John Williams'

Shadow Government Statistics

Analysis Behind and Beyond Government Economic Reporting

COMMENTARY NUMBER 949

April Consumer and Producer Price Indices, Real Earnings

May 11, 2018

A Double-Whammy from Oil-Price-Driven Inflation:
Surging Inflation Impairs Real Income, Liquidity and Economic Growth;
Surging Prices Do Not Reflect Surging Economic Demand

April 2018 Inflation-Adjusted, Real Average Weekly Earnings Fell for All Employees
(Rose for Production and Supervisory); Quarterly Contractions Held in Place

A Leading Indicator to Broad Economic Activity, April 2018
Real Annual Growth in Money Supply M3 Slowed to an Eight-Month Low

Unadjusted Annual CPI-U Inflation Rose to a 14-Month High of 2.46% in April 2018,
Up from 2.36% in March 2018, Holding Well Shy of Common Experience

"Core" CPI-U Inflation (Ex-Food and Energy) Held at 2.1% in April,
Above the Fed's 2.0% Target for a Second Straight Month

April Annual PPI Inflation Eased to a 7-Month Low of 2.57%,
Backing Off the 74-Month High of 3.03% Seen in March

Nothing Like Massaged Inflation Numbers to Boost You into a Higher Tax Bracket

---

PLEASE NOTE: The next regular Commentary, planned for Thursday, May 17th, will cover April 2018 Retail Sales, Industrial Production and New Residential Construction (Housing Starts and Building Permits, including annual revisions), along with initial detail from the annual benchmark revisions to Manufacturers' Shipments and New Orders for Durable Goods.

Best wishes — John Williams (707) 763-5786

Today's (May 11th) *Opening Comments and Executive Summary.* The ***Opening Comments*** review unfolding inflation and economic trends, leading to the *Hyperinflation Watch* discussion. The ***Executive Summary*** (page 3) highlights reporting of the April 2018 Consumer Price Index, Producer Price Index and Real Average Weekly Earnings.

The ***Reporting Detail*** (beginning on page 7) reviews the April CPI, PPI and Real Earnings in greater detail.

The ***Hyperinflation Watch*** (page 24) updates current conditions and outlook in the financial markets as tied particularly to the U.S. dollar, gold, silver and oil, in the context of evolving economic and inflation conditions, and Federal Reserve policy..

The ***Consumer Liquidity Watch***. The *CLW* is being updated, for republication with next week's *Commentary No. 950*, as discussed in prior *Commentary No. 948* (the most recent version is there) .

The ***Week, Month and Year Ahead*** (page 30) provides background on recent *Commentaries* and previews next week's releases of April 2018 Retail Sales, Industrial Production and Housing Starts, and the annual revisions to New Residential Construction and benchmark revisions to New Orders for Durable Goods.

OPENING COMMENTS

Some Observations on Inflation: Little Is as Advertised. Headline inflation details of the April 2018 Consumer Price Index (CPI) and Producer Price Index (PPI) generally showed a continuing pick up in unadjusted annual inflation, broadly tied to rising petroleum-related prices. That was seen in aggregate with the CPI and in the Energy Sector of the PPI.

Some view inflation as a signal of rising economic activity, and it can be that. Where rising consumption drives demand for goods and services beyond existing supply and inventories, that tends to push prices higher, as production or services expand to match that demand. Such is a relatively positive experience leading to an expanding, healthier economy.

The United States has not seen such a circumstance in more than a decade, and only sporadically going back several decades. What is in play at the moment is a headline inflation in the United States generated by rising oil prices. Reflected in those higher oil prices are supply distortions and political disruptions outside the United States, factors that do not benefit the U.S. economy. Although domestic oil production does receive benefit from the higher prices, the rising, current domestic inflation largely is oil-price driven, not driven by robust economic activity.

Robust economic growth also would drive domestic income higher. Instead, as seen with today's Real Earnings data and as discussed in the *Opening Comments* and *Hyperinflation Watch* of prior *Commentary No. 948*, with weak income growth, the higher inflation from rising oil prices is sapping the domestic purchasing power of real earnings. It also reduces domestic real liquidity has seen in *Graph 5* on page 13.

Much of what is happening here is a direct result of the effective systemic collapse in 2008, and the Federal Reserve's inability to restore a fully-functioning system. Raising interest in this circumstance has extraordinarily dangerous implications for the economy and the financial system. More will follow on this in a future *Commentary*.

Nothing Like Massaged Inflation Numbers to Boost You into a Higher Tax Bracket! Just a quick note on the May 10th revisions to the Chained-Consumer Price Index (C-CPI-U), which was introduced specifically to reduce headline inflation, so to as to help reduce the Federal Deficit: (1) by pushing taxpayers into higher tax brackets (now in place with the new tax law), and (2) by cutting Cost of Living Adjustments (COLA) to Social Security recipients (not activated yet). Discussed on page 13, the revisions are made each quarter, going back a year, knocking off even increments of annual inflation growth. That looks like massaging the data, not "correcting" it for errors. More will follow here, too.

EXECUTIVE SUMMARY: Consumer Price Index—April 2018—Monthly CPI Rose by 0.2%; Unadjusted Annual CPI Rose to 2.5%; Fed's Targeted "Core" Inflation Held at 2.1%. Once again, gasoline-price volatility and unstable seasonal adjustments of same, remained the driving force behind headline monthly consumer inflation. Amidst continued unstable, but related, seasonal adjustments. The problem remains that extreme, monthly gasoline price volatility of recent years increasingly has been moved by factors other than regular, seasonal supply and demand issues. Accordingly, the series cannot be seasonally adjusted, easily or meaningfully.

Unadjusted annual inflation rose to 2.43% in April 2018, versus 2.36% in March 2018. Although the April reading was the highest since February 2017, it still held well below that February 2017 60-month high of 2.74%. Intervening extremes include a subsequent near-term trough of 1.63% in June 2017.

What had led to the inflation surge into the February 2017 CPI annual gain were rising gasoline prices, largely independent of near-term economic activity. The same has remained true ever since, including the current circumstance, heavily distorted by hurricane-disruptions and recovery from same, along with shifting political circumstances in the Middle East. Near-term inflation volatility usually reflects volatile gasoline prices, which can reflect the factors mentioned, as well as more-controllable areas, such as the U.S. dollar and Federal Reserve policies (see the *Hyperinflation Watch*).

Unstable seasonal adjustments and resulting gasoline-price volatility continued to move CPI-U monthly inflation, with sharply seasonally-adjusted gasoline prices weakening the headline March and April 2018 CPI data. Consider that consumers saw gasoline prices in March drop by 0.2% (-0.2%) at the pump, but after seasonal adjustments that was a drop of 4.9% (-4.9%) in gasoline prices, seen by no one other than statisticians at the Bureau of Labor Statistics (BLS). The pattern was repeated in April, where gasoline at the pump rose by 6.21%, but the increase after seasonal adjustments was 3.04%.

As result, where the seasonally-adjusted CPI-U declined by 0.06% in March 2018, it gain 0.23% unadjusted. Where the seasonally adjusted CPI-U rose by 0.22% in April 2018, it increased by 0.40% not seasonally adjusted.

As to the financial market's concentration on the FOMC's favored gimmick, the CPI-U component inflation measure hyped as the targeted "Core" rate (net of food and energy), jumped above its range-bound 1.8% of the prior year, hitting 2.1% in March 2018 and holding there in April, its highest level since January 2017.

Yet, with the unadjusted, aggregate annual March 2018 CPI-U inflation up by 2.4%, year-to-year inflation is not and has not been quite as low as indicated, when considered in the context of traditional CPI reporting and common experience. Moving on top of the unadjusted annual changes to the CPI-U, the ShadowStats-Alternate Inflation Measures showed year-to-year inflation in April 2018 at 6.0%, based on 1990 methodologies, and at 10.2%, based on 1980 methodologies (see the *Reporting Detail*).

CPI-U versus CPI-W. The Consumer Price Index for All Urban Consumers (CPI-U), the broadest headline consumer-inflation number, is used to adjust numerous economic measures, such as Retail Sales and All Employees real average weekly earnings, for inflation effects. The narrower Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is used for deflating measures such as real average weekly earnings for Production and Nonsupervisory Employees on private nonfarm payrolls (see *Graph 1*). Somewhat more-heavily weighted for the increase in adjusted gasoline prices, the April 2018 seasonally-adjusted CPI-W gained month-to-month by 0.26%, versus a decline of 0.16% (-0.16%) and gains of 0.11% in February and 0.62% in January. Unadjusted, year-to-year change in the April 2018 CPI-W was 2.59%, versus 2.44% in March 2018, 2.32% in February 2018 and 2.14% in January 2018.

Real Average Weekly Earnings—April 2018—Down in the Month for All Employees (Up for Production and Supervisory Employees), First-Quarter 2018 Contractions Held in Place. The headline estimate for April 2018 real average weekly earnings was published along with the release of the April CPI-W and CPI-U. Discussed in the *Reporting Detail*, for the "production and nonsupervisory employees category"—the only series for which there is a meaningful history (back to 1964), the regularly-volatile, real average weekly earnings rose by 0.3% in April 2018, versus gains of 0.2% in March, 0.7% in February, and a monthly drop of January by 1.1% (-1.1%). That left first-quarter 2018 real average weekly earnings down at a revised annualized quarterly pace of 1.2% (-1.2%) [previously 1.5% (-1.5%)] versus fourth-quarter 2017, the third consecutive quarterly contraction, the fifth such decline in the last six quarters.

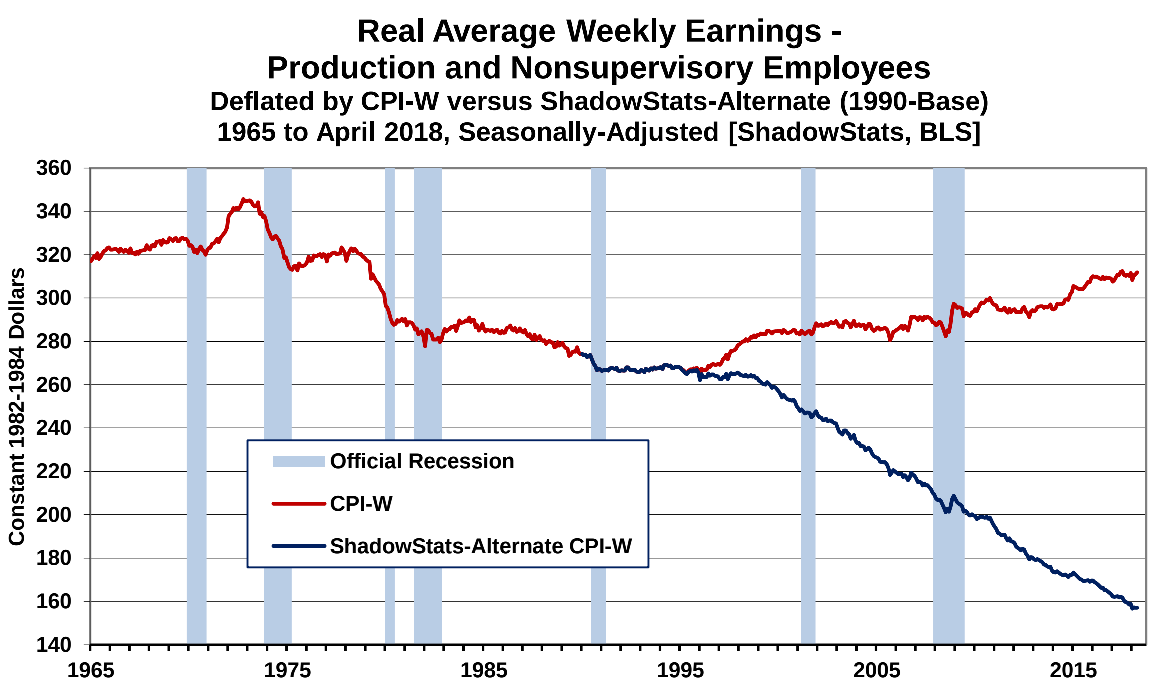
<u>All Employees Detail.</u> In the broader All Employees detail (deflated by the CPI-U), real average weekly earnings contracted by 0.07% (-0.07%) in April 2018, having gained 0.29% in March. Annual growth slowed to 0.42% in April 2018, versus 0.89% in March 2018.

