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

COMMENTARY NUMBER 844 Third-Quarter GDP, Consumer-Liquidity and Monetary-System Updates October 28, 2016

Third-Quarter GDP Growth of 2.9% Was Not Credible

Politically-Massaged Data Traditionally Have Negligible Impact on Voters

Real Annual Growth of 2.3% in Third-Quarter Disposable Income Held Below 2.9%, Indicating Incumbent-Party Loss of the White House

Underlying Economic Reality Remains Far from Recovery and Expansion

Headline GDP Remained Massively Inconsistent with Recession Seen in Freight Traffic, Petroleum Usage, Corporate Revenues, Construction, Industrial Production, Broad Employment Indicators, Etc.

Third-Quarter Velocity of Money Slowed Anew

Monetary Base Tumbled to a Three-Year Low in a Record Year-to-Year Drop, Annual M3 Growth Turned Sharply Lower in October

September Real Median Household Income Continued to Stagnate, While Consumer Attitudes Took a Beating in October

PLEASE NOTE: The next regular Commentary, scheduled for Friday, November 4th, will cover October employment and unemployment, and the September trade deficit and construction spending.

Please call at (707) 763-5786 if you have questions or would like to discuss current issues or otherwise. Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

A Little Bit of Exaggeration Here? With headline real annualized quarterly growth of 2.90% in the initial reporting of third-quarter 2016 Gross Domestic Product (GDP), the real GDP now stands 11.41% above its pre-recession high of fourth-quarter 2007. Such has resulted from highly creative reporting by the Bureau of Economic Analysis (BEA), in the context of a variety of private and public indicators that show the broad U.S. economy never fully recovered from the economic collapse into 2009. Further, following an extended period of low-level stagnation, broad economic activity began to turn lower again in December 2014, a month that eventually should be recognized as the beginning of a "new" recession.

Consider that the Federal Reserve values its Industrial Production Index at 65% of real GDP, yet the production index is down by 1.42% (-1.42%) from its pre-recession peak (coincident with GDP). With the GDP up by 11.41%, that implies the remainder of the GDP is up by about 35% from its pre-recession high. Most major monthly economic series overlap some with industrial production, but of those major series, only headline real retail sales is above its pre-recession peak, and that is up by 6.31%.

Real construction spending is down 19.74% (-19.74%) from the period of the GDP's pre-recession peak, and down by 24.60% (-24.60%) from the February 2006 pre-recession high for the construction spending series. Since the GDP's pre-recession peak in fourth-quarter 2007, the real merchandise trade deficit had widened as of second-quarter 2016, with net-negative implications for the net-export account in the GDP at that time. That deficit appears to have narrowed somewhat in third-quarter 2016, but the initial reporting of that number awaits the October trade-deficit detail of November 4th.

Even allowing for heavily-modeled and guesstimated fudge factors such as "intellectual properties," and guesstimated "healthcare" and other services that lack solid reporting bases, it is difficult to see how the GDP has recovered to 11.41% above its pre-recession peak.

Politically-Manipulated Boosts in GDP and Jobs Data Traditionally Have Negligible Impact on Voters. With headline third-quarter GDP growth of 2.90%, which is above the post-recession average of 2.05%, above consensus expectations of 2.5% and is the strongest annualized-quarterly real growth since 4.96% in third-quarter 2014 (another election year), such likely will be touted as a good sign for the incumbent party holding the White House going into the general election, eleven days from now.

Noted in <u>Commentary No. 839</u>, the incumbent party has lost the White House in every election since 1932, when headline annual real growth in Disposable Personal Income (DPI)—effectively take-home pay net of inflation—has been below 2.9%. The headline annual growth for third-quarter 2016 was 2.3%, signaling such a loss. The 1932 election is used as the base here, where that is the earliest date with historically-consistent DPI data. Although the DPI levels are bloated throughout, the relative growth rates are reasonably consistent and comparable over time.

Still, the problem remains that growth in the GDP is bloated well beyond reality and common experience. It is that common experience, not the headlines, that drives voter reaction at the polling booth. Where today's highly questionable headline GDP detail may have received some extra political consideration

(likely in the trade detail), gimmicked, good headlines generally have limited impact on the electorate, if voters are not otherwise personally sharing in the purported good news. Such was the case in 1992.

Facing an upcoming reelection bid, the first-Bush Administration worked an outside-the-system manipulation of the then-GNP headline reporting, in order to generate an early-end to the 1990 recession. While the recession "ended" early, that did not fool Main Street, U.S.A., and the Democrats won the White House with Bill Clinton. Reporting games, however, have been common to both sides of the Aisle.

President Lyndon Johnson, for example, reportedly reviewed the GNP numbers before their release, and he would return them to the Commerce Department, if Commerce had gotten them "wrong." He would keep doing so until Commerce got the numbers "right." Johnson may not have been the first, but he definitely was not the last president to have a direct interest in the headline GNP reporting, or what since has become the generally more-positive, but less-substantive GDP reporting in the current heavily-politicized environment.

Today's *Commentary* (October 28th). The balance of these *Opening Comments* covers the summary of the "advance" estimate of third-quarter 2016 GDP detail, as well as an update to consumer conditions for September real median household income and October consumer sentiment and confidence. Extended GDP information follows in the *Reporting Detail*.

The *Hyperinflation Watch* covers the third-quarter 2016 Velocity of Money, as commonly updated with the first GDP estimate of a given quarter. The monetary base and an early-estimate of annual M3 growth for October 2016 are covered a week earlier than usual, given unusual developments.

The Week and Month Ahead previews next week's reporting of the full trade deficit and construction spending for September, and labor conditions in October.

Gross Domestic Product (GDP)—Third-Quarter 2016, "Advance" or First Estimate—A Politically-Convenient, Statistically-Insignificant and Above-Consensus 2.9% Headline Gain. The "advance" or first estimate of third-quarter 2016 GDP showed a statistically-insignificant, real (inflation-adjusted), annualized, quarterly headline gain of 2.90%. The current headline detail remains in the context of the July 29th annual GDP benchmark revisions discussed in *Commentary No.* 823.

The initial estimate of third-quarter growth came in above consensus expectations, a politically fortuitous circumstance. In addition to a large, positive growth contribution from a purportedly narrowing trade deficit, the headline gain of 2.90% was spiked by a positive change in inventories. Final Sales (GDP net of inventory change) grew at an annualized real quarterly pace of 2.29% in third-quarter 2016, down from 2.57% in second-quarter 2016 final sales.

The headline third-quarter 2016 annualized real growth of 2.90%, followed gains of 1.42% in second-quarter 2016, 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015.

