John Williams'

Shadow Government Statistics

Analysis Behind and Beyond Government Economic Reporting

COMMENTARY NUMBER 974

September Consumer and Producer Price Indices, Liquidity and Markets

October 15, 2018

As Some Acorns Begin to Fall, Beware the Dollar;
Risks of Major Financial-Market Upheaval Are High

Ongoing Federal Reserve Rate Hikes and Related Policies
Have Continued to Tighten Systemic and Consumer Liquidity,
Pummeling Retail Sales and Near-Term Economic Prospects, and
Threatening Financial-System Stability

Hurricane-Triggered Boosts to Energy Prices in September 2017
Depressed Relative Year-to-Year Inflation Rates in September 2018;
Annual Consumer Inflation Should be Pushing Three-Percent by December

CPI-U Unadjusted Annual Inflation, Depressed by 2017 Hurricane Distortions,
Softened to 2.28% in September 2018 versus 2.70% in August 2018

CPI-W Unadjusted Annual Inflation, Depressed by 2017 Hurricane Distortions,
Softened to 2.33% in September 2018 versus 2.87% in August 2018

September Real Average Weekly Earnings Growth Remained Impaired

2019 Social Security COLA of 2.8% (Based on the CPI-W), Would Have Been 2.4%
Using the C-CPI-U, Which Has Been Designed for That Purpose, But Not Yet Implemented

FOMC-Targeted Core CPI Inflation, Little Affected by Year-Ago Hurricane Disruptions,
Held at 2.17% Year-to-Year in September 2018 versus 2.20% in August 2018

Aggregate PPI Unadjusted Annual Inflation, Depressed by 2017 Hurricane Distortions,
Softened to 2.64% in September 2018 versus 2.83% in August 2018

PLEASE NOTE: The next regular *Commentary No. 975*, planned for Thursday, October 18th will provide a full review of the September Retail Sales, Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Hyperinflation and Consumer Liquidity Watches. Both of the most-recent *Watches*, *Hyperinflation Watch – No. 3* of August 12th and *Consumer Liquidity Watch – No. 4* of August 10th will be updated shortly in *Special Editions*.

DAILY UPDATE Coverage. Detail on new headline economic data is posted in the ***Daily Update*** section in the top left-hand column of the *www.ShadowStats.com* home page. When major economic releases are published, brief, summary headline details are posted there usually within an hour or two of the release. Those details remain posted until they are covered separately in a subsequent *Commentary*.

The planned ShadowStats Publication Schedule, Schedule Revisions and Notes to Subscribers also are provided regularly at the end of that column.

Your comments and suggestions always are invited.

Best wishes to all, John Williams (707) 763-5786, johnwilliams@shadowstats.com

Today's (October 15th) *Opening Comments* reviews recent consumer and systemic liquidity developments, supplemental to No. 973: ALERT of October 14th (see the *Week*, *Month and Year Ahead* section), and in advance of pending updates to the *Hyperinflation* and *Consumer-Liquidity Watches*.

The ***Reporting Detail*** reviews the September 2018 Consumer and Producer Price Indices, and CPI-related liquidity measures.

The ***Week, Month and Year Ahead*** repeats the text of No. 973 ALERT, previews pending economic releases and provides background on recent *Commentaries*.

Commentary No. 974 contents, including graphs and tables, are indexed and linked on following page.

Contents – Commentary No. 974 Major Sections and Graphs

OPENING COMMENTS

Recent Stock-Market Volatility and Mounting Liquidity Risks

The Squirrelly Season Is Upon Us. The Markets Are Vulnerable to Negative Shocks, and the Fed Likely Will Face Increasing Pressures to Cease Its Tightening. In the context of last night's *Special Commentary No. 973 – ALERT* (text repeated in today's *Week, Month and Year Ahead* section, page 29) and *Commentary No. 970* of September 26th, last week's largely negative stock-market turmoil likely marked the onset of this year's *Squirrelly Season*, when the markets tend to take on a more-cautionary tone. The particular problem at present is the confluence of the squirrelly season with intensifying tightening of consumer- and systemic-liquidity conditions, resulting from the tightening policies of the Federal Reserve and its Federal Open Market Committee (FOMC).

The Fed has been raising rates in an effort to back out of the extraordinary measures it took to save the U.S. Banking System from formal collapse in 2007/2008. Yet, the current policies have been constraining consumer liquidity and activity, and are beginning to hit the U.S. economy hard, as seen with today's release of September 2018 Real Retail Sales, discussed in the *Pending/Current Economic Releases* in the *Week, Month and Year Ahead* section on page 30.

This leaves the Fed in an extraordinarily difficult position. With the weakening economy and current stock-market instabilities, the U.S. central bank will come under increasing political pressure, and likely its own internal pressures from mounting banking system liquidity concerns, to back off its current "unwinding" or reversal of the Quantitative Easing (QE) programs. If it does back away from the "unwinding" and reverts to a new QE program, such likely would trigger heavy selling of the U.S. dollar. If the Fed pushes ahead with its tightening, it likely will push the still fragile domestic economy (consider that manufacturing and construction never have recovered fully from the Great Recession) off a new cliff, triggering a heavy sell-off in the U.S. dollar. These issues should come to a head in the near term, as discussed in *Hyperinflation Watch – No. 3* and *Consumer Liquidity Watch – No. 4*, which will be updated shortly in *Special Editions*. The basic concepts discussed in the current issues already are in play.

Signals of severely constrained, headline consumer and systemic liquidity continue in the context of the publication of the latest headline inflation numbers.

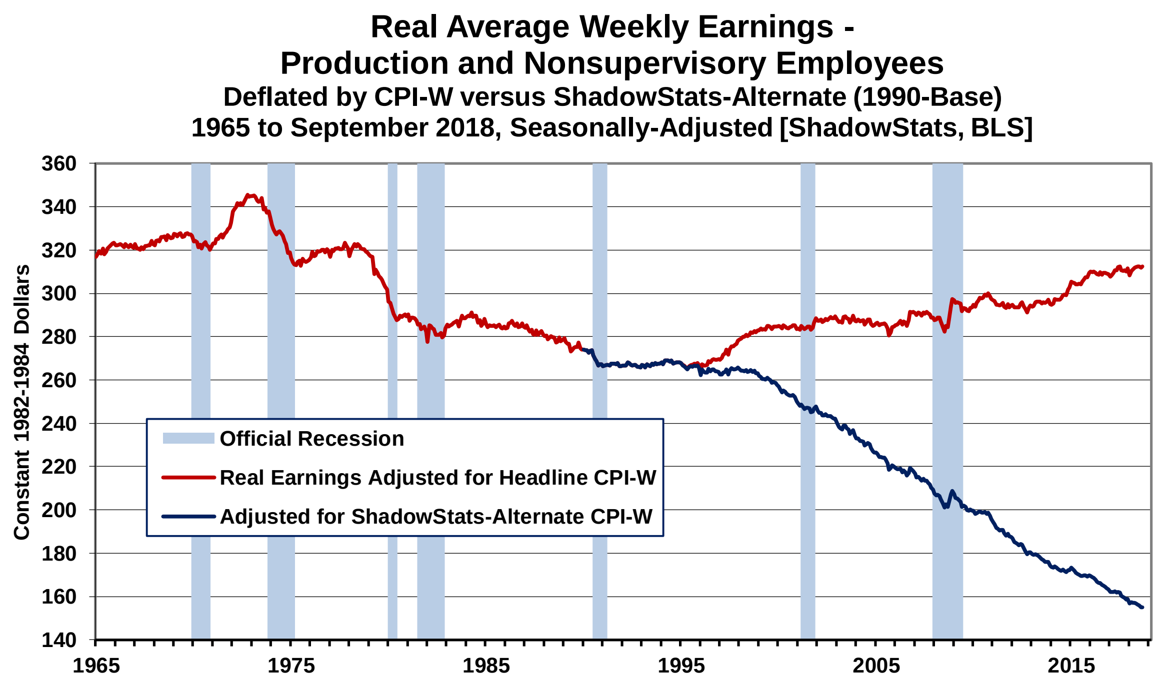
Graphs OC-1 to *OC-4* provide a sampling of updated graphs regularly followed in the *Watches*. *Graph OC-1* plots the estimates of Real Average Weekly Earnings to September 2018. There is no recovery there. *Graph OC-2* plots the latest estimate of Household Sector, Real Credit Market Debt Outstanding (including home mortgages) from the recently-published, second-quarter 2018 Flow-of-Funds accounts out of the Federal Reserve Board. Real debt outstanding remains 10.6% (-10.6%) shy of recovering its pre-recession peak.

Graph OC-3 shows the regular ShadowStats calculations of the twelve-month smoothed level of monthly real Consumer Credit Outstanding, ex-student loans held by the federal government, which currently remains 15.0% (-15.0%) shy of recovering its pre-recession peak.

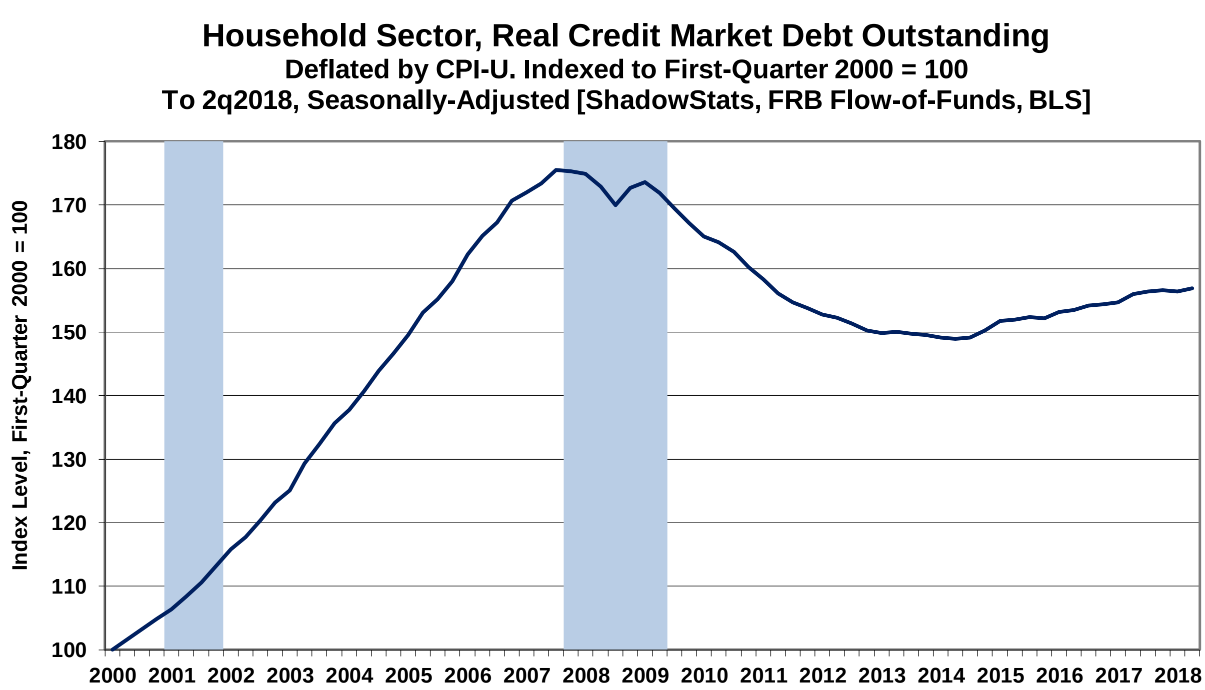
Real annual growth in M3 (the ShadowStats Ongoing M3 Estimate in *Graph OC-4* shows systemic liquidity at a high level of stress. Noted in the text surrounding the copy of *OC-4/Graph 5* on page 21, but for the 2017 hurricane-depressed annual gains in headline unadjusted CPI-U inflation, August and September 2018 real annual growth in M3 would have generated a “hard” recession signal.

[Graphs OC-1 to OC-4 begin on the following page.]