First-quarter 2018 earnings contracted at a deepened annualized pace of 0.44% (-0.44%) [previously 0.35% (-0.35%)], versus an unrevised, annualized decline of 0.03% (-0.03%) in fourth-quarter 2017 and an annualized gain of 3.48% in third-quarter 2017.

In the broader "all employees category" real average weekly contracted in the month, down in April 2018 by 0.07% (-0.07%), having gained 0.29% in March. Real earnings here also contracted in first-quarter 2018, down a at revised, deeper an annualized quarterly pace of 0.4% (-0.4%) [previously 0.3% (0.3%)]. Discussed in the *Consumer Liquidity Watch* of prior *Commentary No. 948*, with real earnings falling in conjunction with slowing growth in real consumer credit outstanding, consumer liquidity has continued to tighten markedly.

Graph 1 shows the seasonally-adjusted earnings as officially deflated by the Bureau of Labor Statistics (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 in 2015 by negative headline inflation), but most recently downtrending. Deflated by the ShadowStats (1990-Based) measure, real earnings have been in fairly-regular decline for the last four decades, which is much closer to common experience than the pattern suggested by the CPI-W. See the *Public Commentary on Inflation Measurement* for further detail.

Graph 1: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date



Producer Price Index (PPI)—April 2018—Final Demand Annual PPI Inflation Backed Off to 2.57% from a 74-Month High of 3.03%, with a Muted Monthly Gain of 0.09%, Despite Soaring Oil. In the context of real-world, sharply-rising energy prices—minimized by warped seasonal-adjustment patterns—monthly Final Demand Producer Price Index (FD-PPI) inflation eased to 0.9% in April 2018, versus 0.26% in March. In like manner, annual inflation softened to an unadjusted 2.57% in April 2018, versus 3.03% in March 2018. That annual inflation of 3.03% in March had been the highest headline level seen in over six years.

By sector, the dominant April 2018 Services inflation rose month-to-month by a seasonally-adjusted 0.9%, versus 0.26 in March, in line with the aggregate series. Goods inflation (including soaring energy) was unchanged, versus a monthly gain of 0.26% in March, while monthly Construction inflation was a bloated 1.09% in April, versus 0.17% in March.

The April 2018 reduction in unadjusted annual inflation to 2.57% in the FD-PPI, from 3.03% in March 2018, encompassed mixed trends in annual inflation across the major sectors. Annual inflation in dominant Services Sector slowed to 2.39% in April 2018, from 2.93% in March 2018. In the Goods Sector, which was hit hard by the irregular seasonal adjustments to energy, April 2018 annual inflation growth slowed to 2.88%, from 3.17% in March 2018. In the Construction Sector, April 2018 annual inflation was 4.24%, up from 3.57% in March 2018.

Impact of Energy Sector Seasonal-Adjustment Distortions. Consider that unadjusted annual inflation in the energy sector rose by 9.02%, against 8.54% in March 2018. On an unadjusted basis, monthly energy inflation rose by 1.99% in April versus a monthly drop of 0.94% (-0.94%) in March. Seasonally adjusted, those changes were depressed to a monthly gain of just 0.09% in April, versus a monthly contraction of 2.11% (-2.11%) in March. On an unadjusted basis, monthly inflation in the goods sector would have been 0.35% in April instead of 0.00%, where monthly inflation in March would have been 0.44%, instead of 0.26%, all due largely to unstable oil and gasoline prices. Discussed in the *Consumer Price Index* section, the simply BLS does not have the ability to seasonally adjust these irregularly-volatile numbers adequately.

[Extended analysis of the PPI and analysis and graphs of the CPI follows in the **Reporting Detail.*]***

____

REPORTING DETAIL

CONSUMER PRICE INDEX—CPI (April 2018)

Headline CPI-U Inflation Gained 0.2% Month-to-Month; Unadjusted Annual Inflation Increased to 2.5%; Fed's Targeted 2.0% "Core" Held at 2.1% for a Second Month. Gasoline price volatility continued as a primary driving force behind much of the variability in headline, monthly consumer inflation, amidst continued highly unstable and irregular seasonal adjustments to gasoline prices. The problem remains that extreme, monthly gasoline price volatility of recent years increasingly has been moved by factors other than regular, seasonal supply and demand issues. In the last several months, headline gasoline inflation has appeared weaker than most people would have anticipated, due to these issues.

Discussed in the *Opening Comments*, this is inflation triggered more by shifting political circumstances and the irregular timing of natural disasters, than it is by underlying economic activity. Monthly average gasoline prices have been heavily distorted by hurricane-disruptions, recovery from same and by shifting circumstances in the Middle East. Near-term inflation volatility generally has reflected volatile gasoline prices, which can reflect the factors mentioned, as well as more-controllable issues, such as U.S. dollar valuation and Federal Reserve policies (see the *Hyperinflation Watch*).

Unadjusted annual CPI-U rose to 2.46% in April 2018, versus 2.36% in March 2018, at its highest level since its 60-month high of 2.74% seen in February 2017, with an intervening near-term trough of 1.63% in June 2017. Parallel unadjusted annual pricing of gasoline rose by 13.43% in April 2018, versus 11.09% in March 2018, with an intervening near-term trough of an annual contraction of 0.43% (-0.43%) in June 2017. The April 2018 gasoline peak was the highest since 30.66% in February 2017, except for a storm-related surge to 19.28% in September 2017, which the BLS appears to have modified in the CPI with its occasional "intervention analysis" for unusual or one-time data disruptions.

The way most people look at gasoline prices is what they pay at the pump. In April 2018, gasoline prices were up month-to-month by 6.21% at the pump, up by 3.04% in the seasonally-adjusted CPI-U. In March, pump prices declined by 0.24% (-0.24%), with the headline, adjusted CPI-U costs down by 4.89% (-4.89%). The distortions that flow through to the headline seasonally-adjusted CPI-U instabilities have the effect on inflation-adjusted real growth estimates of overstating growth (when inflation is too low) or understating growth (when inflation is too high). As a result, real retail sales growth in March 2018, as well as real change in monthly real median household income in March 2018, would appear to have received artificial boosts from too-low inflation overstating real growth. These patterns do shift over the year, with inflation understatement in the first-half of the year, beginning in February.

Related inflation surges in recent decades, past and present, rarely have been driven by an overheating economy, as claimed by some on the Fed's Federal Open Market Committee (FOMC). Indeed, the FOMC's favored charade, the targeted CPI-U inflation measure, the "Core" rate, net of food and energy, finally broke above the 2.0% "target" rate, to an unadjusted 2.11% in March 2018 and held at 2.14% in April 2018. Such was against 1.85% in February 2018, where it had held for the prior eleven months at 1.8% +/- 0.1%, otherwise tied as the lowest annual core inflation rate since 1.6% in December 2015. The headline annual gain did not drop to or below 2.0% in the current cycle until just a year ago, when it dropped to 2.00%. Such is a contrived number, from which "Inflation Scare" headlines rarely are made. The term charade is used here, since Alan Greenspan was instrumental in redefining the CPI-U series so that it would not show meaningful inflation (see the *Public Commentary on Inflation Measurement* for further detail).

Separately, with the headline unadjusted annual April 2018 CPI-U inflation up by 2.5%, year-to-year inflation is not and has not been quite as low as indicated, when considered in the context of traditional CPI reporting and common experience. Moving on top of the unadjusted annual changes to the CPI-U, the ShadowStats-Alternate Inflation Measures showed year-to-year inflation in April 2018 at 6.0%, based on pre-Greenspan-gimmicked 1990 methodologies, and at 10.2%, 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 (see the *Hyperinflation Watch*). Most recently there has been some near-term 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. In a related matter, also nearing extreme crisis are burgeoning, long-term U.S. sovereign-solvency issues.

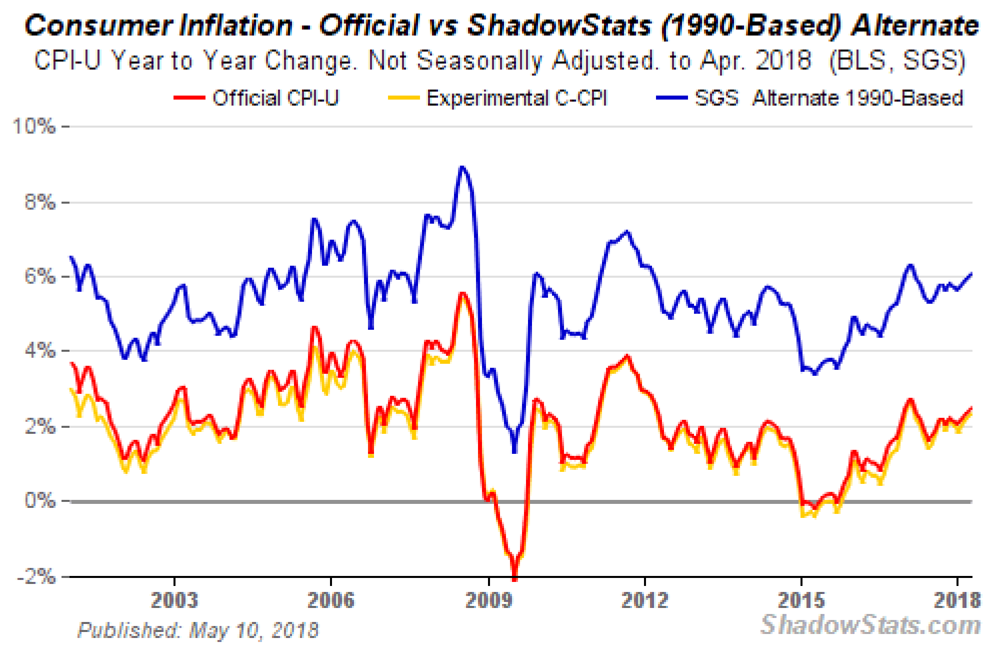
Recent FOMC tightenings have been despite continued, lack of full economic recovery from the 2008 collapse, both in terms of the banking system, where real consumer credit outstanding has not expanded beyond pre-recession levels, and in terms of industries such as manufacturing and construction, which 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 is has started to unwind, (see the discussions *Opening Comments* of *Commentary No. 948* and *Commentary No. 947*). Those same "adverse circumstances" have acted as a drain on insurance-industry reserves and personal saving used to pay for disaster damages. With first-quarter 2018 GDP showing weakened consumer components, the quarterly GDP remained open to significant slowing or contraction in pending revisions, or in post-benchmarking revisions in second-quarter 2018. 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 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.