In the *Reporting Detail*, *Graphs 18* and *20* plot headline levels of real quarterly GDP activity, while *Graphs 19* and *21* plot headline year-to-year real GDP growth. Annual third-quarter 2016 real growth rose to 1.50%, from 1.28% in second-quarter 2016, but it was down from 1.57% in first-quarter 2016 and 1.88% in fourth-quarter 2015. Through second-quarter 2016 reporting, real annual growth had been in continual decline since a near-term peak of 3.31% in first-quarter 2015, the post-recession high annual growth for the series. A sharp downtrend in annual growth is common at the onset of formal recessions.

Third-Quarter 2016 GDP, First Estimate - Growth Distribution. The first estimate of third-quarter 2016 GDP was an annualized real growth rate of 2.90%. Such was against growth of 1.42% in second-quarter 2016, 0.83% in first-quarter 2016, 0.87% in fourth-quarter 2015, 1.99% in third-quarter 2015, 2.61% in second-quarter 2015 and 2.05% in first-quarter 2015.

The annualized growth number in each sub-category of consumer spending, business/residential investment, trade deficit and government spending is the additive contribution to the total, headline change in GDP, where 1.47% + 0.52% + 0.83% + 0.09% = 2.90%, with a rounding difference. <u>Commentary No. 836</u> of September 26th detailed the last growth-distribution for second-quarter GDP.

Regrouped by general product line, the BEA estimated that the headline 2.90% quarterly GDP growth rate included a 1.08% growth-rate contribution from services and a 2.15% contribution from goods, with a growth-rate subtraction of 0.33% (-0.33%) from structures.

Contributing Growth Factors. The headline gain in third-quarter 2016 GDP was dominated by a further faux trade contribution, with gains across the other sectors, including continued consumption gains in motor vehicles, utility usage and healthcare, a positive change in inventory levels and increased spending by the federal government. Some offsetting negative contributions came from residential investment and transportation equipment.

- Consumer Spending Contributed 1.47% to Third-Quarter 2016 GDP Growth; Second-Quarter Growth Contribution was 2.88%. The largest GDP growth contribution came from the consumer spending category, dominated on the goods side by motor vehicles (0.38% contribution), and on the services side by weather-induced utility usage surge (0.30% contribution) and from the nebulous, non-productive and heavily-guesstimated healthcare sector (0.27% contribution).
- Business/Residential Investment Contributed 0.52% to Third-Quarter 2016 GDP Growth; Subtracted 1.34% (-1.34%) from Second-Quarter Growth. A positive change to inventory growth contributed 0.61% to the GDP growth rate. Accordingly, headline final sales—GDP net of inventory change—declined to an annualized quarterly growth rate of 2.29%, from 2.57% in second-quarter 2016. Declining residential construction subtracted 0.24% (-0.24%) from GDP growth
- Net Exports Added 0.83% to Third-Quarter 2016 GDP Growth; Added 0.18% to Second-Quarter Growth. The improvement here was heavily distorted, first with a one-time surge in soybean exports, and second from highly-suspect, improved "advance" reporting of the October trade deficit. Further detail will follow in next week's related Commentary No. 845.
- Government Spending Added 0.09% to Third-Quarter 2016 GDP Growth, It Subtracted 0.30% (-0.30%) from Second-Quarter Growth. Federal government spending contributed 0.17% to the

GDP growth rate, split evenly between defense and nondefense spending. The offsetting decline to the aggregate here was in the area of state and local gross investment, net of somewhat higher consumption.

Implicit Price Deflator (IPD). The first estimate of third-quarter 2016 GDP inflation, or the implicit price deflator (IPD), showed annualized quarterly change of 1.49%, versus an annualized 2.29% in second-quarter 2016, 0.46% in first-quarter 2016, 0.91% in fourth-quarter 2015, 1.22% in third-quarter 2015, 2.25% in second-quarter 2015 and 0.04% in first-quarter 2015.

As general guidance, the weaker the inflation rate used in deflating an economic series, the stronger will be the resulting inflation-adjusted growth, and vice versa. The downside movement in the third-quarter versus second-quarter 2016 IPD of 0.80% was worth a relative, parallel boost in real growth versus nominal growth for third-quarter 2016 relative to the second-quarter 2016.

Year-to-year, headline third-quarter 2016 IPD inflation was 1.29%, versus 1.22% in second-quarter 2016, 1.21% in first-quarter 2016, 1.10% in fourth-quarter 2015, 1.00% in third-quarter 2015, 1.11% in second-quarter 2015 and 1.10% in first-quarter 2015. CPI-U comparisons are available in the *Reporting Detail*.

Gross National Product (GNP) and Gross Domestic Income (GDI). Standardly, the first estimates of third-quarter GNP and GDI are not published along with the "advance" or first headline estimate of third-quarter GDP. That circumstance is due to quality issues with the available "advance" data, a problem also common to the GDP reporting. Initial third-quarter 2016 estimates of GNP and GDI will follow on November 30th, along with the second estimate of, first revision to the third-quarter GDP. Previously reported details on the GNP and GDI are found in Commentary No. 836.

GNP remains the broadest measure of U.S. economic activity, where GDP is GNP net of trade flows in factor income (interest and dividend payments). As a reporting gimmick aimed at boosting the headline reporting of economic growth for net-debtor nations such as the United States, international reporting standards were shifted some decades back to reporting headline GDP instead of what had become a relatively weaker GNP. Headline, annualized real second-quarter 2016 GNP growth stood at 2.16%, versus an "unchanged" 0.00% [a fractional annualized quarterly contraction of 0.003% (-0.003%)] in first-quarter 2016.

GDI is the theoretical income-side equivalent to the consumption-side GDP estimate. The GDP and GDI are made to equal each other, every quarter, with the addition of a "statistical discrepancy" to the GDI-side of the equation. Second-quarter 2016 GDI contracted at an annualized 0.18% (-0.18%), against a gain of 0.81% in first-quarter GDI.

Underlying Economic Reality. Despite the broadly neutral, and artificially-smoothed 2016 GDP benchmark revisions of July 29th (see *Commentary No. 823*), and an above-consensus 2.90% headline real annualized growth for third-quarter 2016, the U.S. economy has continued in a deepening and as-yet-unrecognized "new" recession. Headline monthly reporting activity in subsidiary economic series generally still are moving market expectations in that general direction (the ShadowStats contention remains that the "new" downturn is in reality just a continuation of the economic crash into 2009).

The "advance" estimate of third-quarter 2016 GDP at an annualized real quarterly pace of 2.90% was statistically-insignificant. That followed annualized real quarterly growth 1.42% in second-quarter 2016,

versus benchmarked annualized gains of 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015. The three consecutive quarters through second-quarter 2016 were the weakest three quarters of real GDP growth since 2012 and otherwise since formally exiting the 2007 recession. After two likely downside revisions to today's headline third-quarter growth, the number of "consecutive" quarters likely will change to four.