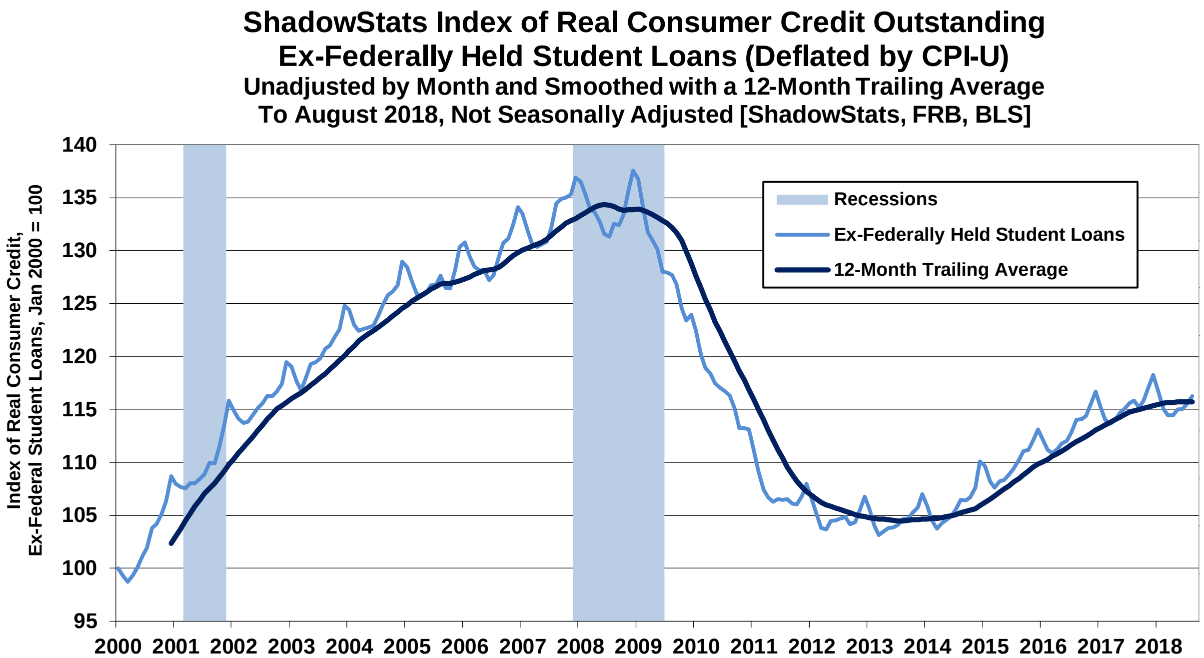
Graph OC-1: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date
(Same as Graph 4 in the Reporting Detail)



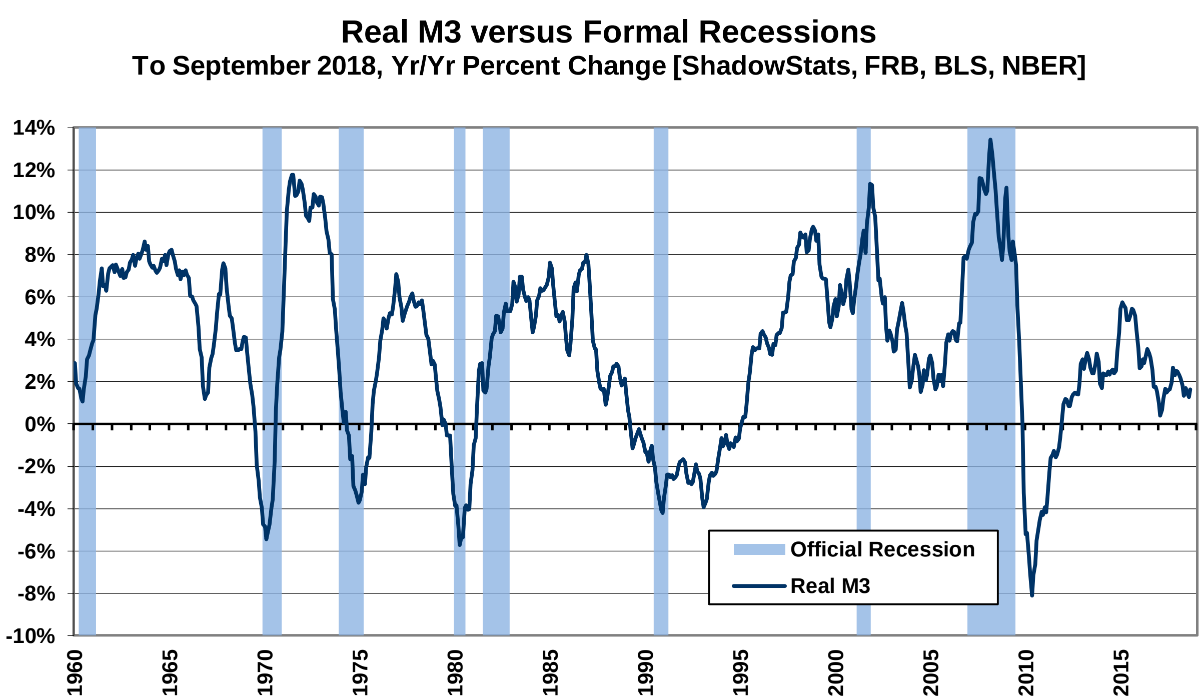
Graph OC-2: Household Sector, Real Credit Market Debt Outstanding (2000 through Second-Quarter 2018)
(To be reviewed in pending Consumer Liquidity Watch No. 5)



Graph OC-3: Real Consumer Credit Outstanding, Ex-Federally Held Student Loans, 12-Month Moving Avg
(To be reviewed in the pending Consumer Liquidity Watch No. 5)



Graph OC-4: Real M3 Annual Growth versus Formal Recessions
(Same as Graph 5 in the Reporting Detail)



REPORTING DETAIL

Plummeting Annual Inflation Was Depressed by Year Ago Hurricane-Spiked Energy Prices

Consumer Price Index (September 2018)

As Forewarned in Recent Commentaries, Do Not Take the Headline September 2018 Annual Inflation Numbers Too Seriously. The September 2018 Consumer Price Index (CPI-U) Annual inflation (not seasonally adjusted) dropped to 2.28%, from 2.70% in August 2018 and 2.95% in July 2018, thanks primarily to relative year-ago, hurricane-spiked gasoline and energy prices. As those relative distortions disappear, particularly with gasoline prices on rise, headline CPI annual inflation should be pushing 3% again by December.

If the impact of the unadjusted drop in annual inflation for the CPI-U Energy Sector from 10.22% in August 2018 to 4.85% in September 2018 (tied directly to prior-year hurricane disruptions) were reversed out of the headline aggregate CPI-U, year-to-year aggregate CPI-U inflation would have been 2.71% in September 2018, against 2.70% in August 2018, instead of the actual headline 2.28% against 2.70%.

A similar analysis for a month earlier shows that August 2018 would have been 2.85%, against 2.95% in July 2018, instead of the actual headline 2.70% against 2.95%. The remaining difference was an artefact of an unusual spike to annual Core CPI-U in July 2018.

Unaffected by year-ago distortions, the seasonally adjusted monthly gain of 0.06% in September 2018 CPI-U, versus 0.22% in August, reflected rising Core inflation, offset by an adjusted decline (unadjusted jump) in retail gasoline prices, which was not reflected otherwise in Department of Energy reporting. That helped to keep the CPI-W depressed (more-heavily weighted for gasoline).

Artificially Depressed Annual Inflation, Artificially Spikes Annual Growth in Inflation-Adjusted Numbers. As will be seen later in *Graph 4* of *Real Average Weekly Earnings* and *Graph 5* of *Real Annual Growth in Money Supply M3* the temporarily suppressed annual inflation rates have spiked annual real growth rates in those series, temporarily. Prior growth levels should be recovered in the monthly reporting of those real annual growth rates by the end of 2018.

Again, unadjusted, annual September 2018 CPI-U annual inflation dropped to 2.28%, from 2.70% in August 2018, where Annual CPI-U had jumped to 2.95% in July 2018, a 79-month high (highest since

December 2011), while the September 2018 CPI-W dropped to 2.34%, from 2.88% in August 2018 and 3.16% in July 2018. The higher annual inflation levels in July took a heavy headline and functional toll on consumer liquidity, particularly as the numbers played into knocking down the levels of real average weekly earnings. Yet the FOMC does not appear to be concerned, even though personal and systemic liquidity would benefit from a real liquidity infusion from the Fed, instead of what almost is a certain, intensified liquidity drain. While the short-lived lower headline annual inflation numbers will help the headline liquidity numbers, they do nothing to help the functional liquidity constraints.

Social Security COLA and the CPI-W (2.8%) or the C-CPI-U (2.4%). Used in determining the Social Security Cost of Living Adjustment (COLA) for next year, unadjusted annual CPI-W of 2.34% (September 2018), 2.88% (August 2018) and 3.16% (July) combined to set the 2019 COLA at 2.8%. The CPI-W used in COLA adjustments tends to run higher than the CPI-U when gasoline-price inflation is higher than average inflation.

Consider the Chained-CPI-U or C-CPI-U, which was designed specifically by the Clinton Administration and Congress, with encouragement from the Greenspan Fed, so as to reduce reported inflation and, accordingly to reduce COLA payments. The effect was planned so as to help reduce the federal budget deficit on the backs of Social Security recipients and federal pensioners, who simply would have their cost-of-living-adjustments further reduced artificially, by headline inflation that had been manipulated deliberately so as to understate further, common inflation experience.

Discussed in the C-CPI-U section beginning on page 16, the C-CPI-U has not yet officially supplanted the CPI-W in COLA, but the C-CPI-U was designed specifically for that function. Inevitably, it will be put into play, barring some public outcry. The difference? 2019 COLA would be 2.4% with the C-CPI-U, instead of 2.8% with the CPI-W.

Underlying Common Experience Continues to Suggest Formal Understatement of Headline Inflation. Otherwise, in more-general terms, informal surveying by ShadowStats of consumer views, as to the credibility of headline inflation continues to suggest that most individuals believe headline consumer inflation consistently understates their real world inflation experience. The informal consensus is in the range of a 3% to 4% understatement of headline annual inflation against common experience. That is consistent with the ShadowStats Alternate CPI (versus 1990-based methodologies), and less severe than the 6% to 8% range suggested by the ShadowStats Alternate CPI (1980-based methodologies).

That latter measure is more accurate in terms of the meaningful methodological changes made to CPI reporting, beginning about 1980, which then began to exclude a component measure of the cost of buying a house. The revamped series shifted over to assessing housing costs as "homeowners equivalent rent," Those all were "guesstimations" by the BLS as to what homeowners would charge themselves to rent their owned properties. The inflation rate then was determined to be the amount of increase in the monthly rent that homeowners would charge themselves.

Where this was a completely rigged number, the BLS estimated it would have the net effect of reducing the headline annual CPI-U inflation rate by 1.4% (-1.4%) per year from what would have been reported otherwise. Where that annual inflation-rate saving was cumulative, that one change knocked about 13.2% off the cumulative level of the headline CPI-U in the first decade. These issues are discussed in the *Alternate Consumer Inflation Measures* section.

Specifically, with the headline unadjusted annual September 2018 CPI-U inflation up by 2.3%, 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 (also depressed by year-ago hurricane disruptions) in September 2018 at 5.9%, based on pre-Clinton-gimmicked 1990 methodologies, and at 10.0%, based on 1980 methodologies. Detailed in *Public Commentary on Inflation Measurement*, inflation based on common experience is much worse than the headlines, both as experienced by individual consumers, as well the business community.

Longer-Range Inflation Outlook. Despite U.S. dollar strength of recent years, and what had been accelerating, then faltering dollar strength, subsequent to the post-2016 election euphoria, the dollar recently had seen fairly regular and intensifying selling pressure, then a reversal to the upside, and ongoing mixed pressures, currently to the downside with the volatile equity markets. Much of what happens here has reflected market expectations of continuing FOMC rate hikes in the United States, and recent indications by the European Central Bank (ECB) that it may hold off another year or so to raise rates (see *Hyperinflation Watch – No. 3* and the imminent update to same in *HW-4*). Separately there have been mixed pressures, given shifting global and domestic political tensions and the squirrelly season discussed in the *Week, Month and Year Ahead*.