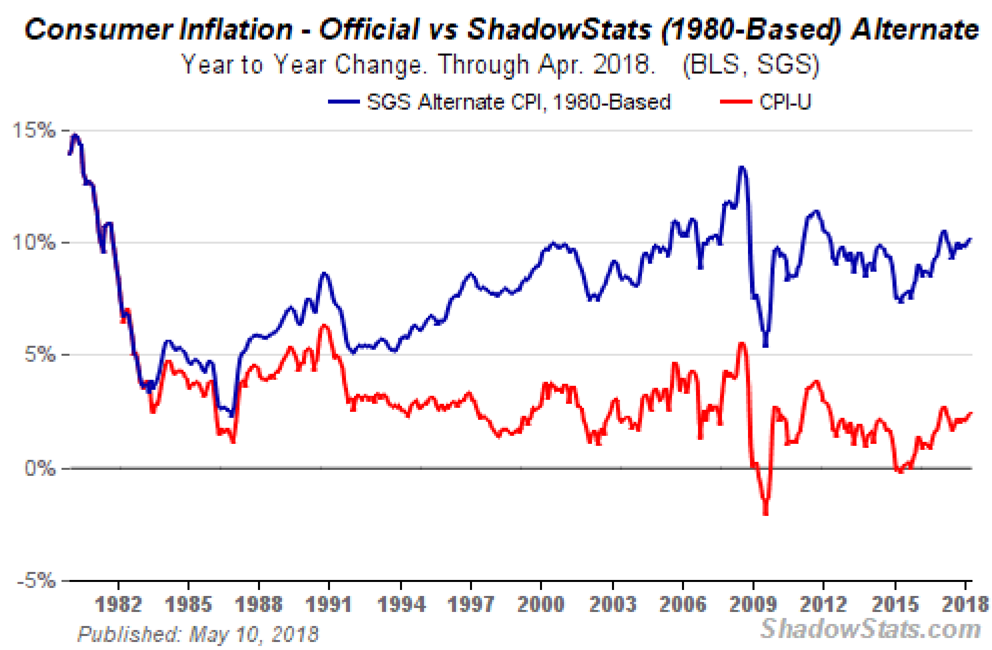
Compounding the high-risk of an increasing near-term run on the U.S. dollar remains mounting recognition in global markets of the Fed's conundrum, particularly amidst mounting concerns as to U.S. fiscal stability. The Federal Reserve and other central banks still have no effective idea as to how to boost 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 the today's *Hyperinflation Watch*, *Special Commentary No. 888* and *Special Commentary No. 935*).

[Graphs 2, 3 and "Notes on Different Measures of the Consumer Price Index" follow.]

Graph 2: Comparative Headline Year-to-Year Change, CPI-U vs. ShadowStats 1990-Based Alternate



Graph 3: 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 May 10th that the headline, seasonally-adjusted April 2018 CPI-U inflation increased month-to-month by 0.2% [up 0.22% at the second decimal point], having declined by 0.1% (-0.1%) [0.06% (-0.06%)] in March, 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, 0.4% [0.40%] in August and 0.1% [0.11%] in July, "unchanged" at 0.0% [a gain of 0.05%] in June, a monthly decline of 0.1% (-0.1%) [0.07% (-0.07%)] in May, an increase in April of 0.2% [0.15%], a March drop of 0.2% [-0.16%], an "unchanged" 0.0% [0.03%] in February and 0.5% [0.51%] gain in January 2017.

Unadjusted monthly April 2018 CPI-U rose by 0.40%, having gained 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%), having gained by 0.53% in

September and 0.30% in August, having declined in July by 0.07% (-0.07%), and having gained by 0.09% in June, 0.09% in May, 0.30% in April, 0.08% in March, 0.31% in February and 0.58% in January 2017.

<u>Major CPI-U Groups</u>. On a monthly basis, in the context of continuing, irregular gasoline-price swings and related seasonal-adjustment aberrations, reflecting gasoline-price seasonal adjustments having turned negative in February, the seasonally-adjusted gain of 0.22% in the April 2018 CPI-U monthly inflation again was dominated by soaring energy costs, despite heavy downside seasonal adjustments, versus negligibly-positive impact from "Core" inflation (everything but food and energy) and a proportionate monthly gain in adjusted Food prices. On an unadjusted basis, the April CPI-U showed a 0.40% monthly gain, dominated by even-stronger, unadjusted Energy inflation and lower, but still positive "Core" and Food inflation.

By the numbers, the April 2018 CPI-U seasonally-adjusted monthly inflation gain of 0.22% [up by 0.40% on an unadjusted basis], encompassed a "Core" (ex-food and energy) inflation rate of 0.10% [up by 0.16% unadjusted], Food inflation of 0.26% [up by an unadjusted 0.33%] and the still-dominant gain in Energy inflation, up by an adjusted 1.41% in the month [up by 2.95% unadjusted].

Moving in line with FOMC hopes and expectations for a second month, unadjusted annual April 2018 "Core" CPI-U held at 2.1%, the same level as in March, where the March 2018 annual core inflation had broken to 2.1%, above its 2.0% target, for the first time since February 2017. As of as of February 2018, the "Core" rate had held range-bound for the 11th straight month (since April 2017) at 1.8% +/- 0.1%. It showed an unadjusted year-to-year inflation rate of 2.14% in April 2018 and 2.12% in March 2018, versus 1.85% in February 2018, 1.82% in January 2018, 1.78% in December 2017, 1.71% in November 2017, 1.77% in October 2017, 1.69% in September 2017, 1.68% in August 2017, 1.69% in July 2017, 1.70% in June 2017, 1.73% in May 2017, 1.88% in April 2017, 2.00% in March 2017, 2.22% in February 2017 and versus 2.27% in January 2017.

April 2018 seasonal adjustments for monthly gasoline inflation—usually reflective of the dominant pressure in energy prices—still were heavily negative, again. Such took an April 2018 CPI-U unadjusted monthly gain of 6.21% in gasoline prices to an adjusted month-to-month gain of 3.04%. The Department of Energy (DOE) had estimated an unadjusted monthly gain for April 2018 of 6.05%.

With early-May 2018 retail gasoline prices (DOE) running higher month-to-month versus April 2018, by an order of magnitude of 3.0%, and given continued negative seasonal adjustments to May 2018 gasoline prices, there likely will be a net-neutral monthly impact of gasoline prices on the headline May 2018 CPI, shy of a continued sharp rise, or a fallback in headline gas prices for the balance of May.

<u>Year-to-Year CPI-U</u>. Not seasonally adjusted, April 2018, year-to-year inflation for the CPI-U increased by 2.5% [2.46% at the second decimal point], versus gains of 2.4% [2.36%] in March 2018, 2.2% [2.21%] in February 2018, 2.1% [2.07%] in January 2018, 2.1% [2.11%] in December 2017, 2.2% [2.20%] in November 2017, 2.0% [2.04%] in October 2017, 2.2% [2.23%] in September 2017, 1.9% [1.94%] in August 2017, 1.7% [1.73%] in July 2017, 1.6% [1.63%] in June 2017, 1.9% [1.87%] in May 2017, 2.2% [2.20%] in April 2016, 2.4% [2.38%] in March 2017, a 60-month high of 2.7% [2.74%] in February 2017 and 2.5% [2.50%] in January 2017.

Year-to-year, CPI-U inflation would increase or decrease in next month's May 2018 reporting, dependent on the seasonally-adjusted, month-to-month change, versus the adjusted, headline monthly contraction of 0.07% (-0.07%) in the May 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 May 2018, the difference in May's headline monthly change (or forecast of same), versus the year-ago monthly change, should be added to or subtracted directly from the unadjusted April 2018 annual inflation rate of 2.46%. Given an early guess of a seasonally-adjusted monthly gain of about 0.2% in the May 2018 CPI-U, that would leave the annual CPI-U inflation rate for May 2018 at about 2.7% plus or minus.

Quarterly CPI-U. On a seasonally-adjusted annualized quarter-to-quarter basis, CPI-U rose by 3.51% in first-quarter 2018, having gained 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 2.21% in first-quarter 2018, versus 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 April 2018 seasonally-adjusted, headline CPI-W, which is a narrower series and traditionally has had greater weighting for gasoline than does the CPI-U, rose month-to-month by 0.26%, following monthly gains of 0.16% (-0.16%) in March, 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, 0.49% in August, 0.06% in July, 0.04% in June and a decline in May of 0.10% (-0.10%) in May, a monthly gain of 0.15% in April, declines in March of 0.22% (-0.22%) and 0.05% (-0.05%) in February and a gain of 0.59% in January 2017.

On an unadjusted basis, year-to-year CPI-W gained by 2.59% in April 2018, versus 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, 1.93% in August 2017, 1.64% in July 2017, 1.50% in June 2017, 1.78% in May 2017, 2.14% in April 2017, 2.35% in March 2017, 2.82% in February 2017 and 2.51% in January 2017.

Quarterly CPI-W. On an annualized quarter-to-quarter basis, seasonally-adjusted CPI-W rose by 3.70% in first-quarter 2018, having gained 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 2.30% in first-quarter 2018, versus 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, but it is revised quarterly for the prior year, as was seen again with the April 2018 reporting with the January 2018 reporting, in which year-to-year inflation rates revised lower by 0.05% (-0.05%) for each month back through May 2017, with April revised lower by 0.07% (-0.07%). In the prior January 2018 revisions, year-to-year inflation rates revised lower by 0.09% (-0.09%) for each month back through March 2017. The next series of revisions should be published with the headline July 2018 data.

The headline annual inflation rate for the C-CPI-U in April 2018 was 2.30%, versus downwardly annual inflation in March 2018 was 2.18%, 1.99% in February 2018, versus 1.82% in January 2018, 1.88% in December 2017, 1.97% in November 2017, 1.75% in October 2017, 2.03% in September 2017, 1.64% in August 2017, 1.33% in July 2017, 1.21% in June 2017, 1.48% in May 2017, 1.82% in April 2017 and unrevised annual inflation of 2.07% in March 2017, 2.56% in February 2017, and 2.27% in January 2017.

Quarterly C-CPI-U, Year-to-Year. On an unadjusted, year-to-year basis, annual inflation by quarter was up by a downwardly–revised 2.00% in first-quarter 2018, versus 1.87% in fourth-quarter 2017, 1.66% in third-quarter 2017, versus 1.50% in second-quarter 2017 and an unrevised 2.30% in first-quarter 2017.

Annual Average C-CPI-U. The annual average C-CPI-U inflation rate was lower to 1.83% [previously] 1.87% in 2017, versus an unrevised annual gain of 0.93% in 2016 and contraction of 0.12% (-0.12%) in 2015.

See today's *Opening Comments* and the *Opening Comments* of *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 6.0% in April 2018, versus 5.9% in March 2018, 5.8% in February 2018, 5.6% in January 2018, 5.7% in December 2017, 5.8% in November 2017, 5.6% in October 2017, 5.8% in September 2017, 5.5% in August 2017, 5.3% in July 2017, 5.2% in June 2017, 5.5% in May 2017, 5.8% in April 2017, 6.0% in March 2017, 6.3% in February 2017 and 6.1% in January 2017.

The April 2018 ShadowStats-Alternate Consumer Inflation Measure (1980-Base), which reverses gimmicked changes to official CPI reporting methodologies back to 1980, was at about 10.2% (10.23% at the second decimal point), versus 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. Historic monthly detail, along with 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).

