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

COMMENTARY NUMBER 965

July 2018 Consumer and Producer Price Indices, Real Earnings, FOMC

August 12, 2018

July 2018 CPI-U, CPI-W and PPI-FD Goods Annual Inflation Rates Jumped to Respective New 79-Month Highs (Since December 2011) of 2.95%, 3.16% and 4.50%

Less-Meaningful PPI-FD Aggregate Inflation Backed Off to 3.27% from 3.37% in June, Hit by Falling Profit Margins at Gasoline Stations

July 2018 Real Average Weekly Earnings Contracted Anew, Month-to-Month (Seasonally Adjusted) and/or Year-to-Year (Unadjusted) Down by 0.01% (-0.01%) in the Month, by 0.22% (-0.22%) in the Year for Production and Nonsupervisory Employees

Real Average Weekly Earnings for All Employees Fell by 0.20% (-0.20%) in July, Unchanged at 0.00% Year-to-Year

Intensifying Consumer Income and Credit Woes Dim Economic Prospects

Mounting Systemic- and Consumer-Liquidity Issues Reflect Fed Tightening and Surging Annual Inflation, Driven by Oil Prices, Not by Strong Economic Demand

FOMC-Targeted Annual "Core" CPI-U Inflation Rose to 2.35% from 2.26%, "Worst" Level Since September 2008, Although It Was 2.33% in February 2016

Fed Rumblings for Greater Rate Hikes to Kill the "Overheating" Economy

PLEASE NOTE: The next regular *Commentary No. 966* on Friday, August 17th will review July 2018 Retail Sales, Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Updating Extended Commentaries. I apologize to subscribers for the delayed, extended coverage of the GDP-Benchmarking and the July Labor Detail *Commentaries*. Reflecting a combination of lingering, but dwindling effects from my fall, and an unusually-heavy workload, I have not published all I had hoped for and expected by this point in time. To catch up, the GDP benchmarking detail and the related *Special Commentary* on the economy all will be included in *Special Commentary No. 968* of August 31st, which also will cover the second-estimate of Second-Quarter 2018 GDP (the related benchmark–revised Velocity of Money was published in today's *Hyperinflation Watch – No. 3*). Separately, the extended July labor coverage will be included in the August labor coverage of the September 7th *Commentary No. 969*.

Latest Hyperinflation and Consumer Liquidity Watches. Hyperinflation Watch – No. 3 was posted this afternoon (August 12th), with Consumer Liquidity Watch – No. 4 posted on October 10th. These Watches always are available directly at www.shadowstats.com, along with your case-sensitive login and password. Updates are advised by e-mail, unless you request otherwise (send a note to johnwilliams@shadowstats.com).

The planned Publication Schedule, revisions to same and any updated Notes to Subscribers are posted regularly near the top of the left hand-column (under the *Latest Commentaries* heading) of the *ShadowStats* home page.

Your comments and suggestions always are invited.

Best wishes to all, John Williams (707) 763-5786

Today's (August 12th) *Opening Comments* reviews the evolving economic, liquidity and inflation outlook in the context of the July 2018 headline inflation numbers.

The *Reporting Detail* reviews the July Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings and related inflation issues.

The *Week, Month and Year Ahead* provides background on recent *Commentaries* and discusses/previews next week's releases of the July 2018 Retail Sales, Industrial Production and New Residential Construction.

Commentary No. 965 contents, including graphs and tables, are indexed and linked on following page.

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OPENING COMMENTS

FOMC and Oil-Disrupted Inflation Set to Scuttle Any Nascent Recovery

Federal Reserve Likely Will Pursue More Aggressive Tightening, at Least Temporarily. With the headline second-quarter 2018 GDP booming at 4.1% and with "Core Inflation" just hitting a 10-year high, the interest-rate hawks on the Federal Reserve's Federal Open Market Committee (FOMC) likely will push for more aggressive tightening of monetary policy, until ensuing financial-market and/or economic turmoil causes them to reverse policy, as discussed and reviewed in today's (August 12th) <u>Hyperinflation Watch – No. 3</u> (HW3) and the August 10th <u>Consumer Liquidity Watch – No. 4</u> (CLW4).

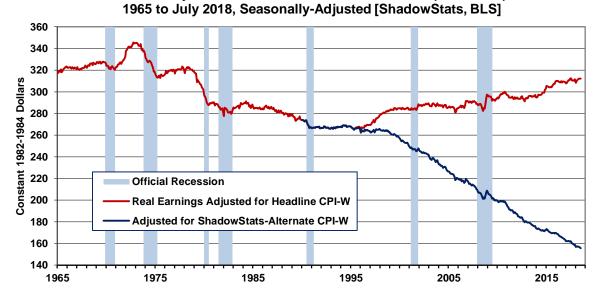
Potential Nascent Economic Recovery at Risk. Assessed in <u>Commentary No. 963</u>, ShadowStats contends that broad U.S. economic activity is off bottom, but still well shy of recovering its pre-recession high. It was been growing consistently year-to-year and quarter-to-quarter since second-quarter 2017, still holding shy of its pre-recession peak by 5.3% (-5.3%), although it is 1.9% above its trough. In contrast, the headline real GDP is 17.4% above its pre-recession peak and 22.3% off its trough, a performance not close to being matched by any other major economic or employment measure. This assessment was in the context of better-quality economic measures than the headline GDP, including consistent indications from the CASS Freight IndexTM, the Manufacturing Sector of Industrial Production, New Orders for Durable Goods and the headline GDP Series recast and corrected for the understatement of the inflation used in deflating it.

Assessed both current *ShadowStats Watches*, referenced and linked above in the opening paragraph, rapidly intensifying systemic- and consumer-liquidity constraints are of a nature that usually signals a pending economic downturn. Tightening liquidity constraints out of the FOMC (see *HW3*) are key to both the systemic and consumer woes (lack of growth in consumer credit outstanding), while heavily oil-price distorted consumer inflation—inflation not driven by a robust economic expansion—is particularly significant in terms of consumer liquidity (see *CLW4*) tied to real growth in earnings and credit.