Regularly discussed here, a tremendous threat to the dollar, systemic U.S. liquidity and market stability continues, tied to the U.S. Federal Reserve's fundamental inability to resolve the 2008 financial collapse, other than having bought finite time with emergency, stopgap measures and extraordinary jawboning and financial-market interventions. The proximal trigger here for potential shifts in FOMC policies likely remains tied to "unexpected" economic weakness. In a related matter, also with potential for triggering crisis-level disruptions in the global currency and financial markets are rapidly deteriorating, long-term U.S. sovereign-solvency issues.

The recent FOMC tightenings have been despite continued, lack of full-economic recovery from the 2008 collapse. That is both in terms of the banking system, where real consumer credit outstanding still has not expanded beyond pre-recession levels, and confirmed by the recently-published, second-quarter 2018 Flow-of-Funds Analysis out of the Federal Reserve (see *Graphs OC-2* and *OC-3* in the *Opening Comments* and pending *Consumer Liquidity Watch No. 5*). These issues also are evident in terms of industries such as Manufacturing and Construction, which have yet to expand beyond pre-2007 recession levels.

How can the FOMC boast an expanding economy, when Main Street U.S.A. broadly still is not seeing it, and where Income Variance, as recently published by the Commerce Department (see *Commentary No. 969-Extended*) is at extremes rarely seen except before the greatest financial market calamities.

Headline series such as Retail Sales (see *Week, Month and Year Ahead*) and Industrial Production are not booming month-to-month. These indicators remain in the realm of "adverse" economic circumstances once feared by former Fed Chair Janet Yellen. Weaker economic circumstances were masked, temporarily in late 2017 by near-term disaster-recovery boosts to economic activity that now have unwound for a number of series.

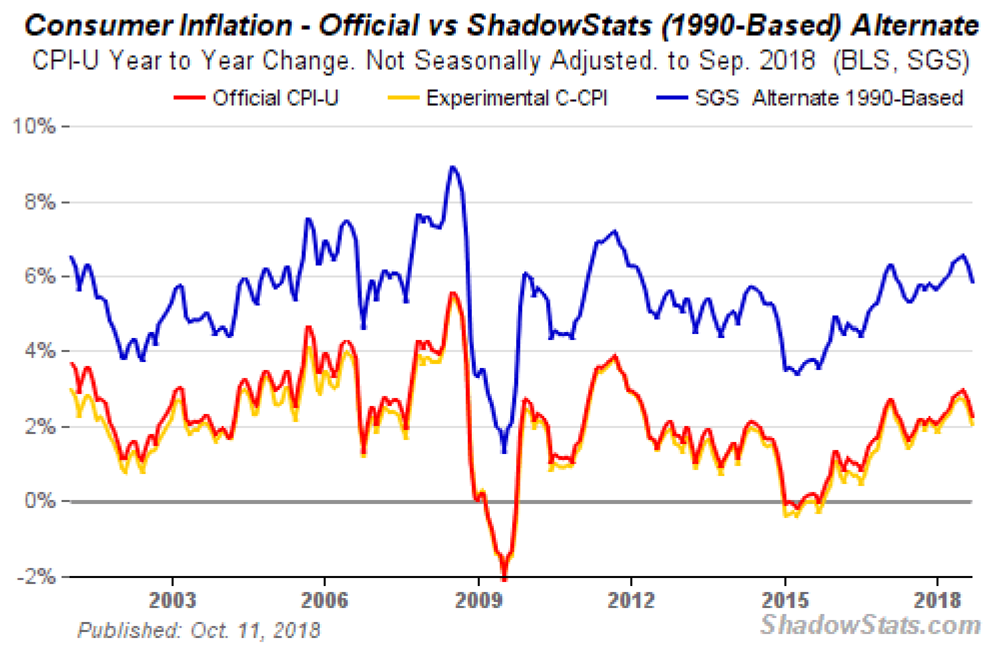
Despite the headline booming second-quarter 2018 GDP, the financial markets, particularly the global currency markets versus the U.S. dollar, should increasingly pick up on renewed faltering of U.S. basic and broad economic activity and on intensifying long-range U.S. Treasury solvency concerns. Fed Chairman Powell's initial response to those unfolding adverse circumstances should be forced within the near future.

Out of necessity, the U.S. central bank has been forced to and continues to prop domestic banking-system liquidity against an ongoing gale of renewed, economically driven, banking-system solvency and liquidity issues. Those pressures were masked and then intensified by recent natural disasters, rapidly intensifying political discord in Washington and mounting global political instabilities. Again, despite strong speculation and protestations to the contrary and promised continued tightening into at least December 2018, the FOMC likely still will end up renewing/expanding quantitative easing within the next six months.

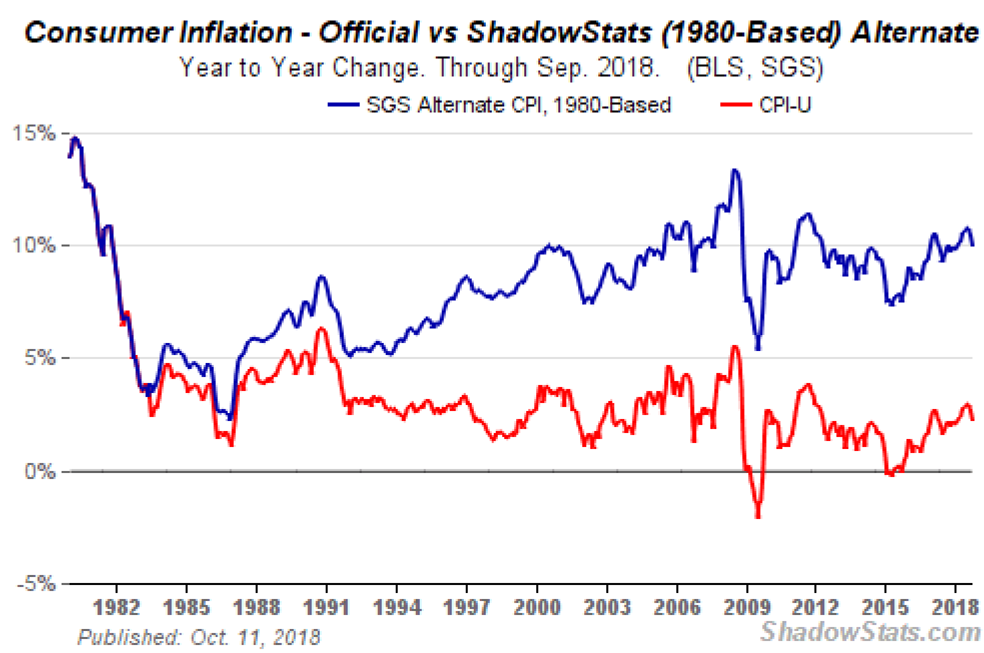
Compounding the high-risk of an increasing near-term run on the U.S. dollar remains what should be mounting recognition in global markets of the Fed's conundrum, again, particularly amidst mounting concerns as to U.S. fiscal stability. The Federal Reserve and other central banks still have no effective 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. That circumstance only can be exacerbated by intensifying economic and political uncertainties (again, see *Hyperinflation Watch – No. 3* and pending update, *Commentary No. 970*, *Special Commentary No. 888* and *Special Commentary No. 935)*.

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

Graph 1: Comparative Headline Year-to-Year Change, CPI-U vs. ShadowStats 1990-Based Alternate



Graph 2: Comparative Headline Year-to-Year Change, CPI-U vs. ShadowStats 1980-Based Alternate



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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)** was an experimental measure—now set to go active, formally, with pending 2017 Tax Reform (see the Opening Comments)—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 October 11th that the headline, seasonally-adjusted September 2018 CPI-U inflation increased month-to-month by 0.1% [up by 0.06% at the second decimal point], having gained 0.2% [0.22%] in August, 0.2% [0.17%] in July, 0.1% [0.13%] in June, 0.2% [0.21%] in May, 0.2% [0.22%] in April, declined in March by 0.1% (-0.1%) [0.06% (-0.06%)], having gained 0.2% [0.15%] in February, 0.5% [0.54%] in January, 0.2% [0.20%] in December 2017, 0.3% [0.34%] in November, 0.1% [0.08%] in October, 0.5% [0.46%] in September.

Unadjusted, monthly September 2018 CPI-U gained by 0.12%, having gained 0.06% in August, 0.01% in July, 0.16% in June, 0.42% in May, 0.40% in April, 0.23% in March, 0.45% in February, 0.54% in January, having declined 0.06% (-0.06%) in December 2017, having been unchanged at 0.00% in November, having declined in October by 0.06% (-0.06%) and gained by 0.53% in September.

Major CPI-U Groups. The softer September 2018 CPI-U month-to-month inflation reflected a monthly drop in Energy costs, along with a negligible gain in Food prices and an increase in “Core” inflation. By the numbers, the September 2018 CPI-U seasonally-adjusted monthly inflation gain of 0.06% [up by 0.12% unadjusted] was against a 0.22% [up by 0.06% on an unadjusted basis] adjusted monthly gain in August 2018.

That encompassed a “Core” (ex-food and energy) September 2018 month-to-month inflation rate of 0.12% [up by 0.16% unadjusted], previously a gain of 0.08% [up by 0.06% unadjusted] in August.

Month-to-month Food inflation was 0.03% [up by 0.12% unadjusted] in September, versus a gain of 0.09% [up by an unadjusted 0.13%] in August.

Despite distortions in annual comparisons, Energy sector inflation dropped in the month of September by an adjusted 0.46% (-0.46%) and by an unadjusted 0.34% (-0.34%), having surged by an adjusted 1.88%, but dropped by an unadjusted 0.07% (-0.07%) in August 2018.

Related gasoline costs declined month-to-month by an adjusted 0.21% (-0.21%), but gained by an unadjusted 0.34% in September, while having gained an adjusted 3.01% in August, but was down in the month by 0.34% (-0.34%) unadjusted.

Holding with FOMC expectations, unadjusted annual September 2018 “Core” CPI-U topped the targeted 2.0% annual inflation rate for the seventh consecutive month, holding at 2.2% in September 2018, although it had eased back to 2.2% in August 2018, from 2.4% in July 2018. Such was against annual inflation of 2.3% in June 2018, 2.2% in May 2018 and 2.1% in April and March, where the March 2018 annual core inflation had broken to 2.1%, above the Fed’s announced 2.0% target, for the first time since February 2017. As of February 2018, the “Core” rate had held range-bound for eleven straight months (since April 2017) at 1.8% +/- 0.1%. At the second decimal point, “Core” inflation showed an unadjusted year-to-year inflation rate of 2.17% in September 1018, versus 2.20% in August 2018, 2.35% in July 2018, 2.26% in June 2018, 2.24% in May 2018, 2.14% in April 2018 and 2.12% in March 2018, 1.85% in February 2018 and 1.82% in January 2018.

Year-to-Year CPI-U. Not seasonally adjusted, year-to-year inflation for the September 2018 CPI-U increased by 2.3% [2.28% at the second decimal point (see the opening discussion in the CPI section on year-ago hurricane disruptions)]. That followed gains of 2.7% [2.70%] in August 2018, 2.9% [2.95%] in July 2018, 2.9% [2.87%] in June 2018, 2.8% [2.80%] in May 2018, 2.5% [2.46%] in April 2018, 2.4% [2.36%] in March 2018, 2.2% [2.21%] in February 2018, 2.1% and [2.07%] in January 2018. Annual inflation of 2.1% [2.11%] in December 2017 followed 2.2% [2.20%] in November 2017, 2.0% [2.04%] in October 2017, and 2.2% [2.23%] in September 2017.

