.20% (Was 2.38%), with
CPI-W at 2.14% (Was 2.35%) and ShadowStats at 10.0% (was 10.1%)

April Final-Demand PPI Annual Inflation Hit a 62-Month High of 2.45%

Moving Off Bottom, April Industrial Production Showed Solid Gains, but
Production and Manufacturing Still Remained Below Their Pre-Recession Highs

Declining April Housing Starts Held Shy of Pre-Recession Peak by 48.4% (-48.4%);
First-Quarter Starts Revised to a Quarterly Contraction, Amidst Annual Revisions

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PLEASE NOTE: The next regular Commentary*, tomorrow, April 17th, will cover the details of April 2017 Industrial Production and New Residential Construction (Housing Starts), as released today, May 16th.*

Today's Commentary *was delayed by a now-resolved production issue, but the delay pushed formal ShadowStats coverage of today's (May 16th) releases of April Industrial Production and Residential Construction back a day. Headline details, though, are summarized in the* Week Ahead *section.*

I apologize to subscribers for the delayed releases. Please call me at (707) 763-5786 if you have any questions or would like to talk. Best wishes to all — John Williams

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Today's *Commentary* (May 16th). Headline details of the April 2017 Consumer and Producer Price Indices, along with nominal and real Retail Sales and real Average Weekly Earnings are reviewed in today's ***Opening Comments and Executive Summary***.

The ***Reporting Detail*** (beginning page 11) provides more-extensive analysis and additional graphics.

The ***Hyperinflation Watch*** (beginning page 7) reviews recent and prospective market conditions for the U.S. dollar, Gold, Silver and Oil.

The ***Week, Month and Year Ahead*** (beginning page 27) reviews recent *Commentaries* and briefly highlights the results of today's headline releases of April Industrial Production and Housing Starts, which will be detailed, as standardly covered, in tomorrow's *Commentary No. 887*.

OPENING COMMENTS

Economy Remains in Broad Non-Recovery. With headline, key economic series, such as has Housing Starts and Industrial Production coming in at levels below the peak levels of activity seen before the 2007 recession and economic collapse into 2009, the broad U.S. economy is not booming, as popularly advertised. Discussed in today's *Hyperinflation Watch*, economic non-recovery and an intensifying deterioration in business conditions have particularly harsh and negative implications for the U.S. dollar.

Recent economic reporting will be reviewed in *Special Commentary No. 888*, subsequent to the release of the annual-benchmark revisions of New Orders for Durable Goods, this Thursday, May 18th. That ShadowStats *Commentary* most likely will be published over the weekend of May 20th. The accompanying economic review in *No. 888* also will provide a full update of *Consumer Liquidity Conditions*, including the latest faltering in real Consumer Credit Outstanding and the continued flattening/somewhat uptrending, but still-high level of Consumer Sentiment, as published by the University of Michigan in its advance estimate for May 2017.

Executive Summary: Retail Sales, Nominal and Real—April 2017—Annual Real Sales Growth Resettled at the Traditional Recession-Signal Level. In the context of the annual benchmark revisions to the Retail Sales series on April 26th (see *Commentary No. 882*) and subsequent reporting of headline April Retail Sales and CPI on May 12th, the annual rate of real growth in the Retail Sales series has settled back to around two-percent, the traditional low-growth signal for imminent economic recession, where it had been pushing three percent pre-benchmarking.

Nominal Retail Sales (Not Adjusted for Inflation). The "advance" estimate of April 2017 Retail Sales showed a nominal monthly gain of 0.39% month-to-month, a gain of 0.12% in March and a decline of 0.20% (-0.20%) in February. Year-to-year nominal growth increased by 4.45%, versus annual gains of 4.84% in March 2017 and 4.72% in February 2017.

Real Retail Sales (Adjusted for Inflation). Net of the seasonally-adjusted headline CPI-U inflation, real seasonally-adjusted month-to-month Retail Sales rose by 0.22% in April 2017, versus a gain of 0.41% in

March and a decline of 0.32% (-0.32%) in February. Real year-to-year sales growth was 2.21% in April 2017, versus 2.40% in March 2017 and 1.87% in February 2017.

Real Retail Sales Graphs, Corrected and Otherwise. In the *Reporting Detail*, *Graphs 9* and *11* show the level of real retail sales activity (deflated by the CPI-U), while *Graphs 10* and *12* show year-to-year percent change. The apparent "recovery" of headline real retail sales shown in the following *Graph 1* (see also *Graph 9* in the *Reporting Detail*) generally continued into late-2014. Although headline reporting turned down in December 2014, into first-quarter 2015, it turned higher into the third-quarter 2015, slowed to a near-standstill in fourth-quarter 2015 and contracted in first-quarter 2016, with an uptick in second-quarter 2016, renewed slippage into third-quarter 2016, a further uptick in fourth-quarter 2016 and a generally upside-trending fluttering into 2017.

Nonetheless, headline real growth in retail sales continued to be overstated heavily, due to the understatement of CPI-U inflation used in deflating the retail sales series. Discussed more fully in *Chapter 9* of *2014 Hyperinflation Report—Great Economic Tumble* – *Second Installment* and *Public Commentary on Inflation Measurement*, deflation by too-low an inflation number (such as the CPI-U) results in the deflated series overstating inflation-adjusted economic growth.

Both of the accompanying graphs are indexed to January 2000 = 100.0 to maintain consistency in the series of graphs related to corrected inflation-adjustment, including the regular plots of the "corrected" industrial production index (see *Commentary No. 881*), and "corrected" new orders for durable goods and "corrected" GDP (covered respectively in *Commentary No. 882* and *Commentary No. 883*, and also in *No. 859 Special Commentary*).

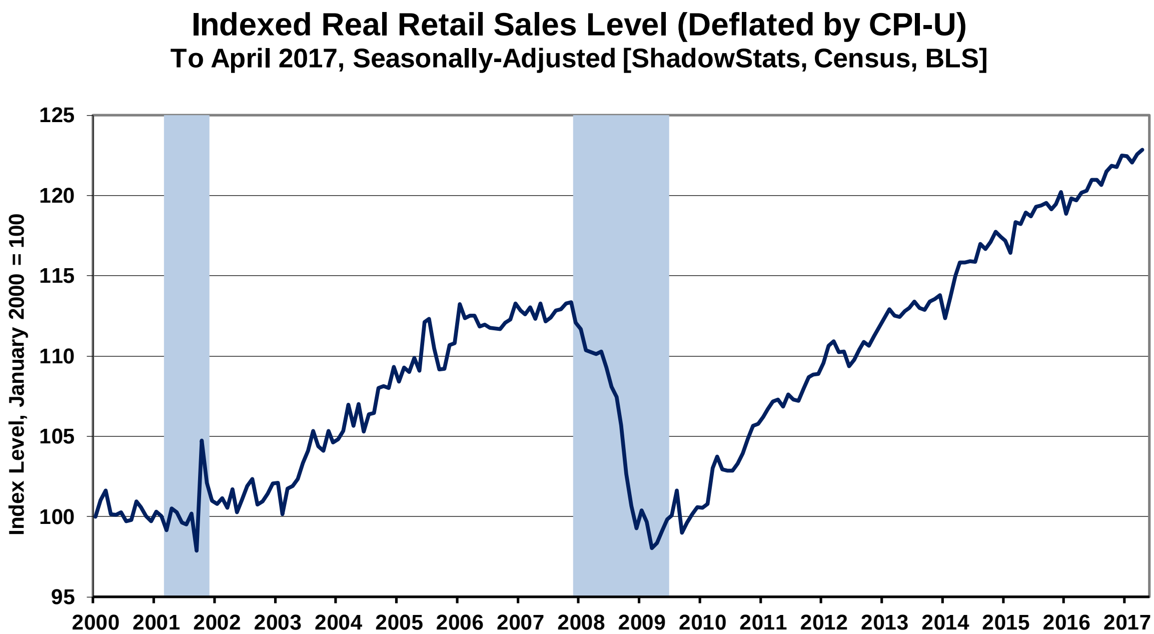
The first graph here reflects the official real retail sales series, except that it is indexed, instead of being expressed in dollars. The plotted patterns of activity and rates of growth are exactly the same for the official series, whether the series is indexed or expressed in dollars, again, as is evident in a comparison of *Graph 1* with *Graph 9* in the *Retail Sales—Nominal and Real* in the *Reporting Detail* section.

Instead of being deflated by the CPI-U, the "corrected" real retail sales numbers—in *Graph 2*—use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation. With the higher inflation of the ShadowStats measure, the revamped numbers show a pattern of plunge and stagnation and renewed downturn. That pattern generally is consistent with consumer indicators such as real average weekly earnings (see *Graph 3* in the next section), faltering consumer liquidity conditions (see *Commentary No. 883* and the *ECONOMY* section of *No. 859 Special Commentary*).

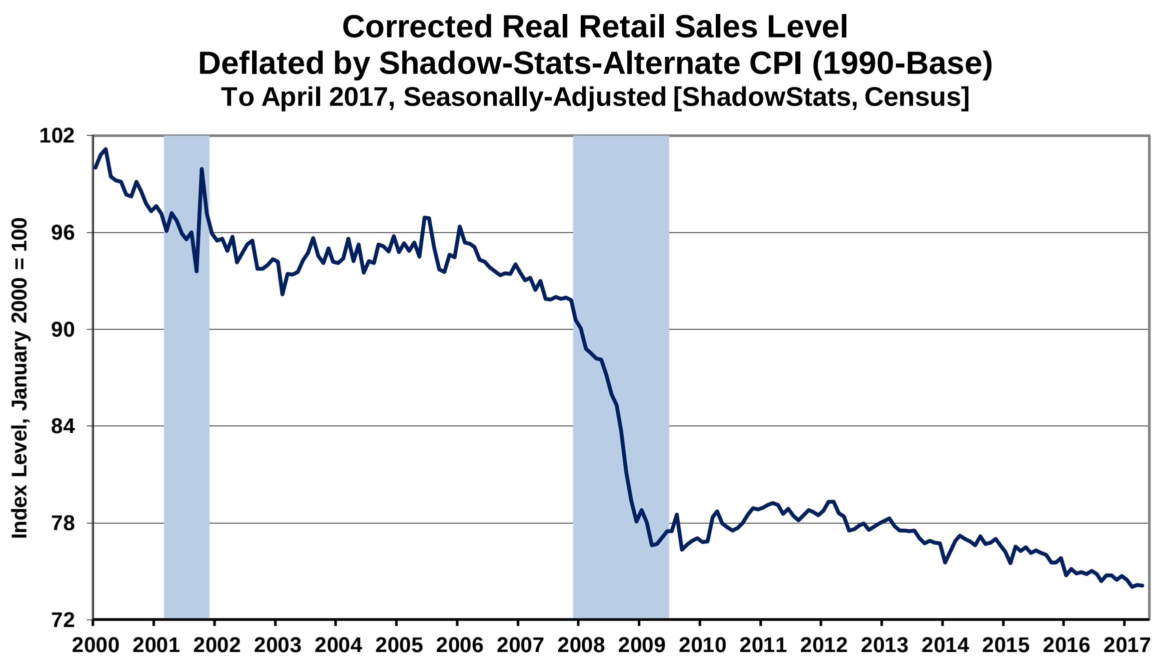
Extended coverage is found in the *Reporting Detail*.

[Graphs 1 and 2 follow on the next page.]

Graph 1: Headline Real Retail Sales Level, Indexed to January 2000 = 100



Graph 2: "Corrected" Real Retail Sales Level, Indexed to January 2000 = 100



Consumer Price Index (CPI)—April 2017—Headline CPI-U Inflation Rose by 0.2% for the Month, Slowed to 2.2% Year-to-Year. Regular reporting in the first-half of the calendar year shows a pattern of downside seasonal-adjustments to month-to-month CPI growth, from January through June. The headline

April 2017 CPI-U monthly inflation of 0.17% reflected continued negative seasonal adjustments to rising gasoline prices, rising food prices and rising "core" inflation (net of food and energy). Not adjusted for seasonal factors, as most people experience life, headline CPI-U inflation rose by 0.30% month-to-month in April 2017.