Discussed in the benchmarking <u>Commentary No. 823</u>, the benchmark revisions effectively were neutral in aggregate, with the business-cycle reporting "smoothed" by the BEA. The revisions were not of a nature to trigger formal immediate recognition of a "new" recession, which likely still should be clocked from December 2014. While such eventually will happen, the focus now shifts to the rapidly weakening economy in the next several months, which should trigger the "formal" recession recognition. More detail will follow in the pending, post-election *ShadowStats Special Report*.

Formal headline GDP activity continues to run well above economic reality as signaled by a number of business indicators, such as domestic freight activity (see *Graph 5*), domestic consumption of petroleum products (see *Graph 6*), corporate revenues (see *Graph 7*). A variety of better-quality economic series, such as industrial production, new orders for durable goods and real retail sales also confirm lack of economic recovery, as detailed most recently in *Commentary No. 840*, *Commentary No. 841* and *Commentary No. 843*.

Either the GDP reporting is wrong, or all other major economic series are wrong, as further suggested in the opening sentences of these *Opening Comments*. While the GDP is heavily modeled, imputed, theorized and gimmicked, it also encompasses reporting from those various major economic series and private surveys, which still attempt to measure real-world activity. Flaws in the GDP inflation methodologies and simplifying reporting assumptions have created the "recovery."

Accordingly, the broad ShadowStats economic outlook has not changed, and the gist of most of this and following text remains along the lines of other recent GDP *Commentaries*. The details and numbers, however, are updated to reflect the latest headline detail.

Discussed in <u>Commentary No. 739</u>, which covered last year's 2015 GDP annual benchmark revisions, annual benchmarkings increasingly are reshaping the GDP-reporting history into a post-2007 collapse pattern of successive multiple dips, irrespective of the current gimmicked revisions. By the next comprehensive GDP benchmark revision in July 2018, post-2007 historical GDP reporting should be confirming a non-recovering, multiple-dip economic collapse including a "new" or ongoing recession.

That circumstance should encompass the evolving, current downturn in broad, domestic economic activity, discussed previously in <u>No. 777</u> and <u>No. 742 Special Commentary: A World Increasingly Out of Balance</u>. Where again, the present "new" recession or multiple-dip downturn remains likely to be timed from December 2014, without headline back-to-back contractions of quarterly GDP currently in place. Formal recognition of same remains pending, where consecutive quarterly GDP contractions no longer are necessary for formal recession recognition (see the opening paragraphs of <u>Commentary No. 823</u>). Recognition of the onset of the prior December 2007 recession was not formalized until November 28, 2008, but did have consecutive GDP contractions.

Ongoing monthly economic-reporting details for key series, public and private, increasingly confirm the patterns of declining or collapsing economic activity. For example, consider the discussion in

<u>Commentary No. 820</u> on The Conference Board Help Wanted OnLine[®] Advertising, which was generating a signal for an economic downturn. September detail was published on October 5th, and a review of those numbers shows that the year-to-year declines in the monthly data continue unabated. Historically, such activity has been among the best of the leading indicators to an unfolding economic

In combination, these various collapsing economic indicators should engender a formal recession call, irrespective of the timing of actual, headline quarterly contractions in real GDP or related political gaming of the data out of Washington.

Fundamental, real-world economic activity shows that the broad economy began to turn down in 2006 and 2007, plunged into 2009, entered a protracted period of stagnation thereafter—never recovering—and then began to turn down anew in recent quarters. Irrespective of the reporting gimmicks introduced in the July 2013, July 2014 and July 2016 GDP benchmark revisions—including a recent pattern of inclusion and estimation of highly-questionable data on the Affordable Care Act (ACA) and related healthcare spending—a consistent, fundamental pattern of faltering historical activity is shown in the accompanying "corrected" GDP graphs.

Please note that the pattern of activity shown for the "corrected" GDP series is much closer to the patterns shown in the graphs of unemployment (see *Graph 8* and *Commentary No. 838*), monthly real median household income and other consumer measures (see the *Consumer Liquidity Update* in the next section and the full liquidity review in *Commentary No. 833*). This also has been detailed in *No. 742 Special Commentary: A World Increasingly Out of Balance* and *No. 692 Special Commentary: 2015 - A World Out of Balance*. Similar patterns are found in economic series not otherwise reliant on understated inflation for their reported growth, such as housing starts (see *Commentary No. 842* and *2014 Hyperinflation Report—Great Economic Tumble – Second Installment*).

With liquidity-strapped consumers unable to fuel sustainable growth in consumption, a full business recovery could not have taken place since 2009, and a recovery will not be forthcoming until consumer structural income and liquidity problems are resolved, including more-normal credit functioning of the domestic banking system.

Official and Corrected GDP. Usually discussed in these Commentaries covering the quarterly GDP reporting and monthly updates, the full economic recovery indicated by the official, real GDP numbers remains an illusion. It is a statistical illusion created at least partially by using a too-low rate of inflation in deflating (removing certain inflation effects) from the GDP series. The accompanying graphs tell that story, updated for the first estimate of third-quarter 2016, as well as reflecting other elements of economic reality.

The first set of graphs (*Graphs 1* and 2) updates the detail 1970-to-date, expressed in billions of 2009 dollars as used with the headline GDP. The graphs show official periods of recession as shaded areas, with ShadowStats-defined recessions indicated by the lighter shading in *Graph 2*, the second graph of the first set, as published initially in 2014 Hyperinflation Report—Great Economic Tumble.

The second set of graphs (2000-to-date) is the one that traditionally has been incorporated in the GDP *Commentaries*. *Graphs 3* and 4 show short-term detail, expressed on an index base where first-quarter 2000 = 100.0.

Shown in the first graph of each set (*Graphs 1* and 3) of official *Headline Real GDP*, GDP activity has been reported above pre-2007 recession levels—in full recovery—since second-quarter 2011, and headline GDP has shown sustained growth since (growth pauses or interruptions for second-half 2012 and first-quarter 2014 excepted). Adjusted for GDP inflation (the implicit price deflator - IPD), headline third-quarter 2016 GDP currently stands 11.4% above its pre-recession peak-GDP estimate of fourth-quarter 2007. In contrast, the "corrected" GDP version, in the second graph of each set (*Graphs 2* and 4), shows third-quarter 2016 GDP activity to be down from its pre-recession peak of first-quarter 2006 by 7.2% (-7.2%).