Year-to-year, CPI-U inflation would increase or decrease in next month’s October 2018 reporting, dependent on the seasonally-adjusted, month-to-month change, versus the adjusted, headline monthly gain of 0.08% in the October 2017 CPI-U. The adjusted change is used here, since that is how consensus expectations are expressed. To approximate the annual unadjusted inflation rate for October 2018, the difference in October’s headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the unadjusted September 2018 annual inflation rate of 2.28%. Given an early guess of a seasonally-adjusted monthly change of 0.3% in the October

2018 CPI-U, that would leave the annual CPI-U inflation rate for October 2018 around 2.5% to 2.6% plus-or-minus (still depressed by 2017 hurricane impact).

Given the year-ago price distortions in gasoline, and barring extreme gasoline-price gyrations in the next several months, unadjusted annual CPI-U inflation should be jumping back to around 3.0% by the November/December 2018 timeframe.

Quarterly CPI-U. On a seasonally-adjusted annualized quarter-to-quarter basis, CPI-U rose by 2.00% in third-quarter 2018, having gained 1.66% in second-quarter 2018, 3.51% in first-quarter 2018, 3.31% in fourth-quarter 2017, 2.13% in third-quarter 2017, 0.10% in second-quarter 2017 and 2.96% in first-quarter 2017.

On an unadjusted, year-to-year basis, headline annual inflation by quarter was up by 2.64% in third-quarter 2018, versus 2.71% in second quarter 2018, 2.21% in first-quarter 2018, 2.12% in fourth-quarter 2017, 1.97% in third-quarter 2017, 1.90% in second-quarter 2017 and 2.54% in first-quarter 2017.

Annual Average CPI-U. The unadjusted annual average CPI-U inflation rate was 2.13% in 2017, versus 1.26% in 2016 and 0.12% in 2015.

CPI-W. The September 2018 seasonally-adjusted, headline CPI-W, which is a narrower series than the CPI-U and traditionally has greater weighting for gasoline than the CPI-U, rose month-to-month by 0.03%, following monthly gains of 0.27% in August, 0.15% in July, 0.14% in June, 0.23% in May and 0.26% in April, a decline of 0.16% (-0.16%) in March, gains of 0.11% in February, 0.62% in January, 0.19% in December 2017, 0.43% in November, 0.05% in October and 0.55% in September.

On an unadjusted basis, year-to-year CPI-W gained by 2.34% in September 2018 [again see the open discussion of this CPI section on hurricane distortions], having gained 2.88% in August 2018, 3.16% in July 2018, 3.09% in June 2018, 3.00% in May 2018, 2.59% in April 2018, 2.44% in March 2018, 2.32% in February 2018, 2.14% in January 2018, 2.18% in December 2017, 2.32% in November 2017, 2.05% in October 2017 and 2.31% in September 2017.

Quarterly CPI-W. On an annualized quarter-to-quarter basis, seasonally-adjusted CPI-W rose by 2.04% in third-quarter 2018, versus 1.57% in second-quarter 2018, 3.70% in first-quarter 2018, 3.75% in fourth-quarter 2017, 2.26% in third-quarter 2017, having declined by 0.26% (-0.26%) in second-quarter 2017 and having gained by 3.04% in first-quarter 2017.

On an unadjusted year-to-year basis, annual inflation by quarter rose by 2.79% in third-quarter 2018, versus 2.89% in second-quarter 2018, 2.30% in first-quarter 2018, 2.18% in fourth-quarter 2017, 1.96% in third-quarter 2017, 1.80% in second-quarter 2017 and 2.56% in first-quarter 2017.

Annual CPI-W. The unadjusted annual average CPI-W inflation rate was 2.13% in 2017, versus an average gain of 0.98% in 2016 and an average contraction of 0.41% (-0.41%) in 2015.

Chained-CPI-U. The headline C-CPI-U is not seasonally adjusted, and standardly is revised quarterly for the prior year, as was seen in the July 2018 reporting, where year-to-year inflation rates revised lower by 0.175% (-0.175%) for each month back through September 2017. There were no further revisions in the August 2018 reporting.

The unadjusted annual inflation rate for the C-CPI-U in September 2018 was 2.04%, versus 2.48% August 2018, 2.71% in July 2018, 2.54% in July 2018, 2.44% in May 2018, 2.13% in April 2018, 2.01% in March 2018, 1.82% in February 2018, 1.64% in January 2018, 1.71% in December 2017, 1.79% in November 2017, 1.58% in October 2017 and 1.86% in September 2017. This ongoing accounting fraud was set up during the Clinton Administration and the Congress of the time, along with the support of the Greenspan Federal Reserve, with the openly stated of intent of reducing (artificially reducing, deliberately understating) the annual Cost of Living Adjustments (COLA) for Social Security recipients, as it had been defined and intended originally, as well as artificially boosting taxpayers into higher tax brackets.

Through multiple downside quarterly revisions, the level of the headline C-CPI-U Index has been reduced by 0.35% from its original headline reporting level, beyond the initially understated headline reporting. These quarterly "revisions" clearly are plug numbers, not actual revisions to underlying calculations with better numbers. While these bogus numbers indeed now are boosting taxpayers artificially into higher tax brackets, the Congressional miscreants have not had the courage, yet, to debase further the COLA for Social Security, although the C-CPI-U initially was designed specifically for that purpose. Give them time. Other gimmicks, however, have been used in the interim.

Discussed the opening paragraphs of this CPI section, currently-defined CPI-W (otherwise artificially understated in recent decades) Social Security COLA adjustment will be 2.8% for 2019. It would have been 2.4% if the intended C-CPI-U were fulfilling its intended role.

Quarterly C-CPI-U, Year-to-Year. On an unadjusted, year-to-year basis, annual inflation by quarter was up by 2.41% in third-quarter [planned future COLA calculation basis], 2.37% in second-quarter 2018, 1.82% in first-quarter 2018, 1.69% in fourth-quarter 2017, 1.56% in third-quarter 2017, 1.50% in second-quarter 2017 and 2.30% in first-quarter 2017.

Annual Average C-CPI-U. The annual average C-CPI-U inflation rate was 1.76% in 2017, versus 0.93% in 2016 and contraction of 0.12% (-0.12%) in 2015.

See the *Opening Comments* of *Commentary No. 945* and *Commentary No. 920* as to the impact of the adoption of this measure and its costs to the tax-paying public in the recent overhaul of federal income taxes. Also, see discussions in the earlier *Commentary No. 721* and in the opening notes in the *CPI Section* of *Commentary No. 699* as to the most-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 increasingly 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 5.9% in September 2018, versus 6.3% in August 2018, 6.5% in July 2018, 6.4% in June, 6.4% in May, 6.0% in

April 5.9% in March, 5.8% in February, 5.6% in January, 5.7% in December 2017, 5.8% in November, 5.6% in October, 5.8% in September, 5.5% in August, 5.3% in July, 5.2% in June, 5.5% in May, 5.8% in April, 6.0% in March, 6.3% in February and 6.1% in January. Those data are reflected in *Graph 1*.

The September 2018 ShadowStats-Alternate Consumer Inflation Measure (1980-Base), which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was at about 10.0% (10.03% at the second decimal point), versus 10.5% (10.48%) in August 2018, 10.8% (10.75%) in July 2018, 10.7% (10.67%) in June 2018, 10.6% (10.59%) in May 2018, 10.2% (10.23%) in April 2018, 10.1% (10.12%) in March 2018, 10.0% (9.96%) in February 2018, 9.8% (9.81%) in January 2018, 9.8% (9.85%) in December 2017, 9.9% (9.95%) in November 2017, 9.8% (9.78%) in October 2017, 10.0% (9.98%) in September 2017, 9.7% (9.67%) in August 2017, 9.4% (9.44%) in July 2017, 9.3% (9.34%) in June 2017, 9.6% (9.60%) in May 2017, 10.0% (9.95%) in April 2017, 10.1% (10.14%) in March 2017, 10.5% (10.53%) in February 2017 and 10.3% (10.27%) in January 2017. Those data are reflected in *Graph 2*. Historical monthly detail and a related inflation calculator are found in the CPI section of the Alternate Data tab of the ShadowStats home page: www.ShadowStats.com.

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 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 the Public Commentary on Inflation Measurement *and the discussion prior* Commentary No. 969-Extended *for further details).*

[Details on Gold and Silver Prices versus Inflation Measures follow on the next page.]

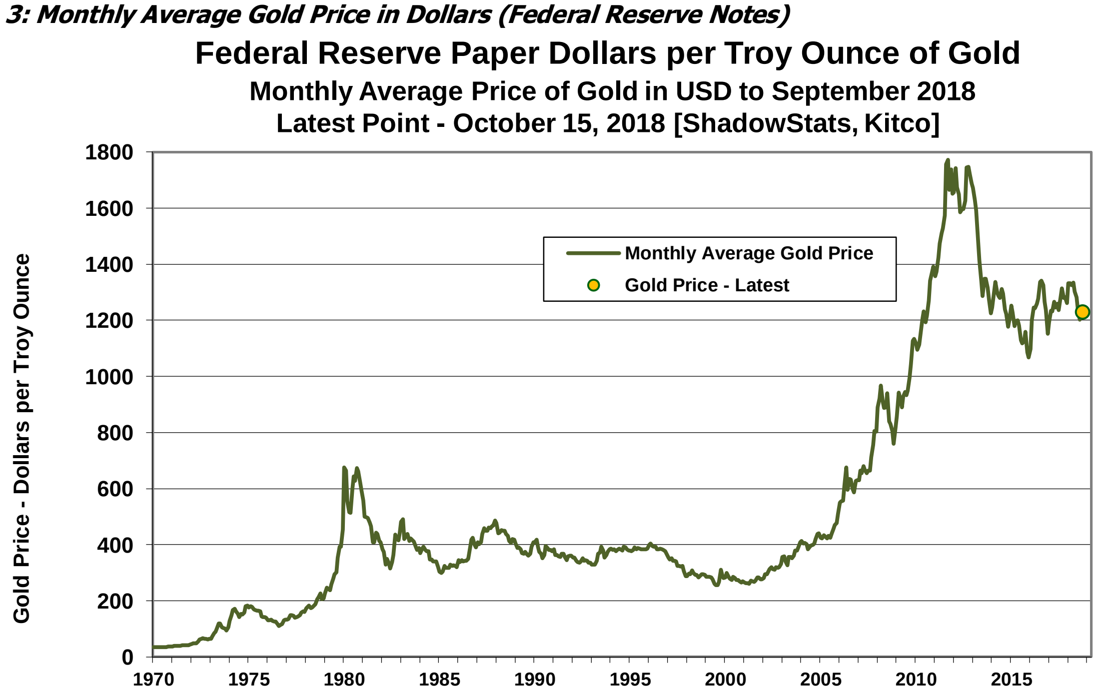
Gold and Silver Historic High Prices Adjusted for September 2018 CPI-U/ShadowStats Inflation

CPI-U: GOLD at $2,758 per Troy Ounce, SILVER at $160 per Troy Ounce
ShadowStats: GOLD at $16,083 per Troy Ounce, SILVER at $936 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 $2,758 per troy ounce, based on September 2018 CPI-U-adjusted dollars, and $16,083 per troy ounce, based on September 2018 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 September 2018 CPI-U inflation, the 1980 silver-price peak would be $160 per troy ounce and would be $936 per troy ounce in terms of the September 2018 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (again, all series not seasonally adjusted).