Unadjusted, year-to-year CPI-U inflation continued to back off its 60-month high of 2.74% of February 2017, having fallen back to 2.38% in March 2017 and to 2.20% in April 2017. The recent inflation surge had been driven by gasoline prices, not by an overheating economy. Still, the current 2.20% year-to-year inflation is not and has not been quite as low as indicated, when considered in the context of traditional CPI reporting and common experience. Moving on top of the unadjusted annual changes to the CPI-U, the ShadowStats-Alternate Inflation Measures showed year-to-year inflation in April 2017 at 5.8%, based on 1990 methodologies, and at 10.0%, based on 1980 methodologies.

The Consumer Price Index for All Urban Consumers (CPI-U) is the broadest headline consumer-inflation number and is used to adjust numerous economic measures such as Retail Sales for inflation effects as reflected in *Retail Sales—Nominal and Real* of the *Reporting Detail*. The narrower Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used for deflating measures such as earnings for production and nonsupervisory employees on private nonfarm payrolls. April 2017 seasonally-adjusted CPI-W gained 0.18% month-to-month, declined 0.37% (-0.37%) in March, and gained 0.06% in February. Unadjusted, year-to-year change in the April 2017 CPI-W was 2.14%, down from 2.35% in March 2017 and 2.82% in February 2017.

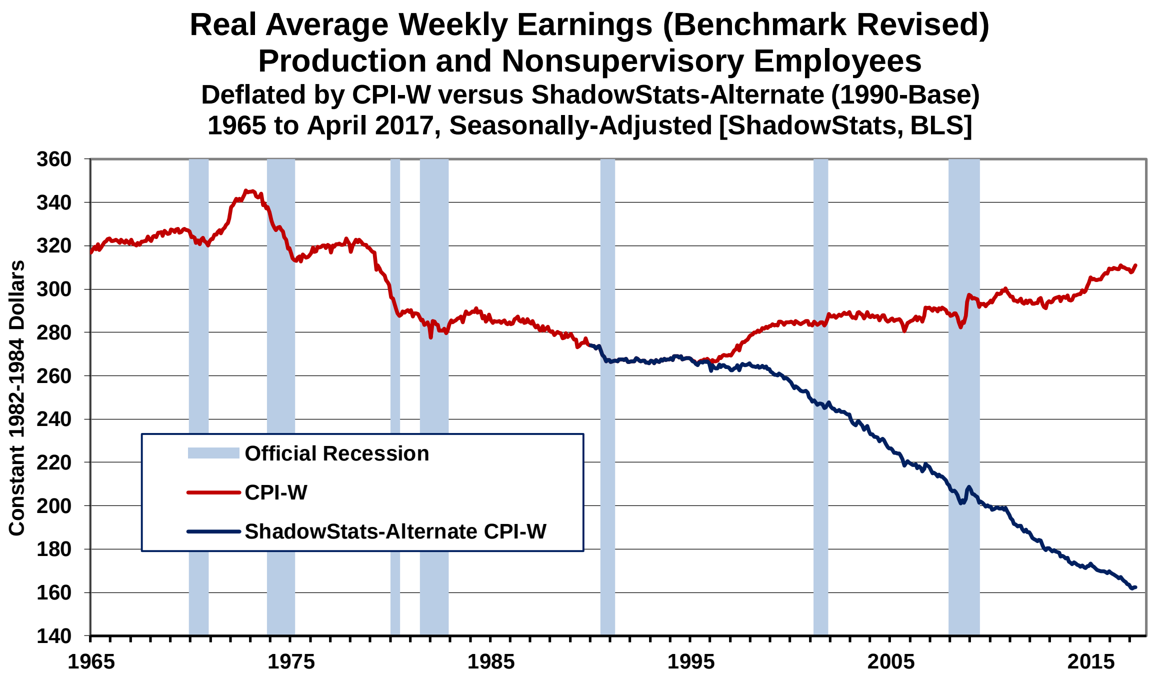
Real Average Weekly Earnings—April 2017—First-Quarter 2017 Annual Decline and Second Consecutive Quarter-to-Quarter Contraction Remained Intact, with Mixed April Headlines. April 2017 real average weekly earnings for the production and nonsupervisory employees category—the only series for which there is a meaningful history, the volatile real average weekly earnings gained 0.39% month-to-month in April 2017, down versus 0.55% in March 2017 and against an unrevised 0.07% gain in February. Year-to-year, the adjusted April 2017 year-to-year change rose to 0.49%, versus a revised annual decline of 0.01% (-0.01%) in March 2017, and unrevised annual drops of 0.39% (-0.39%) in February 2017 and 0.46% (-0.46%) in January 2017.

With the initial headline April 2017 and related March 2017 revisions in place, first-quarter 2017 real earnings contracted at an annualized quarter-to-quarter pace of 1.13% (-1.13%), having declined at an annualized 1.36% (-1.36%) in fourth-quarter 2016.

Year-to-year change in first-quarter 2017 real earnings also contracted at a pace of 0.29% (-0.29%), the first annual quarterly contraction since fourth-quarter 2012, when the real GDP stalled. The signal here highlights financial stresses on the consumer and major downside risk to headline real GDP reporting.

Graph 3 plots the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI Measure, 1990-Base (blue-line). When inflation-depressing methodologies of the 1990s began to kick-in, the artificially-weakened CPI-W (also used in calculating Social Security cost-of-living adjustments) helped to prop up the reported real earnings. Official real earnings today still have not recovered their inflation-adjusted levels of the early-1970s, and, at best, have been in a minimal uptrend for the last two decades (albeit spiked recently by negative headline inflation). Deflated by the ShadowStats (1990-Based) measure, real earnings have been in fairly-regular decline for the last four decades, which is much closer to common experience than the pattern suggested by the CPI-W. See the *Public Commentary on Inflation Measurement* for further detail.

Graph 3: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date



Producer Price Index (PPI)—April 2017—Final Demand PPI Annual Inflation Hit a 62-Month High. In the context of seasonally-adjusted monthly PPI Goods inflation rising by 0.45%, Construction inflation increasing by 0.43% and the dominant "margins" in the Services sector rising by 0.44%, aggregate Final-Demand PPI (FD-PPI) monthly inflation rose by 0.54% month-to-month in April 2017, with unadjusted year-to-year inflation rising to 2.45%, a 62-month high.

Where, the headline growth looks too high, given lower headline gains of all its components, there likely are some inconsistencies in the calculation and rounded reporting of the headline detail. Separately, aside from the irregular distortions to the headline detail from estimating wholesale goods inflation in combination with nebulous and inconsistent profit margins in the services sector, regular monthly revisions for December 2016, based on the April 2017 detail, indicated continuing unstable surveying/reporting in services sector. These inconsistences and a full breakout on monthly and annual PPI inflation detail by major sub-category are found in the *Reporting Detail*.

[The* Reporting Detail *contains extended analysis and graphs of the Retail Sales, CPI, PPI and related series.]

HYPERINFLATION WATCH

Deteriorating Economic Data Increasing Should Roil the Markets. Little has changed in the outlook here from the discussion in *Commentary No. 880*. In the context of recent rate hikes by the Federal Reserve's Federal Open Market Committee, the FOMC has allowed that "substantially adverse economic circumstances" not only could thwart tentative considerations to begin normalizing the Fed's balance sheet by year-end, but also could trigger renewed buying of assets, effectively returning the U.S. central bank's monetary policy to some form of expanded quantitative easing.

The feared "adverse economic circumstances" have begun to unfold and should intensify in the next month or so, as shall be detailed in pending *Commentary No. 888* over the next weekend.

Despite the Fed's protestations to the contrary of "normal" or "healthy" economic activity (see *No. 859 Special Commentary*), the adverse economic circumstances never went away, subsequent to the Panic of 2008 and the economic collapse into 2009. Again, these circumstances likely should continue to deteriorate in the weeks and months ahead.

Separately, meaningful fiscal stimulus for the U.S. economy continues to be stalled, at present, by lack of Congressional cooperation with the new Administration. There is a chance to turn the U.S. economic and fiscal conditions to the plus-side, but again, as discussed in *No. 859 Special Commentary*, a three pronged effort is needed: (1) fiscal stimulus [there is roughly a one-year lead time for results], (2) a credible proposal to bring the U.S. government's long-term fiscal conditions into balance, which could provide leeway for a brief widening of the deficit, and (3) overhauling the Federal Reserve and banking system.

With near-term Congressional action increasingly unlikely, and renewed "adverse" economic conditions increasingly in hand, financial markets could turn savagely against the U.S. dollar at any time. As the markets sense the mounting economic woes and movement by the Fed back towards quantitative easing, heavy selling of the U.S. currency should reflect mounting fears of dollar debasement. Flight from the weakening dollar (and a related spike in oil prices), increasingly would flow into the heavy buying of gold and silver as stores of wealth, vehicles that can preserve the purchasing power of one's wealth and assets.

FOMC Focus Remains Banking-System Solvency; Economic Activity and Inflation Are Peripheral Concerns Other than for Banking-System Impact. The ShadowStats assessment of faltering-economic activity pushing the FOMC back towards an expanded form of quantitative easing, and various, possible economic and financial scenarios facing the Trump Administration, were reviewed in *No. 859 Special Commentary* of January 8th, which is included here by reference. That broad outlook has not changed since that *Special Commentary*, particularly in the context of the recent rate hikes.

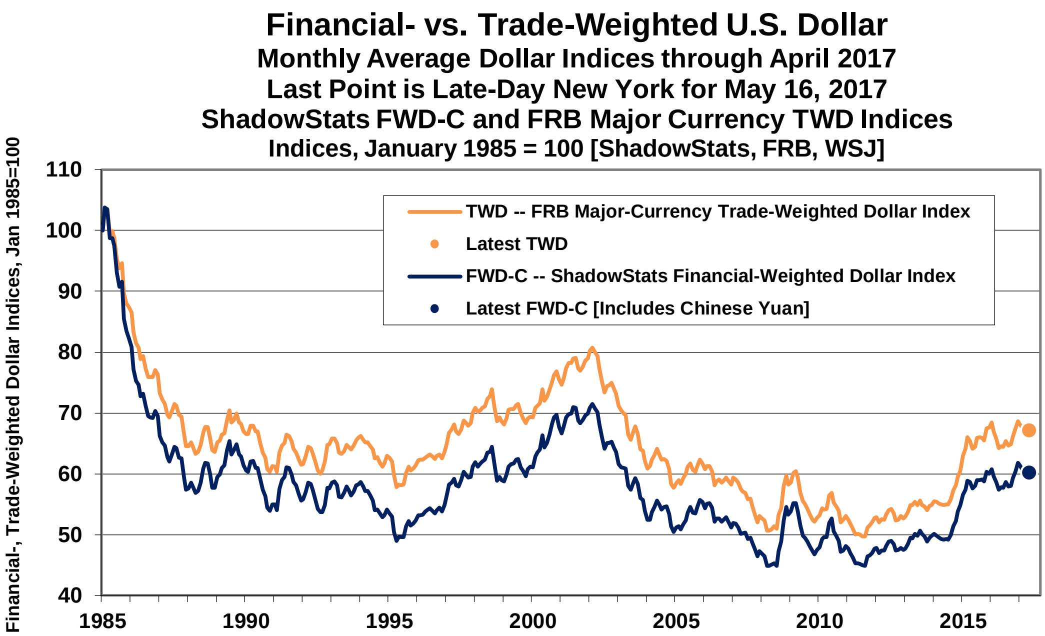
Consider, as the banking system approached the brink of collapse in the Panic of 2008, the Fed and the U.S. Treasury opted to save the system at any and all costs, which involved creating, spending, buying, lending whatever money, and guaranteeing whatever obligations, liabilities or circumstances that had to be covered. The stopgap measures saved the system, temporarily buying time, but none of the major underlying issues—from the collapsing domestic economy to long-term solvency issues were addressed.

The Fed's primary job always has been to support the banking system. Purported economic stimulus from the various forms of quantitative easing was nonsense, it always was about providing liquidity to the banking system. Talk of economic justification for quantitative easing was the Fed's political cover for those banking-system bailout actions, and that remains the case.

What has changed since the first of the year is some subsequent, now intensifying, weakening in headline economic detail, with the value of the U.S. dollar moving off its recent highs, and with gold and silver prices and oil prices moving off recent bottoms. Those trends generally should continue, despite further near-term Federal Reserve jawboning for more interest-rate hikes. The re-intensifying economic downturn increasingly should push the FOMC back towards quantitative easing.