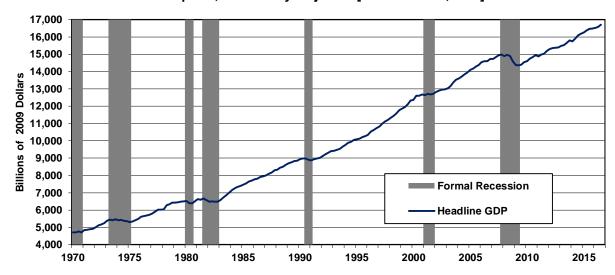
Again, the second graph in each series (*Graphs 2* and 4) plots the *Corrected Real GDP*, adjusted for the understatement inherent in official inflation estimates (see <u>Public Commentary on Inflation</u> <u>Measurement</u>), with the deflation by the implicit price deflator (IPD) adjusted for understatement of roughly two-percentage points of annual inflation in recent years. The inflation understatement has resulted from hedonic-quality adjustments, also as discussed in the *Hyperinflation Reports*.

The pattern of economic collapse into 2009, followed by some minimal recovery, low-level stagnation and renewed contraction is seen with many series. As shown in *Graphs 5* to 8, better-quality independent numbers—including some U.S. government—put the lie to the gimmicked headline reporting that has been massaged for decades by government agencies and consulting academics.

[Graphs 1 to 8 begin on the next page]

Graph 1: Real GDP Index (1970-2016), First Estimate of Third-Quarter 2016

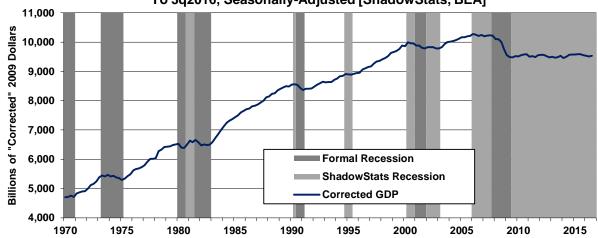
Headline Real GDP Nominal GDP Deflated by Implicit Price Deflator To 3q2016, Seasonally-Adjusted [ShadowStats, BEA]



Graph 2: "Corrected" Real GDP (1970-2016), First Estimate of Third-Quarter 2016

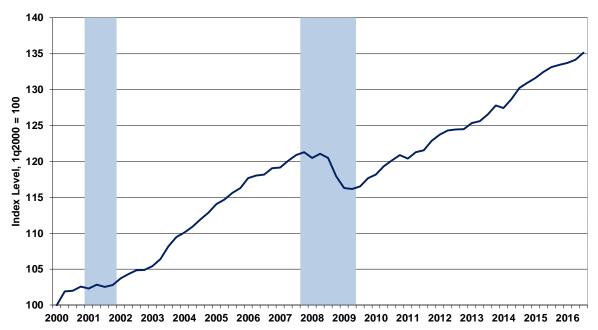
Corrected Real GDP

Nominal GDP Deflated by Implicit Price Deflator Adjusted for Understatement of Annual Inflation To 3q2016, Seasonally-Adjusted [ShadowStats, BEA]



Graph 3: Real GDP Index - Headline Real GDP through First Estimate of Third-Quarter 2016

Headline Real GDP -- Index Level GDP Deflated by Official Implicit Price Deflator To 3q2016, Seasonally-Adjusted [ShadowStats, BEA]



Comparative Indicators. Graph 4 of the "corrected" GDP series follows on the next page. Added for comparison there and after are several graphs. Used in the prior two Commentaries, Graph 5 is the Cass Freight IndexTM measure of North American freight volume, used with the permission of Cass Information Systems, Inc. (see Commentary No. 834). Few measures better reflect the actual flow of goods in commerce than freight activity. As a broad measure of basic domestic economic activity, the index has much more in common with the "corrected" GDP in Graph 4, than with the headline GDP of Graph 3 shown above.

Graphs 6 to 8 have been lifted from <u>Commentary No. 838</u>, and generally confirm the story from the "corrected" GDP graph, the economy never recovered from its collapse into 2009, and with the possible exception of *Graph 6* on petroleum consumption, that the economy is in renewed downturn. The U.S. aggregate consumption of crude oil petroleum product, measured in physical barrel count, is an extraordinarily broad indicator of general activity [The U.S. Energy Information Agency (EIA)].

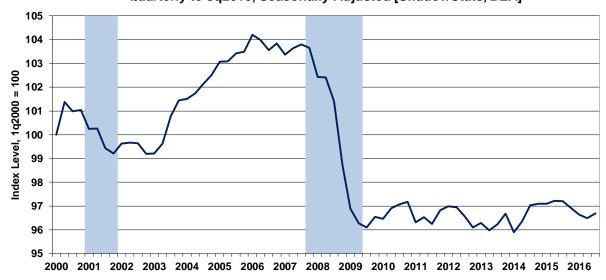
As with the CASS index, where the monthly data are not seasonally adjusted, ShadowStats has plotted the petroleum series using a trailing twelve-month average, through the headline monthly detail of July 2016. The resulting smoothed pattern reflects the economic collapse into 2009, followed by a protracted period of variable, low-level stagnation, and an upside notch into first-half 2016. In contrast, the CASS index continues to turn down in its twelve-month trailing average, with monthly year-to-year contractions.

Graph 7 of S&P 500 revenues is plotted (not seasonally adjusted) on a quarterly basis, adjusted for the estimated impact of share buybacks and inflation. Graph 8 of the employment to population ratio is a

solid indicator of underlying labor conditions in the context the broad population and long-term discouraged and displaced workers.

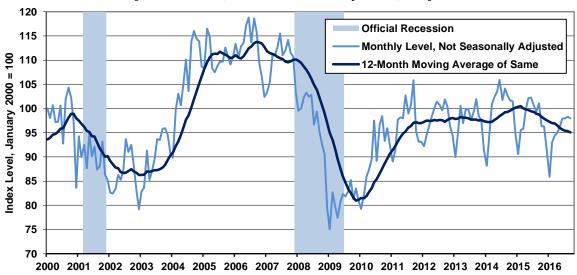
Graph 4: "Corrected" Real GDP Index (2000-2016), First Estimate of Third-Quarter 2016

Corrected Real GDP Nominal GDP Deflated by Implicit Price Deflator Corrected for Roughly Two-Percentage Point Understatement of Annual Inflation Quarterly to 3q2016, Seasonally-Adjusted [ShadowStats, BEA]



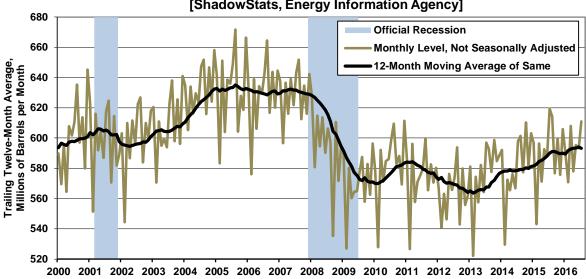
Graph 5: Cass Freight Index ™ (2000-September 2016)

Cass Freight Index[™] (Jan 2000 = 100) To September 2016, Not Seasonally Adjusted [ShadowStats, Cass Information Systems, Inc.]