Following *Graphs OC-1* and *OC-2* are discussed and detailed in today's *Reporting Detail*, tied to rising annual growth in consumer inflation and intensifying stress on growth in real earnings as well as intensifying systemic liquidity stresses. *Graphs OC-3* and *OC-4* (covered in *CLW4*), respectively reflect real growth in Consumer Credit Outstanding (affected by both rising inflation and FOMC policy), and the trend in Consumer Sentiment as surveyed by the University of Michigan. All these measures are at or beyond the tipping point of a new economic downturn. Aggressive FOMC tightening, which likely is in the works, easily could suffocate any nascent economy recovery.

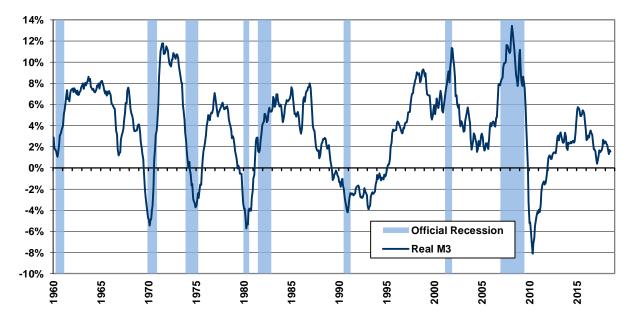
Graph OC-1: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date
(Same as Graph 4 in the Reporting Detail and CLW-8 in Consumer Liquidity Watch — No. 4)

Real Average Weekly Earnings Production and Nonsupervisory Employees Deflated by CPI-W versus ShadowStats-Alternate (1990-Base)



Graph OC-2: Real M3 Annual Growth versus Formal Recessions
(Same as Graph 5 in the Reporting Detail, and Graph HW-4 in Hyperinflation Watch — No. 3)

Real M3 versus Formal Recessions To July 2018, Yr/Yr Percent Change [ShadowStats, FRB, BLS, NBER]



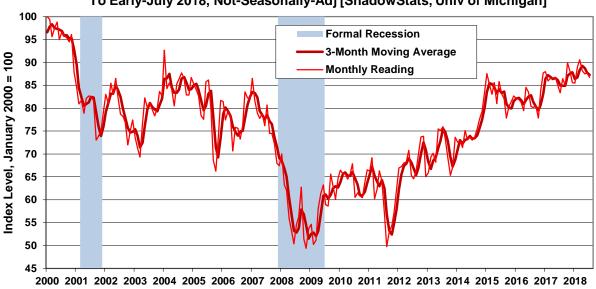
Graph OC-3: Consumer Credit Outstanding, Ex-Federally Held Student Loans, Yr-to-Yr Percent Change (Same as Graph CLW-14 in Consumer Liquidity Watch — No. 4)





Graph OC-4: Consumer Sentiment (2000 to 2018)
(Same as Graph CLW-2 in Consumer Liquidity Watch – No. 4)

Consumer Sentiment Index -- University of Michigan
Monthly and 3-Month Moving-Average Index (Jan 2000 = 100)
To Early-July 2018, Not-Seasonally-Adj [ShadowStats, Univ of Michigan]



REPORTING DETAIL

July 2018 Consumer Price Index (CPI)

CONSUMER PRICE INDEX—CPI (July 2018)

Headline CPI-U Inflation Gained 0.17% Month-to-Month; Unadjusted Annual Inflation Increased to 2.95%; Fed's Targeted 2.0% "Core" Notched Higher to a Ten-Year Peak of 2.35%. Not only did the headline CPI-U inflation numbers come in about as expected at 0.2% month-to-month and 2.9% year-to-year, but also the monthly numbers were not heavily skewed by big swings in monthly gasoline prices.

Nonetheless, if the year-to-year unadjusted 2.95% CPI-U had come just 0.00485% higher, the unadjusted headline year-to-year gain in July 2018 CPI-U would have rounded to 3.0% instead of 2.9%. I look at a broad spectrum of headline numbers published by the federal government's statistical bureaus and have noted this circumstance of the happy downside rounding on numbers, where the politicians generally would prefer to have lower, rather than higher—unemployment rates or CPI inflation (both series from the Bureau of Labor Statistics) for example—the rounding there rarely goes minimally to the upside, except long after the fact, such as in the annual benchmark revisions to the unemployment rate.

Annual unadjusted consumer inflation jumped to 79-month highs (highest since December 2011) of 2.95% for the CPI-U and 3.16% for the CPI-W, inflation levels that took a heavy toll on functional consumer liquidity, particularly as the numbers played into knocking down the levels of real average weekly earnings. The Fed's FOMC could not care less, even though personal and systemic liquidity would benefit from a real liquidity infusion from the Fed, instead of what now likely will be an intensified liquidity drain.

The FOMC's long-targeted, unadjusted annual "Core" inflation rose from 2.26% in June 2018, to a tenyear high of 2.35% in July 2018. Considering that the unadjusted "Core" rate had been at 2.33% as recently as February 2016. Calls for the FOMC to hike the federal funds rate, so as to kill the "overheating" economic expansion, broadly were nonsense. The serious nature of the renewed economic crisis created by these gimmicked numbers and the Federal Reserve's inability to resolve fully or to exit the 2008 banking crisis are discussed in today's *Opening Comments* and *Hyperinflation Watch – No. 3*.

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 reality. 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" and the raising of that 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%) from what would have been reported otherwise. These issues are discussed in the *Alternate Consumer Inflation Measures* section.

Specifically, with the headline unadjusted annual July 2018 CPI-U inflation up by 2.9%, year-to-year inflation is not and has not been quite as low as indicated, when considered in the context of traditional CPI reporting and common experience. Moving on top of the unadjusted annual changes to the CPI-U, the ShadowStats-Alternate Inflation Measures showed year-to-year inflation in July 2018 at 6.5%, based on pre-Greenspan-gimmicked 1990 methodologies, and at 10.8%, 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, although that has reversed in recent months, reflecting market expectations of continued FOMC rate hikes in the United States, and recent indications by the European Central Bank (ECB) that it may hold off another year to raise rates (see https://example.com/hyperinflation/watch-No.3. Separately there has been some near-term dollar strength, given shifting global political tensions.