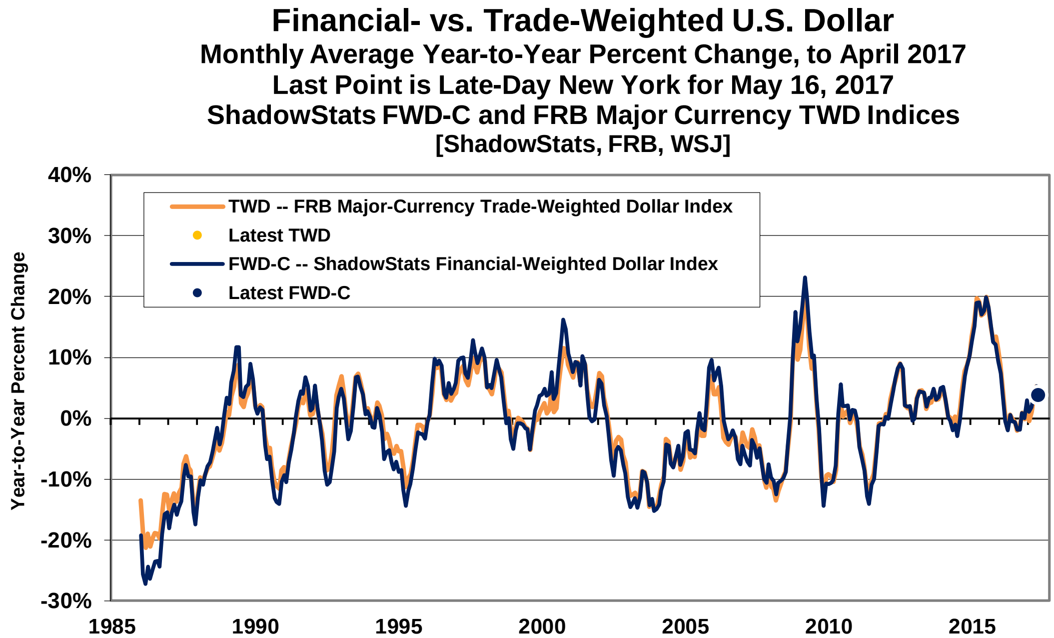
The updated U.S. dollar and gold graphs that usually accompany the monthly CPI *Commentary* follow, showing monthly-average plots of prices covering the U.S. Dollar (*Graphs 4* and *5*), along with gold (*Graphs 6*, *7* and *8*), where the May points on the graphs reflect late-day New York prices for Tuesday, May 16th.

Graph 4: Financial- versus Trade-Weighted U.S. Dollar

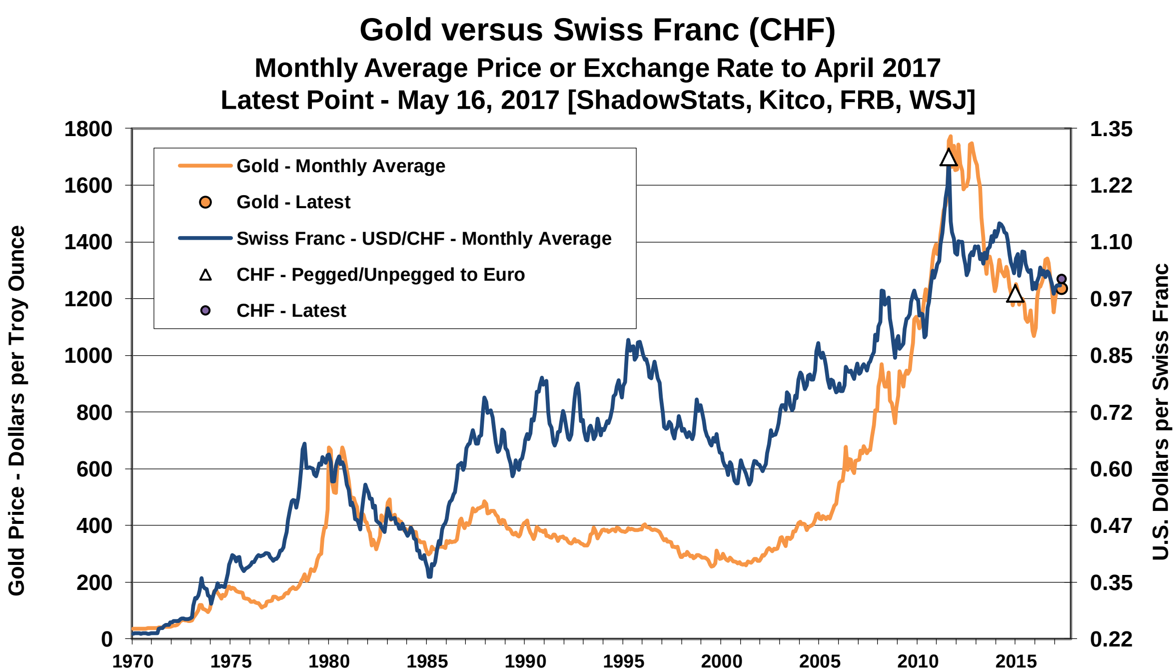


[Graphs 5 to 8 begin on the following page.]

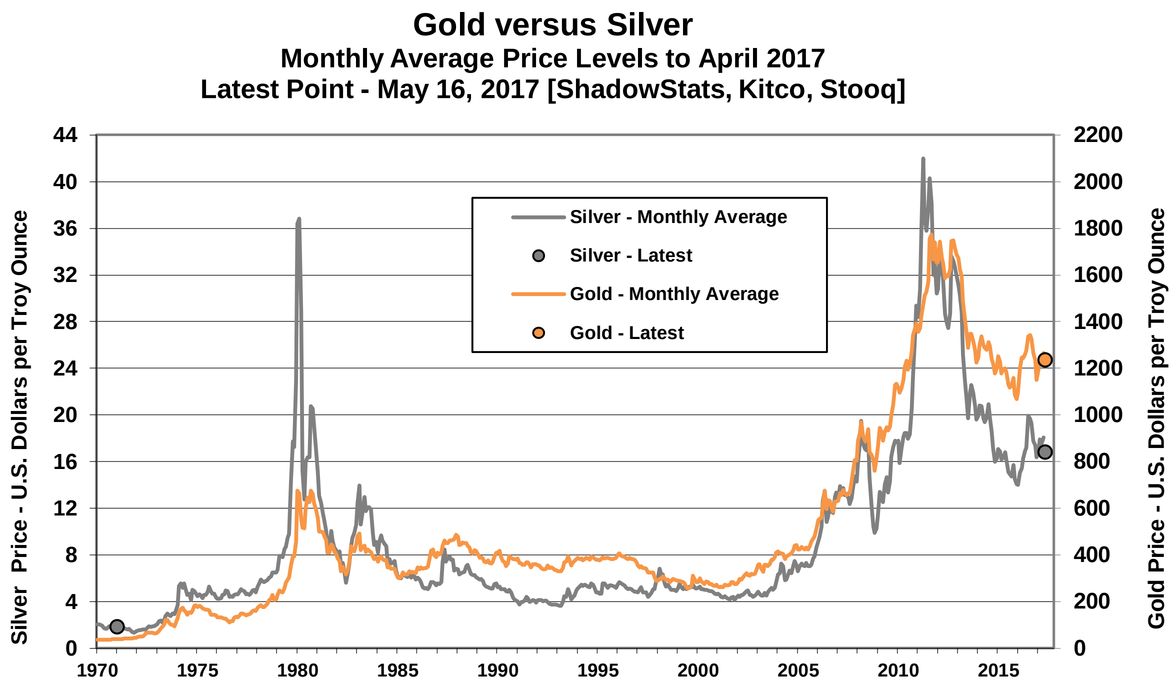
Graph 5: Year-to-Year Change, Financial- versus Trade-Weighted U.S. Dollar



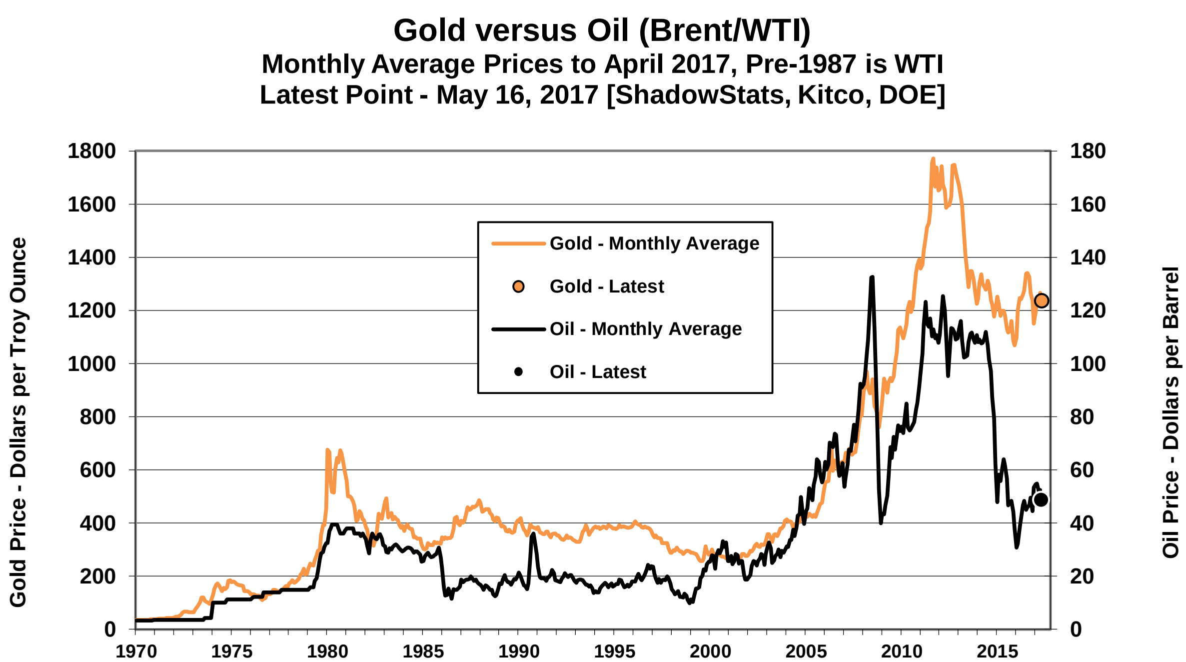
Graph 6: Gold versus the Swiss Franc



Graph 7: Gold versus Silver



Graph 8: Gold versus Oil



REPORTING DETAIL

RETAIL SALES – Nominal and Real (April 2017)

Annual Real Retail Sales Growth Resettled at Traditional Recession-Signal Level. In the context of the annual benchmark revisions to the Retail Sales series on April 26th (see *Commentary No. 882*), which are incorporated here by reference, and reflecting the subsequent reporting of headline April Retail Sales and CPI on May 12th, the annual rate of real growth in the Retail Sales series has settled back around two-percent, the traditional low-growth signal of imminent economic recession, where it had been pushing three percent pre-benchmarking.

Sales Growth Softened Net of Inflation. Headline nominal Retail Sales, before inflation adjustment, rose month-to-month by 0.4% in April 2017, versus a gain of 0.1% in March 2017, but the inflation-adjusted real gain in April declined to 0.2%, versus a real gain of 0.4% in March. Annual growth slowed from a nominal 4.8% in March 2017, to 4.5% in April 2017, with respective real annual growth rates slowing from 2.4% to 2.2%.

Nominal Retail Sales—April 2017. The Census Bureau reported May 12th its post-benchmarking "advance" estimate of April 2017 Retail Sales. Headline nominal activity gained 0.39% month-to-month, following a monthly gain of 0.12% in March and a monthly decline of 0.20% (-0.20%) in February.

That seasonally-adjusted, headline April 2017 decline of 0.39% +/- 0.59% was not statistically-significant (all confidence intervals are expressed at the 95% level). The headline March 2017 monthly retail sales gain of 0.12% +/- 0.23%, also was statistically-insignificant.

Year-to-Year Annual Change. The April 2017 nominal year-to-year change in Retail Sales showed a statistically-significant increase of 4.45% +/- 0.82%, versus annual gains of 4.84% in March 2017 and 4.72% in February 2017.

April Core Retail Sales, Net of Food and Gasoline. Reflecting a real-world environment that in theory should see rising, seasonally-adjusted food prices [up by 0.20% in the month per the Bureau of Labor Statistics (BLS)] and stronger gasoline prices [up by 1.19% for the month on a seasonally-adjusted basis, per the BLS], seasonally-adjusted grocery-store sales fell month-to-month by 0.42% (-0.42%), with gasoline-station sales up by 0.18% in April 2017.