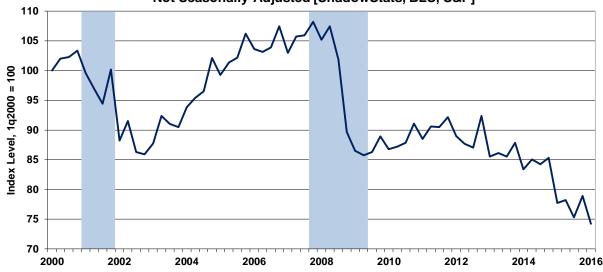
Graph 6: U.S. Petroleum Consumption to July 2016

U.S. Product Supplied of Crude Oil and Petroleum Product To July 2016, Not Seasonally Adjusted, Millions of Barrels per Month, Trailing Twelve-Month Average [ShadowStats, Energy Information Agency]



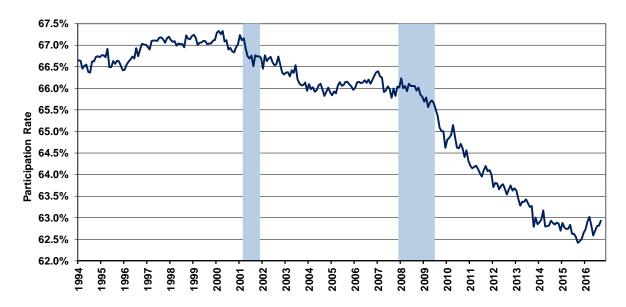
Graph 7: Real S&P 500 Sales Adjusted for Share Buybacks (2000 - 2015), Indexed to January 2000 = 100

Real S&P 500 Quarterly Revenues per Share Adjusted for Share Buybacks, Deflated by CPI-U, 2000 to 1q2016,Indexed to January 2000 = 100 Not Seasonally-Adjusted [ShadowStats, BLS, S&P]



Graph 8: Civilian Employment-Population Ratio

Participation Rate (Labor Force as a Percent of Population) To September 2016, Seasonally-Adjusted [ShadowStats, BLS]



Liquidity Conditions Continue to Constrain Individual Consumption and Broad Economic Activity. Underlying fundamentals to consumer economic activity, such as liquidity, have been impaired severely in the last decade or so, driving economic activity into collapse and preventing meaningful or sustainable economic rebound, recovery or ongoing growth. The level of and growth in sustainable real income, and the ability and willingness of the consumer to take on new debt remain at the root of the liquidity crisis, where the issues generally continue to intensify.

This partial update of consumer conditions and liquidity (previously fully updated in <u>Commentary No. 838</u>), covers the full-October detail on the Conference Board's Consumer-Confidence Index[®] (released October 25th) and the University of Michigan's Consumer Sentiment Index (released this morning, October 28th). Also covered is the September 2016 monthly real median household income detail reported by <u>www.SentierResearch.com</u> on October 27th.

Generally, the higher and stronger these measures are, the healthier is consumer spending. Most measures of consumer liquidity and attitudes remain off their lows, and one—real monthly median household income—actually had spiked recently to pre-recession levels, reflecting the temporary collapse in gasoline prices and deflation by the otherwise underestimated headline CPI-U inflation. Real monthly median income, however, generally has begun to move lower, stagnating again, along with a pickup in consumer inflation (see the discussion with *Graph 9*).

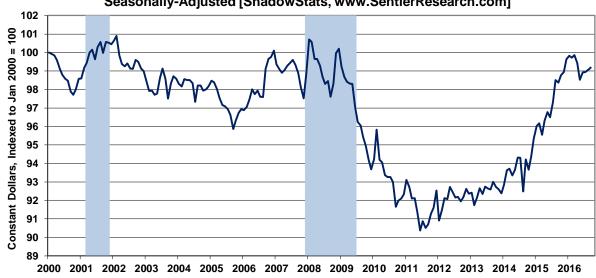
Still, these underlying economic fundamentals simply have not supported, and do not support a turnaround in broad economic activity. Never truly recovering in the post-Panic of 2008 era, limited growth in household income and credit, and a still generally, faltering consumer outlook, have eviscerated

and continue to impair broad, domestic U.S. business activity, which feeds off the financial health and liquidity of consumers

Such has driven the housing-market collapse and ongoing stagnation in consumer-related real estate sales and construction activity, as well as having constrained both nominal and real retail sales activity and the related, personal-consumption-expenditures and residential-construction categories of the Gross Domestic Product (GDP). Together, those sectors account for more than 70% of total U.S. GDP activity.

Now, with the economy never having recovered fully from the collapse into 2009, consumers again are pulling back on consumption, as evidenced by a renewed slowdown in broad economic activity, where that reality is evident in more-meaningful series—not the gimmicked GDP—as discussed in this *Commentary*. Irrespective of the headline, gimmicked boost to third-quarter 2016 GDP growth reported this morning, there has been no economic recovery, and there remains no chance of significant, broad economic growth without a fundamental upturn in consumer- and banking-liquidity conditions.





Monthly Household Income Measure Still Signals Broad-Based Economic Difficulties. Shown in Graph 9 is the latest monthly real median household income detail through September 2016. Headline median household income turned down anew, with a statistically-significant monthly decline in May 2016, after several months of statistically-insignificant flutterings around its near-term January 2016 peak. Stagnating at the moment, statistically-insignificant flutterings have continued in June, July, August and now September 2016.

On a monthly basis, when headline GDP purportedly started its solid economic recovery in mid-2009, the monthly household income number nonetheless plunged to new lows. Generally, the income series had been in low-level stagnation, with the recent uptrend in the monthly index boosted specifically by collapsing gasoline prices and the related, negative headline CPI-U consumer inflation. The index reached pre-recession levels in the December 2015 reporting, but it remains minimally below the pre-

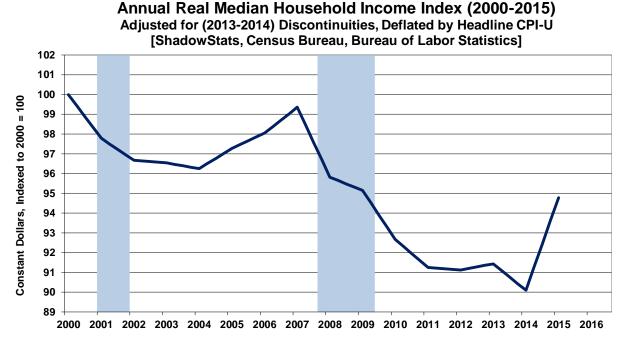
recession highs for both the formal 2007 and 2001 recessions. It should continue turning down anew, as headline monthly consumer inflation continues to pick-up.