Graph 3: Monthly Average Gold Price in Dollars (Federal Reserve Notes)



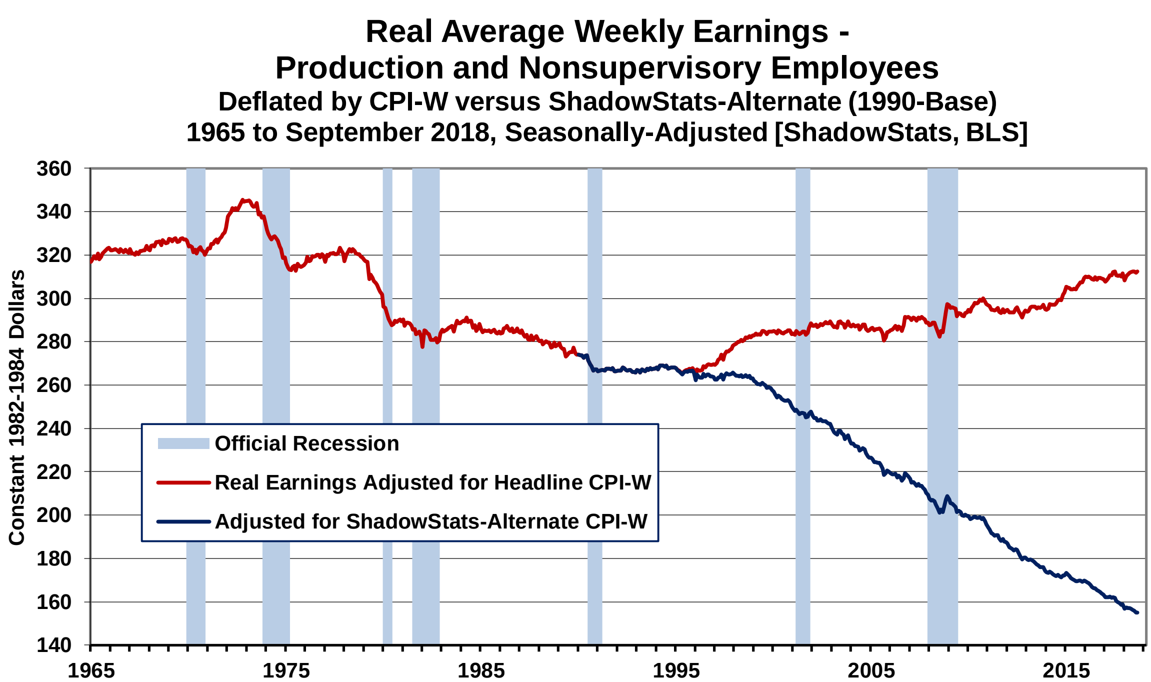
Graph 3 shows the regular gold plot published with monthly CPI detail, with extended graphs in the [*Hyperinflation Watch – No. 3*]() (and in the soon-to-be published *Hyperinflation Watch – No. 4* [*HW-4*]). As economic expectations increasingly take some hit in the weeks and months ahead, the dollar should continue to back off its recent strength, losing ground against both gold and the stronger currencies such as the Swiss France (CHF). Recent, relative short-term U.S. dollar strength has proved somewhat fleeting

(again, as will be expanded upon in pending *HW-4*), in what fairly quickly could become a highly inflationary circumstance for those living in a U.S. dollar-denominated world.

Shown in *Table 1* on page 47 of [*No. 859 Special Commentary*], and in *Table INFLATION-1* on page 46 of [*Special Commentary No. 935*], 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. The precious metals also (particularly gold in the last year) 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 Average Weekly Earnings—September 2018—Annualized Third-Quarter 2018 Quarterly Growth for the "Production and Nonsupervisory Employees" Category Was Just 0.13%. Estimates of September 2018 real average weekly earnings were published along with the headline CPI-W and CPI-U on October 11th. This series will be updated in the pending *Consumer Liquidity Watch – No. 5* (*CLW-5*). Consistent with prior data reviewed in *Consumer Liquidity Watch – No. 4*, real month-to-month changes were minimal, real annual growth was spiked by year-ago hurricane inflation distortions that also depressed current, annual CPI inflation, as discussed earlier.

Graph 4: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date
(Same as Graph OC-2 in the Opening Comments)



Graph 4 of the Production and Nonsupervisory Employee series shows 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 flattened, 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.

Production and Nonsupervisory Employees September 2018 Detail (Plotted in *Graph 4*). In the production and nonsupervisory employees category (deflated by the CPI-W)—the only series for which there is a meaningful history, back to 1964, the regularly-volatile, real average weekly earnings in September 2018 gained 0.24% month-to-month, seasonally adjusted, where August revised negatively to a monthly decline of 0.21% (-0.21%) [previously up by 0.04%] versus a revised 0.03% gain [previously down by 0.01% (-0.01%) in July.

The unadjusted year-to-year real earnings gains were bloated by year-ago hurricane disruptions that weakened both headline September 2018 and August 2018 annual CPI-W inflation rates as discussed in the opening *CPI Section* comments. Where headline September real earnings gained year-to-year by 2.18%, that was against a revised annual gain of 0.33% [previously 0.25%], reflecting the suppressed the respective unadjusted annual inflation for both September and August, by enough to have shown contracting real annual earnings growth, at least for August, otherwise, versus a revised year-to-year decline in July 2018 of 0.13% (-0.13%) [previously 0.22% (-0.22%)].

Against unrevised second-quarter 2018 numbers, third-quarter 2018 saw an annualized quarterly real gain slowing to just 0.13%, with an unadjusted annual gain of 0.79% (year-ago inflation distorted)

Against an unrevised first-quarter 2018 annualized quarterly contraction of 1.22% (-1.22%) and unadjusted 0.06% year-to-year growth, second-quarter 2018 showed an annualized quarterly gain of 2.87%, with annual growth of 0.45%.

That first-quarter 2018 contraction remained the third-consecutive annualized quarterly contraction in real average weekly earnings, the fifth quarterly decline in the last six quarters. Fourth-quarter 2017 earnings showed an annualized contraction of 0.39% (-0.39%), versus a minimal decline of 0.03% (-0.03%) in third-quarter 2017, a gain of 3.48% in second-quarter 2017, and contractions of 0.84% (-0.84%) in first-quarter 2017 and 0.18% (-0.18%) in fourth-quarter 2016.

All Employees Detail. In the broader "All Employees" category (deflated by the CPI-U), which has a more-limited history than the production and non-supervisory category, September 2018 real average weekly earnings gained 0.24% in the month, versus a revised monthly gain of 0.11% [previously 0.15%], having declined by a revised 0.16% (-0.16%) 0.20% (-0.20%) in the July. Unadjusted September 2018 real annual earnings growth was 2.65%, versus a revised 0.78% [previously 0.82%] in August 2018, versus a revised annual gain of 0.04% [previously "unchanged" at 0.00%] in July 2018. Again, the annual growth rates in August and September 2018 were bloated heavily by year-ago hurricane distortions.

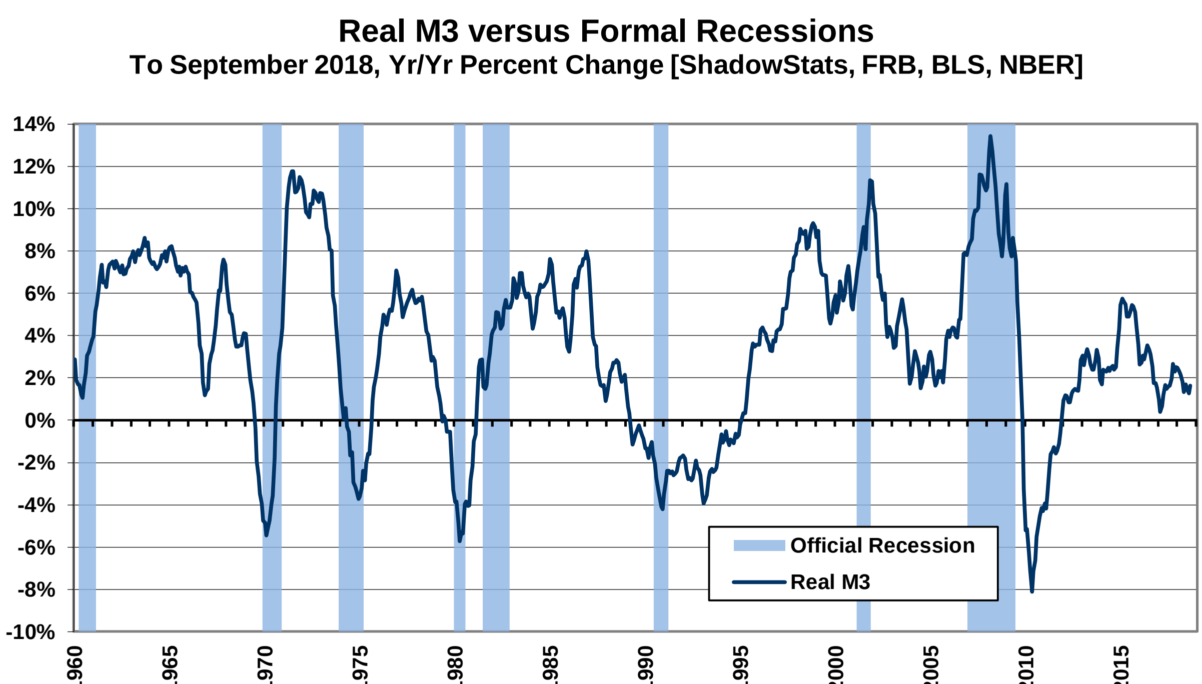
Third-quarter 2018 real earnings gained at an initial, annualized pace of 1.00%, down from an unrevised 1.83% in second-quarter 2018 real earnings, where first-quarter 2018 real earnings contracted at an unrevised annualized pace of 0.44% (-0.44%), versus an annualized 0.03% (-0.03%) decline in fourth-quarter 2017 and against an annualized gain of 0.55% in third-quarter 2017.

Intensifying Consumer Liquidity Stress. Discussed in today's *Opening Comments* and the soon-to-be-updated *Consumer Liquidity Watch – No. 4* (*CLW-5*), real consumer income and credit conditions generally reflect intensifying liquidity issues for the consumer.

A Leading Indicator to Broad Economic Activity, Real Money Supply M3—September 2018—Annual Change Moved Off a Sixteen Month Low, Thanks to Year-Ago Hurricane Inflation Distortions. Annual growth in nominal September 2018 M3, notched lower, but annual CPI-U inflation dropped much faster, depressed by short-lived, year-ago hurricane-induced disruptions to oil and gasoline prices. Accordingly annual real growth in Money Supply M3 rose to 1.65% in September 2018, off its sixteen-month low 1.26% annual growth in August 2018. August 2018 M3 annual growth had declined at a faster pace than annual CPI-U inflation, which also was depressed artificially on the downside (meaning that comparable headline annual inflation would have been higher/real M3 annual growth lower) by year-ago hurricane distortions. That said, annual growth in real August 2018 M3 dropped to a sixteen-month low.

Nominal annual growth in September 2018 M3 eased to 3.92%, from a revised 3.96% [previously 3.97%] in August 2018 and versus minimally revised annual gains of 4.44% in July 2018, of 4.56% in June 2018 and 4.12% in May 2018. At the same time, year-to-year change in the September 2018 CPI-U plunged to 2.28%, from 2.70% in August 2018, 2.95% in July 2018, versus 2.87% in June 2018 and 2.80% in May 2018. That combination boosted the increase in real or inflation-adjusted annual M3 growth to 1.65% in September 2018, from a 1.26% [previously 1.27%] in August 2018, versus minimally-revised annual gains of 1.49% in July 2018, 1.69% in June 2018 and 1.32% in May 2018. The August 2018 reading had been the weakest since April 2017. Net of the year-ago hurricane distortions that suppressed current headline annual inflation, the series was close to generating a "hard" signal for recession, and would also have come close to such a signal in September 2018, despite the boost in the real headline growth rate.

Graph 5: Real Annual M3 Growth versus Formal Recessions (1960 to September 2018)
(Same as Graph OC-4 in the Opening Comments)



On a quarterly basis, third-quarter 2018 annual real growth in Money Supply M3 stood at 1.47%, down from 1.61% in second-quarter 2018, the weakest since 1.44% in second-quarter 2017 and then 0.66% in first-quarter 2017, which was the weakest seen since a long series of outright monthly year-to-year contractions throughout 2010 and 2011. Net of year-ago hurricane disruption s to current annual CPI inflation, third-quarter 2018 annual real growth in Money Supply M3 stood would have been 1.22% (instead of 1.47%).

The signal for a double-dip, multiple-dip or simply protracted, ongoing recession, based on annual contraction in the real broad money supply (M3), had been re-triggered/intensified over a year ago, in February 2017. Yet, that signal then softened or flattened out with a contrary bounce from May 2017 into December 2017, turning down anew after the Federal Reserve's Federal Open Market Committee (FOMC) began more-aggressive tightening in December 2017. The previous recession signal of December 2009 had remained in place, despite real annual M3 growth having rallied into positive territory post-2011.