Under normal conditions, 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 historical preference for ignoring food and energy prices when "core" inflation is lower than full inflation (when the Fed is looking to downplay inflation)—are estimated using two approaches:

Version I: April 2017 versus March 2017 seasonally-adjusted retail sales series—net of total grocery store and gasoline-station sales—gained by 0.52%, versus the official headline aggregate sales nominal gain of 0.39%.

Version II: April 2017 versus March 2017 seasonally-adjusted retail sales series—net of total grocery store and gasoline-station revenues—gained by 0.42%, versus the official headline aggregate sales nominal gain of 0.39%.

Real Retail Sales—April 2017. The headline detail from the coincident (May 12th) release of the April 2017 CPI-U showed a month-to-month gain in seasonally-adjusted inflation gain of 0.17%, versus a monthly decline of 0.29% (-0.29%) in the March and a monthly gain of 0.12% in February, with year-to-year seasonally-adjusted CPI-U inflation of 2.20% in April 2017, versus 2.38% in March 2017 and 1.87% in February.

Real month-to-month retail sales gained 0.22% in April 2017, versus 0.41% in March and a decline of 0.32% (-0.32%) in February. Real annual Retail Sales growth was 2.21% in April 2017, versus 2.40% in March 2017 and 1.87% in February 2017.

Intense Signal of Recession in Annual Real Growth Was Shaken Out of Temporary Abeyance by the Annual Benchmark Revisions. During normal economic times, annual real growth in Retail Sales at or below 2.0% signals an imminent recession. That signal broadly had been in play since February 2015 (the "new" recession likely will be timed from December 2014, based on industrial production, retail sales and other indicators), suggesting a deepening, broad economic downturn.

Where that annual growth recently had moved higher, close to three-percent, ShadowStats had viewed that recession signal as in temporary abeyance. Post-2017 benchmarking, however, annual growth rates have shifted lower, towards two-percent, again reviving that recession signal.

First-Quarter 2017 Annualized Real Growth Slowed Sharply versus Fourth-Quarter 2016. Updated for the revisions and latest detail, the first-quarter 2017 annualized quarter-to-quarter real growth in Retail Sales slowed sharply to 1.08%, versus 3.34% in fourth-quarter 2016, with annual year-to-year real growth for first quarter-2017 at 2.43%, versus 2.03% in fourth-quarter 2016.

Based solely on April's headline detail, second-quarter 2017 has started with an early-trend for 1.57% annualized real quarterly growth, with year-to-year quarterly change on track for a gain of 1.96%.

Structural Liquidity Issues Continue to Impair Retail Sales. An extreme consumer-liquidity bind increasingly constrains retail sales activity, as reviewed most recently in *Commentary No. 883* and more fully reviewed in the *CONSUMER LIQUIDITY* section of *No. 859 Special Commentary*. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for the income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including retail sales, real or nominal. That circumstance—in the last nine-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity, 70% of which is dependent on personal spending.

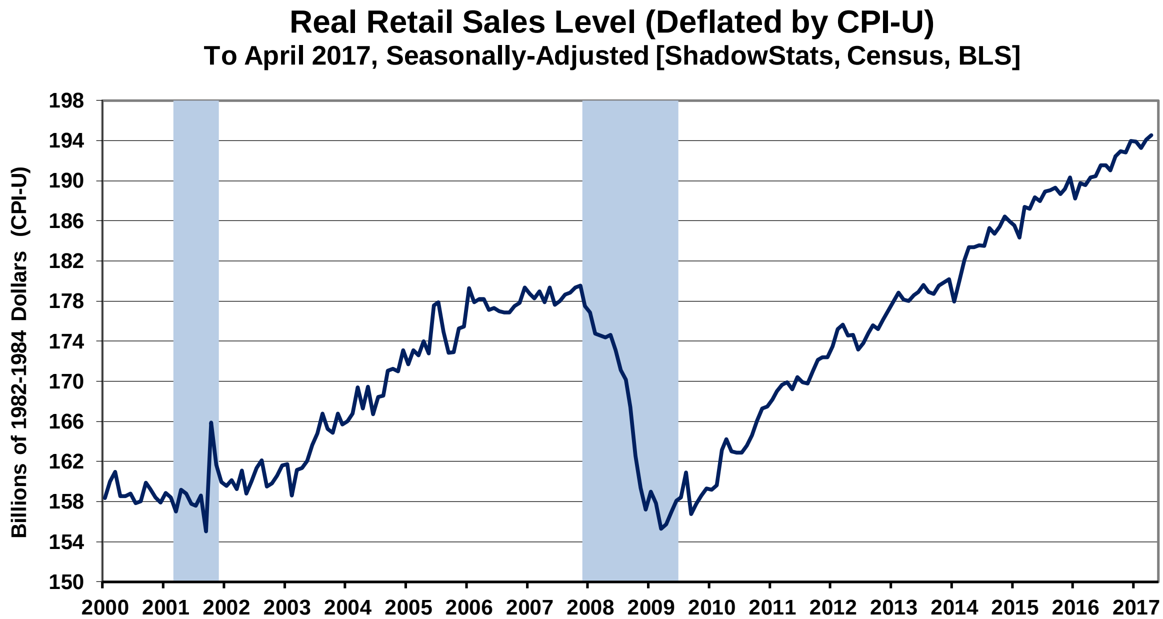
As headline consumer inflation generally continues its upside climb in the year ahead, and as overall Retail Sales continue to suffer from the ongoing consumer liquidity squeeze, the real Retail Sales data generally should continue to trend meaningfully lower, in what eventually still should gain recognition as a formal “new” recession.

Noted in the *Opening Comments*, *Consumer Liquidity Conditions* will be updated fully in *Commentary No. 888*.

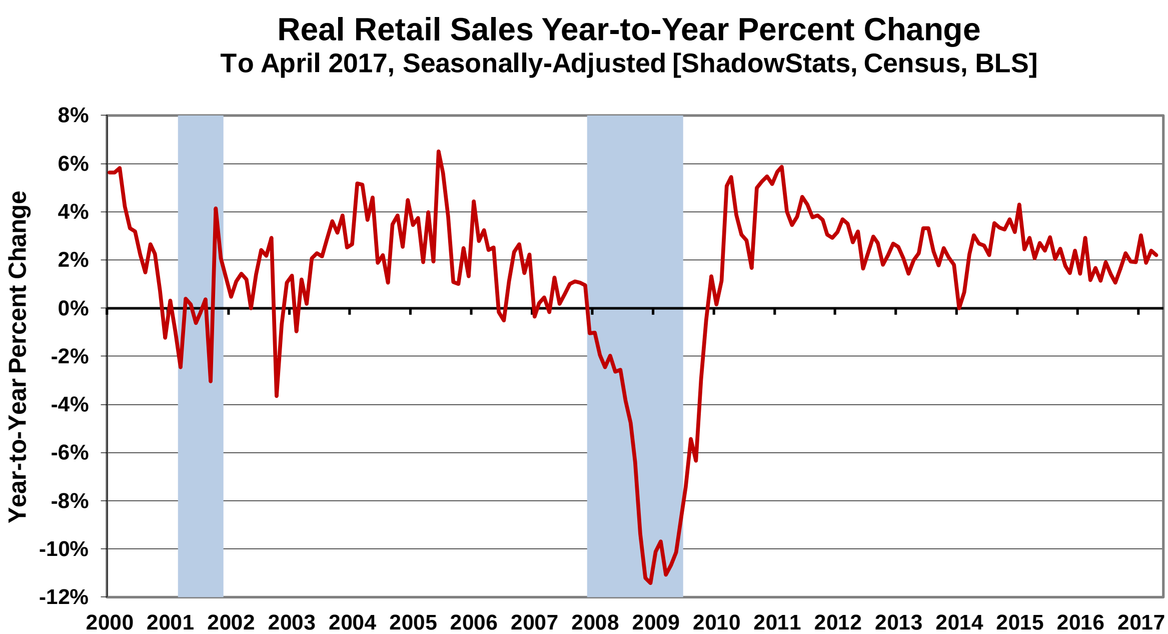
Real Retail Sales Graphs. The first of the four graphs following, *Graph 9* shows the level of real retail sales activity (deflated by the CPI-U) since 2000; *Graph 10* shows the year-to-year percent change for the same period. Annual real growth had slowed markedly into fourth-quarter 2015 and 2016, generating an intense recession signal, despite some near-term volatility and revisions with some recent upturn in annual real growth. *Graphs 11* and *12* show the level of, and annual growth in, real retail sales (and its predecessor series) in full post-World War II detail.

[Graphs 9 to 12 begin on the following page.]

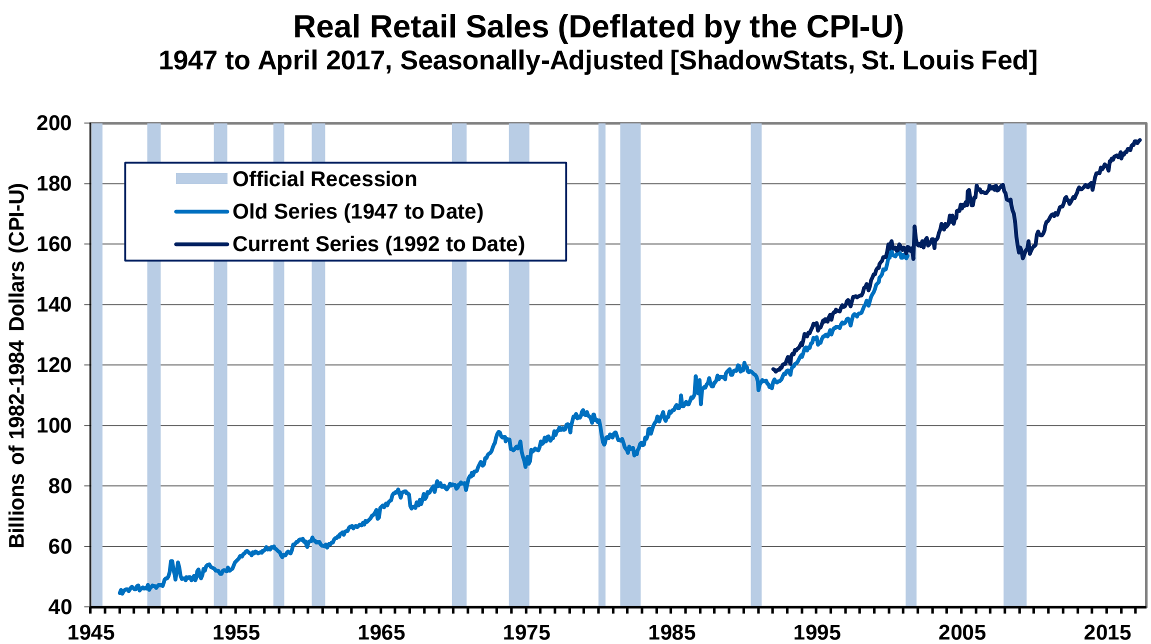
Graph 9: Level of Real Retail Sales (2000 to Date)



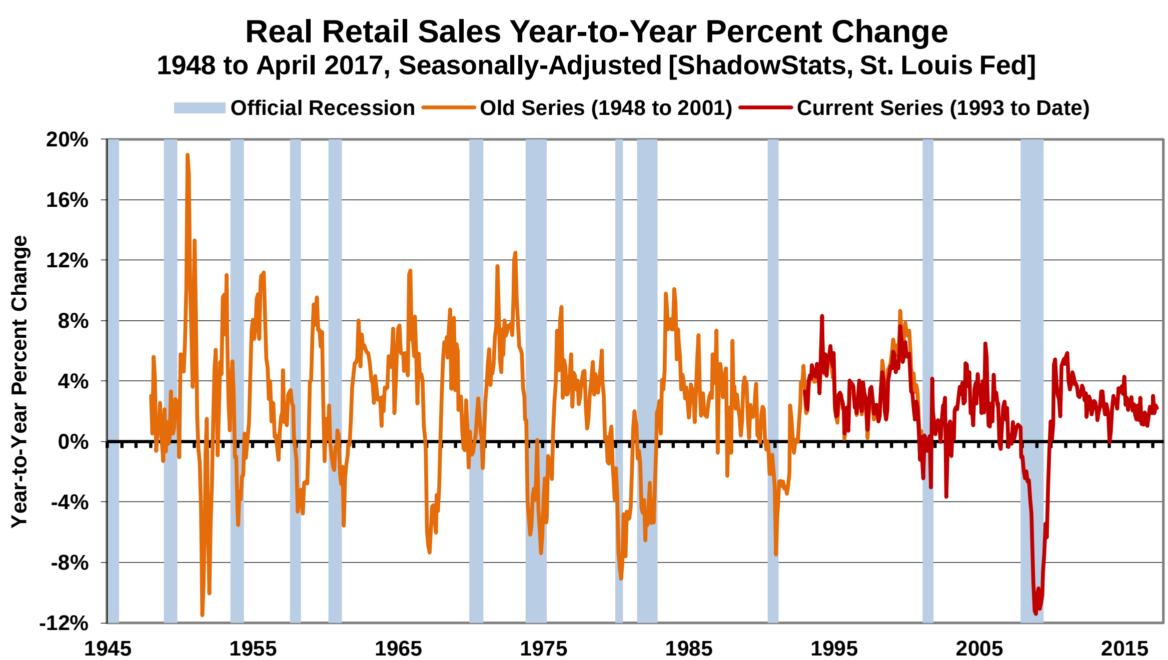
Graph 10: Real Retail Sales (2000 to Date), Year-to-Year Percent Change