Where lower gasoline prices had provided some minimal liquidity relief to the consumer, indications are that any effective extra cash generally was used to help pay down unsustainable debt or other obligations, not to fuel new consumption. Again, the effects of lower gasoline prices have begun to bottom out and reverse.

This measure of real monthly median household income generally can be considered as a monthly version of the annual detail shown in *Graph 10*, which was updated recently for 2015 detail (see the full analysis of the 2015 annual household income reporting in *Commentary No. 833*).

Differences in the Monthly versus Annual Median Household Income. The general pattern of relative historical weakness also has been seen in the headline reporting of the annual Census numbers, shown in *Graph 10*, with 2014 real annual median household income having hit a ten-year low, and with the new, historically consistent 2015 annual number still holding below that seen when the collapsing economy hit its purported trough in 2009. The Sentier numbers had suggested a small increase in 2014 versus 2013 levels. Still, the monthly and annual series remain broadly consistent, although based on separate questions within the monthly Consumer Population Series (CPS), as conducted by the Census Bureau. Where Sentier uses monthly questions surveying current annual household income, the headline annual Census detail is generated by a once-per-year question in the March CPS survey, as to the prior year's annual household income.

Graph 10: Annual Real Median Household Income through 2015, Discontinuities Removed



Consumer Confidence, Sentiment and Credit. Beyond the real median household income data discussed in the prior section, the detail here incorporates the respective October 2016 readings for the Conference Board's Consumer-Confidence and University of Michigan's Consumer-Sentiment measures. Reflected

in *Graphs 11* to *13*, where both confidence and sentiment rose in September, they plunged in October, likely reflecting concerns as to the direction of the presidential race.

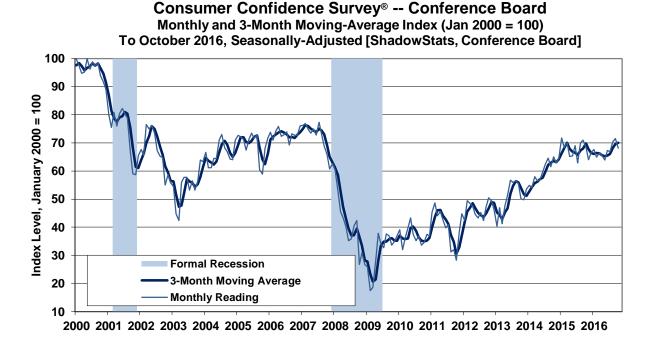
The Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index® (*Graph 11*), and the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph 13*) jumped and eased in their respective August readings, but both measures rose in September, only to collapse in October, with the downturn in the early-October estimate for Sentiment intensifying in its final reporting for the full month. The three-month moving averages in both series continued to hold below their respective March/February 2015 near-term peaks.

Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs 11* to *13* reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board's Consumer Confidence Index[®] is set with 1985 = 100, while the University of Michigan's Consumer Sentiment Index is set with January 1966 = 100.

Both series also have continued to hold off near-term peaks, as smoothed for six-month moving-average readings (*Graph 13*), with both measures down from their June 2015 near-term highs.

The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in <u>Commentary No. 764</u>), and often are highly volatile month-to-month, as a result. With increasingly-negative, unstable and uncertain headline financial and economic reporting, and beyond any immediate post-election gyrations, successive negative hits to both the confidence and sentiment readings remain increasingly likely in the months ahead, primarily from the faltering economy.

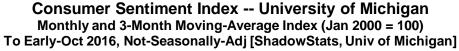
Graph 11: Consumer Confidence to October 2016

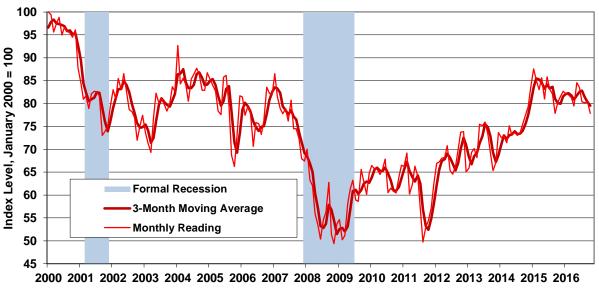


Smoothed for irregular, short-term volatility, the two series remain at levels seen typically in recessions. Suggested in *Graph 13*—plotted for the last 45 years—the latest readings of Confidence and Sentiment

generally have not recovered levels preceding most formal recessions of the last four decades. Broadly, the consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth as suggested by headline GDP growth in 2014, and for second-and third-quarter 2015.

Graph 12: Consumer Sentiment to October 2016





Graph 13: Comparative Confidence and Sentiment (6-Month Moving Averages) since 1970

Consumer Confidence and Consumer Sentiment Indices Six-Month Moving Averages, 1970 to Full-October 2016 [ShadowStats, Conference Board, University of Michigan, NBER] Common Re-Indexed Level, January 2000 = 100 **Formal Recession** Sentiment Confidence

[The Reporting Detail section contains significant additional GDP analysis and graphs.]

HYPERINFLATION WATCH

MONETARY CONDITIONS: Third-Quarter Velocity of Money Slowed; Headline Monetary Base Plunged; Annual M3 Growth in Sharp Slowdown. Despite the purported pick-up in nominal GDP growth, it generally continued below the growth rate in the various money supply measures, with the result of quarterly growth in the velocity of money (GDP/money supply) continuing to weaken.

An unusually-sharp drop in the monetary base, a record year-to-year decline of 12.7% (-12.7%) in the two weeks ended October 12th, is why that series, and an early estimate of the ShadowStats Ongoing M3 annual growth in October 2016 have been advanced to today's *Commentary*, instead of next week's *Commentary No. 845*, in which they would have been reviewed in the normal course of business. There appear to be some shifts afoot either in monetary policy or in the stability of systemic liquidity, with a sharp decline in the pace of annual M3 money supply growth, suggesting an increased flight to liquidity and cash. Circumstances will be reviewed as they develop.