Nonetheless, a tremendous threat to the dollar and 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 limited time with emergency, stopgap measures. 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 burgeoning, long-term U.S. sovereign-solvency issues.

Recent FOMC tightenings have been despite continued, lack of full economic recovery from the 2008 collapse, both in terms of the banking system, where real consumer credit outstanding still has not expanded beyond pre-recession levels, and in terms of industries such as manufacturing and construction, which also have not expanded beyond pre-recession levels. These areas remain the realm of "adverse" economic circumstances once feared by former Fed Chair Janet Yellen. Weaker economic circumstances

were masked, temporarily, by near-term disaster-recovery boosts to economic activity that now have unwound.

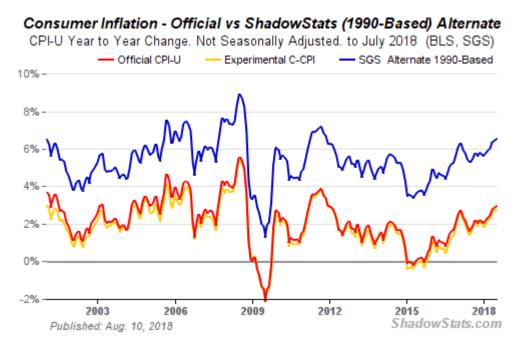
Despite the headline booming second-quarter 2018 GDP, the financial markets, particularly the global currency markets versus the U.S. dollar, should begin to pick up on renewed faltering of U.S. economic activity and on intensifying long-range U.S. Treasury solvency concerns. Fed Chairman Powell's initial response to those unfolding adverse circumstances should be forthcoming in the next couple of months.

The U.S. central bank has been forced to, and continues to prop 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, increasing political discord in Washington and mounting global political instabilities. Again, despite strong speculation and protestations to the contrary, the FOMC likely will end up renewing/expanding quantitative easing within the 2018 calendar year.

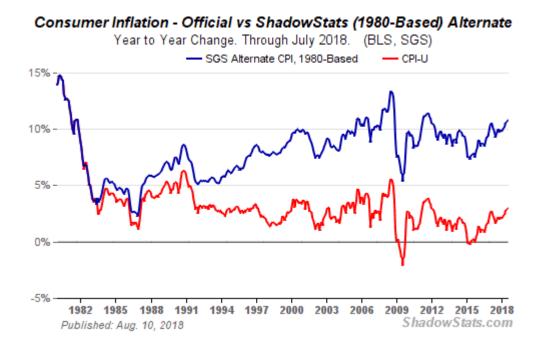
Compounding the high-risk of an increasing near-term run on the U.S. dollar remains what should be mounting recognition in global markets of the Fed's conundrum, again, particularly amidst mounting concerns as to U.S. fiscal stability. The Federal Reserve and other central banks still have no effective 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 (see <u>Hyperinflation Watch – No. 3</u>, <u>Special Commentary No. 888</u> and <u>Special Commentary No. 935</u>).

[Graphs 1 and 2 follow 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



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.

CPI-U. The Bureau of Labor Statistics (BLS) reported August 10th that the headline, seasonally-adjusted July 2018 CPI-U inflation increased month-to-month by 0.2% [up by 1.7% at the second decimal point], having gained 0.1% [up 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 and 0.4% [0.40%] in August.

Unadjusted monthly July 2018 CPI-U gained by 0.01%, having gained 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%), gained by 0.53% in September and 0.30% in August.

Major CPI-U Groups. The relatively soft, July 2018 CPI-U monthly inflation gain of 0.17% reflected a month-to-month decline in Energy costs, along with upside movement in Food prices and "Core" inflation. By the numbers, the July 2018 CPI-U seasonally-adjusted monthly inflation gain of 0.17% [up by 0.01% on an unadjusted basis] encompassed a "Core" (ex-food and energy) inflation rate of 0.24% [up by 0.07% unadjusted]. Month-to-month July Food inflation was 0.14%, up by an unadjusted 0.20%. The Energy sector declined by an adjusted 0.50% (-0.50%), down by 0.89% (-0.89%) unadjusted. Related gasoline costs declined by an adjusted 0.62% (-0.62%) in the month, down by 1.43% (-1.43%) unadjusted.

Holding with FOMC expectations, unadjusted annual July 2018 "Core" CPI-U notched higher to 2.4% in July 2018 for the fifth consecutive month above 2.0%, versus 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 2.0% target, for the first time since February 2017. As of as of February 2018, the "Core" rate had held range-bound for eleven straight months (since April 2017) at 1.8% +/- 0.1%. It showed an unadjusted year-to-year inflation rate of 2.35% in July 2018, versus 2.26% in June 2018, versus 2.24% in May 2018, 2.14% in April 2018 and 2.12% in March 2018, versus 1.85% in February 2018.

<u>Year-to-Year CPI-U</u>. Not seasonally adjusted, year-to-year inflation for the July 2018 CPI-U increased to 2.9% [2.95% at the second decimal point (see the opening paragraph of the *Reporting Detail*)]. That followed gains of 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, 2.2% [2.23%] in September 2017 and 1.9% [1.94%] in August 2017.

Year-to-year, CPI-U inflation would increase or decrease in next month's August 2018 reporting, dependent on the seasonally-adjusted, month-to-month change, versus the adjusted, headline monthly gain of 0.42% in the August 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 August 2018, the difference in August's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the unadjusted July 2018 annual inflation rate of 2.95%. Given an early guess of a seasonally-adjusted monthly change of 0.3% in the August 2018 CPI-U, that would leave the annual CPI-U inflation rate for August 2018 still at about 2.8% plus-or-minus.

<u>Quarterly CPI-U.</u> On a seasonally-adjusted annualized quarter-to-quarter basis, CPI-U rose by 1.66% in second-quarter 2018, having gained 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 2.71% in second quarter 2018, versus 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.

<u>Annual Average CPI-U.</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 July 2018 seasonally-adjusted, headline CPI-W, which is a narrower series than the CPI-U and traditionally has had greater weighting for gasoline than the CPI-U, rose month-to-month by 0.15%, following monthly gains 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, 0.55% in September and 0.49% in August and 0.06%.