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

CPI-U: GOLD at $2,737 per Troy Ounce, SILVER at $159 per Troy Ounce
ShadowStats: GOLD at $15,563 per Troy Ounce, SILVER at $906 per Troy Ounce

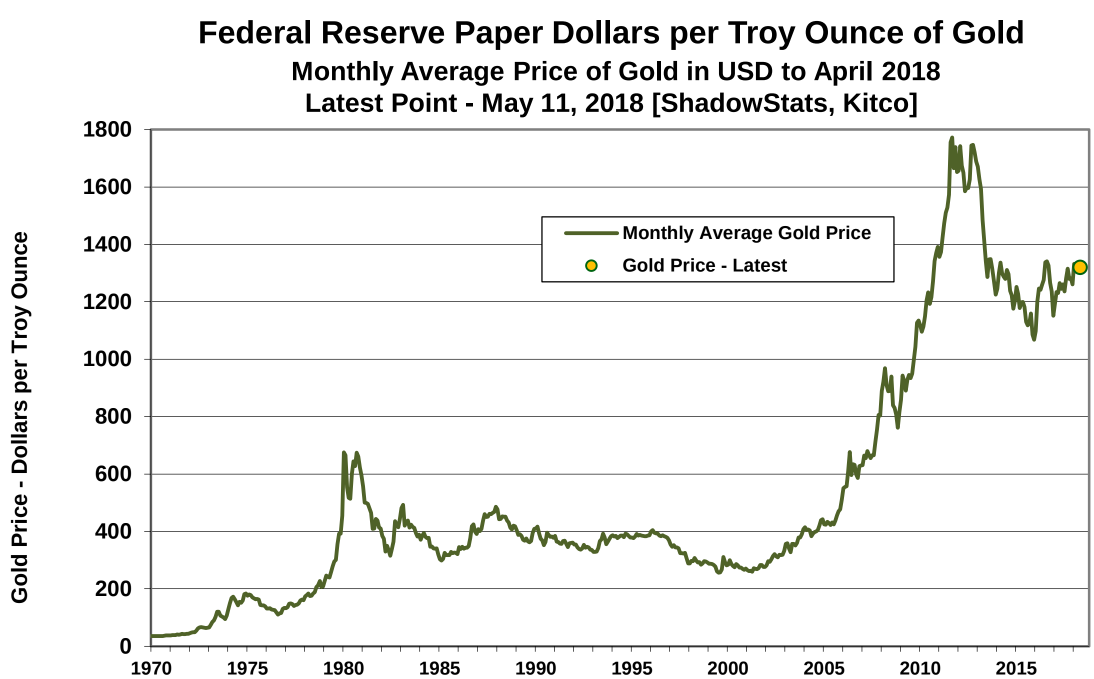
Despite the September 5, 2011 historic-high gold price of $1,895.00 per troy ounce (London afternoon fix), and despite the multi-decade-high silver price of $48.70 per troy ounce (London fix of April 28, 2011), gold and silver prices have yet to re-hit their 1980 historic levels, adjusted for inflation. The earlier all-time high of $850.00 (London afternoon fix, per Kitco.com) for gold on January 21, 1980 would be $2,737 per troy ounce, based on April 2018 CPI-U-adjusted dollars, and $15,563 per troy ounce, based on April 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 April 2018 CPI-U inflation, the 1980 silver-price peak would be $159 per troy ounce and would be $906 per troy ounce in terms of the April 2018 ShadowStats-Alternate-CPI (1980-Base) adjusted dollars (again, all series not seasonally adjusted).

Accompanying *Graph 4* shows the regular gold plot published with monthly CPI detail, with further detail and graphs found in the *Hyperinflation Watch*. As economic expectations take a likely hit in the week 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 (see today's *Hyperinflation Watch*), in what should 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).

Graph 4: Monthly Average Gold Price in Dollars (Federal Reserve Notes)



Real Average Weekly Earnings—April 2018—Down in the Month for All Employees (Up for Production and Supervisory Employees), First-Quarter 2018 Contractions Held in Place. Estimates of April 2018 real average weekly earnings were published along with the headline CPI-W and CPI-U on May 10th.

Production and Nonsupervisory Employees Detail. *[Note: Details are plotted in the* Executive Summary, Graph 1 *on page 5.]* For 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 April 2018 weekly earnings gained month-to-month by 0.26%, having gained an upwardly revised 0.18% [previously 0.05%] in March and an upwardly revised 0.71% [previously 0.67%] in February. Earnings declined month-to-month by an unrevised 1.08% (-1.08%) in January.

Year-to-year growth slowed to 0.34% in April 2018, from a revised 0.46% [previously 0.28%] in March 2018, 0.68% [previously 0.64%] in February 2018%] and an unrevised 0.20% in January 2018.

In the context of those revisions, first-quarter 2018 activity contracted at a revised annualized pace of 1.22% (-1.22%) [previously 1.51% (-1.51%)], which remained the third-consecutive annualized quarterly contraction in real average weekly earnings, the fifth such quarterly decline in the last six quarters.

Fourth-quarter 2017 earnings showed an unrevised 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), real average weekly earnings contracted by 0.07% (-0.07%) in April 2018, having gained 0.29% in March. Annual growth slowed to 0.42% in April 2018, versus 0.89% in March 2018.

First-quarter 2018 real earnings contracted at a deepened annualized pace of 0.44% (-0.44%) [previously 0.35% (-0.35%)], versus an unrevised, annualized decline of 0.03% (-0.03%) in fourth-quarter 2017 and an annualized gain of 3.48% in third-quarter 2017.

Intensifying Consumer Liquidity Stress. Discussed in the *Consumer Liquidity Watch* of prior *Commentary No. 948,* in conjunction with flat Real Median Household Income, continued slowing growth in real Consumer Credit Outstanding and faltering Consumer Optimism, the government's headline real earnings data indicated continuing and mounting income and liquidity issues for the consumer.

Graph 1 in the *Executive Summary* 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 *Public Commentary on Inflation Measurement* for further detail.

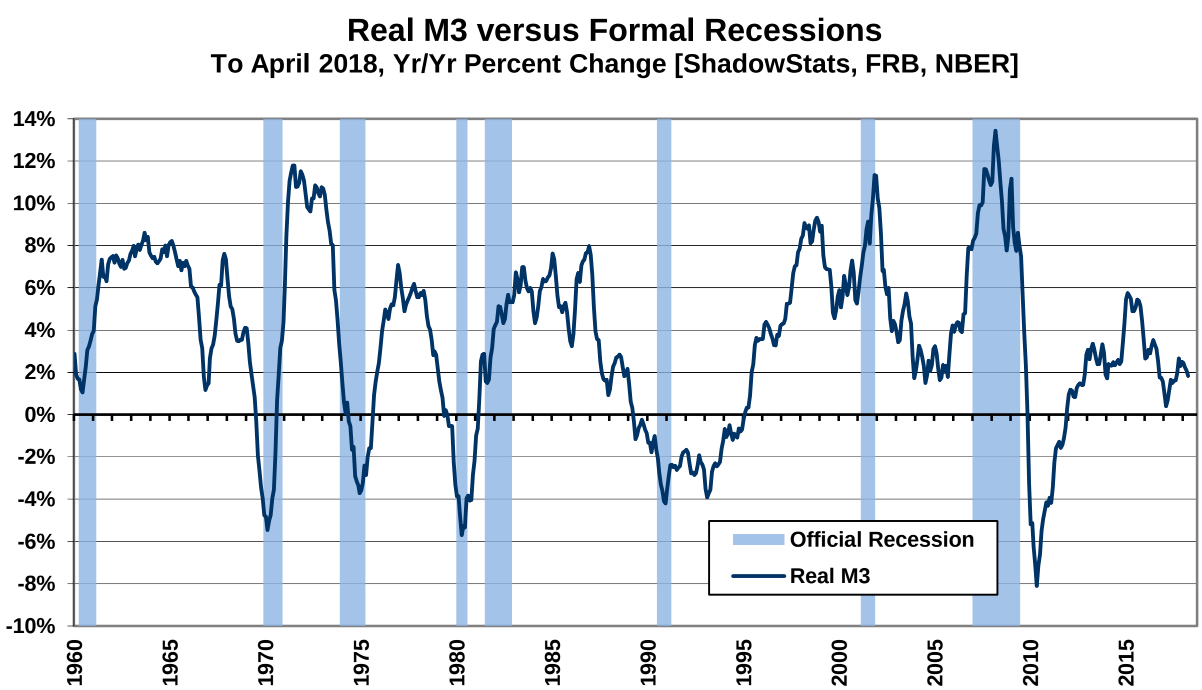
A Leading Indicator to Broad Economic Activity, Inflation-Adjusted Money Supply M3—April 2018—Annual Change Continued Sinking, Now at an Eight-Month Low. The signal for a double-dip, multiple-dip or simply protracted, ongoing recession, based on annual contraction in the real broad money supply (M3), had been re-triggered/intensified one 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's (FOMC) began more-aggressive tightening in December. Noted in the *Hyperinflation Watch* of prior *Commentary No. 948*, and discussed here, the previous recession signal of December 2009 had remained in place, despite real annual M3 growth having rallied into positive territory post-2010.

In the context of weakening annual growth in M3, and some continued pick-up in annual CPI inflation, an unfolding recession signal in the near-term has become increasingly likely. Shown in *Graph 5*—based on the April 2018 CPI-U reporting and the latest ShadowStats-Ongoing M3 Estimate (see the discussion on slowing annual money supply growth in the *Opening Comments* and *Hyperinflation Watch* of prior *Commentary No. 948*)—annual inflation-adjusted growth in April 2018 M3 dropped to an eight month low of 1.83%. That was against minimally-revised growth rates of 2.09% in March 2018, 2.24% in February 2018, 2.45% in January 2018, 2.49% in December 2017 and 2.30% in November 2017. Those patterns reflected successive, downside benchmark revisions to the Federal Reserve's money measures and upside movement in annual CPI-U inflation. Those levels of activity were against a near-term peak growth of 2.65% in October 2017, and against the February 2015 cycle-high peak growth of 5.75%.

The recent stronger annual growth likely still reflected 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 always seen going into, or already in a recession.

The signal for a downturn or an intensified downturn is generated when annual growth in real M3 first slows sharply, approaches zero and turns negative in a given cycle; the signal is not dependent on the depth of the downturn or its duration. Breaking into positive territory does not generate a meaningful signal one way or the other for the broad economy. The previous "new" downturn signal was generated in December 2009, even though there had been no upturn since the economy purportedly hit bottom in mid-2009. The ongoing issue here confounding the regular signal is that the U.S. economy never has recovered fully from its collapse into 2009 (see *Commentary No. 877* , *Commentary No. 902-B* and *Commentary No. 947*). 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 recession signal.

Graph 5: Real M3 Annual Growth versus Formal Recessions



Again, when real M3 growth breaks above zero, there is no signal; the signal is generated only when annual growth moves to zero and into negative territory, 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. 947*).

Despite the purported, ongoing growth seen in headline GDP activity, a renewed downturn in official data appears to be underway, particularly with consumer related series such as retail sales and housing. Such likely will gain official recognition as a "new" recession, in the year ahead. Underlying reality remains that the collapse into 2009 was followed by a plateau of low-level economic activity—no meaningful upturn, no full recovery from, or end to, the official 2007 recession, no new economic expansion—where the unfolding "new" downturn remains nothing more than a continuation and re-intensification of a downturn that began unofficially in 2006.

PRODUCER PRICE INDEX—PPI (April 2018)

April 2018 Final Demand Annual PPI Inflation Pulled Back Sharply to 2.57%, from Its 74-Month High of 3.03% in March 2018, with Monthly Inflation Easing to 0.09%. Heavily distorted by unstable seasonal adjustments to volatile, but generally rising energy costs, monthly Final Demand Producer Price Index (FD-PPI) inflation eased to 0.9% in April 2018, versus 0.26% in March, while annual inflation softened to an unadjusted 2.57% in April 2018, versus 3.03% in March 2018. That annual inflation of 3.03% in March had been the highest headline level seen since January 2012.