[Note: If realistic, not headline, inflation numbers were used here, there would be no question of an ongoing negative real annual growth in M3, or a renewed deepening of the economic collapse into 2009, as discussed in *Commentary No. 957* and *Public Commentary on Inflation Measurement*.]

FOMC Policy Is Setting Up a Formal, "New" Economic Downturn. A formal recession signal from low-level or negative annual real money supply growth has become increasingly likely in the near term. That reflects a continued, general weakening trend in nominal annual M3 growth, driven by FOMC policy, in combination with a continued (renewed) pick-up in annual CPI inflation, ex-temporary hurricane distortions. Headline inflation generally has surged recently, driven by unstable political/supply conditions in the oil markets, not by an overheating U.S. economy that the FOMC likes to tout as the reason for its continued spiking of interest rates.

Reflected in *Graph 5*, and noted in prior section, third-quarter 2018 annual real growth in Money Supply M3 stood at 1.47%, its weakest showing in more than year, closing rapidly on signaling a downturn, when annual inflation reporting returns to normal.

What recently had been higher, albeit tepid, real annual growth likely was a temporary reversal in the pattern of plunging annual growth, which had held at levels last seen in plunging growth into the 2009 economic collapse, a level never seen outside an economy falling into, or already in a recession.

The Signal. The signal for a downturn or an intensified downturn in economic activity 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*, *Commentary No. 902-B* and the latest GDP coverage in *Commentary No. 957*). The initial economic downturn never evolved into a meaningful or sustainable recovery. The current level and pattern of real annual M3 growth generally has been followed by annual contraction and a recession signal.

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, from which it has backed off 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. Actual post-2009 economic activity has remained at relatively low levels—in protracted stagnation—with negligible recovery that already may sinking anew due to current FOMC policies (see *Commentary No. 970* and today's *Week, Month and Year-Ahead* section.)

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[Coverage of the Producer Price Index (PPI) begins on the next page.]

Producer Price Index (September 2018)

September Goods-Sector PPI Annual Inflation Backed Off to 3.1%, from 3.9% in August and July's Seven-Year Peak of 4.5%, Due Solely to Year-Ago Hurricane-Disrupted Energy Inflation. The headline, aggregate September 2018 Final Demand Producer Price Index (FD-PPI) gained 0.17% in the month, dominated by airline services, with the aggregate series having declined 0.09% in August. Unadjusted, aggregate year-to-year FD-PPI inflation softened to 2.64% from 2.83% in August 2018, with September annual inflation specifically depressed by the year-ago relative spike from hurricane disrupted oil and gasoline prices.

The Final Demand Producer Price Index (FD-PPI) is dominated by Services Sector inflation, which has little definitional consistency with the old-fashioned Goods Sector inflation (see the ensuing *Bulk of Headline PPI Reporting Is of Little Practical Use* section). Accordingly, the index of primary significance in this series, as an indicator of headline inflation, is the Good Sector, as headlined above.

Aggregate PPI and by Sector. The continuing decline in aggregate annual PPI inflation to 2.64% in September, from, 2.83% in August 2018 and 3.27% in July 2018 remained dominated by hurricane distortions to August and September 2017 Energy in the Goods Sector, along with the usual nonsense reporting in the Services Sector. Where the August and September 2018 Goods sector showed lower annual inflation, due to the storm-induced surge in 2017 Energy costs, the Services sector showed mixed annual inflation trends, tied to declining profit margins for Machinery and Equipment sales in August and Trade Services, areas involving general non-consistent definitional issue discussed regularly in the *Bulk of Headline PPI Reporting Is of Little Practical Use* section.

Services Sector. In the dominant (most heavily weighted) Services Sector, unadjusted annual inflation growth of 2.37% in September 2018, increased minimally versus 2.19% in August 2018, but remained down from 2.55% in July 2018 and from 2.82% in June 2018, its recent near-term peak. Month-to-month, seasonally-adjusted services inflation rose by 0.26% in September, having declined in August by 0.09% (-0.09%), the same as in July, versus a monthly gain of 0.43% in June.

According to the BLS, "... over one–third of the advance in prices for final demand services [in September] can be traced to the index for airline passenger services, which rose by 5.5 percent." On the downside, among a number of other areas, were margins for automotive fuels (i.e. gasoline) and lubricants. Short-term shifts here in Services margins (counted as PPI price movements) often run counter to underlying price movements, given inventories bought at earlier prices.

Goods Sector. Unadjusted September 2018 annual inflation growth of 3.21% declined from 3.86% in August, 4.50% in July 2018 and versus 4.32% in June 2018. The July reading had been the highest annual inflation rate in that series since December 2011. By subsector, the pattern of decreasing annual growth in September 2018 was dominated by the Energy Sector, where annual inflation dropped to 9.68% in September 2018, versus 13.62% in August 2018, 17.01% in July 2018, again dominated by a hurricane-induced spike to oil prices in August 2017. Inflation in the "Core" Goods Sector rose to 2.74% in September 2018, versus 2.65% in August 2018, and in the context of 2.83% in July 2018, with Food Sector inflation declining year-to-year by 1.37% (-1.37%) in September 2018, versus 1.03% (-1.03%) in August 2018, having dropped by 1.19% (-1.19%) in July 2018.

Construction Sector. In the Construction Sector, September 2018 annual inflation rose to 3.41%, having held at 3.24% in August 2018 and July 2018, down from 4.15% in June 2018. Month-to-month headline inflation was 0.08% in September 2018, the same as in August, having moved higher to 0.41% in July from 0.17% in June. That pattern largely was a repeating artefact of the quarterly update to estimated construction industry margins, published in the first month of each calendar quarter. As discussed later, where the month-to-month numbers are not comparable, the year-to-year numbers generally are, as seen with the August 2018 and July 2018 annual numbers holding at a constant level.

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, rather than as the hybrid measure of the headline Producer Price Index Final Demand, the aggregate headline series here (ShadowStats separates the analyses of those sectors by sub-category) 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 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. When 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 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 ten years of post-2008-panic data) to establish any meaningful relationship to general inflation or other economic or financial series.

Headline Details of the September 2018 Final-Demand Producer Price Index and Its Major Sub-Sectors. The Bureau of Labor Statistics (BLS) reported Wednesday, October 10th, that the seasonally-adjusted, month-to-month, headline Producer Price Index Final-Demand (FD-PPI or PPI-FD) inflation for September 2018 was a gain of 0.17%, following a monthly decline of 0.09% (-0.09%) in August, having been unchanged at 0.00% in July and having increased by 0.26% in June.

On a not-seasonally-adjusted basis—all annual growth rates are expressed unadjusted—year-to-year PPI-FD inflation in September 2018 dropped to 2.64%, from 2.83% in August 2018, versus 3.27% in July 2018 and from what had been a 79-month high of 3.37% in June 2018, versus 3.11% in May 2018 and an unrevised 2.66% in April 2018. Again, both the September and August 2018 annual change numbers here were skewed lower by year-ago hurricane disruptions to (boosting of) oil and gasoline prices.

In summary, for the three major subcategories of the September 2018 PPI-FD, which showed an adjusted monthly gain of 0.17%, and an unadjusted 2.64% annual inflation; headline monthly Goods inflation was an adjusted decline of 0.09% (-0.09%), up by an unadjusted 3.13% year-to-year; Services "inflation" (profit margins) gained month-to-month by 0.26%, up by 2.37% year-to-year; and Construction "inflation" was up by an inconsistent 0.08% in the month, up by 3.41% year-to-year.

Final Demand Goods (weighted at 33.02% of the Aggregate Index). Running somewhat in parallel with the old Finished Goods PPI series, headline month-to-month Final Demand Goods inflation in September 2018 declined by 0.09% (-0.09%), having been unchanged at "0.00%" in August, and having gained 0.09% month-to-month July. There was neutral impact on the aggregate goods monthly reading from underlying seasonal-factor adjustments (tied largely to energy). Not-seasonally-adjusted, September inflation was down by 0.09% (-0.09%) for the month. Unadjusted, year-to-year goods inflation in September 2018 showed an annual gain of 3.21%, versus 3.86% in August 2018 and 4.50% in July 2018.

Seasonally-adjusted monthly changes by major components of September 2018 Final Demand Goods:

- "Foods" inflation (weighted at 5.72% of the total index) in September 2018 declined month-to-month by 0.61% (-0.61%), having declined by 0.60% (-0.60%) in August and by 0.09% (-0.09%) in July. Seasonal adjustments were positive for the September change, which was an unadjusted monthly decline of 0.69% (-0.69%). Unadjusted and year-to-year, annual September 2018 foods inflation declined by 1.37% (-1.37%), having declined by 1.03% (-1.03%) in August 2018 and by 1.19% (-1.19%) in July 2018.
- "Energy" inflation (weighted at 5.58% of the total index) declined month-to-month in September 2018 by 0.80% (-0.80%), having gained by 0.36% in August 2018 and having declined by 0.53% (-0.53%) in July. Seasonal adjustments were negative in September, with unadjusted energy

showing a monthly gain of 0.09%. Unadjusted and year-to-year, September 2018 energy prices gained 9.68%, versus 13.62% in August 2018 and 17.01% in July 2018.

- "Less foods and energy" ("Core" goods) monthly inflation (weighted at 21.72% of the total index) was 0.17% month-to-month in September 2018, having been "unchanged" at 0.00% in August, and having gained 0.26% July. Seasonal adjustments were positive for monthly "Core" inflation, with the unadjusted monthly September inflation "unchanged" at 0.09%. Unadjusted and year-to-year, September 2018 "Core" inflation rose by 2.74%, versus 2.65% in August 2018 and 2.83% in July 2018.

<u>Final Demand Services (weighted at 65.33% of the Aggregate Index).</u> Headline Final Demand Services inflation rose month-to-month by 0.26% in September 2018, having declined month-to-month by 0.09% (-0.09%) in both August and July. The overall seasonal-adjustment impact on headline services inflation was positive, with an unadjusted monthly gain in September of 0.17%. Year-to-year, unadjusted September 2018 services inflation was 2.37%, versus 2.19% in August 2018 and 2.55% in July 2018.

The headline monthly changes by major component for September 2018 Final Demand Services inflation:

- "Services less trade, transportation and warehousing" inflation or the "Other" category (weighted at 40.56% of the total index) rose by 0.26% in September 2018, the same as in August and July 2018. Seasonal-adjustment impact on the September detail was positive, where the unadjusted monthly gain was 0.00%. Unadjusted and year-to-year, September 2018 "other" services inflation was up by 2.74%, versus 2.65% in August 2018 and 2.39% in July 2018.
- "Transportation and warehousing" inflation (weighted at 4.48% of the total index) rose month-to-month by 1.81% in September 2018, having declined by 0.57% (-0.57%) in August and having gained 0.33% in July. Seasonal adjustments were positive for September, against an unadjusted monthly gain of 0.25%. Unadjusted and year-to-year, September 2018 transportation inflation rose by 5.88%, versus 5.62% in August 2018 and 6.40% in July 2018.
- "Trade" inflation (weighted at 20.29% of the total index) rose month-to-month in September 2018 by 0.09%, having declined in August by 0.85% (-0.85%), the same as in July. Seasonal adjustments had a negative impact, where the unadjusted monthly change was a gain of 0.35%. Unadjusted and year-to-year, September 2018 trade inflation increased by 0.87%, versus 0.78% in August 2018 and 2.01% in September 2018.

<u>Final Demand Construction (weighted 1.64% of the Aggregate Index).</u> 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 increased by 0.08% in September 2018 for the second month, versus 0.41% in July, versus a revised 0.08% [previously 0.17%] in June, a revised 0.08% in May [previously "unchanged" at 0.00%], having jumped by 1.09% in April, by 0.08% in March, 0.08% in February and 0.76% in January. These monthly changes reflect a regular, nonsense monthly distortion in the first month of each quarter, when the BLS introduces new quarterly profit-margin estimates for the sector.

The impact of seasonal factors on the September 2018 Construction reading was neutral, as usual, where the unadjusted monthly change also was a gain of 0.08%. 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.