On an unadjusted basis, year-to-year CPI-W gained by 3.16% in July 2018, versus 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, 2.31% in September 2017 and 1.93% in August 2017.

Quarterly CPI-W. On an annualized quarter-to-quarter basis, seasonally-adjusted CPI-W rose by 1.57%, in second-quarter 2018, versus 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 2.89% in second-quarter 2018, versus 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.

<u>Annual CPI-W.</u> 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 seen in today's July 2018 reporting, in which year-to-year inflation rates revised lower by 0.175% (-0.175%) for each month back through September 2017.

The unadjusted annual inflation rate for the C-CPI-U in July 2018 was 2.71%, versus a revised June 2018 2.54% [previously 2.72%], versus 2.44% [previously 2.62%] in May 2018, and so on in the ongoing accounting fraud set up during the Clinton Administration to cheat Social Security recipients on their annual Cost of Living Adjustments (COLA). Through multiple downside quarterly revisions, the level of the headline C-CPI-U Index has been reduced by 0.35% from its original level. These clearly are plug numbers, not actual revisions to underlying calculations with better numbers. While these bogus numbers are being used now to boost 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 for that. Other gimmicks, however, have been used.

Quarterly C-CPI-U, Year-to-Year. On an unadjusted, year-to-year basis, annual inflation by quarter was up by a revised 2.37% [previously 2.55%] in second-quarter 2018, versus a revised 1.82% [previously 2.00%] in first-quarter 2018, a revised 1.69% [previously 1.87%] in fourth-quarter 2017, and a revised 1.56% [previously 1.66%] in third-quarter 2017, versus an unrevised 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 a revised 1.76% [previously 1.83%] in 2017, versus an annual gain of 0.93% in 2016 and contraction of 0.12% (-0.12%) in 2015.

See the *Opening Comments* of <u>Commentary No. 945</u> and <u>Commentary No. 920</u> 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 <u>Commentary No. 721</u> and in the opening notes in the <u>CPI</u> <u>Section</u> of <u>Commentary No. 699</u> 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 <u>Commentary No. 841</u>) 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 6.5% in July 2018, versus 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.

The July 2018 ShadowStats-Alternate Consumer Inflation Measure (1980-Base), which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was at about 10.8% (10.75% at the second decimal point) in July 2018, versus 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. Historical monthly detail, and an inflation calculator will be 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.

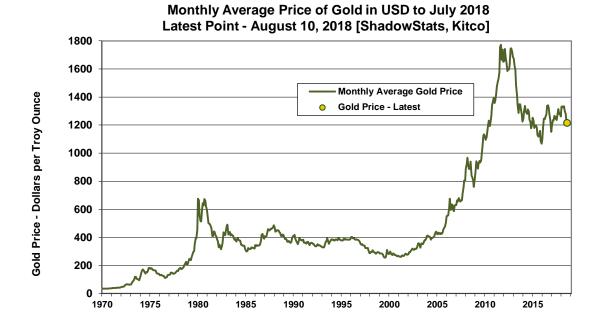
The ShadowStats estimates are adjusted on an additive basis for the cumulative impact on the annual inflation rate from the various BLS changes in methodology (reversing the net aggregate inflation reductions by the BLS). The series are adjusted by ShadowStats for those aggregate changes, but the series otherwise are not recalculated.

Over the decades, the BLS has altered the meaning of the CPI from being a measure of the cost of living needed to maintain a constant standard of living, to something that neither reflects the constant-standard-of-living concept nor measures adequately what most consumers view as out-of-pocket expenditures. Roughly five percentage points of the additive ShadowStats adjustment since 1980 reflect the BLS's formal estimate of the annual impact of methodological changes; roughly, two percentage points reflect changes by the BLS, where ShadowStats has estimated the impact not otherwise published by the BLS.

For example, the BLS does not consider more-frequent weightings of the CPI series or shifting the nature of retail outlets to be changes in methodology. Yet those changes have had the effect of reducing headline inflation from what it would have been otherwise (see Public Commentary on Inflation Measurement for further details).

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

Federal Reserve Paper Dollars per Troy Ounce of Gold



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

CPI-U: GOLD at \$2,753 per Troy Ounce, SILVER at \$160 per Troy Ounce ShadowStats: GOLD at \$15,969 per Troy Ounce, SILVER at \$929 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 \$2,753 per troy ounce, based on July 2018 CPI-U-adjusted dollars, and \$15,969 per troy ounce, based on July 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 July 2018 CPI-U inflation, the 1980 silver-price peak would be \$160 per troy ounce and would be \$929 per troy ounce in terms of the July 2018 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (again, all series not seasonally adjusted).

Accompanying $Graph\ 3$ shows the regular gold plot published with monthly CPI detail, with further detail and graphs found in today's $\underline{Hyperinflation\ Watch-No.\ 3}$. As economic expectations increasingly

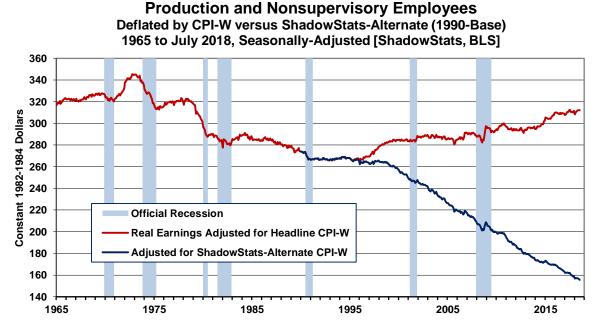
take some hit in the week and month ahead, the dollar should lose some ground against both gold and the stronger currencies such as the Swiss France (CHF). Recent, relative short-term U.S. dollar strength should prove fleeting (again see $\underline{Hyperinflation\ Watch-No.\ 3}$), in what fairly quickly 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—July 2018—Faltered Sharply for Both the "All Employees" and "Production and Nonsupervisory Employees" Categories. Estimates of July 2018 real average weekly earnings were published along with the headline CPI-W and CPI-U on August 10th, as also discussed in Consumer Liquidity Watch – No. 4.