Aggregate PPI and Services Sector. The April 2018 reduction in unadjusted annual inflation to 2.57% in the FD-PPI, from 3.03% in March 2018, encompassed mixed trends in annual inflation across the major sectors and subsectors. In the dominant Services Sector, April 2018 annual inflation growth was 2.39%, down from 2.93% in March 2018. That pattern was repeated in the various Services subsectors.

Goods Sector. In the Goods Sector, April 2018 annual inflation growth was 2.88%, down from 3.17% in March 2018. While that pattern was repeated in the food and "core" (ex-food and energy) sectors, the energy sector went the other way.

Consider that unadjusted annual inflation in the energy sector rose by 9.02%, against 8.54% in March 2018. On an unadjusted basis, monthly energy inflation rose by 1.99% in April versus a monthly drop of 0.94% (-0.94%) in March. Seasonally adjusted, those changes were depressed to a monthly gain of just 0.09% in April, versus a monthly contraction of 2.11% (-2.11%) in March. On an unadjusted basis, monthly inflation in the goods sector would have been 0.35% in April instead of 0.00%, where monthly inflation in March would have been 0.44%, instead of 0.26%, all due largely to unstable oil and gasoline prices. Discussed in the *Consumer Price Index* section, the BLS does not have the ability to seasonally adjust these irregularly-volatile numbers adequately.

Construction Sector. In the Construction Sector, April 2018 annual inflation was 4.24%, up from 3.57% in March 2018. Month-to-month inflation was 1.09% in April, versus 0.17% in March, both adjusted and unadjusted. As discussed later, the month-to-month numbers are not comparable, but the year-to-year numbers are.

Core Goods. Irrespective of inflation reporting out of the Bureau of Labor Statistics (BLS), which runs well shy of common experience for consumers, as well as businesses (see the *Consumer Price Index* section), the Federal Reserve purports to ignore energy and food inflation in determining its headline policies, concentrating instead on "Core" inflation, net of those "problem" energy and food areas. That might make some sense if the public did not view food and energy the broad, general category of the necessities of life.

Annual "Core" inflation on the PPI-FD Goods side was at 2.12% in April 2018, versus 2.22% in March 2018, with monthly gains of an adjusted 0.26% in April and 0.35% in March.

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 eight years of post-2008-panic data) to establish any meaningful relationship to general inflation or other economic or financial series.

April 2018 Headline PPI Detail. The Bureau of Labor Statistics (BLS) reported May 9th, that the seasonally-adjusted, month-to-month, headline Producer Price Index Final-Demand (PPI-FD) inflation for April 2018 rose by 0.09%, having gained 0.26% in May and 0.17% in February.

On a not-seasonally-adjusted basis—all annual growth rates are expressed unadjusted—year-to-year PPI-FD inflation in April 2018 pulled back to 2.57%, from 3.03% in March 2017 (a 74-month high, the highest since January 2012). That followed annual inflation of 2.77% in February 2018. The unadjusted April annual inflation was the weakest since September 2017.

Again, in summary, for the three major subcategories of the April 2018 PPI-FD, which showed a monthly gain of 0.09% and 2.57% annual inflation, headline monthly Goods inflation was an adjusted "unchanged" at 0.00% month-to-month, up by an unadjusted 2.88% year-to-year, Services "inflation" (profit margins) rose month-to-month by 0.09%, up by 2.39% year-to-year, and Construction inflation rose in the month by an inconsistent 1.09%, up by 4.24% year-to-year.

Final Demand Goods (weighted at 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 April 2018 was "unchanged" at 0.00%, having gained 0.26% in March and having declined by 0.09% (-0.09%) in February. There was negative impact on the aggregate goods headline reading from underlying seasonal-factor adjustments (largely tied to energy). Not-seasonally-adjusted, April inflation was up by 0.35%. Unadjusted, year-to-year goods inflation in April 2018 showed an annual gain of 2.88%, following gains of 3.17% in March 2018 and 3.00% in February 2018.

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

- "Foods" inflation (weighted at 5.72% of the total index) in April 2018 plunged month-to-month by 1.10% (-1.10%), having jumped by 2.24% in March and having dropped by 0.43% (-0.43%) in February. Seasonal adjustments were negative for the April headline change, which was an unadjusted monthly decline of 0.85% (-0.85%). Unadjusted and year-to-year, annual April 2018 foods inflation declined by 0.34% (-0.34%), having gained by 1.99% in Mar 2018 and by 0.61% in February 2018.
- "Energy" inflation (weighted at 5.58% of the total index) rose month-to-month in April 2018 by 0.09%, having dropped by 2.11% (-2.11%) in March and by 0.46% (-0.46%) in February. Seasonal adjustments were strongly negative, once more, in March, with unadjusted energy showing a monthly gain of 1.99%. Unadjusted and year-to-year, April 2018 energy prices gained 9.02%, versus 8.54% in March 2018 and 9.12% in February 2018.
- "Less foods and energy" ("Core" goods) monthly inflation (weighted at 21.71% of the total index) gained month-to-month by 0.26% in April 2018, having gained by 0.35% in March and by 0.17% in February. Seasonal adjustments were positive for monthly "Core" inflation, with the unadjusted monthly April inflation up by 0.17%. Unadjusted and year-to-year, April 2018 "Core" inflation rose by 2.12%, versus 2.22% in March 2018 and 2.13% in February 2018.

Final Demand Services (weighted at 65.35% of the Aggregate Index). Headline Final Demand Services inflation rose by 0.09% in April 2018, having gained 0.26% in both March and February. The overall seasonal-adjustment impact on headline services inflation was positive, with an unadjusted monthly decline of 0.9% (-0.9%). Year-to-year, unadjusted April 2018 services inflation eased to 2.39%, versus 2.93% in March 2018 and 2.76% in February 2018.

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

- "Services less trade, transportation and warehousing" inflation, or the "Other" category (weighted at 40.53% of the total index) declined month-to-month by 0.09% (-0.09%) in April 2018, having gained by 0.35% in both March and February. Seasonal-adjustment impact on the April detail was positive, where the unadjusted monthly reading was a decline of 0.26% (-0.26%). Unadjusted and year-to-year, April 2018 "other" services inflation was up by 2.40%, versus annual gains of 3.13% in March 2018 and 2.77% in February 2018.
- "Transportation and warehousing" inflation (weighted at 4.47% of the total index) rose month-to-month by 0.58% in April 2018, versus 0.59% in March and 0.93% in February. Seasonal adjustments were positive for the headline April reading, versus an unadjusted monthly gain of 0.25%. Unadjusted and year-to-year, April 2018 transportation inflation rose by 4.67%, versus 5.05% in March 2018 and 3.21% in February 2018.
- "Trade" inflation (weighted at 20.35% of the total index) gained month-to-month by 0.17% in April 2018, the same as in March, versus a decline of 0.17% (-0.17%) in February. Seasonal adjustments had a negative impact, where the unadjusted monthly change was up by 0.34%. Unadjusted and year-to-year, April 2018 trade inflation eased to 1.92%, from 2.02% in March 2018 and 2.57% in February 2018.

Final Demand Construction (weighted at 1.64% of the Aggregate Index). Although a fully self-contained subsection of the Final Demand PPI, Final Demand Construction inflation receives no formal headline coverage. Month-to-month construction inflation jumped 1.09% in April 2018, versus 0.17% in March and 0.08% in February. This reflects a regular, nonsense monthly distortion at the beginning of each quarter, reflecting the BLS's introduction of new profit-margin estimates.

The impact of seasonal factors on the April reading was neutral, as usual, where the unadjusted monthly gain also was 1.09%. 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 4.24% in April 2018, versus 3.57% in March 2018 and 3.48% in February 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 much higher construction-related inflation than 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) now used by ShadowStats in deflating the Census Bureau's monthly estimates of Construction Spending Put in Place in the United States (see *Commentary No. 948*).

PPI-Inflation Impact on Pending Reporting of April 2018 New Orders for Durable Goods. As to the upcoming reporting of April 2018 New Orders for Durable Goods, April 2018 inflation for manufactured durable goods (reported only on a not-seasonally-adjusted basis) increased by 0.41%, the same as in March, having gained 0.23% in February and 0.41% in January. Year-to-year annual inflation was 2.12%

in April 2018, 1.96% in March 2018, 1.72% in February 2018 and 1.79% in January 2018. In the context of the pending May 17th annual benchmark revisions to the New Orders series through March 2017, April 2018 new orders for durable goods (both nominal and real), will be reported and calculable on May 25th, with coverage in a *Commentary* likely on May 30th.

[The* Hyperinflation Watch *begins on the next page.]

HYPERINFLATION WATCH

THE U.S. DOLLAR AND THE FINANCIAL MARKETS

Day of Reckoning Looms for the U.S. Dollar and Financial Markets. Discussed in today's *Opening Comments*, *Week, Month and Year Ahead* sections, and the *Opening Comments* and *Consumer Liquidity Watch* of prior *Commentary No. 948*, a confluence of some unhappy factors could hit the U.S. financial system near future, possibly in the next several weeks, likely to impact Federal Reserve Policy, the U.S. dollar and the U.S. equity and credit markets. These issues have slower to break than expected by ShadowStats, but they are in play and can break at any time. Potential issues include:

- A marked and intensifying deterioration in current consumer liquidity conditions (faltering real earnings and real consumer credit outstanding), see prior *Commentary No. 948*.
- Headline economic reporting next week (April Retail Sales, Industrial Production and Housing Starts) that has the potential to weaken the broad consensus outlook on U.S. economic conditions, exacerbated by likely negative downside revisions to series such as retail sales and durable goods orders.
- Those factors combined could be enough to start moving financial-market expectations towards a possible easing shift in Federal Reserve monetary policy.
- Rapidly mounting, global currency and credit market concerns as to U.S. government finances (budget deficit and funding needs) and related long-term sovereign-solvency issues.
- Potential for trade deficit/tariff disputes to intensify.
- Potential for new conflict in the Middle East (oil supply disruption).
- Mounting turmoil tied to efforts (likely unsuccessful) by political adversaries to remove President Trump from office (see *Special Commentary No. 888*), where elements of the dispute may be coming to a head very shortly.

The circumstances here remain the tinder for igniting a financial-market firestorm, which likely would engulf the U.S. dollar in conjunction with intensifying flight of foreign capital from liquid U.S. financial assets, particularly stocks and Treasury bonds. The text that follows largely is as written previously.

Watch Out for the U.S. Dollar! Increasingly obvious in recent headline data, the real-world U.S. economy is not recovering or booming as advertised, despite heavy hype in the press of a booming, full-employment economy, and in the context recent FOMC tightening actions.

Discussed in in the *Opening Comments* and *Hyperinflation Watch* of prior *Commentary No. 948*, and as discussed along with *Graph 5* on page 13, current tightening actions by the FOMC are instrumental in accelerating a new downturn in a U.S. economy that has yet to recover fully from its 2008 collapse.

Reporting in most economic series should be back to normal (recovering from hurricane disruptions). New data increasingly should reflect "unexpected" downtrending economic activity. Where misleading, recent headline details had contributed to a manic stock market, that mania is vulnerable to rapid unwinding, a process should accelerate as market perceptions increasingly shift towards renewed economic downturn.