Graph 11: Level of Real Retail Sales (1947 to Date)



Graph 12: Real Retail Sales (1948 to Date), Year-to-Year Percent Change



The relative strength seen in the real retail series since the economic trough in 2009 largely has reflected the understatement of the rate of inflation used in deflating the series. Discussed more fully in *Chapter 9* of *2014 Hyperinflation Report—Great Economic Tumble – Second Installment,* deflation by too low an inflation number (such as the CPI-U) results in the deflated series overstating inflation-adjusted, real economic growth. Shown in the latest "corrected" real retail sales—*Graph 2* in the *Executive Summary* section—with the deflation rates corrected for the understated inflation reporting of the CPI-U, the recent pattern of real sales activity has turned increasingly negative. The corrected graph shows that the post-2009 period of protracted stagnation ended, and a period of renewed and ongoing contraction began in second-quarter 2012 and continues to date. The corrected real retail sales numbers use the ShadowStats-Alternate Inflation Measure (1990-Base) for deflation instead of the CPI-U.

CONSUMER PRICE INDEX—CPI (April 2017)

Headline CPI-U Inflation Rose by 0.2% for the Month, Slowed to 2.2% Year-to-Year. Regular reporting in the first-half of the calendar year shows a pattern of downside seasonal-adjustments to month-to-month CPI growth, from January through June. The headline April 2017 CPI-U monthly inflation of 0.2% [up by 0.17% at the second decimal point] was the consensus expectation, reflecting continued negative seasonal adjustments to rising gasoline prices, rising food prices and rising "core" inflation (net of food and energy). Not adjusted for seasonal factors, as most people experience life, headline CPI-U inflation rose by 0.30% month-to-month in April 2017.

In contrast to the Producer Price Index (PPI), which just hit a 62-month high in April 2017, unadjusted, year-to-year CPI-U inflation continued to back off its 60-month high of 2.74% of February 2017, having fallen back to 2.38% in March 2017 and to 2.20% in April 2017. As with the PPI, the recent inflation surge had been driven by gasoline prices, not by an overheating economy. Those pressures go both ways and, again, are affected heavily by seasonal adjustments. Consider that in April 2017, the Bureau of Labor Statistics (BLS) reported that gasoline prices rose month-to-month by 4.02% unadjusted; that is what people paid at the pump. Seasonally-adjusted, headline gasoline prices rose by just 1.19% month-to-month. Meaningful seasonal adjustments are difficult to work, when most pricing volatility of the last two-to-three years has continued to be largely independent of regular monthly patterns of seasonality.

Adjusted monthly gains in the food, energy and "core" (net of food and energy) sectors subdued headline out-of-pocket, unadjusted, CPI-U inflation of 0.30%, again, to 0.17%.

Separately, with headline annual April 2017 CPI-U inflation at 2.2%, year-to-year inflation is not and has not been quite as low as indicated, when considered in the context of traditional CPI reporting and common experience. Moving on top of the unadjusted annual changes to the CPI-U, the ShadowStats-Alternate Inflation Measures showed year-to-year inflation in April 2017 easing to 5.8% [previously 6.0%], based on 1990 methodologies, and to 10.0% [previously 10.1%], based on 1980 methodologies.

Longer-Range Inflation Outlook. Despite the U.S. dollar strength of recent years, and accelerating dollar strength subsequent to the election and the hype leading into recent quarter-point FOMC rate hikes, a tremendous threat to the dollar and systemic liquidity and stability continues, tied to the U.S. Federal Reserve's inability to resolve fundamentally the 2008 financial collapse, other than having bought limited additional time with its emergency stopgap measures (see today's *Hyperinflation Watch* and *No. 859 Special Commentary*). Since the 2008 crisis, domestic- and global-banking systems have not been stabilized in a healthy or sustainable manner. Efforts to stimulate a non-recovering U.S. economy, amidst renewed faltering activity, have been nil, up through the advent of the Trump Administration. Given standard lead times, positive impact from any economic-stimulus package this year would not have significant effect now until mid-2018, at the earliest, a time lapse fraught with potential disaster created by a still-incapacitated Fed, fighting to the death a battle it already lost in the 2008 panic.

In the context of current economic reporting and signals, faltering economic activity has become increasingly obvious, along with related, increasing stresses on domestic systemic-liquidity and solvency issues, pushing the U.S. central bank back towards expanded quantitative easing in the next several months. Such likely would generate high risk of extreme flight from the U.S. dollar—a massive dollar debasement—threatening an increasingly-rapid upturn in energy and dollar-based commodity inflation, driving headline U.S. inflation much higher.

Compounding the high-risk of a near-term run on the U.S. dollar remains mounting recognition in global markets that the U.S. Federal Reserve and other central banks still have no effective idea as to how to boost current economic activity, how to stabilize global banking-system solvency, or otherwise how to slog their way out of a self-generated quagmire.

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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 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. Since it is fully substitution based, the series tends to reflect lower inflation than the other CPI measures. Accordingly, the C-CPI-U is the "new inflation" measure being proffered by Congress and the White House as a tool for reducing Social Security cost-of-living adjustments by stealth. Moving to accommodate the Congress, the BLS introduced changes to the C-CPI-U estimation process with the February 26, 2015 reporting of January 2015 inflation, aimed at finalizing the C-CPI-U estimates on a more-timely basis, and enhancing its ability to produce lower headline inflation than the traditional CPI-U.*

*The **ShadowStats 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. There are two measures, where the first is based on reporting methodologies in place as of 1980, and the second is based on reporting methodologies in place as of 1990.*

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CPI-U. The Bureau of Labor Statistics (BLS) reported on May 12th that the headline, seasonally-adjusted April 2017 CPI-U rose month-to-month by 0.2% [up by 0.17% at the second decimal point]. That followed a March month-to-month decline of 0.3% (-0.3%) [down by 0.29% (-0.29%)] and monthly gains of 0.1% [up by 0.12%] in February, 0.6% [0.55%] in January, and 0.3% [0.26%] in December 2016.

Adjusted April 2017 monthly inflation was weakened by across-the-board negative seasonal adjustments. food sector inflation rose by 0.23% unadjusted, versus 0.20% adjusted, energy sector inflation rose by 2.15% unadjusted, versus 1.14% adjusted, while the "core" (ex-food and energy) sector rose by 0.14% unadjusted, versus 0.07% adjusted. On an unadjusted basis, monthly April 2017 CPI-U gained 0.30%, 0.08% in March, 0.31% in February, 0.58% in January and 0.03% in December 2016.

April 2017 seasonal adjustments for monthly gasoline inflation were heavily negative, "depressing" a CPI-U unadjusted monthly gain of 4.02% in gasoline prices into an adjusted gain of 1.19%. The Department of Energy (DOE) estimated an unadjusted monthly gain in gasoline prices of 3.73%.

While early-May 2017 retail gasoline prices (DOE) are running lower month-to-month by about 1.4%, sharply negative seasonal adjustments to May 2017 gasoline prices easily could turn the adjusted, aggregate monthly May CPI-U to a month-to-month decline.

<u>Major CPI-U Groups</u>. Encompassed by the seasonally-adjusted monthly gain of 0.17% in April 2017 CPI-U [up by an unadjusted 0.30%], April food inflation rose by a seasonally-adjusted 0.20% [up by 0.23% unadjusted], energy inflation gained by a seasonally-adjusted 1.14% in April [up by an unadjusted 2.15%], while the adjusted April "core" (ex-food and energy) inflation rate rose by 0.07% [up by 0.14% unadjusted]. Separately, core CPI-U inflation showed unadjusted year-to-year inflation of 1.88%, down from 2.00% in March 2017, 2.22% in February 2017, 2.27% in January 2017 and 2.20% in December 2016.

<u>Year-to-Year CPI-U</u>. Not seasonally April 2017 year-to-year inflation for the CPI-U fell back to 2.2% [2.20% at the second decimal point], from 2.4% [2.38%] in March 2017 and from a 60-month high of 2.7% [2.74%] in February 2017, versus 2.5% [2.50%] in January 2017 and 2.1% [2.07%] in December 2016.

Year-to-year, CPI-U inflation would increase or decrease in next month's May 2017 reporting, dependent on the seasonally-adjusted month-to-month change, versus the adjusted, headline gain of 0.19% in May 2016 CPI-U. The adjusted change is used here, since that is how consensus expectations are expressed. To approximate the annual unadjusted inflation rate for May 2017, 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 April 2017 annual inflation rate of 2.20%. Given an early guess of a seasonally-adjusted 0.1% [-0.1%] decline in the monthly May 2017 CPI-U, that would leave the annual CPI-U inflation rate for May at about 1.9%, plus-or-minus, depending on rounding.

CPI-W. The April 2017 seasonally-adjusted, headline CPI-W, which is a narrower series and has greater weighting for gasoline than does the CPI-U, increased month-to-month by 0.18%, following a decline of 0.37% (-0.37%) in March, and gains of 0.06% in February, 0.61% in January and 0.29% in December 2016.

On an unadjusted basis, year-to-year CPI-W rose 2.1% in April 2017, versus 2.35% in March 2017, 2.82% in February 2017, 2.51% in January 2017 and 1.99% in December 2016.

Chained-CPI-U. The headline C-CPI-U is not seasonally adjusted, but it is revised quarterly for the prior year, as seen with the headline April 2017 reporting. April 2017 C-CPI-U annual inflation came in at 2.09%, versus downwardly revised levels of 2.28% in March 2017, 2.74% in February 2017, 2.43% in January 2017 and 1.92% in December 2016. Monthly annual growth levels were revised lower by 0.15% (-0.15%), back through June 2016, with the downside revisions tapering to 0.00% in March 2016.

See discussions in the earlier CPI *Commentary No. 721* and in the opening notes in the *CPI Section* of *Commentary No. 699* as to recent changes in the series. More-frequent revisions and earlier finalization of monthly detail broadly have been designed to groom the C-CPI-U series as the new Cost of Living Adjustment (COLA) index of choice for the budget-deficit-strapped federal government, as discussed in the *Public Commentary on Inflation Measurement*.

Caution: Artificially-low inflation numbers estimated by the U.S. Government and used in fields ranging from Social Security COLAs (see the 2017 CPI-W estimate discussion in *Commentary No. 841*) to determining income-tax brackets, have been redesigned in recent decades specifically to help reduce the federal deficit. They are harmfully misleading to anyone using a government CPI estimate as a meaningful cost-of-living measure for guidance on income or investment purposes.

Alternate Consumer Inflation Measures. The ShadowStats-Alternate Consumer Inflation Measures are constructed on top of the unadjusted CPI-U series. Adjusted to 1990 methodologies—the ShadowStats-Alternate Consumer Inflation Measure (1990-Base)—year-to-year annual inflation was roughly 5.8% in April 2017, versus 6.0% in March 2017, 6.3% in February 2017, 6.1% in January 2017 and 5.7% in December 2016.