Real Average Weekly Earnings -

Graph 4: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date
(Same as Graph OC-1 in the Opening Comments and CLW-8 in Consumer Liquidity Watch — No. 4)



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 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 <u>Public Commentary on</u> <u>Inflation Measurement</u> for further detail.

Production and Nonsupervisory Employees 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 July 2018 eased month-to-month by 0.01% (-0.01%) and declined year-to-year by 0.22% (-0.22%).

The seasonally-adjusted monthly decline of 0.01% (-0.1%) in July, followed monthly gains of 0.04% in June and 0.03% in May. The unadjusted year-to-year decline of 0.22% (-0.22%) in July 2018 followed an annual contraction of 0.04% (-0.04%) in June 2018 and an annual gain of 0.34% in in May 2018.

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 2.81%, with annual growth of 0.34%. 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, July 2018 real average weekly earnings declined by 0.20% (-0.20%) in the month, having gained a revised 0.31% [previously 0.06%] in June, having gained a revised 0.09% [previously 0.05%] in May 2018 and having been an unrevised "unchanged" at 0.00% in April. Unadjusted, annual growth slowed to "no change" or 0.00% in July 2018, from 0.44% in June 2018, versus 0.25% in May 2018 and 0.76% in April 2018.

Second-quarter 2018 real earnings gained at an annualized pace of 1.78%, where first-quarter 2018 real earnings contracted at an 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 3.48% in third-quarter 2017.

<u>Intensifying Consumer Liquidity Stress.</u> Discussed in today's *Opening Comments* and <u>Consumer Liquidity Watch – No. 4</u>, in conjunction with continued slowing/declining growth in real Consumer Credit Outstanding and faltering Consumer Optimism, the government's headline real earnings data indicated intensifying income and liquidity issues for the consumer.

A Leading Indicator to Broad Economic Activity, Inflation-Adjusted Money Supply M3—July 2018—Annual Change Moved Back Towards Its Thirteen -Month Low. Annual growth in nominal July 2018 M3 notched lower to 4.49%, versus 4.57% in June 2018 and up from 4.10% in May 2018. At the same time, year-to-year change in the July 2018 CPI-U increased to 2.95%, from 2.87% in June 2018 and 2.80% in May 2018, which minimally muted the increase in real or inflation-adjusted annual M3 growth to 1.54% in July 2018, versus 1.69% in June 2018 and 1.30% in May 2018. The May reading was the weakest since April 2017. Other than for May 2018, July 2018 annual growth was the softest since June 2017.

On a quarterly basis, second-quarter 2018 annual real growth in Money Supply M3 stood at 1.60%, 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.

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*.]

Graph 5: Real Annual M3 Growth versus Formal Recessions (1960 to June 2018)
(Same as Graph HW-4 in Hyperinflation Watch - No. 3)



Real M3 versus Formal Recessions To July 2018, Yr/Yr Percent Change [ShadowStats, FRB, BLS, NBER]

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 pick-up in annual CPI inflation. Headline inflation generally has surged recently, driven by unstable political/supply conditions in the oil markets, not by an overheating U.S. economy, as the FOMC likes to tout.

Shown in *Graph 5*, based on July 2018 CPI-U reporting and the recent money supply benchmarking, the ShadowStats-Ongoing M3 Estimate of annual inflation-adjusted growth in July 2018 M3 was 1.54%, down from 1.69% in June 2018, versus 1.30% in May 2018. That was against 1.79% in April 2018 and annual growth rates of 2.14% in March 2018, 2.30% in February 2018 and 2.49% in January 2018. Those patterns broadly have reflected successive, downside benchmark revisions to the Federal Reserve's money measures, versus upside movement in annual CPI-U inflation. Those levels of activity were against a near-term peak growth of 2.66% in October 2017, and against the February 2015 and cycle-high peak growth of 5.74%.

Noted in the opening paragraph of this section, second-quarter 2018 annual real growth in Money Supply M3 stood at 1.66%, its weakest showing in a year, having slowed from 2.31% in first-quarter 2018.

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 <u>Commentary No. 877</u>, <u>Commentary No. 902-B</u> and the latest GDP coverage in <u>Commentary No. 957</u>). 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, with significant new softness in recent reporting, separate from short-lived activity generated by the destruction and resulting recovery from particularly-severe hurricane and California wildfire seasons. Actual post-2009 economic activity has remained at relatively low levels—in protracted stagnation—with no actual recovery (see the *ECONOMY* section of *Special Commentary No. 935* and, again, *Commentary No. 957*).

[Coverage of the Producer Price Index follows on the next page.]

July 2018 Producer Price Index (PPI)

July Goods-Sector PPI Annual Inflation Rose by 4.5%, Its Highest Reading Since December 2011; Less-Meaningful Headline PPI-FD Annual Inflation Backed Off to 3.3% from 3.4% in June. July 2018 Final Demand Producer Price Index (FD-PPI) inflation was unchanged at a seasonally-adjusted 0.00% month-to-month, following monthly gains of 0.26% in June and 0.52% in May. The headline unchanged reading in July largely reflected a headline monthly decline of 0.09% (-0.09%) in the virtually-meaningless albeit dominant Services Sector, offset by monthly gains of 0.09% in the more-meaningful Goods Sector and by 0.41% in the inconsistently reported Construction Sector.

July 2018 year-to-year PPI inflation rose by a not-seasonally-adjusted 3.27%, backing off from its multi-year high of 3.37% in June 2018, but still above 3.11% in May 2018. Such encompassed a multi-year high in annual inflation of 4.50% in the Goods Sector, versus slowing annual growth of 2.55% in the Services Sector and 3.24% in the Construction Sector.

Aggregate PPI and by Sector. The decline in annual PPI inflation to 3.27% in July 2018, from 3.37% in the June 2018 was dominated by the usual nonsense reporting in the Services Sector. Where the goods sector showed higher annual inflation, the services sector showed weaker annual inflation, tied to declining profit margins at gasoline stations, an 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 2.55% in July 2018 slowed from 2.82% in June 2018, its recent near-term peak. Month-to-month services inflation declined by 0.09% (-0.09%) in July, versus a gain of 0.43% in June.