An unhappy period of market readjustment to underlying real-world circumstances looms, where Wall Street's proponents of a never-ending stock-market rally parlayed a temporary, nonrecurring economic boosts from natural disasters into a year-end 2017 economic boom. Increasingly negative economic "surprises" should shock the markets and the U.S. dollar on the downside. As the reported economic downturn intensifies in the months ahead, the FOMC—under its new Chairman Jerome H. Powell—eventually should face an "unexpected" policy retrenchment, moving back towards quantitative easing.

Intensified Selling of the U.S. Dollar and Negative Stock-Market Turmoil Are Likely, Soon. The headline economic boom that helped to drive the major U.S. stock indices to recent all-time highs has begun to fall apart. Again, that process should accelerate in the near future, as underlying economic detail increasingly re-stabilizes at lower levels of downtrending activity. With headline numbers faltering anew, selling of the U.S. dollar should intensify (shy of any continued, temporary flight to political safety in the dollar from global political instabilities). Both factors are likely to begin turning stock prices lower. With a full-fledged dollar selling panic a fair bet, stock prices likely would tank in tandem, as foreign as well as domestic investors increasingly sought safer havens in other currencies.

Federal Reserve Still is Unable to Extricate Itself from the Panic of 2008. Today's *Opening Comments* provided some background economic context for this *Hyperinflation Watch*. Despite consensus expectations of fully recovered economy booming, underlying economic activity never has fully recovered. While natural-disaster-recovery activity boosted late-2017 economic numbers, the system has begun to re-stabilize in its prior, non-recovery, intensifying downturn mode.

The increasing, fundamental disconnection between the happy hype in the media, the financial markets and the FOMC pronouncements as to a rapidly expanding U.S. economy, and the underlying reality of broad U.S. economic activity never having recovered its pre-recession 2007 peak, promises to disrupt FOMC policy and financial-market tranquility in the months ahead. Oncoming headline economic detail increasingly should confirm a renewed economic contraction (see *Special Commentary No. 935*).

In response to likely renewed liquidity stresses on the banking system from an "unexpected" economic downturn, the FOMC remains likely to abandon its current path of policy tightening, for a renewed and expanded quantitative-easing program to bolster the still liquidity-challenged domestic banking system. The market response to, or anticipation of a shift in policy, should pummel the value of the U.S. dollar in the global markets, spiking gold, silver and oil prices. Again, in turn, domestic equity and credit-market prices should fall sharply, as significant capital flees the weakening U.S. dollar and the domestic markets.

Holding physical gold and silver remain the ultimate hedges—stores of wealth—for preserving the purchasing power of one's U.S. dollar assets, in the context of liquidity and portability, during the difficult and highly inflationary times that lie ahead.

The graphs in this section reflect New York late-afternoon or closing prices of May 11th.

U.S. Dollar. *Graphs HW-1* and *HW-2* reflect plots of the Federal Reserve Board's (FRB) Major-Market Trade-Weighted Dollar (TWD), which reflects the U.S. dollar exchange rate weighted versus the Euro, Yen, Pound Sterling, Australian Dollar, Swiss Franc and the Canadian Dollar; and the ShadowStats Financial-Weighted Dollar (FWD), which reflects the U.S. dollar exchange rate weighted versus the same currencies, based on respective currency trading volume in the markets, instead of merchandise trade.

ShadowStats modified the FWD to add the Chinese Yuan, at such time as it was recognized as a global reserve currency by the Bank for International Settlements in 2015, but there was no resulting visual difference in the ShadowStats plot, until recently, given the relatively low weighting of the CNY at present, and the closely tied movement of the CNY to USD over time. The plots of the FWD versus the TWD both had shown recent weakness in the U.S. dollar, with the declining year-to-year change. There has been a short-term relative dollar rally, largely reflective of current global political instabilities. In times of global political stress, the dollar often has been viewed as a safe-haven, as have gold and silver.

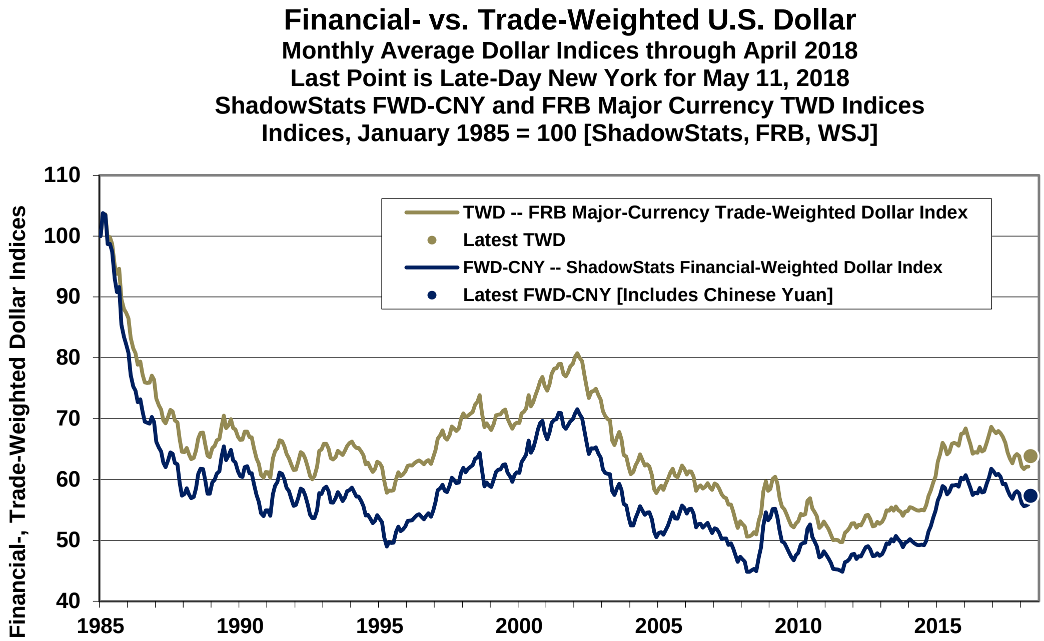
Gold and Silver, and Gold versus Stocks. *Graphs HW-3* and *HW-4* show plots of the price level of the S&P 500 Total Return Index (all dividends reinvested) versus the price of physical gold, with both series indexed to January 2000 =100, with the first plot showing both series in nominal terms and the second plot in real, inflation-adjusted terms, deflated by the CPI-U. While Gold has outperformed the S&P 500 since the beginning of millennium, it is interesting to note that the S&P 500, net of inflation, did not break above parity until 2013.

Graphs HW-5 to *HW-7* are the traditional ShadowStats gold graphs, respectively versus the Swiss Franc, versus Silver and versus Oil (Brent).

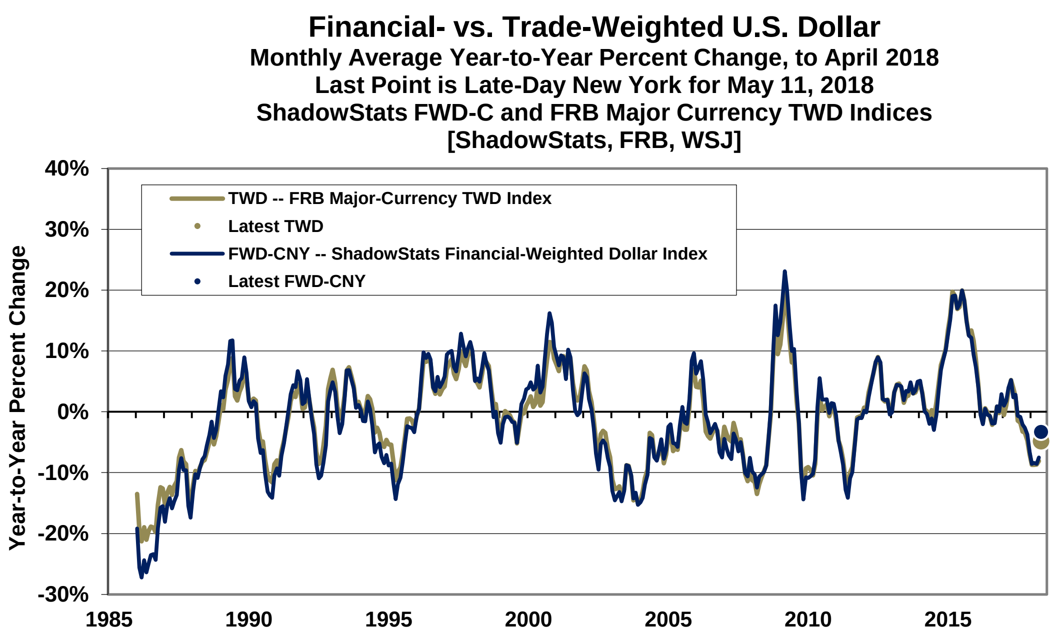
Again, the final price points in the various graphs reflect the closing or late-day May 11, 2018 New York prices.

[Graphs HW-1 to HW-7 begin on the next page.]

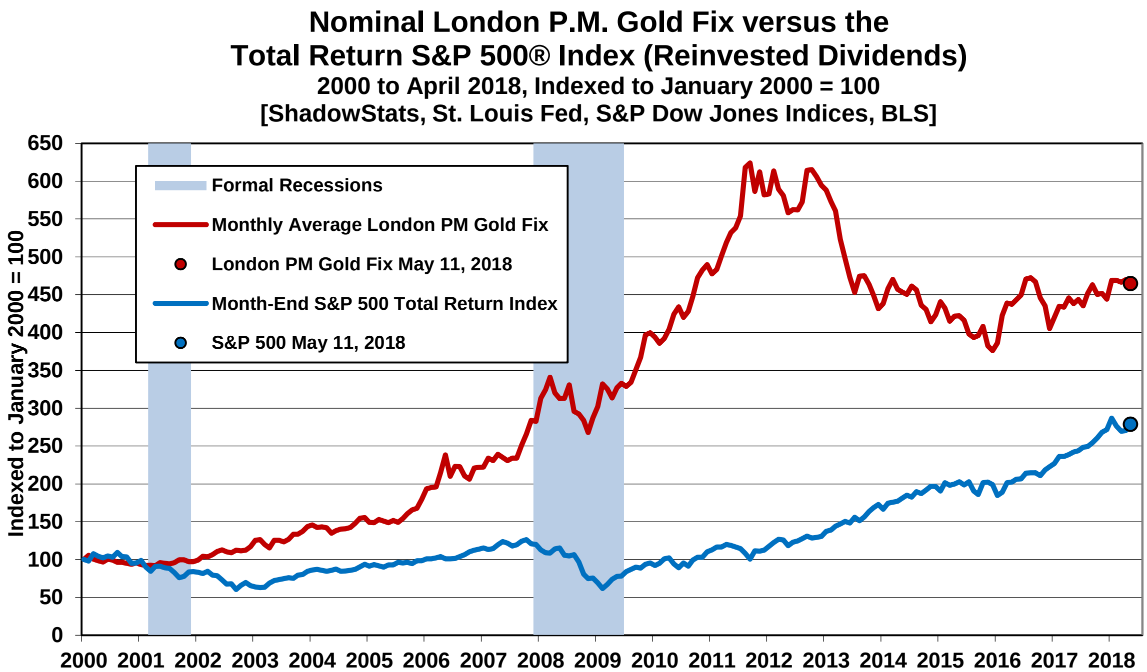
Graph HW-1: Financial- versus Trade-Weighted U.S. Dollar