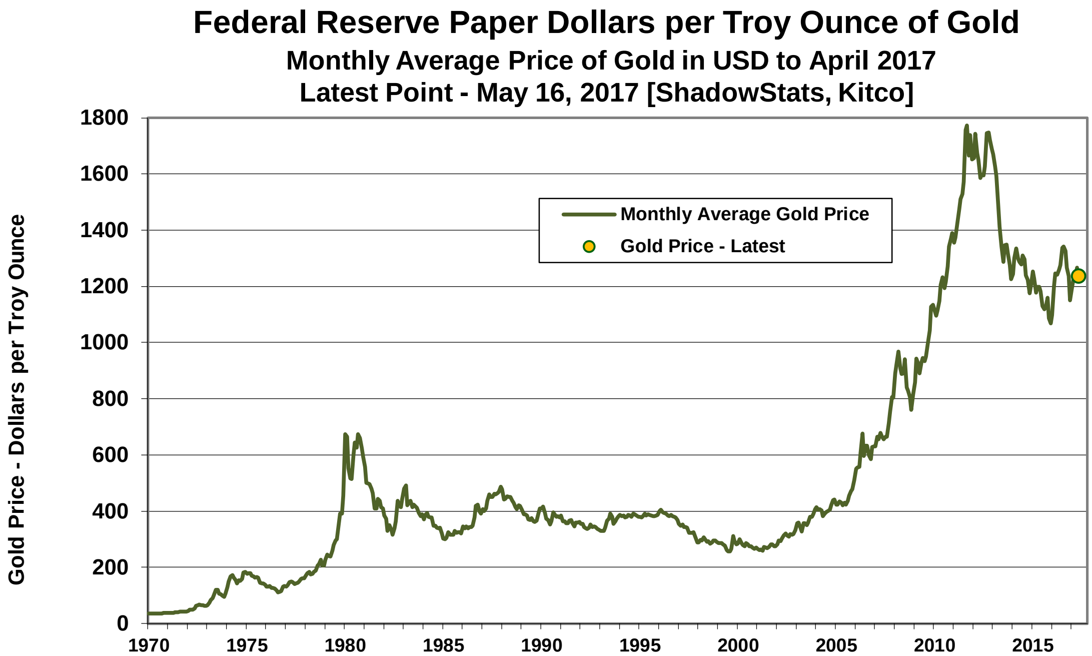
The April 2017 ShadowStats-Alternate Consumer Inflation Measure (1980-Base), which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was at about 10.0% (9.95% at the second decimal point), versus 10.1% (10.14%) in March 2017, 10.5% (10.53%) in February 2017, 10.3% (10.27%) in January 2017 and 9.8% (9.81%) in December 2016. Detail, along with an inflation calculator will be found in the CPI section of the Alternate Data tab of the www.ShadowStats.com home page.

Note: The ShadowStats-Alternate Consumer Inflation Measures largely have been reverse-engineered from BLS estimates of the anticipated impact on annual CPI inflation from various changes made to CPI reporting methodology since the early 1980s, as also incorporated in the CPI-U-RS series. That series provides an official estimate of historical inflation, assuming that all current methodologies were in place going back in time. The changes reflected there are parallel with and of the same magnitude of change as estimated by the BLS, when a given methodology was changed.

The ShadowStats estimates are adjusted on an additive basis for the cumulative impact on the annual inflation rate from the various BLS changes in methodology (reversing the net aggregate inflation reductions by the BLS). The series are adjusted by ShadowStats for those aggregate changes, but the series otherwise are 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 what most consumers view as out-of-pocket expenditures. Roughly five percentage points of the additive ShadowStats adjustment since 1980 reflect the BLS's formal estimate of the annual impact of methodological changes; roughly, two percentage points reflect changes by the BLS, where ShadowStats has estimated the impact not otherwise published by the BLS. For example, the BLS does not consider more-frequent weightings of the CPI series or shifting the nature of retail outlets to be changes in methodology. Yet those changes have had the effect of reducing headline inflation from what it would have been otherwise (See Public Commentary on Inflation Measurement *for further details.)*

Graph 13: Monthly Average Gold Price in Dollars (Federal Reserve Notes)



Gold and Silver Historic High Prices Adjusted for April 2017 CPI-U/ShadowStats Inflation—

CPI-U: GOLD at $2,672 per Troy Ounce, SILVER at $155 per Troy Ounce
ShadowStats: GOLD at $14,119 per Troy Ounce, SILVER at $821 per Troy Ounce

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) for gold on January 21, 1980 would be $2,672 per troy ounce, based on April 2017 CPI-U-adjusted dollars, and $14,119 per troy ounce, based on April 2017 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (all series here are not seasonally adjusted).

In like manner, the all-time high nominal 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 April 2017 CPI-U inflation, the 1980 silver-price peak would be $155 per troy ounce and would be $821 per troy ounce in terms of the March 2017 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (again, all series not seasonally adjusted).

Shown in *Table 1*, on page 47 of *No. 859 Special Commentary*, 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. They also effectively have come close to fully compensating for the loss of purchasing power of the dollar based on the ShadowStats-Alternate Consumer Price Measure (1980-Methodologies Base).

Real Retail Sales—April 2017—Growth Softened to a 0.22% Real Monthly Gain by Rising, Headline CPI-U Inflation. Real Retail Sales are detailed in the prior *Retail Sales - Nominal and Real* section.

Real Average Weekly Earnings—April 2017—First-Quarter 2017 Year-to-Year Decline and Second Consecutive Quarter-to-Quarter Contraction Remained Intact, with Mixed April Headlines. The headline estimate for April 2017 real average weekly earnings was published coincident with the May 12th release of the April CPI-W. In the production and nonsupervisory employees category—the only series for which there is a meaningful history, the regularly-volatile real average weekly earnings were up by 0.39% month-to-month in April 2017, at a slower pace than the revised monthly gain of 0.55% [previously 0.25%] in March 2017, at an unrevised revised 0.07% gain in February, having declined in January by an unrevised 0.47% (-0.47%), the sixth consecutive monthly decline for the series.

Year-to-year, the adjusted April 2017 year-to-year change rose to 0.49%, versus a revised annual decline of 0.01% (-0.01%) [previously down by 0.31% (-0.31%)] in March 2017, versus unrevised annual drops of 0.39% (-0.39%) in February 2017 and 0.46% (-0.46%) in January 2017.

Such left fourth-quarter 2016 in an unrevised 1.36% (-1.36%) annualized real quarter-to-quarter contraction, versus third-quarter 2016 growth of 1.48%, a second-quarter 2016 annualized contraction of 0.11% (-0.11%) and unrevised first-quarter 2016 annualized growth of 1.81%.

First-Quarter 2017 Real Earnings Still Contracted Quarter-to-Quarter and Year-to-Year. With the initial headline April 2017 and related March 2017 revisions in place, first-quarter 2017 contracted at a revised, annualized quarter-to-quarter pace of 1.13% (-1.13%) [previously 1.53% (-1.53%)], such was the second, consecutive quarter-to-quarter real contraction.

Year-to-year change in first-quarter 2017 real earnings contracted by 0.29% (-0.29%) [previously 0.39% (-0.39%)], the first annual or year-to-year quarterly contraction since fourth-quarter 2012, when the real GDP effectively was unchanged quarter-to-quarter. The signal here highlights financial stresses on the consumer and major downside risk to headline real GDP reporting.

The 2015 rally in real annual income and the subsequent slowdown in latter 2016 were tied directly to the impact of collapsing gasoline prices, and a subsequent rebound in inflation-adjusted income.

While these usually heavily-revised and seasonally-adjusted monthly changes are without much, if any, meaning in the near-term—effectively reporting garbage—over the longer term and quarterly, and particularly the benchmarked trends tend to be of some substance. As with the BLS reporting tied to the nonfarm payrolls, the headline seasonally-adjusted monthly data here are not comparable due to reporting issues with concurrent seasonal factor adjustments (see *Headline Distortions from Shifting Concurrent-Seasonal Factors* on page 26 of prior *Commentary No. 879*).

Separately, the CPI-W deflated reporting here also is biased versus the CPI-U-deflated series, where the CPI-W—more heavily weighted with gasoline prices—tends to have much deeper, negative headline inflation, with resulting stronger headline, real growth than would be seen with the CPI-U, when gasoline prices are falling, and vice versa. Such was true again, in the April 2017 detail, where higher, seasonally-adjusted gasoline prices generated a headline, seasonally-adjusted CPI-W gain of 0.18%, month-to-month, versus the parallel CPI-U decline of 0.17%.

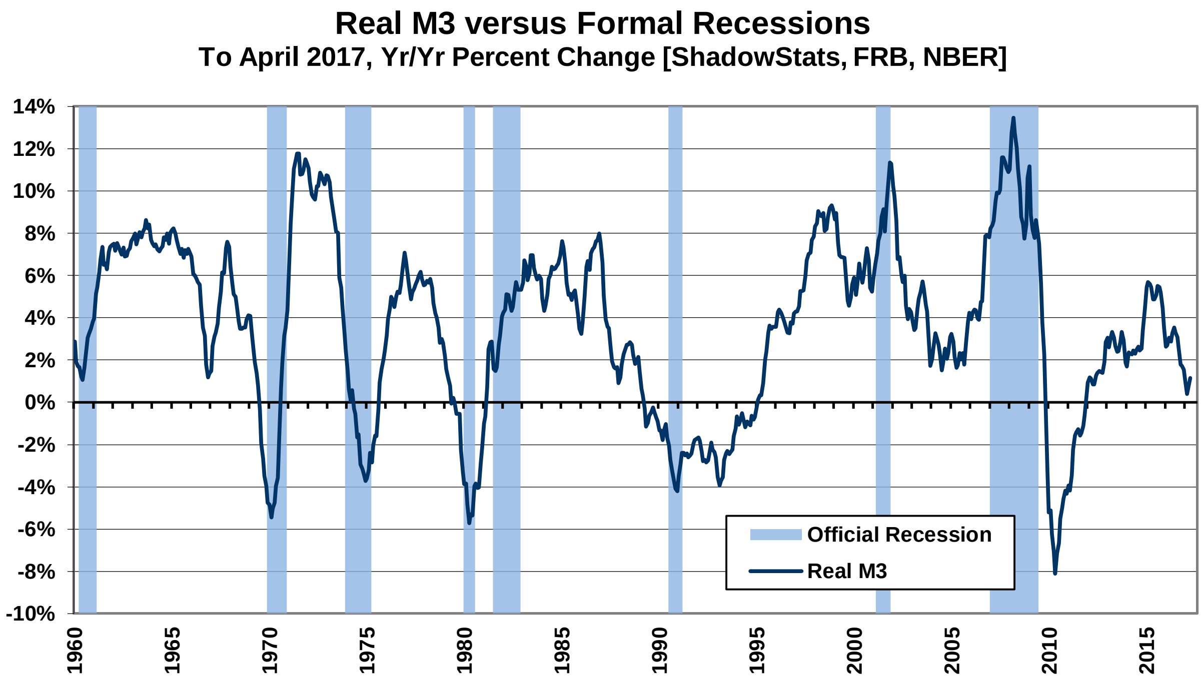
Found in the *Executive Summary* section, *Graph 3* plots this series, showing the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI Measure, 1990-Base (blue-line). When inflation-depressing methodologies of the 1990s began to kick-in, the artificially-weakened headline CPI-W (also used in calculating Social Security cost-of-living adjustments) helped to prop up the reported real earnings. Official real earnings today still have not recovered their inflation-adjusted levels of the early-1970s, and, at best, have been in a minimal uptrend for the last two decades (albeit spiked recently by negative headline inflation). Deflated by the ShadowStats (1990-Based) measure, real earnings have been in fairly-regular decline for the last four decades, which is much closer to common experience than the pattern suggested by the CPI-W. See the *Public Commentary on Inflation Measurement* for further detail.

Real (Inflation-Adjusted) Money Supply M3—April 2017—Annual Growth Bounces Higher. The signal for a double-dip, multiple-dip or simply protracted, ongoing recession, based on annual contraction in the real (inflation-adjusted) broad money supply (M3), was recently been re-triggered, now with a minimal contrary bounce, although the previous signal had remained in place, despite real annual M3 growth having rallied into positive territory post-2010. Shown in *Graph 14*—based on April 2017 CPI-U reporting and the latest ShadowStats-Ongoing M3 Estimate—annual inflation-adjusted growth in April 2017 M3 rose to 1.15%, versus downwardly-revised gains in March 2017 M3 of 0.69% [previously 0.70%], of 0.40% [previously to 0.47%, initially 0.39%] in February 2017 M3 and of 1.05% [previously 1.09%] in January 2017, all down from a minimally-revised prior peak growth of 5.69% [previously 5.67%] in February 2015. Such has continued to reflect rapidly slowing nominal annual M3 growth (see *Commentary No. 871*) with offsets in April 2017 and March 2017 from the headline, unadjusted annual growth in CPI-U inflation falling back to 2.20% in April and 2.38% in March, from 2.74% in February 2017.