On an unadjusted basis, year-to-year construction inflation rose to 3.41% in September 2018, versus 3.24% in both August 2018 and July 2018, versus 4.15% in June 2018, a revised 4.15% [previously] 4.06% in May 2018, 4.24% in April 2018 and 3.57% in March, February and January 2018. Unlike the month-to-month data, the annual changes are reasonably comparable. Annual change here recently has moved closer to the estimates of private surveying and other government estimates (GDP deflators), which usually show higher construction-related inflation than does the PPI. Annual inflation in those measures generally appears to be on the rise. Discussed in *Commentary No. 829*, the Construction Sector PPI has little relationship to real world activity. ShadowStats constructed a Composite Construction Deflator (CCD) used in deflating the Census Bureau's monthly estimates of Construction Spending Put in Place in the United States (see *Commentary No. 964-A*).

PPI-Inflation Impact on Pending Reporting of September 2018 New Orders for Durable Goods. As to the pending relative reductions in inflation-adjusted real growth, versus the nominal reporting of September 2018 New Orders for Durable Goods, PPI inflation for manufactured durable goods (reported only on a not-seasonally-adjusted basis) increased month-to-month by 0.17% in September 2018, versus 0.11% in August, 0.17% in July, 0.35% in June, an unrevised 0.46% in May, an unrevised 0.35% in April, an 0.41% in March, 0.35% in February and 0.41% in January.

Year-to-year annual inflation rose to 3.31% in September 2018 (the highest level since 3.29% in August 2011), versus 3.25% in August 2018, 3.20% in July 2018, 2.96% in June 2018, 2.66% in May 2018, an unrevised 2.19% in April 2018, 2.08% in March 2018, 1.84% in February 2018 and 1.79% in January 2018. September 2018 New Orders for Durable Goods (both nominal and real), will be reported and calculable on Thursday, October 25th.

[Week, Month and Year Ahead Section begins on the next page.]

WEEK, MONTH AND YEAR AHEAD

MOUNTING RISK OF INTENSE FINANCIAL MARKET TURMOIL

[The following text was published as *Special Commentary No. 973 – ALERT* on October 14th, modified only for reference to today's *Opening Comments.*]

Risks of Intense Dollar and Financial-Market Turmoil Are Magnified by Deteriorating Economic, Fiscal and Political Conditions and Are Exacerbated by Mounting Systemic- and Consumer-Liquidity Stresses. In the context of recent intensified, negative Stock Market volatility, the happy hype on the ongoing stock market boom has begun to pull back a bit. Discussed here are risks of extraordinary financial-market disruptions and turmoil—selloffs—mounting rapidly in the near-term, in the next six months or even in the next couple of weeks. Further background and detail are discussed in today's *Opening Comments* on Consumer Liquidity and will be expanded upon in pending *Special Editions* of the *Consumer-Liquidity* and *Hyperinflation Watches*.

I view this brief missive to be of enough importance to put out as a separate piece.

With the backdrop of the *Squirrelly Season* and likely tipping point for the markets discussed in *Commentary No. 970*, likely rapid deterioration in near-term headline economic activity and rapidly mounting risks of near-term political turmoil and/or perceptions of same are combining to widen the risk of major downside movements in the U.S. dollar and U.S. equity markets, all coming together at the same point in time.

A sudden sell-off in the U.S. dollar, likely would be coincident with, if not the proximal trigger for the intensifying flight from liquid dollar-denominated assets such as stocks and bonds.

Consider as basic background *Hyperinflation Watch – No. 3* and *Consumer Liquidity Watch – No. 4*. Both *Watches* will be updated shortly in *Special Editions*, but the basic concepts discussed there already are in play, or as otherwise discussed here.

What continues to unfold is the still-unresolved 2007/2008 banking-system collapse, where the Federal Reserve has done its best to bailout, obfuscate, forestall or mask a systemic problem that has had neither an easy nor a rapid solution. Despite trillions of dollars used to prop the banks in the last decade, neither the U.S. banking system nor the U.S. economy has been able to return to anything close to normal functioning, post-2007. As the FOMC moves to reverse course by raising interest rates and tightening domestic liquidity, it also is killing whatever nascent economic recovery was beginning to surface.

Accordingly, the U.S. dollar and financial markets remain at extreme risk of intense, panicked declines that could happen at any time. The financial system and the markets eventually should become self-healing, but not without likely significant cost to or alteration of existing circumstances.

Holdings of physical gold and silver remain the ultimate hedges—stores of wealth—for preserving the purchasing power of one's U.S. dollar assets, during times of high U.S. inflation and currency debasement and/or political- and financial-system upheaval. Such circumstances increasingly are likely in the next six months, but, again, they could begin to break at any time.

Please call (707) 763-5786, or contact me by e-mail at johnwilliams@shadowstats.com, if you would like to discuss current circumstances, or otherwise.

Best wishes – John Williams

PENDING/CURRENT ECONOMIC RELEASES:

Note: Summary observations of these numbers are posted as soon as possible to the *Daily Update* section of the *www.ShadowStats.com* home page, usually within an hour or so of headline release.

Retail Sales—Nominal and Real (September 2018). Released today, October 15th, by the Census Bureau, September 2018 Retail Sales effectively collapsed against robust consensus expectations, on top of small downside revisions to prior activity. Consensus expectations were for a nominal monthly gain of 0.6% to 0.7%, where the headline monthly gain in September was 0.1% (0.10% at the second decimal point), versus a revised 1.0% (0.06% [previously 0.09%]) gain in August and a revised 0.6% (0.61% [previously 0.68%]) gain in July. Net of prior-period revisions September nominal retail sales were "unchanged" at 0.00%. There likely were mixed effects from Hurricane Florence, with some surge in replacement auto sales fueled by hurricane destruction being touted.

Reflecting intensified Federal Reserve tightening and a resulting, intensifying consumer liquidity squeeze, real Retail Sales (net of headline CPI-U inflation) was unchanged month-to-month at a headline 0.0% [0.04% at the second decimal point], down by 0.05% (-0.05%) net of revisions, following a deeper, revised 0.2% (-0.2%) [0.17% (-0.17%)], previously down by 0.1% (-0.1%) [0.14% (-0.14%)] in August. Annual real growth slowed to 2.4% (2.39%) in September 2018, from a revised 3.7% (3.72%) [previously 3.8% (3.85%)] in August 2018, a pattern commonly seen at the onset of recessions.

Flash highlights from the expanded text above were posted in the ***Daily Update*** section on the www.ShadowStats.com home page of October 15th, with full coverage planned in regular *Commentary No. 975*, scheduled for Thursday, October 18th.

The liquidity-strapped U.S. consumer remains unable to sustain regular, broad growth in economic activity, including Retail Sales, Real or Nominal. Consumer liquidity issues broadly have been intensified by the oil-price-driven rising inflation (although year-hurricane distortions to energy prices will boost the headline annual real growth numbers in September, as discussed in today's CPI-related *Reporting Detail*). Discussed in today's *Opening Comments*, *Consumer Liquidity Watch – No. 4* and its imminent revision, real personal consumption remains constrained by the lack of sustainable growth in real income, as well as the lack of consumer ability and/or willingness to take on meaningful new debt to offset that lack of income growth.

Industrial Production (September 2018). The Federal Reserve Board will publish its estimate of September 2018 Industrial Production tomorrow, Tuesday, October 16th. Flash highlights will be posted in the ***Daily Update*** section on the www.ShadowStats.com home page, with full coverage planned in regular *Commentary No. 975*, scheduled for Thursday, October 18th. In the context of *Commentary No. 970*, which covered August production detail, where virtually of the headline gains were generated by prior-period downside revisions, September production is good bet to disappoint a positive consensus outlook for a monthly gain of 0.2% to 0.3%.

> **Headline production should continue to disappoint minimally positive expectations, particularly net of prior-period revisions. Net of likely strength in Oil and Gas Exploration and Extraction, and random volatility in Utilities, the dominant Manufacturing Sector of Industrial Production likely will continue flat-to-minus, versus also minimally positive consensus expectations. The dominant Manufacturing Sector will continue shy of recovering its pre-2007 peak, likely weakening anew, month-to-month.**

New Residential Construction—Building Permits and Housing Starts (September 2018). The Census Bureau and the Department of Housing and Urban Development will release their September 2018 estimate of New Residential Construction, including Housing Starts and Building Permits, on Wednesday, October 17th. Flash highlights will be posted in the ***Daily Update*** section on the www.ShadowStats.com home page, with full coverage planned in regular *Commentary No. 975*, scheduled for Thursday, October 18th.

> **Given a deepening six-month downtrend in Building Permits, Housing Starts broadly are most likely to continue moving in that direction. That said, the reporting here usually is unstable and irregularly volatile. Results could come in anywhere, irrespective of current negative consensus expectations, which currently reflect that outlook only because the unstable series had come in on the upside of August expectations (see *Commentary No. 971*). Smoothed over six months, both Permits and Starts, not only are in downtrend, but remain down by recovering their pre-recession highs by 44% (-44%) to 45% (-45%). The series should continue to downtrending, non-recovering stagnation.**

As with the issue in the Retail Sales sector, the liquidity bind besetting consumers continues to constrain consumer activity, including in residential real estate. Headline investment in residential real estate showed unusual, outright quarterly contractions in both first- and second-quarter 2018 GDP, with all major residential construction and home-sales measures declining, smoothed for six-month moving averages (see *Commentary No. 971* and *Consumer Liquidity Watch – No. 4*).

In the context of the Federal Reserve rapidly clamping down on consumer liquidity, without sustainable growth in real income, and without the ability or willingness to take on meaningful new debt in order to make up for an income shortfall (see today's *Opening Comments*), the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including residential real estate sales and related demand for residential construction. That circumstance—in the last twelve-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

[Links to Prior Commentaries, etc. begin on the next page.]

LINKS TO PRIOR COMMENTARIES, SPECIAL REPORTS AND OTHER WRITINGS

Most Recent Watches:

The ***Consumer Liquidity Watch*** of August 10th: *Consumer Liquidity Watch – No. 4*.

The ***Hyperinflation Watch*** of August 12th: *Hyperinflation Watch – No. 3*.

The latest Watches always are available on www.ShadowStats.com and by link from the current *Commentary*. Updates pending in the coming week will be advised by e-mail as they are posted.

Prior Writings Underlying the Regular and *Special Commentaries*: Underlying the recent *Special Commentary No. 935 (Part One)* and the pending *Special Commentaries (Part Two)* on Inflation, and *(Part III)* on the Federal Reserve and U.S. banking system, are *Commentary No. 899* and *General Commentary No. 894*, along with general background from regular *Commentaries* throughout 2017.

These missives also are built upon writings of prior years, including *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). In turn, they 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 Regular Commentaries: *[Listed here are* Commentaries *of the last several months or so, plus recent* Special Commentaries *and a sampling of others covering a variety of non-monthly issues, including annual benchmark revisions. Please Note: Complete ShadowStats archives back to 2004 are available at www.ShadowStats.com (left-hand column of home page).]*

These regular *Commentaries* should be published about weekly, with *Consumer Liquidity* and *Hyperinflation Watches* updated every several weeks or so, updating general economic, consumer-liquidity and financial-market circumstances as they develop.

Special Commentary No. 973 – ALERT (October 14th) Was a single-page discussion and warning of rapidly mounting risks of instabilities in the domestic financial markets in six months ahead. See the latest *Hyperinflation* and *Consumer-Liquidity Watches* and *Commentary No. 970.*

Commentary No. 972 (October 7th) Covered September 2018 Employment and Unemployment, Monetary Conditions and the August Trade Deficit and Construction Spending.

Commentary No. 971 (October 3rd) Reviewed August 2018 New Residential Construction, Existing- and New-Home Sales, New Orders for Durable Goods and the third estimate of Second-Quarter 2018 GDP, along with an updated review of underlying economic reality.

Commentary No. 970 (September 26th) Discussed a potential, pending Tipping Point in the U.S. financial markets along with a review of August 2018 CPI, PPI, Retail Sales, Industrial Production and the CASS Freight Index™.