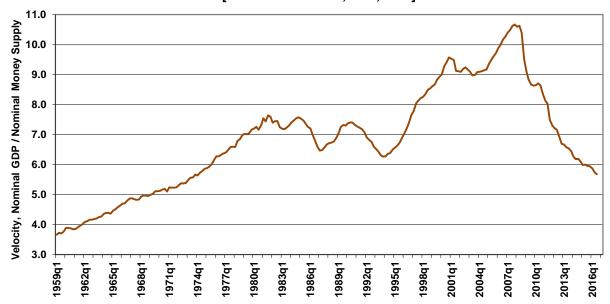
Velocity of Money Continued to Slow. Incorporating the headline detail of nominal third-quarter 2016 GDP, as well as detail from the latest Federal Reserve reporting of benchmark revisions to money-supply-related data, *Graphs 13* and *14* show estimates of the velocity of money, broken out for money supply M1, M2 and M3 (the ShadowStats Ongoing-M3 Measure). Velocity is a measure of how many times the money supply turns over in a year, versus the broad economy (GDP). Velocity is calculated simply as the ratio of the nominal GDP (not adjusted for inflation) to the nominal money supply measure.

The respective headline velocities of money supply M1, M2 and M3 generally declined (M3 was flat when rounded) in third-quarter 2016. Where nominal GDP is in the numerator and the nominal money measure is in the denominator of the velocity ratio, the slowing velocity indicated a relatively slower pace of nominal economic growth versus the money supply growth. Nominal headline annual GDP growth rose in third-quarter 2016 by 2.8%, while year-to-year growth rates in the money measures were higher. Year-to-year growth in nominal money supply, third-quarter 2016 was 7.9% for M1, 7.3% for M2 and 4.1% for M3, although the M3 growth had slowed minimally from the prior quarter.

Velocity had plunged into first-quarter 2015 for M1 and M2. Since the end of 2010, however, the broader measure of M3 velocity had been steady through third-quarter 2014, when it also turned lower. With the exception of an uptick in second-quarter 2015, all velocity measures have been declining since late-2014.

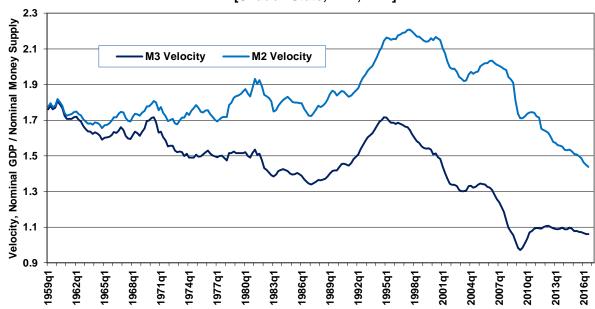
Graph 21: Velocity of Money Supply M1 through 3q2016

Velocity of Money Supply M1 (1q1959 to 3q2016) Benchmarked Nominal GDP/Nominal Money Supply [ShadowStats.com, FRB, BEA]



Graph 22: Velocities of Money Supply M2 and M3 through 3q2016

Velocities of Money Supply M3 and M2 (1q1959 to 3q2016) Benchmarked Nominal GDP/Nominal Money Supply [ShadowStats, FRB, BEA]



As to M1, consider that perhaps 70% or more of the cash-in-circulation component of that measure (with cash accounting for about 43% of M1) could be physically outside the United States, per the Federal Reserve. Where that has been an increasing trend, a true measure of domestic M1 velocity well could be showing a significant uptrend. In like manner, where M1 includes cash, M2 includes M1, and M3 includes M2, M2 and M3 velocities also would be higher (cash is roughly 11% of M2, 8% of M3).

M3 versus M1 and M2 had been showing opposite patterns since 2011, because growth in M3 had been weaker than growth in M1 and M2. The reason behind that difference was that much of the relatively stronger M1 and M2 growth reflected cash moving out of M3 categories—such as large time deposits and institutional money funds—into M2 or M1 accounts. The clarity of what happened there is why ShadowStats still tracks what had been the broadest money measure (M3) available. Again, though, M3 velocity also has started to turn down in the last year or two.

Subscribers often ask for specifics on the velocity of the money supply, with the result that this section has become a standard feature for *Commentaries* covering the "advance" GDP reporting of a given quarter. The nature of velocity is discussed in further detail in the 2008 *Money Supply Special Report*. Again, velocity simply is the number of times the money supply turns over in the economy in a given year, or the ratio in nominal terms (not adjusted for inflation) of GDP to the money supply. It is a residual number, not otherwise open to calculation or independent surveying.

Velocity has theoretical significance. In combination with money-supply growth, it should be a driving force behind inflation. Yet, since velocity is a ratio of two not-particularly-well or realistically-measured numbers, its actual estimate is of limited value. As an inflation predictor, it has to be viewed in the context of accompanying money-supply growth, and vice versa, generally as a coincident indicator. Again, full definitions can be found in the *Money Supply Special Report*.

October 2016 M3 Annual Growth in Apparent Plunge; Increasing Flight to Liquidity. Based on a limited two-to-three weeks of reporting and regular benchmark revisions in underlying Federal Reserve data, the advance-estimate of October 2016 annual growth for the ShadowStats Ongoing M3 Money Supply plunged to 3.5%, down from a downwardly-revised 4.1% [previously 4.3%] in September. Such reflected sharp movement out of M3 categories for large time deposits and institutional money funds, although such had the effect of providing relative boosts to subcomponents in M2 and M1.

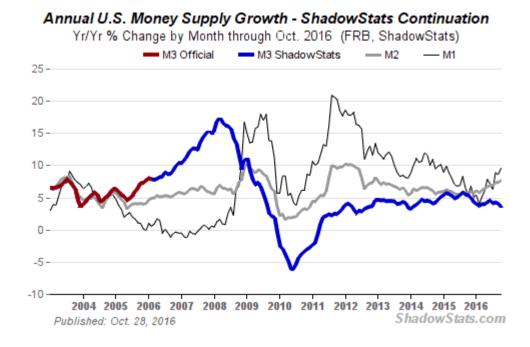
The advance-estimate of M2 annual growth rose to 7.7% in October 2016, from a downwardly revised 7.4% [previous 7.7%] in September 2016. Reflecting a continuing relative flight to cash or near cash, the advance- estimate of M1 annual growth rose to 9.6% in October 2016, from an upwardly-revised 8.6% [previously 7.4%] in September 2016.

Again, the relative weakness in annual M3 growth versus M2 and M1 (M2 includes M1; M3 includes M2) reflects the shift over time in funds from accounts included just in M3, such as large time deposits and institutional money funds, into accounts in M2, as was seen again in the headline October 2016 detail.

The October year-to-year estimates are published here earlier than usual, based on limited data. The details will be updated fully in *Commentary No. 845* of November 4th, when the October estimates standardly would have been published. The latest estimates of level and annual growth for October 2016

M3, M2 and M1, and for earlier periods are available on the <u>Alternate Data</u> tab of www.ShadowStats.com. See the *Money Supply Special Report* for full definitions of those measures.