The current monthly uptick in annual growth reflected a likely temporary reversal in the pattern of plunging annual growth, but still at levels last seen in plunging growth into the 2009 economic collapse, and at a level always seen going into or already in a recession. The uptick in April 2017 real M3 growth reflected an uptick annual M3 nominal growth as well as a downtick in annual CPI-U growth.

The signal for a downturn or an intensified downturn is generated when annual growth in real M3 first slows sharply, approaches zero and 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 previous "new" downturn signal was generated in December 2009, even though there had been no upturn since the economy purportedly hit bottom in mid-2009. The ongoing issue here confounding the regular signal is that the U.S. economy never has recovered fully from its collapse into 2009 (see *Commentary No. 877*). The initial economic downturn never evolved into a meaningful or sustainable recovery. The current level and pattern of real annual M3 growth always has been followed by annual contraction and recession signal.

Graph 14: Real M3 Annual Growth versus Formal Recessions



Again, when real M3 growth breaks above zero, there is no signal; the signal is generated only when annual growth moves to zero and into negative territory, where it continues to head at present. The broad economy tends to follow in downturn or renewed deterioration roughly six-to-nine months after the signal. Weaknesses in a number of economic series have continued to the present, with significant new softness in recent reporting. Actual post-2009 economic activity has remained at relatively low levels of activity—in protracted stagnation, with no actual recovery (see *Graphs 2* and *3* in the *Executive Summary*, and again see *Commentary No. 877* and the *ECONOMY* section of *No. 859 Special Commentary*).

Despite the purported, ongoing recovery shown in headline GDP activity, a renewed downturn in official data is underway that likely still will gain official recognition as a "new" recession, in the months ahead. Underlying reality remains that the collapse into 2009 was followed by a plateau of low-level economic activity—no meaningful upturn, no recovery from or end to the official 2007 recession—and the unfolding "new" downturn remains nothing more than a continuation and re-intensification of the downturn that began unofficially in 2006.

PRODUCER PRICE INDEX (April 2017)

Final Demand PPI Annual Inflation Hit a 62-Month High. In the context of seasonally-adjusted monthly PPI Goods inflation rising by 0.45%, Construction inflation increasing by 0.43% and the dominant "margins" in the Services sector rising by 0.44%, aggregate Final-Demand PPI (FD-PPI) monthly inflation rose by 0.54% month-to-month in April 2017, with unadjusted year-to-year inflation rising to 2.45%, at a 62-month high.

Headline Details Do Not Add Up? Raising an issue as to headline-reporting quality of this series, one generally does not see aggregate annual growth in the total series that exceeds the annual growth levels in each major sub-series. In the current circumstance, the headline, seasonally-adjusted 0.54% aggregate month-to-month increase exceeded all the major sub-series growth rates, which ranged from 0.43% to 0.45%, where the weightings of those three sub-series total 100.00% of the headline series (not seasonally adjusted) and account for the full aggregate series, irrespective of whether it is adjusted or unadjusted. Other than an outright error, the issue here appears to be with large seasonal-adjustment variation issues in the unadjusted-weighting patterns, against seasonally-adjusted energy pricing. Such easily could be distorted where the PPI and its component indices are published rounded to the first-decimal point, which can be plus or minus 0.1% in inflation, while the aggregate series itself likely is rounded to its index level only after all the unrounded components are in place.

Spiking Annual Inflation No Due to Overheating Economy. Nonetheless, with headline annual inflation at a five-year high, and as previously discussed here, the recent spike in annual headline inflation has not reflected an overheating economy, as claimed by some at the Fed. The headline issue remains energy-price distortions in the last several years that have been rigged heavily through the Federal Reserve's interest-rate jawboning and dollar-propping gimmicks, combined with recent OPEC-supply jawboning. Headline April 2017 energy prices rose sharply month-to-month, with minimally-slowing annual growth, both before and after seasonal adjustment.

Services-Side Nonsense Detail. The headline monthly Final-Demand PPI inflation generally still reflects neither real-world activity, nor common experience, except by possible coincidence. As structured, the monthly wholesale inflation rate remains dominated by the services sector, which remains of negligible common-experience or theoretical value, as discussed in the following *Bulk of Headline PPI Reporting Is of Little Practical Use* section. It also has proven to be highly unstable in its surveying and related reporting. Consider that the monthly PPI detail is subject to revision five months after its initial reporting. Those changes usually are small.

For the December 2016 PPI revision, this month, the headline monthly change revised from an initial month-to-month gain of 0.1% to a monthly increase of 0.2%. The revision incorporated shifts in food- and energy-inflation reporting, as well as shifts across the unstable services sector (see *Inflation That Is More Theoretical than Real World*).

Bulk of Headline PPI Reporting Is of Little Practical Use. *[The background text here and in the next subsection is as published previously.]* Beyond the broad issues with general inflation measurement (see *Public Commentary on Inflation Measurement*), indeed the bulk of the PPI is covered by the "services" sector, where inflation is determined largely by shifting profit margins. Discussed in the next subsection, profit-margin inflation estimates generally are handled in a manner counter-intuitive to the more-traditional measurement of inflation in goods and services, otherwise calculated as a measurement of change in prices. Accordingly, the headline detail here increasingly has a limited relationship to real-world activity.

The conceptual differences between goods inflation and services profit margins do not blend well and are not merged easily or meaningfully in the current version of the PPI. While, the dual measures are more meaningfully viewed independently than as the hybrid measure of the headline Producer Price Index Final Demand—ShadowStats separates the analyses of those sectors by sub-category—the aggregate headline series here also is reviewed and covered within the headline reporting conventions of the Bureau of Labor Statistics (BLS).

Inflation That Is More Theoretical than Real World. Effective with January 2014 reporting, a new Producer Price Index (PPI) replaced what had been the traditional headline monthly measure of wholesale inflation in Finished Goods (see *Commentary No. 591*). In the new headline monthly measure of wholesale Final Demand, Final Demand Goods basically is the old Finished Goods series, albeit expanded.

The new otherwise dominant Final Demand Services sector largely reflects problematic and questionable surveying of intermediate or quasi-wholesale profit margins in the services area. To the extent that profit margins shrink in the services sector, one could argue that the resulting lowered estimation of inflation actually is a precursor to higher inflation, as firms subsequently would move to raise prices, in an effort to regain more-normal margins. In like manner, in the circumstance of "increased" margins—due to the lower cost of petroleum-related products not being passed along immediately to customers—competitive pressures to lower margins would tend to be reflected eventually in reduced retail prices (CPI). The oil-price versus margin gimmick works both way. In times of rapidly rising oil prices, it mutes the increase in Final Demand inflation, in times of rapidly declining oil prices; it tends to mute the decline in Final Demand inflation.

The current PPI series remains an interesting concept, but it appears limited as to its aggregate predictive ability versus general consumer inflation. Further, there is not enough history available on the new series (just seven years of post-2008-panic data) to establish any meaningful relationship to general inflation or other economic or financial series.

April 2017 Headline PPI Detail. The Bureau of Labor Statistics (BLS) reported May 11th, that the seasonally-adjusted, month-to-month, headline Producer Price Index (PPI) Final Demand inflation for April 2017 was a gain of 0.54%. That was against a monthly contraction of 0.09% (-0.09%) in March, a gain of 0.27% in February, a revised gain of 0.54% [previously 0.63%] in January, due to the five-month revision to December 2016, which now shows a monthly gain of 0.18% [previously 0.09%, initially 0.18%].

On a not-seasonally-adjusted basis—all annual growth rates are expressed unadjusted—year-to-year PPI Final Demand inflation in April 2017 was at a 62-month high of 2.45%, versus 2.38% in March 2017, 2.19% in February 2017, 1.64% in January 2017 and a revised 1.74% [previously 1.65%] in December 2016.

For the three major subcategories of April 2017 Final Demand PPI, headline monthly Goods inflation gained by 0.45%, Services "inflation" (profit margins) gained by 0.44% and Construction inflation rose by 0.43%, with respective unadjusted annual growth rates of 4.03%, 1.80% and 0.96%.

<u>Final Demand Goods (Weighted at 33.84% of the Aggregate Index).</u> Running somewhat in parallel with the old Finished Goods PPI series, headline month-to-month Final Demand Goods inflation in April 2017 rose by 0.45%, having declined 0.09% (-0.09%) March and having gained 0.27% in February. There was

negative impact on the aggregate goods headline reading from underlying seasonal-factor adjustments. Not-seasonally-adjusted, April inflation rose month-to-month by 0.63%.

Unadjusted, year-to-year goods inflation in April 2017 showed an annual gain of 4.03%, following gains of 3.96% in March 2017 and 3.87% in February 2017.

Headline seasonally-adjusted monthly changes by major components of the April 2017 Final Demand Goods:

- "Foods" inflation (weighted at 5.43% of the total index) rose by 0.95% month-to-month in April 2017, having gained 0.87% month-to-month in March and 0.35% in February. Seasonal adjustments were negative for the April headline change, which was up by 1.13% unadjusted. Unadjusted and year-to-year, annual April 2017 foods inflation rose by 1.48%, having gained 0.26% in March 2017 and declined by 1.80% (-1.80%) in February 2017.
- "Energy" inflation (weighted at 5.49% of the total index) rose month-to-month by 0.81% in April 2017, having declined by 2.87% (-2.87%) in March and having gained 0.60% in February. Seasonal adjustments were negative, with unadjusted monthly energy inflation up by 1.85% in the month. Unadjusted and year-to-year, April 2017 energy prices gained 14.34%, versus 15.18% in March 2017 and 19.17% in February 2017.
- "Less foods and energy" ("Core" goods) monthly inflation (weighted at 22.92% of the total index) rose by 0.27% in April 2017, having gained 0.36% in March and 0.09% in February. Seasonal adjustments were neutral for monthly core inflation, with unadjusted monthly inflation at 0.27% for the second month. Unadjusted and year-to-year, April 2017 was 2.26%, versus 2.27% in March 2017 and 2.00% in February 2017.

Final Demand Services (Weighted at 64.09% of the Aggregate Index). Headline monthly Final Demand Services inflation rose by 0.44% in April 2017, versus a decline of 0.09% (-0.09%) in February and a gain of 0.45% in February. The overall seasonal-adjustment impact on headline March services inflation was positive, with an unadjusted monthly gain of 0.35%. Year-to-year, unadjusted April 2017 services rose by 1.80%, versus annual gains of 1.53% in March 2017 and 1.44% in February 2017.

The headline monthly changes by major component for April 2017 Final Demand Services inflation:

- "Services less trade, transportation and warehousing" inflation, or the "Other" category (weighted at 38.87% of the total index), rose month-to-month by 0.81% in April 2017, having declined by 0.09% (-0.09%) in March and having gained 0.54% in February. Seasonal-adjustment impact on the adjusted April detail was positive, where the unadjusted monthly reading was a gain of 0.72%. Unadjusted and year-to-year, April 2017 "other" services inflation was up by 2.09%, having gained 1.45% in March 2017 and 1.64% in February 2017.
- "Transportation and warehousing" inflation (weighted at 4.94% of the total index) gained 0.69% month-to-month in April 2017, having declined by 0.17% (-0.17%) in March and having gained 0.26% in February. Seasonal adjustments were positive for the headline April reading, where the unadjusted monthly number was a gain of 0.43%. Unadjusted and year-to-year, April 2017 transportation inflation was up by 2.20%, having risen by 1.31% in March 2017 and 1.59% in February 2017.

- "Trade" inflation (weighted at 20.28% of the total index) declined month-to-month in April 2017 by 0.35% (-0.35%), having declined by 0.09% (-0.09%) March 2017 and gained by 0.35% in February. Seasonal adjustments also had a negative impact here, where the unadjusted monthly change was a decline of 0.26% (-0.26%). Unadjusted and year-to-year, April 2017 trade inflation slowed to 1.06%, from 1.50% in March 2017 and versus 0.88% in February 2017.

Final Demand Construction (Weighted at 2.08% of the Aggregate Index). Although a fully self-contained subsection of the Final Demand PPI, Final Demand Construction inflation receives no formal headline coverage. Month-to-month construction inflation rose by 0.43% in April 2017, having gained 0.17% in March and having contracted by 0.09% (-0.09%) in February. The impact of seasonal factors on the April reading was neutral, as usual, where the unadjusted monthly gain also was 0.43%. The issues here are a combination of monthly headline cost changes along with a quarterly estimate of contractor profit-margin changes that have little connection to real-world activity. The latter circumstance was addressed in *Commentary No. 829* of September 2, 2016.