According to the BLS, "Leading the July decline in prices for final demand services, margins for fuel and lubricants retailing dropped 12.7 percent" (again, see the *Bulk of Headline PPI Reporting Is of Little Practical Use* section).

Goods Sector. Unadjusted July 2018 annual inflation growth of 4.50%, rose from 4.32% in June 2018. Such was the highest annual inflation rate in that series since December 2011. By subsector, the pattern of increased annual growth in July 2018 was seen only in the "Core" Goods Sector, up by 2.83%, with Food Sector inflation tumbling year-to-year an even greater 1.19% (-1.19%) pace, and with Energy Sector still seeing the strongest annual growth of 17.01%, albeit slightly softer than in June.

Construction Sector. In the Construction Sector, July 2018 annual inflation eased to 3.24% from 4.15% in June 2018. Month-to-month inflation moved higher to 0.41% in July, from 0.17% in June. That pattern largely was an artefact of the quarterly update to estimated construction industry margins, published in the first month of each calendar quarter. Discussed later, the month-to-month numbers are not comparable, but the year-to-year numbers are.

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

<u>Public Commentary on Inflation Measurement</u>), 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 July 2018 Final-Demand Producer Price Index and Its Major Sub-Sectors. The Bureau of Labor Statistics (BLS) reported August 9th, that the seasonally-adjusted, month-to-month, headline Producer Price Index Final-Demand (PPI-FD) inflation for July 2018 was unchanged at 0.00%, having increased by 0.26% in June, 0.52% in May and a revised 0.17% [previously 0.09%] in April.

On a not-seasonally-adjusted basis—all annual growth rates are expressed unadjusted—year-to-year PPI-FD inflation in July 2018 eased back to 3.27% from what had been a 79-month high of 3.37% in June, versus 3.11% in May 2018 and 2.57% in April 2018. The unadjusted April annual inflation was the weakest since September 2017.

Again, in summary, for the three major subcategories of the July 2018 PPI-FD, which showed an adjusted monthly "unchanged" at 0.00%, and an unadjusted 3.27% annual inflation; headline monthly Goods

inflation was an adjusted gain of 0.09% month-to-month, up by an unadjusted 4.50% year-to-year; Services "inflation" (profit margins) declined month-to-month by 0.09% (-0.09%), up by 2.55% year-to-year; and Construction inflation was up an inconsistent 0.41% in the month, up by 3.24% year-to-year.

<u>Final Demand Goods</u> (weighted at 33.02% [previously 33.01%] of the Aggregate Index). Running somewhat in parallel with the old Finished Goods PPI series, headline month-to-month Final Demand Goods inflation in July 2018 gained 0.09%, the same as in June, versus a gain of 0.96% in May. There was neutral impact on the aggregate goods monthly reading from underlying seasonal-factor adjustments (tied largely to food and energy). Not-seasonally-adjusted, July inflation also was up by 0.09% month-to-month. Unadjusted, year-to-year goods inflation in July 2018 showed an annual gain of 5.50%, versus 4.32% in June 2018 and 4.43% in May 2018.

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

- "Foods" inflation (weighted at an unrevised 5.72% of the total index) in July 2018 declined month-to-month by 0.09% (-0.09%), having dropped by 1.11% (-1.11%) in June and having gained 0.09% in May. Seasonal adjustments were positive for the July change, which was an unadjusted monthly decline of 0.51% (-0.51%). Unadjusted and year-to-year, annual July 2018 foods inflation declined by 1.19% (-1.19%), having declined by 1.02% (-1.02%) in June 2018 and having gained 0.51% in May 2018.
- "Energy" inflation (weighted at an unrevised 5.58% of the total index) declined month-to-month by 0.53% (-0.53%) in June 2018, having gained 0.81% in June and 4.59% in May. Seasonal adjustments were negative, once more, in July, with unadjusted energy showing a monthly decline of 0.09% (-0.09%). Unadjusted and year-to-year, July 2018 energy prices gained 17.01%, versus 17.23% in June 2018 and 16.55% in May 2018.
- "Less foods and energy" ("Core" goods) monthly inflation (weighted at a revised 21.72% [previously 21.71%] of the total index) gained month-to-month by 0.26% in July 2018, having also gained 0.26% in June and May. Seasonal adjustments were positive for monthly "Core" inflation, with the unadjusted monthly July inflation up by 0.17%. Unadjusted and year-to-year, July 2018 "Core" inflation rose by 2.83%, versus 2.56% in June 2018 and 2.48% in May 2018.

<u>Final Demand Services (weighted at 65.33% [previously 65.35%] of the Aggregate Index).</u> Headline Final Demand Services inflation declined by 0.09% (-0.09%) month-to-month in July 2018, having gained 0.43% in June 2018 and 0.26% in May. The overall seasonal-adjustment impact on headline services inflation was neutral, with an unadjusted monthly decline in July also of 0.09% (-0.09%). Year-to-year, unadjusted July 2018 services inflation was 2.55%, versus 2.82% in June 2018 and 2.38% in May 2018.

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

• "Services less trade, transportation and warehousing" inflation, or the "Other" category (weighted at 40.56% [previously 40.53%] of the total index) rose by 0.26% in July 2018, the same as in June, having been "unchanged" month-to-month at 0.00% in May 2018. Seasonal-adjustment impact on the June detail was negative, where the unadjusted monthly reading was 0.35%. Unadjusted and year-to-year, July 2018 "other" services inflation was up by 2.39%, versus 2.30% in June 2018 and 2.31% in May 2018.

- "Transportation and warehousing" inflation (weighted at 4.48% [previously 4.47%] of the total index) rose month-to-month by 0.33% in July 2018, having gained 0.49% in June and 0.75% in May. Seasonal adjustments were neutral for the July reading, against an unadjusted monthly gain also of 0.33%. Unadjusted and year-to-year, July 2018 transportation inflation rose by 6.40%, versus 5.68% in June 2018 and 5.04% in May 2018.
- "Trade" inflation (weighted at 20.29% [previously 20.35%] of the total index) declined month-tomonth by 0.85% (-0.85%) in July 2018, having gained 0.68% in June and 0.86% in May. Seasonal adjustments had a positive impact, where the unadjusted monthly change was a decline of 0.93% (-0.93%). Unadjusted and year-to-year, July 2018 trade inflation rose by 2.01%, versus to 3.06% in June 2018 and 1.91% in May 2018.