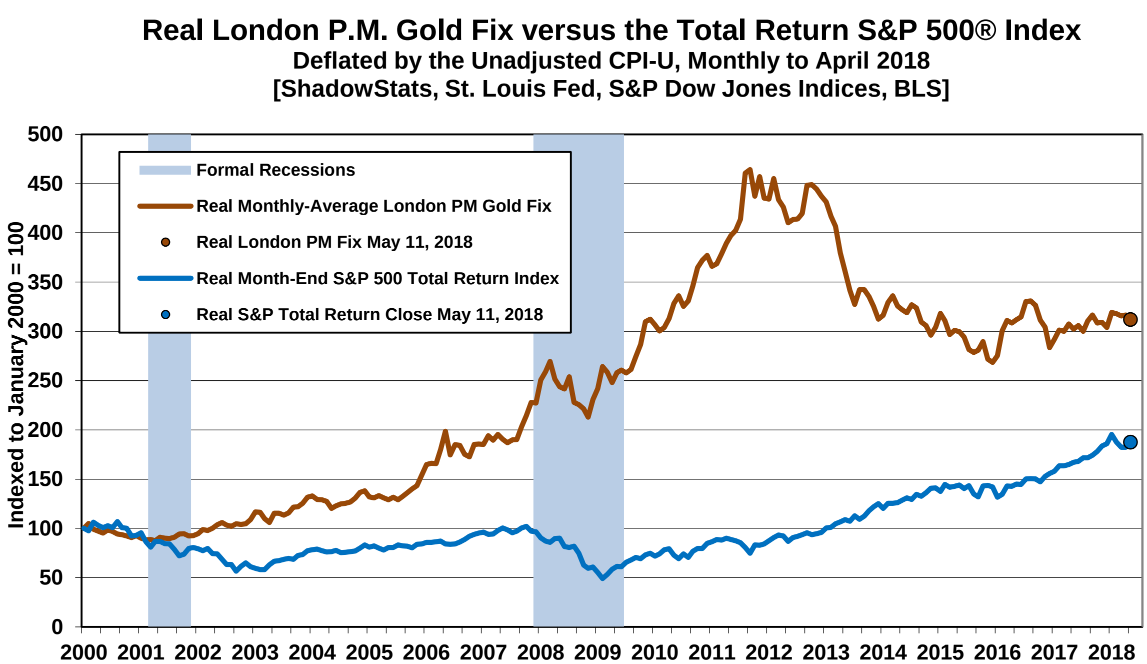
Graph HW-2: Year-to-Year Change, Financial- versus Trade-Weighted U.S. Dollar



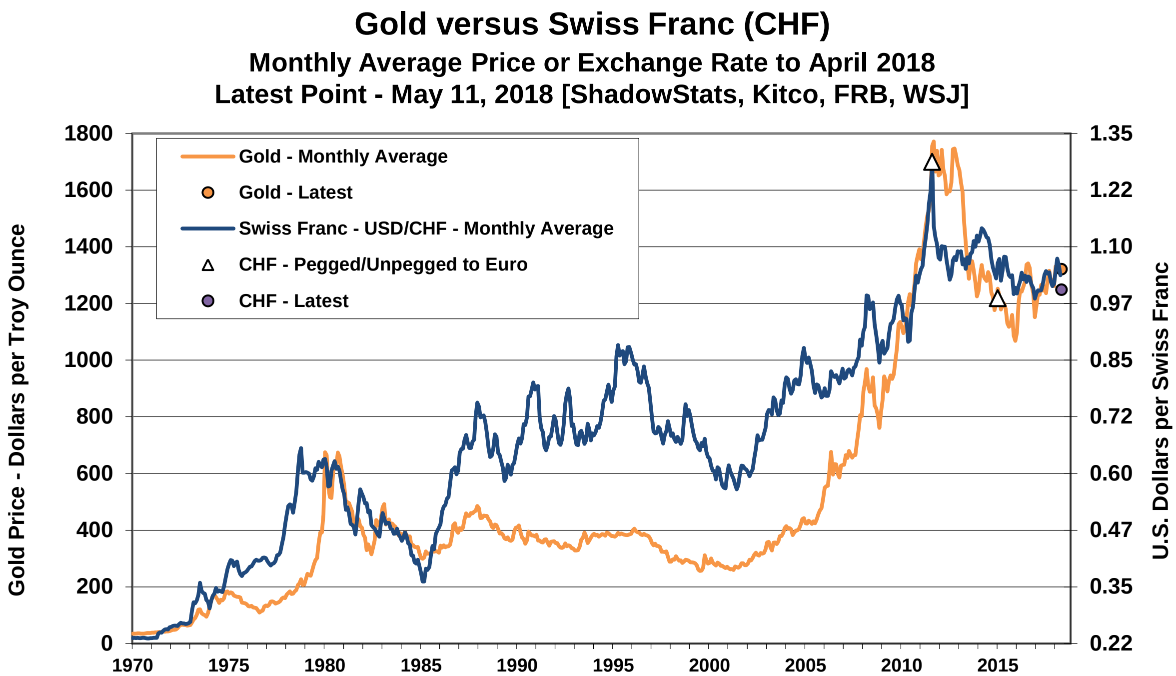
Graph HW-3: Nominal Gold versus the Nominal Total Return S&P 500



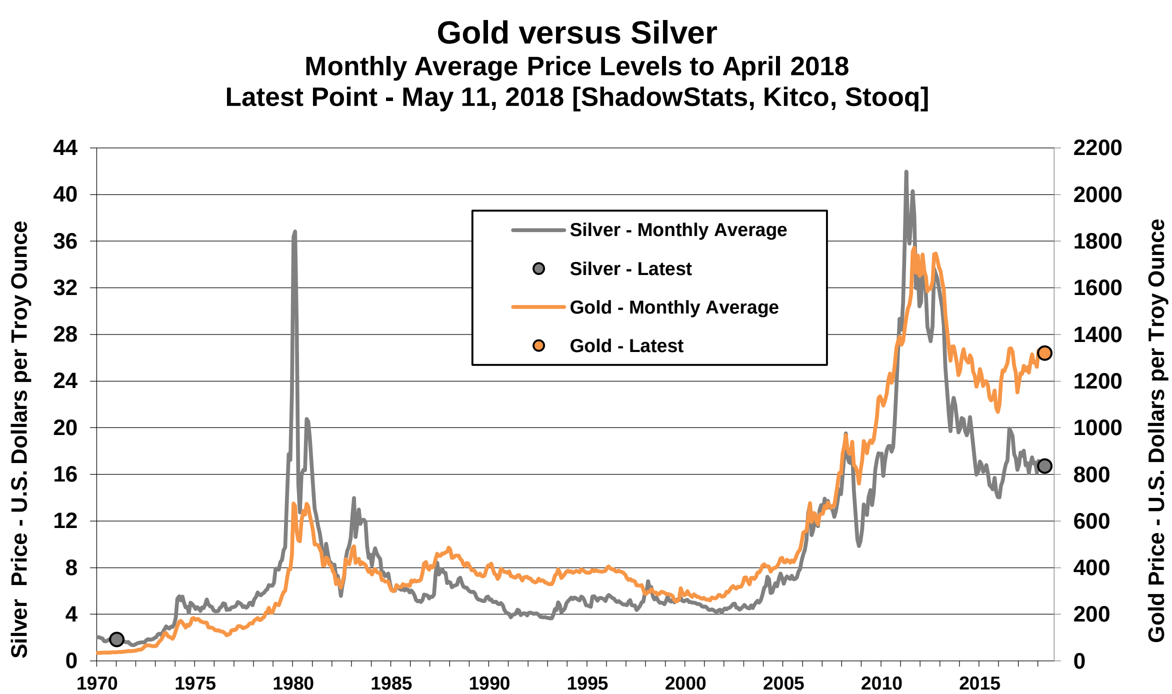
Graph HW-4: Real Gold versus the Real Total Return S&P 500



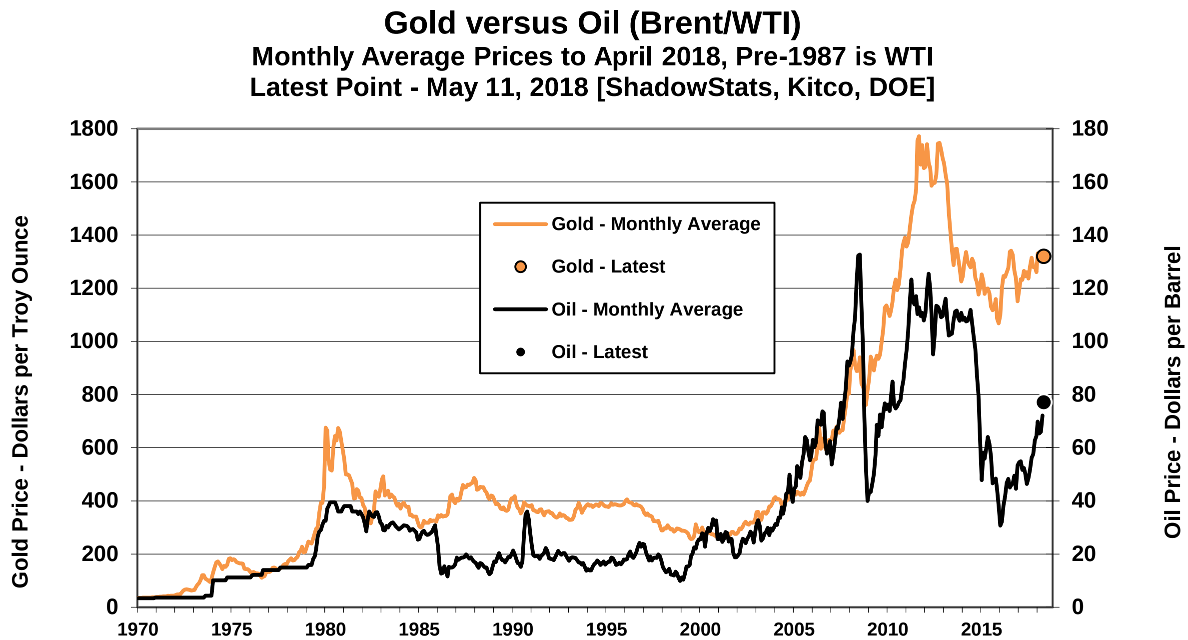
Graph HW-5: Gold versus the Swiss Franc



Graph HW-6: Gold versus Silver



Graph HW-7: Gold versus Oil



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

WEEK, MONTH AND YEAR AHEAD

U.S. Dollar and Financial-Market Turmoil Continue at High Risk, Amidst Mounting Fiscal Concerns, Consumer Liquidity Issues and Non-Expanding, Real-World Economic Activity. In the context of intensifying, negative stresses on basic consumer-liquidity conditions, and weakening, underlying fundamental drivers of broad economic activity, discussed in the today's *Opening Comments* and the *Opening Comments* and *Consumer Liquidity Watch* of prior *Commentary No. 948*, the headline first-quarter GDP reflected difficult economic times hitting U.S. consumer activity, where the U.S. consumer remains the fundamental driving force behind the domestic business conditions. Negative reporting surprises likely will follow in the regular economic reporting and annual benchmark revisions of key economic series in the next couple weeks and months. The broad outlook has not changed. Weaker economic growth and renewed, faltering economic headlines should follow.