On an unadjusted basis, year-to-year construction inflation rose by 0.96% in April 2017, versus 1.50% in March 2017 and 1.23% in February 2017. Private surveys generally show much higher construction-related inflation than is reported in the PPI, by an order of magnitude of a couple of hundred basis points, such as reflected in the privately-published Building Cost and Construction Cost Indices [Dodge Data and Analytics (McGraw Hill) *Engineering News-Record*] and in construction-related price deflators in the National Income Accounts, such as the Gross Domestic Product (GDP). Discussed in *Commentary No. 829*, ShadowStats has constructed a Composite Construction Deflator (CCD) now used by ShadowStats in deflating the Census Bureau's monthly estimates of Construction Spending Put in Place in the United States.

PPI-Inflation Impact on Pending Reporting of New Orders for Durable Goods. As to the upcoming reporting of April 2017 New Orders for Durable Goods, monthly inflation (reported only on a not-seasonally-adjusted basis) for new orders for manufactured durable goods in April 2017 was a gain of 0.24%, the same level as in March and up from 0.18% in February. Year-to-year annual inflation continued to rise, hitting 1.87% in April 2017, versus 1.75% in March 2017 and 1.45% in February 2017. April 2017 durable goods orders (both nominal and real) will be reported and calculable on May 26th, with coverage in the ShadowStats *Commentary No. 889* of that date.

WEEK, MONTH AND YEAR AHEAD

Downturn in the Economic Weakness Should Intensify in Headline Reporting, Compromising Fed Policies, Pummeling the U.S. Dollar and Boosting the Price of Gold. In the context of the *Opening Special Comments* of *Special Commentary No. 885*, and as discussed the *Opening Comments* of *Commentary No. 883*, the developing downshift in economic expectations increasingly should move market expectations for Federal Reserve policy away from rate hikes and the normalization of the Fed's balance sheet, towards renewed quantitative easing. The problem for the U.S. central bank remains that faltering domestic economic activity stresses banking-system solvency. Aside from formal obligations of the Fed to maintain healthy domestic economic and inflation conditions, the central bank's primary function, in practice, always has been to keep the banking system afloat. The near-absolute failure of that function in 2008 remains the primary ongoing and unresolved problem for the Fed, and it is one of the ongoing primary issues preventing the return of U.S. economic activity to normal functioning.

The outlook for future FOMC activity is updated in today's *Hyperinflation Watch*, and remains otherwise as reviewed in the *Opening Comments* and *Hyperinflation Watch* of *Commentary No. 880*, and as previously reviewed in *Commentary No. 873*. The circumstances and outlook remain as broadly outlined in *No. 859 Special Commentary*.

Otherwise, the following discussion has changed little from other recent comments. As reflected in common experience, actual U.S. economic activity generally continues in stagnation or downturn, never having recovered fully its level of pre-economic-collapse (its pre-2007-recession peak). While the latest headline GDP shows economic expansion of 12.3% since that series purportedly recovered its 2007-pre-recession high in 2011, no other "recovered" economic series has come close to showing that expansion either in terms of magnitude or in the purported brevity of the depression. Most of the better-quality series have remained in continuing, not-recovered status, in a period of protracted downturn that now rivals that of the Great Depression (see *Commentary No. 869*). With new signals in hand of intensifying, near-term economic woes, the FOMC soon should shift policies, once again, reverting to some form of quantitative easing, in an effort to address related, intensifying solvency risks in the domestic banking system.

Discussed in *No. 859 Special Commentary*, the Trump Administration continues to face extraordinarily difficult times, but has a chance to turn the tide on factors savaging the U.S. economy and on prospects for long-range U.S. Treasury solvency and for stability and strength in the U.S. dollar. Any forthcoming economic stimulus faces a nine-month to one-year lead-time—now moved well into 2018—before it meaningfully affects the broad economy. Needed at the same time are a credible plan for bringing the U.S. long-term budget deficit (sovereign solvency issues) under control, and action to bring the Federal Reserve under control and/or to reorganize the banking system. These actions broadly are necessary to restore domestic-economic and financial-system tranquility (again, see *No. 859*), and they will not happen without the cooperation of the U.S. Congress.

Prior General Background. *No. 859 Special Commentary* updated near-term economic and inflation conditions, and the outlook for same, including the general economic, inflation and systemic distortions evolving out of the Panic of 2008 that have continued in play, and which, again, need to be addressed by the new Administration in the immediate future (see also the *Hyperinflation Watch* of *Commentary No. 862* and *Commentary No. 869*).

Contrary to the official reporting of an economy that collapsed from 2007 into 2009 and then recovered strongly into ongoing expansion, underlying domestic reality remains that the U.S. economy started to turn down somewhat before 2007, collapsed into 2009 but never recovered fully. While the economy bounced off its 2009 trough, it entered a period of low-level stagnation and then began to turn down anew in December 2014, a month that eventually should mark the beginning of a "new" formal recession (see *General Commentary No. 867*).

Coincident with and tied to the economic crash and the Panic of 2008, the U.S. banking system moved to the brink of collapse, a circumstance from which U.S. and global central-bank policies never have recovered. Unwilling to admit its loss of systemic control, the Federal Reserve had been making loud noises of continuing to raise interest rates, in order to contain an overheating economy, but that "overheating" activity has started to fade. As this ongoing crisis evolves towards its unhappy end, the U.S. dollar ultimately should face unprecedented debasement with a resulting runaway domestic inflation.

Broad economic and systemic conditions are reviewed regularly, with the following *Commentaries* of particular note: *Special Commentary No. 885*, *Commentary No. 869*, *No. 777 Year-End Special Commentary* (December 2015*)*, *No. 742 Special Commentary: A World Increasingly Out of Balance* (August 2015) and *No. 692 Special Commentary: 2015 - A World Out of Balance* (February 2015). Those publications updated the long-standing hyperinflation and economic outlooks published in *2014 Hyperinflation Report—The End Game Begins – First Installment Revised* (April 2014) and *2014 Hyperinflation Report—Great Economic Tumble – Second Installment* (April 2014). The two *Hyperinflation* installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic reality are the *Public Commentary on Inflation Measurement* and the *Public Commentary on Unemployment Measurement*.

Recent Commentaries (Most-Recent Coverage of Specific Series or with Special Features):

Special Commentary No. 885, entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*, reviewed the unusual nature of the headline reporting of the April 2017 employment and unemployment details.

Commentary No. 884 reviewed the March 2017 details for the U.S. Trade Deficit and Construction Spending and the Conference Boards' reporting of April 2017 Help Wanted OnLine.

Commentary No. 883 covered the headline detail for the "advance" or first-estimate of first-quarter GDP, along with an update to *Consumer Liquidity Conditions*.

Commentary No. 882 summarized the annual benchmark revisions to Retail Sales and reviewed the March 2017 releases of New Orders for Durable Goods and for New- and Existing-Home Sales.

Commentary No. 881 reviewed March 2017 Industrial Production, Housing Starts and the Cass Freight Index™, along with an economic update in advance of the initial first-quarter 2017 GDP estimate.

Commentary No. 880 detailed the prior March 2017 headline reporting the of both Real and Nominal Retail Sales, Real Earnings, the CPI, the PPI and updated Consumer Liquidity, where mounting stresses on consumer income and credit are signaling major economic issues ahead.

Commentary No. 879 covered March 2007 Employment and Unemployment, Help-Wanted Advertising and an update on monetary policy and Money Supply M3 (the ShadowStats Ongoing Measure).

Commentary No. 878 reviewed detail on the February 2007 Trade Deficit and Construction Spending, along with the latest update on Consumer Liquidity conditions.

Commentary No. 877 outlined the nature of the downside annual benchmark revisions to industrial production, along with implications for pending annual revisions to Retail Sales, Durable Goods Orders and the GDP.

Commentary No. 876 current headline economic activity in the context of formal definitions of the business cycle (no other major series come close to the booming GDP, which is covered in its third revision to fourth-quarter activity. Also the February 2017 SentierResearch reading on real median household income was highlighted.

Commentary No. 875 assessed and clarified formal definitions of the U.S. business cycle, which were expanded upon significantly, subsequently, in *No. 876*. It also provided the standard review of the headline February 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the Cass Freight Index™.

Commentary No. 873 discussed prospects for future tightening and/or a return to quantitative easing by the FOMC, along with the prior review of the February 2017 Residential Construction reporting.

Commentary No. 872 offered some initial comment on the FOMC rate hike, in conjunction with the review of last month's February 2017 Retail Sales (real and nominal), Real Earnings and the CPI and PPI.

Commentary No. 871 covered prior reporting of February Labor Conditions, updated Consumer Liquidity and the ShadowStats Ongoing M3 Measure for February 2017, and a revised FOMC outlook.

Commentary No. 869 reviewed and assessed underlying economic reality and a broad variety of indicators in the context of the second-estimate of fourth-quarter 2016 GDP.

General Commentary No. 867 assessed mixed signals for a second bottoming of the economic collapse into 2009, which otherwise never recovered its level of pre-recession activity. Such was in the context of contracting and faltering industrial production that now rivals the economic collapse in the Great Depression as to duration. Also covered were the prior January 2017 New- and Existing Home Sales.

Commentary No. 864 analyzed January 2017 Employment and Unemployment detail, including benchmark and population revisions, and estimates of December Construction Spending, Household Income, along with the prior update to Consumer Liquidity.

Commentary No. 861 covered the December 2016 nominal Retail Sales, the PPI, with a brief look at some summary GAAP reporting on the U.S. government's fiscal 2016 operations. The GAAP-detail will be reviewed in a *Special Commentary*.

No. 859 Special Commentary reviewed and previewed economic, financial and systemic developments of the year passed and the year or so ahead.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. Significant reporting-quality problems remain with most major economic series. Beyond the pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended to understate inflation and to overstate economic activity—as generally viewed in the common experience of Main Street, U.S.A.—ongoing headline reporting issues are tied largely to systemic distortions of monthly seasonal adjustments (see the *Opening Special Comments*).

Data instabilities—induced partially by the still-evolving economic turmoil of the last eleven years—have been without precedent in the post-World War II era of modern-economic reporting. The severity and ongoing nature of the downturn provide particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). That issue is discussed and explored in the labor-numbers related *Supplemental Commentary No. 784-A* and *Commentary No. 695*.

Further, discussed in *Commentary No. 778*, a heretofore unheard of spate of "processing errors" surfaced in 2016 surveys of earnings (Bureau of Labor Statistics) and construction spending (Census Bureau). This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. That construction-spending issue now appears to have been structured as a gimmick to help boost the July 2016 GDP benchmark revisions, aimed at smoothing the headline reporting of the GDP business cycle, instead of detailing the business cycle and reflecting broad economic trends accurately, as discussed in *Commentary No. 823*.

Combined with ongoing allegations in the last year or two of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series (see *Commentary No. 669*). John Crudele of the *New York Post* has continued his investigations in reporting irregularities: *Crudele Investigation*, *Crudele on Census Bureau Fraud* and *John Crudele on Retail Sales* (worth a review in the context of the recently-published 2017 retail sales benchmarking).

TODAY'S HEADLINE RELEASES: April 2017 Industrial Production and New Residential Construction. Regular coverage and details of the April 2017 Industrial Production and New Residential Construction (Housing Starts) series, released this morning, May 16th, will follow in the next *Commentary No. 887.*

Index of Industrial Production (April 2017). Headline production growth was solid across the various industry and market groups covered by the Federal Reserve, coming in above expectations. With both production and its dominant manufacturing sector up month-to-month by 1.0% in April, the production series has been moving off its recent bottom. Nonetheless, both series remained below their pre-recession peak activity levels. In terms of protracted, non-economic expansion, the industrial production and manufacturing series, since 2007, now rival fully the patterns of non-expansion seen during the Great Depression of the 1930s.

Residential Construction—Housing Starts (April 2017). In the context of annual revisions back to 2015, housing starts weakened in the April reporting and revisions, contrary to strong monthly upside expectations in this extremely unstable series. First-Quarter 2017 activity revised from a small quarterly gain, to a small quarterly contraction. The broad series remained in low-level, non-recovering stagnation, with the April 2017 housing starts series down from its pre-recession high by 48.4% (-48.4%).