<u>Final Demand Construction (weighted at an unrevised 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 0.41% in July 20218, versus 0.17% in June, having been "unchanged" at 0.00% in May, 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 July 2018 reading should have been neutral, as usual, where the unadjusted monthly change also was a gain of 0.41%. 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, as addressed in *Commentary No.* 829.

On an unadjusted basis, year-to-year construction inflation rose to 3.12% in July 2018, versus 4.15% in June 2018, 4.06% in May 2018 a revised 4.15% [previously 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, ShadowStats constructed a Composite Construction Deflator (CCD) used by ShadowStats 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 July 2018 New Orders for Durable Goods. As to the pending relative reductions in inflation-adjusted real growth, versus the nominal reporting of July 2018 New Orders for Durable Goods, inflation for manufactured durable goods (reported only on a not-seasonally-adjusted basis) increased month-to-month by a 0.17% in July 2018, versus 0.35% in June, versus 0.52% in May, a revised 0.29% [previously 0.41%] in April, a revised 0.41% [previously 0.29%, initially 0.41%] in March, 0.35% in February and 0.41% in January.

Year-to-year annual inflation, however, jumped to 3.20% in July 2018, the highest level since 3.29% in August 2011, versus 2.96% in June 2018, 2.66% in May 2018, 2.13% in April 2018, 2.08% [previously 1.96%] in March 2018, 1.84% in February 2018 and 1.79% in January 2018. July 2018 New Orders for Durable Goods (both nominal and real), will be reported and calculable on August 24th.

WEEK, MONTH AND YEAR AHEAD

U.S. Dollar and Financial-Market Turmoil Remain at Intensified High Risk, Amidst Mounting Fiscal Concerns, Consumer Liquidity Issues and Non-Expanding, Real-World Economic Activity. In the context of weakening consumer-liquidity trends (see today's *Opening Comments*, <u>Hyperinflation</u> <u>Watch – No. 3</u>, <u>Consumer Liquidity Watch – No. 4</u> and <u>Commentary No. 959-B</u>), the headline economic outlook should continue to dim rapidly, despite the big initial headline jump in second-quarter GDP.

Today's <u>Hyperinflation Watch – No. 3</u> reviews the broad outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets. Such expands upon the annual review in <u>Special Commentary No. 935</u>. The broad outlook on the economy has not changed. Weaker economic growth and renewed, faltering economic headlines should follow. The fundamental outlook for U.S. dollar and related market circumstances also broadly have not changed from the related vulnerabilities discussed in earlier missives.

The dollar and financial markets remain at extraordinarily-high risk of intense, panicked declines, possible at any time. 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 inflation and currency debasement, and/or political- and financial-system upheaval.

Please call (707) 763-5786, if you would like to discuss current circumstances, or otherwise.

Best wishes – John Williams

[Pending Economic Releases are covered on the next page.]

PENDING ECONOMIC RELEASES

Retail Sales—Nominal and Real (July 2018). The Census Bureau will release its "advance" estimate of July 2018 nominal (not-adjusted-for-inflation) Retail Sales on Wednesday, August 15th. Given the August 10th release of the July CPI-U, both nominal and real (adjusted-for-inflation) Retail Sales will be reviewed in the regular *Commentary No. 966* planned for Friday, August 17th. In the context of the strong sales activity reported in June (see <u>Commentary No. 963</u>), which was bloated by inconsistent seasonal adjustment factors, among other issues, there is potential for downside revisions to prior activity and weaker-than-expected monthly sales with the pending July release.

July 2018 Real Retail Sales monthly and annual growth rates will reflect the respective, headline nominal growth rates, before inflation adjustment, minus the respective July 2018 CPI-U seasonally-adjusted monthly and annual inflation rates of 0.17% and 2.89%.

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 have been intensified by the oil-price-driven rising inflation (see today's *Opening Comments* and *Consumer Liquidity Watch – No. 4.*) Real personal consumption remains constrained by the lack of sustainable growth in real income and the lack of consumer ability and/or willingness to take on meaningful new debt to offset that lack of income growth.

Given still-intensifying liquidity pressures on the consumer, headline July Retail Sales is a good bet to disappoint relatively soft consensus expectations around a positive 0.1%, a level that would be in monthly contraction, net of the headline July CPI-U. Headline nominal reporting easily could show an outright month-to-month contraction, on top of downside revisions to May and June activity.

Industrial Production (July 2018). The Federal Reserve Board publishes its estimate of July 2018 Industrial Production on Wednesday, August 15th, with ShadowStats coverage in Commentary No. 965 planned for Friday, August 17th. In the context of Commentary No. 963, which covered June production detail and weakening orders related to consumer goods (also negative implications for the Retail Sales reporting), July production is good bet to disappoint a positive consensus outlook.

Headline July production should be much weaker than June's one-month catch-up spike from May's supply-disrupted hit to Manufacturing (see <u>Commentary No. 963</u>). Separately, soft new orders for consumer goods favor a contraction in related production. 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, broadly weaker than positive consensus expectations that appear centered on a 0.3% monthly production gain.

New Residential Construction—Building Permits and Housing Starts (July 2018). The Census Bureau and the Department of Housing and Urban Development will release their July 2018 estimate of New Residential Construction, including Housing Starts and Building Permits, on Thursday, July 16th, with coverage in the regular Commentary No. 966 planned for Friday, August 17th.

Given a deepening downtrend in Building Permits, Housing Starts broadly are most likely to move in that direction. That said, the reporting here usually is unstable and irregularly volatile. Results could come in anywhere, irrespective of positive consensus expectations, which currently reflect that outlook only because the unstable series had come in weaker than expected in June (see <u>Commentary No. 961</u>). Smoothed over six months, the series should continue to be flat, in relatively low-level, non-recovering stagnation.