Commentary No. 969-Extended (September 16th) Reviewed the reporting of 2017 Real Median Annual Household Income and related measures of Income Dispersion, along with extended coverage of the August 2010 Employment and Unemployment numbers, including an updated Supplemental Labor-Detail Background Supplement.

Flash Commentary No. 969-Advance (September 7th) Covered initial headline employment and unemployment detail for August 2018 (expanded upon in *No 969-B*), July Construction Spending, the July Trade Deficit and a review of August Monetary Conditions.

Special Commentary No. 968-Extended (September 6th) Reviewed underlying economic reality, in the context of statistical deception used in boosting headline GDP activity, and against the background of extended analysis of the 2010 Comprehensive GDP Benchmarking. Separately covered was extended coverage of the second estimate of second-quarter 2018 (see *Flash Commentary No. 968-Advance*).

Flash Commentary No. 968-Advance (August 29th) provided a summary review of the headline first revision, second estimate of Second-Quarter 2018 GDP and initial estimates of GDI and GNP. Also updated early indications from the latest Consumer Liquidity measures.

Commentary No. 967 (August 24th) discuused the annual squirrely season and reviewed July 2018 New Orders for Durable Goods and New- and Existing-Home Sales and the preliminary benchmark revision to 2018 payroll employment.

Commentary No. 966 (August 17th) reviewed July 2018 Retail Sales, Industrial Production, New Residential Construction and the CASS Freight Index™.

Commentary No. 965 (August 12th) covered the July 2018 Consumer and Producer Price Indices (CPI and PPI), and Real Average Weekly Earnings and deteriorating consumer liquidity conditions.

Commentary No. 964-A (August 3rd) preliminary coverage of July 2018 Employment/Unemployment, Conference Board Help Wanted OnLine® Advertising, M3 and the June Trade Deficit and Construction Spending.

Commentary No. 963 (July 31st) reviewed June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index, all in the context of the GDP revisions and unfolding, underlying economic reality.

Commentary No. 962 (July 27th) provided initial coverage of the first or "advance" estimate of Second-Quarter 2018 Gross Domestic Product (GDP) and the Comprehensive Benchmark Revisions to the series back to 1929. A full update and extended coverage are in today's (September 4th) *Special Commentary.*

Commentary No. 961 (July 26th) provided full coverage on New Residential Investment (Housing Starts, Building Permits and New- and Existing-Home Sales. Preliminary coverage was provided on June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index™, all of which were expanded upon in *Commentary No. 963.*

Commentary No. 960 (July 15th) reviewed the June Consumer and Producer Price Indices (CPI and PPI), Real Earnings and related implications for consumer and systemic liquidity

Commentary No. 959-B (July 11th) provided extended detail on June 2018 Employment and Unemployment, the May 2018 Trade Deficit and updated economic outlook, along with expanded discussion on issues affecting the credibility of the headline employment and unemployment data.

Commentary No. 959-A (July 6th) provided flash headlines and summary details of the June 2018 Employment and Unemployment and the May 2018 Trade Deficit, expanded upon in *Commentary No. 959-B* and headline coverage of June 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 958 (July 3rd) covered May 2018 Construction Spending and the accompanying annual benchmarking to that series.

Commentary No. 957 (July 1st) covered May 2018 New Orders for Durable Goods and the third estimate of First-Quarter 2018 Gross Domestic Product (GDP) and the coincident second estimates of Gross National Product (GNP) and Gross Domestic Income (GDI).

Commentary No. 956 (June 27th) reviewed May 2018 Retail Sales, Industrial Production, New Residential Construction (Housing Starts and Building Permits), New- and Existing-Home Sales, along with detail on the May 2018 Cass Freight Index™ and some potential twists to the pending July 27th Comprehensive Benchmark Revision to the GDP.

Commentary No. 955 (June 18th) analyzed May 2018 inflation as reported with the May 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* covering FOMC policy, the U.S. dollar and financial markets. Summary headline details also were provided for May Retail Sales, Industrial Production and the Cass Freight Index™.

Commentary No. 954 (June 8th) reviewed the comprehensive annual benchmark revisions to the Trade Deficit, in the context of recent benchmark revisions to other major economic series and implications for the pending GDP benchmark revisions. Such also covered the headline reporting of the April 2018 headline Trade Deficit detail and an updated Consumer Liquidity Watch.

Commentary No. 953-B (June 5th) analyzed the discrepancies between the record-low headline unemployment rate and near-record-high readings of labor-market stress, in the context of extended coverage the May 2018 Employment and Unemployment and April 2018 Construction Spending, previously headlined in *No. 953-A*.

Commentary No. 953-A (June 1st) provided flash headlines and summary details of the May 2018 Employment and Unemployment and April 2018 Construction Spending, expanded upon in the supplemental coverage of *Commentary No. 953-B*. Current monetary conditions were reviewed, along with the initial estimate of annual growth in the May 2018 ShadowStats Ongoing Estimate of Money Supply M3.

Commentary No. 952 (May 30th) reviewed the second estimate of First-Quarter 2018 GDP, initial estimates of first-quarter GNP and GDI, extended detail on the annual benchmarking of the Retail Sales series, and headline coverage of the May 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 951 (May 25th) reviewed April 2018 New Orders of Durable Goods, in the context of the annual revisions (see prior *No. 950*), New- and Existing-Home Sales and brief coverage of the annual benchmarking of the Retail Sales series.

Commentary No. 950 (May 20th) reviewed April Retail Sales, Industrial Production, New Residential Construction (Housing Starts, Building Permits and annual revisions), the Cass Freight Index™ and annual benchmark revisions to Manufacturers' Shipments, including New Orders for Durable Goods.

Commentary No. 949 (May 11th) reviewed inflation as reported with the April 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* on the U.S. dollar and financial markets.

Commentary No. 948 (May 9th) explored unusual circumstances with April 2018 Employment and Unemployment numbers, along with the April Conference Board Help Wanted OnLine® Advertising, April Monetary Conditions, the March Trade Deficit and Construction Spending, along with the reintroduction of Sentier Research's monthly Real Median Household Income to March 2018.

Commentary No. 947 (April 27th) detailed the first estimate of First-Quarter 2018 GDP and the related Velocity of Money, March New Orders for Durable Goods, New- and Existing-Home Sales and the "advance" estimate of the March 2018 merchandise goods deficit.

Commentary No. 946 (April 22nd) covered March 2018 Retail Sales, Industrial Production, New Residential Construction (Housing Starts and Building Permits), the Cass Freight Index™ and a review of the current state of the GDP reporting and an outlook for first-quarter 2018 activity.

Commentary No. 945 (April 11th) reviewed the March 2018 Consumer and Producer Prices Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* on the U.S. dollar and financial markets.

Commentary No. 944 (April 8th) covered March 2018 Employment and Unemployment, the March Conference Board Help Wanted OnLine® Advertising, March Monetary Conditions and the full February Trade Deficit and Construction Spending.

Commentary No. 943 (March 29th) covered the third-estimate of, second-revision to Fourth-Quarter 2017 GDP and the only estimates to be made in current reporting of the GDI and GDP, as well as the "advance" estimate of the February merchandise trade deficit.

Commentary No. 942-B (March 27th) reviewed the Industrial Production annual benchmark revisions, general reporting-quality issues, February 2018 New Orders for Durable Good, New- and Existing-Home Sales and the Cass Freight Index™.

Commentary No. 942-A (March 23rd) provided a very brief summary of the much more extensive Industrial Production benchmarking details covered in *Commentary 942-B*.

Commentary No. 941 (March 19th) covered February Industrial Production and New Construction Spending (Housing Starts and Building Permits), along with a general discussion in the *Opening Comments* on economic conditions and a preview of the Industrial Production benchmark revisions.

Commentary No. 940 (March 15th) covered February 2018 Retail Sales, CPI, PPI and related Real Average Weekly Earnings, real Annual Growth in M3 and updated financial market prospects.

Commentary No. 939 (March 9th) covered the February 2018 Employment and Unemployment details, the full reporting of the January 2018 Trade Deficit, February Conference Board Help Wanted OnLine® Advertising and February Monetary Conditions.

Commentary No. 938 (March 1st) reviewed January 2018 Construction Spending and the second estimate of Fourth-Quarter 2017 GDP.

Commentary No. 937 (February 27th) covered January 2018, New Orders for Durable, New- and Existing-Home Sales, the "advance" estimate of the January 2018 Merchandise Trade Deficit and the Cass Freight Index™.

Commentary No. 936 (February 19th) covered the January 2018 CPI and PPI, Retail Sales, Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Special Commentary No. 935 (February 12th) was the first part of a three part-series reviewing economic and financial conditions of 2017 and the year-ahead, inflation and the U.S. government's balance sheet and conditions in the U.S. banking system and Federal Reserve options.

Commentary No. 934-B (February 6, 2018) provided extended coverage on the January 2018 Employment and Unemployment details, the 2017 benchmark revisions to Payroll Employment and the January annual recasting of population, along with coverage of the December 2017 Trade Deficit.

Commentary No. 934-A (February 2, 2018) provided initial detail on the January 2018 Employment and Unemployment details and the 2017 benchmark revisions to Payroll Employment, along with coverage of January Conference Board Help Wanted OnLine® Advertising, January Monetary Conditions and December 2017 Construction Spending.

Commentary No. 933 (January 26, 2018) covered December New Orders for Durable Goods, the Cass Freight Index™ and the first estimate of Fourth-Quarter 2017 GDP.

Commentary No. 932 (January 18, 2018) covered December Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Commentary No. 931 (January 15, 2018) reviewed December 2017 Retail Sales and the CPI and PPI, along with an update on the U.S. dollar, the financial markets and gold graphs.

Commentary No. 930-B (January 8th) expanded upon the December 2017 Employment and Unemployment numbers and Household Survey benchmarking, Conference Board Help Wanted OnLine® Advertising, December Monetary Conditions and the November 2017 Trade Deficit and Construction Spending, otherwise headlined in *No. 930-A*.

Advance Commentary No. 930-A (January 5, 2018) provided a brief summary and/or comments (all expanded in *Commentary No. 930-B*) on December 2017 Employment and Unemployment numbers, Household Survey benchmarking, Conference Board Help Wanted OnLine® Advertising, December Monetary Conditions and the November 2017 Trade Deficit and Construction Spending.

General Commentary No. 929 (December 28, 2017) reviewed current economic and market conditions at year-end 2017.

Commentary No. 926 (December 15, 2017) reviewed the headline November 2017 numbers for Retail Sales (both real and nominal), and Industrial Production, along a discussion on the dampening economic impact of business and consumer "uncertainty."

Commentary No. 909 (September 14, 2017) assessed the annual release of 2016 Real Median Household Income, along with a review of August Consumer Price Index (CPI) and the Producer Price Index (PPI) and an updated *Alert* on the financial markets.

Special Commentary No. 904 (August 14, 2017) issued an "Alert" on the financial markets (including U.S. equities, the U.S. dollar gold and silver, as well as FOMC policy), in the context of historical activity and unfolding circumstances of deteriorating economic and political conditions. Separately, headline details were reviewed for the July Consumer Price Index (CPI) and the Producer Price Index (PPI).

Special Commentary No. 888 (May 22, 2017) discussed evolving political circumstances that could impact the markets and the economy, reviewed the annual benchmark revisions to Manufacturers' Shipments and New Orders for Durable Goods and updated Consumer Liquidity Conditions.

Commentary No. 887 (May 18, 2017) reported on the April 2017 detail for Industrial Production and Residential Construction (Housing Starts), with some particular attention to historic, protracted periods of economic non-expansion, of which the current non-recovery is the most severe.

Special Commentary No. 885, entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*, (May 8, 2017) reviewed the unusual nature of the headline reporting of the April 2017 employment and unemployment details.

Commentary No. 876 (March 30, 2017) 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 (March 24, 2017) 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™.

General Commentary No. 867 (February 24, 2017) 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.

No. 859 Special Commentary (January 8, 2017) reviewed and previewed economic, financial and systemic developments of the year passed and the post-election year ahead.