Broad outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets were reviewed in *Special Commentary No. 935*, covered there in the *Executive Summary* beginning on page 2, with *Contents* and links to *Major Sections* and *Graphs* beginning there on page 6. The faltering economic outlook also was reviewed in the *Opening Comments* and *Industrial Production Benchmark Revisions* sections of *Commentary No. 942-B*. The circumstances broadly have not changed from the related financial market vulnerabilities discussed in the *Hyperinflation Watch* of *Commentary No. 945*, incorporated here by reference. U.S. dollar and related market conditions are updated in today's *Open Comments* and *Hyperinflation Watch*.

The U.S. dollar and financial markets remain at extraordinarily-high risk of intense, panicked declines, still likely in the very near term. Holding 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: Retail Sales—Nominal and Real (April 2018). The Census Bureau will release its "advance" estimate of April 2018 nominal (not-adjusted-for-inflation) Retail Sales on Tuesday, May 15th. Given the May 10th release of the April CPI-U, both nominal and real (adjusted for inflation) Retail Sales will be reviewed in *Commentary No. 950* of Thursday, May 17th. With the headline April 2018 CPI-U showing a seasonally-adjusted monthly gain of 0.22%, and a seasonally adjusted year-to-year increase of 2.43%, those will be the inflation numbers to be subtracted from the headline, seasonally-adjusted nominal monthly and annual changes for April 2018 sales, in order to generate the headline real Retail Sales changes.

A real quarterly contraction and tumbling year-to-year real growth in first-quarter 2018 Retail Sales have set the stage for continued weakness in near-term consumer activity, in the context of intensifying consumer liquidity issues and rising inflation (see today's *Opening Comments* and the *Opening Comments* and *Consumer Liquidity Watch* sections of prior *Commentary No. 948*). As noted there, without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt to make up for an income shortfall, the liquidity-strapped U.S. consumer remains unable to sustain regular, broad growth in economic activity, including Retail Sales, real or otherwise.

Headline April retail sales are good bet to disappoint on the downside of what appear to be moderately-positive, consensus expectations.

Industrial Production (April 2018). The Federal Reserve Board will publish its estimate of April 2018 Industrial Production on Wednesday, May 16th, with *ShadowStats* coverage in *Commentary No. 950* of Thursday, May 17th. The April 2018 detail will be in the context of the generally-downside annual benchmark revisions to the series on March 23rd, as detailed in *Commentary No. 942-B*. Where oil production still may push the aggregate series higher in April, manufacturing likely soften anew, resuming its drag on the broad index. Consensus expectations appear to be for a strong monthly gain, but they also should be sharply disappointed.

New Residential Construction—Building Permits and Housing Starts (April 2018) and Annual Revisions. The Census Bureau and the Department of Housing and Urban Development will release their April 2018 estimate of New Residential Construction, including Housing Starts and Building Permits, on Wednesday, May 16th. This reporting will be in the context of annual revisions, as discussed on page 2 of the April 17th Census Bureau *Press Release* for the New Residential Construction series:

> **NOTICE** With the April 2018 release [on May 16th], seasonally adjusted estimates of housing units authorized by building permits will be revised back to January 2012, and seasonally adjusted estimates of housing units authorized but not started, started, under construction, and completed will be revised back to January 2013. With each April release, seasonally adjusted data will now be revised for an additional five years beyond the revision period for unadjusted data. Research has shown that this revision span should produce more reliable seasonally adjusted time series.

Common-reporting experience of extreme volatility and unstable revisions should change, if the overhaul is as advertised. Otherwise, look for the headline detail to be generally weaker than wherever consensus expectations settle.

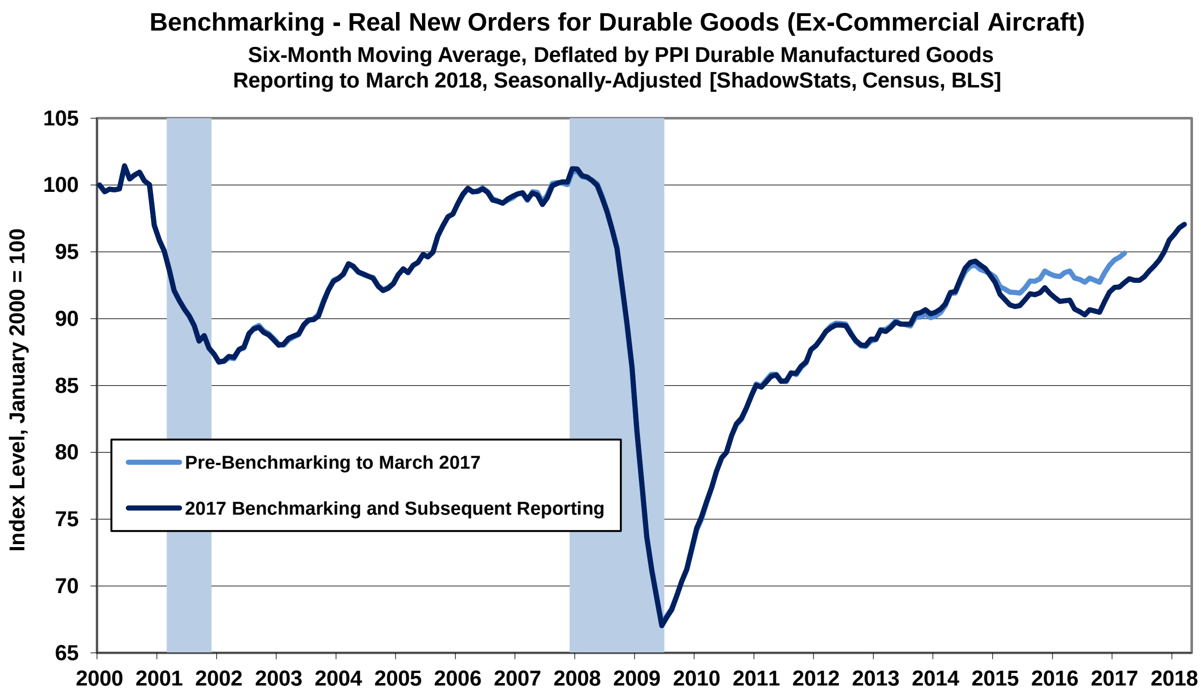
In the context of smoothed and stabilized seasonal adjustments, the broad pattern of Housing Starts should remain consistent with the low-level, stagnant-to-downtrending activity seen in the last year. Both Housing Starts and Building Permits showed patterns of continuing non-recovery in the context of respective March 2018 activity being down by 42.0% (-42.0%) and by 40.2% (-40.2%) from recovering pre-recession highs (see *Commentary No. 946*). Such low-level stagnation is evident particularly with headline detail viewed in the context of a six-month moving average. Again, the smoothed patterns of activity should not change much with the annual revisions.

The liquidity bind besetting consumers continues to constrain residential real estate activity, as reviewed in the *Consumer Liquidity Watch* of prior *Commentary No. 948*. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including residential real estate activity and related demand for residential construction. That circumstance—in the last eleven-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

New Orders for Durable Goods - Manufacturers' Shipments—Annual Benchmark Revisions. Discussed in *Commentary No. 947*, from which much of this text is lifted, the Census Bureau plans its annual benchmark revision to 2017 New Orders for Durable Goods data for release on May 17, 2018 (see the *Press Release*). *ShadowStats* will provide some summary details and highlights in *Commentary No. 950* of Thursday, May 17th, but full details likely will go over that weekend with a supplemental *Commentary*.

As an example of the regular, annual downside restatement of recent activity in this series, consider accompanying *Graph Week Ahead-1*. It shows the net revisions to the six-month moving average of real New Orders for Durable Goods (ex-commercial aircraft) from last year's May 18, 2017 benchmark revisions and subsequent reporting through the March 2018 headline detail, versus the pre-benchmarking detail. For a more-substantive review of the last two years of benchmark revisions to New Orders for Durable Goods, and the parent Manufacturers' Shipments series, see *Special Commentary No. 888*, also see *Commentary No. 942-B* for discussion on the negative implications for the New Orders for Durable Goods series, based on the recently-released, downside revisions to the production series. Both series rely on related-background detail and related-underlying surveys for their results.

Graph Week Ahead-1 Benchmark Revisions to Real Total New Orders for Durable Goods, Ex-Commercial Aircraft.



LINKS TO PRIOR COMMENTARIES AND SPECIAL REPORTS

Prior Writings Underlying the Current *Special Commentaries* and a Sampling of Recent *Regular 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 missive 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 Commentaries. *[Listed here are* Commentaries *of the last several months or so, plus recent* Special Commentaries *and others covering a variety of non-monthly issues, including annual benchmark revisions, dating back through 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 and update the general economic and financial o-market outlook, as circumstances develop.

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 Frist-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 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. 928 (December 22, 2017) covered November 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the third estimate of Third-Quarter 2017 GDP.

Commentary No. 927 (December 19, 2017) reviewed November 2017 New Residential Construction (Housing Starts and Building Permits) and Cass Freight Index™, along with an expanded discussion on underlying economic reality and the financial markets.

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. 925 (December 13th) reviewed November 2017 headline detail on the CPI and PPI, along with an update on the FOMC actions and the regular U.S. dollar, gold graphs.

Commentary No. 924 (December 8, 2017) discussed the November 2017 Employment and Unemployment details and Conference Board Help Wanted OnLine® Advertising, the October Trade Deficit and Construction Spending and updated Monetary Conditions in November.

Commentary No. 923 (November 29, 2017) covered the second estimate of Third-Quarter 2017 GDP, including initial estimates for Third-Quarter GNP, GDI and Per Capita Real Disposable Income, the October Trade Deficit, Cass Freight Index and New-Home Sales.

Commentary No. 919-B (November 6, 2017) provided more in-depth detail on the October 2017 labor detail.

Commentary No. 919-A (November 3, 2017) provided initial detail and background on October labor data, and reviewed the October 2017 Conference Board Help Wanted OnLine® Advertising, the September Cass Freight Index™, Trade Deficit and Construction Spending, and updated Monetary Conditions.

Special Commentary No. 918-B (October 30, 2017) provided a more comprehensive review of the initial third-quarter 2017 GDP detail, along with update versions of the *Hyperinflation Watch* and *Consumer Liquidity Watch*.

Commentary No. 917 (October 26/27, 2017) reviewed September Industrial Production, New Orders for Durable Goods, New Residential Construction (Housing Starts and Building Permits) and New- and Existing-Home Sales.

Commentary No. 916 (October 20th) reviewed the September 2017 Retail Sales details along with the headline Consumer and Producer Price Indices for September.

Commentary No. 915 (October 6, 3017) reviewed the September 2017 Employment and Unemployment details, along with September 2017 monetary conditions.

Commentary No. 913 (September 28, 2017) reviewed the third-estimate of second-quarter 2017 GDP, with a further consideration of some unusual economic reporting in the near future.

Commentary No. 910 (September 15, 2017) reviewed the August 2017 releases of Industrial Production and nominal and real Retail Sales.

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

Commentary No. 908-B (September 6, 2017) provided extended detail of the August 2017 Labor and Monetary conditions and July 2017 Construction Spending, along with coverage of the July 2017 Trade Deficit and the initial estimate of the 2017 Payroll Employment benchmarking.

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).

Commentary No. 903 (August 7, 2017) discussed new signals of economic deterioration in terms of political and FOMC considerations, along with headline coverage of the July labor data, M3 and The Conference Board Help Wanted OnLine®, and June trade deficit and construction spending.

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

Commentary No. 900 (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.

Commentary No. 897 (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 Index™.

General Commentary No. 894 (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.

Commentary No. 890 (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 Index™, and the monthly trade deficit and construction spending.

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. 882 (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.

Commentary No. 877 (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.

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.

Commentary No. 864 (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.

Commentary No. 861 (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.