The liquidity bind besetting consumers continues to constrain consumer activity, including in residential real estate. Headline investment in residential real estate showed an unusual, outright quarterly contraction in first quarter 2018 GDP (see *Commentary No. 957*, *Commentary No. 962* and *Consumer Liquidity Watch – No. 4*). 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, SPECIAL REPORTS AND OTHER WRITINGS

Most Recent Watches:

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

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

The latest Watches always are available on www.ShadowStats.com and by link from the current Commentary, with updates advised by e-mail.

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 <u>No. 777 Year-End Special</u> <u>Commentary</u> (December 2015), <u>No. 742 Special Commentary: A World Increasingly Out of Balance</u> (August 2015) and <u>No. 692 Special Commentary: 2015 - A World Out of Balance</u> (February 2015). In turn, they updated the long-standing hyperinflation and economic outlooks published in <u>2014</u> <u>Hyperinflation Report—The End Game Begins</u> – First Installment Revised (April 2014) and <u>2014</u> <u>Hyperinflation Report—Great Economic Tumble</u> – 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 <u>Public Commentary on Inflation</u> <u>Measurement</u> and the <u>Public Commentary on Unemployment Measurement</u>.

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, dating back to the beginning of 2017. Please Note: Complete ShadowStats archives back to 2004 are found at www.ShadowStats.com (left-hand column of home page).]

These regular *Commentaries* usually are published at least weekly, with *Consumer Liquidity* and *Hyperinflation Watches* updated about every two weeks, updating general economic, consumer-liquidity and financial-market circumstances as they develop.

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

<u>Commentary No. 963</u> (July 31st) reviewed June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index.

<u>Commentary No. 962</u> (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 follow shortly in a pending *Special Commentary*.

<u>Commentary No. 961</u> (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 TM, all of which were expanded upon in *Commentary No. 963*.

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

<u>Commentary No. 959-B</u> (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.

<u>Commentary No. 959-A</u> (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.

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

<u>Commentary No. 957</u> (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).

<u>Commentary No. 956</u> (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 IndexTM and some potential twists to the pending July 27th Comprehensive Benchmark Revision to the GDP.

<u>Commentary No. 955</u> (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 TM.

<u>Commentary No. 954</u> (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.

<u>Commentary No. 953-B</u> (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*.

<u>Commentary No. 953-A</u> (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.

<u>Commentary No. 952</u> (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.

<u>Commentary No. 951</u> (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.

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

<u>Commentary No. 949</u> (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.

<u>Commentary No. 948</u> (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.

<u>Commentary No. 947</u> (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.

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

<u>Commentary No. 945</u> (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.

<u>Commentary No. 944</u> (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.

<u>Commentary No. 943</u> (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.

<u>Commentary No. 942-B</u> (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 IndexTM.

<u>Commentary No. 942-A</u> (March 23rd) provided a very brief summary of the much more extensive details covered in *Commentary 942-B*.

<u>Commentary No. 941</u> (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.

<u>Commentary No. 940</u> (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.

<u>Commentary No. 939</u> (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.

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

<u>Commentary No. 937</u> (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 IndexTM.

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

<u>Special Commentary No. 935</u> (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.

<u>Commentary No. 934-B</u> (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.

<u>Commentary No. 934-A</u> (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.

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

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

<u>Commentary No. 931</u> (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.

<u>Commentary No. 930-B</u> (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.

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

<u>Commentary No. 926</u> (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."

<u>Commentary No. 909</u> (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.

<u>Special Commentary No. 904</u> (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).

<u>Commentary No. 902-B</u> (July 31, 2017) reviewed the 2017 annual benchmark revisions of GDP and related series, along with the "advance" estimate of second-quarter 2017 GDP.

<u>Commentary No. 900</u> (July 19, 2017) reviewed June 2017 New Residential Investment (Housing Starts and Building Permits), and previewed the upcoming annual GDP benchmark revisions and the coincident "advance" estimate of second-quarter 2017 GDP.

<u>Commentary No. 897</u> (July 6, 2017) reviewed the headline May 2017 Construction Spending and the annual revisions to same, along the May Trade Deficit, and June The Conference Board Help Wanted OnLine[®] Advertising and the May Cass Freight IndexTM.

<u>General Commentary No. 894</u> (June 23, 2017) reviewed unfolding economic, financial and political circumstances in the context of market expectations shifting towards an "unexpected" headline downturn in broad economic activity, along with headline details on May 2017 Real Median Household Income (Sentier Research) and New- and Existing-Home Sales.

<u>Commentary No. 890</u> (June 5, 2017) covered the negative-downside annual benchmark revisions to the trade deficit, the May 2017 estimates of labor conditions, ShadowStats Ongoing Money Supply M3, The Conference Board Help Wanted OnLine[®] Advertising and April 2017 estimates of the Cass Freight IndexTM, and the monthly trade deficit and construction spending.

<u>Special Commentary No. 888</u> (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.

<u>Commentary No. 887</u> (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.

<u>Special Commentary No. 885</u>, 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.

<u>Commentary No. 882</u> (April 27, 2017) summarized the annual benchmark revisions to Retail Sales and reviewed the March 2017 releases of New Orders for Durable Goods and New- and Existing-Home Sales.

<u>Commentary No. 877</u> (April 2, 2017) outlined the nature of the downside annual benchmark revisions to industrial production, along with implications for pending annual revisions to Retail Sales, Durable Goods Orders and the GDP.

<u>Commentary No. 876</u> (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.

<u>Commentary No. 875</u> (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 IndexTM.

<u>General Commentary No. 867</u> (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.

<u>Commentary No. 864</u> (February 8, 2017) analyzed January 2017 Employment and Unemployment detail, including benchmark and population revisions, and estimates of December Construction Spending, Household Income, along with the prior update to Consumer Liquidity.

<u>Commentary No. 861</u> (January 13, 2017) covered the December 2016 nominal Retail Sales, the PPI, with a brief look at some summary GAAP reporting on the U.S. government's fiscal 2016 operations.

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.