Graph 15: Comparative Money Supply M1, M2 and M3 Year-to-Year Changes through Advance-October 2016



Monetary Base Plummeted to a Three-Year Low, with a Record Year-to-Year Decline, in the Context of Continued Rate-Hike Waffling and Market Instabilities for Fed Funds? The last two, two-week reporting periods of the monetary base, ended October 12th and October 26th saw extraordinary activity in the first period, unchanged in the second. Those two periods were subsequent to the two-week period ended September 28th, which covered the September 21st FOMC meeting, where interest rates were not raised, despite a heavy chorus of jawboning to the contrary coming into the meeting. The monetary base has dropped by \$300 billion since the period before the September 21st FOMC meeting.

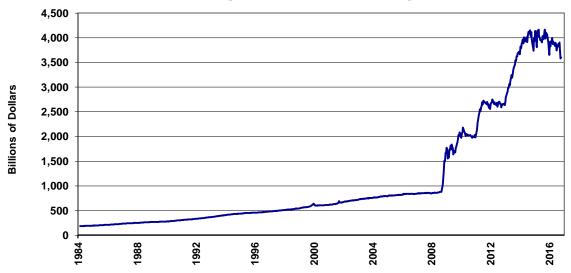
In the two week's ended October 12th, the level of the monetary base plunged to a three-year low, with a record annual decline of 12.7% (-12.7%). Prior to that, the September 28th period's year-to-year decline of 7.5% (-7.5%) in the monetary was the steepest in history, just beating out the 7.4% (-7.4%) decline in the January 6th period, which had included the only rate hike subsequent to the Panic of 2008.

In continuing follow-up to earlier <u>Commentary No. 838, No. 829, No. 824, No. 819, No. 810, No. 805, No. 800, No. 796, No. 790, No. 783, No. 779, No. 779-A</u>, and <u>No. 784</u>, the St. Louis Fed's monetary base had been relatively stable, although annual change and level have shifted increasingly and sharply to the negative side. That has been the case since what still appears to have been a one-time rate-hike in December 2015. Despite the still continuing ranting, jawboning and prattling to the contrary, no further action is likely now until after the election. With actual, underlying economic activity turning down anew, some form of expanded quantitative easing could be seen as discussed in recent *Commentaries*.

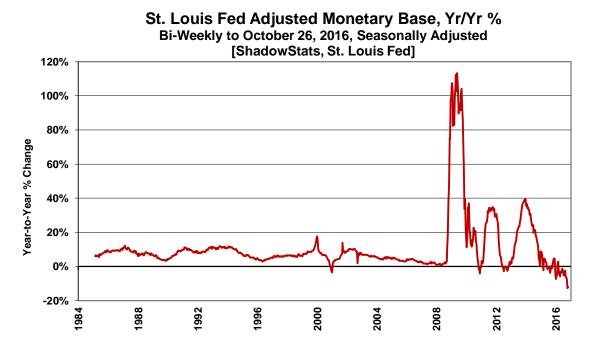
Graphs 16 and *17* show reporting of the St. Louis Fed's Monetary Base through the two-week period ended October 26th, with a level of \$3.600 trillion, versus \$3.584 trillion October 12th, \$3.682 trillion September 28th and \$3.905 trillion as of September 14th.

Graph 16: Monetary Base Level, Bi-Weekly through October 26, 2016

St. Louis Fed Adjusted Monetary Base Bi-Weekly to October 26, 2016, Seasonally Adjusted [ShadowStats, St. Louis Fed]



Graph 17: Monetary Base, Year-to-Year Percent Change, through September 28, 2016



Late in 2014, the Federal Reserve ceased net new purchases of U.S. Treasury securities as part of its quantitative easing QE3, but its outright holdings of Treasury securities have remained stable at about

\$2.5 trillion, rolling over maturing issues. Discussed in the previously-referenced *Commentaries*, where the monetary base during the last year had been plus-or-minus 5% around the St. Louis Fed's estimated 12-month average of \$4.0 trillion, that range had been broken three times, and on the downside. The first was in the immediate post-FOMC period ended January 6th. Such was due largely to related New York Fed activities establishing the newly boosted federal funds rate. Those lower limits had been broken recently, in the July 6th and in the September 28th headline reporting, suggestive, again, of market instabilities and interventions required by the New York Fed. The downside limit in the monetary base now appears to have moved from 5% (-5%) to 10% (-10%), where monetary base sits in its latest headline detail.

REPORTING DETAIL

GROSS DOMESTIC PRODUCT—GDP (Third-Quarter 2016, "Advance" or First Estimate)

Underlying Recession Continues in Play, Despite Heavily-Massaged and Bloated Pre-Election GDP Detail. Broad economic weakness has continued in underlying, fundamental economic series such as industrial production, new orders for durable goods, real retail sales, trade activity and better-quality construction reporting, along with a variety of private indicators ranging from S&P 500® revenues and the Cass Freight IndexTM to the Conference Board's Help Wanted OnLine® advertising survey. Where a number of series have shown clear and continuing recession, the real-world U.S. economy has been in a "new" recession since December 2014. That said, the first estimate of third-quarter 2016 Gross Domestic Product (GDP) and related detail jumped sharply from minimal 1.4% second-quarter 2016 activity, to a headline 2.9%. There is no recession, yet, showing in the headline GDP numbers. Happy news aside, though, third-quarter reporting revisions in the months ahead should move sharply lower. Discussed in the *Opening Comments*, it is difficult to reconcile the GDP's headline recovery from the 2007 recession and subsequent expansion, with the better-quality government and private economic surveys.

Heavily Followed but of Extremely Poor Quality. In this most-politically-sensitive of popularly followed economic series, the GDP does not reflect properly or accurately the changes to the underlying economic fundamentals and measures that drive the broad economy. Separately reported, real-world economic activity has shown that the general economy began to turn down in 2006 and 2007, plunged into 2009, entered a protracted period of stagnation thereafter—never recovering—and then began to turn down anew in late-2014 (see graphs in the Opening Comments section).

The GDP (or the broader GNP detail headlined in earlier decades) simply remains the most worthless of the popular government economic series, in terms of determining what really is happening to U.S.

business activity. The series is the most-heavily-modeled, politically-massaged and gimmicked government indicator of the economy. It has been so since at least the 1960s, and that reporting quality deteriorated anew, sharply in 2016 benchmarking (see the *Opening Comments* of *Commentary No. 823*).

Notes on GDP-Related Nomenclature and Definitions

For purposes of clarity and the use of simplified language in the text of the GDP analysis, here are definitions of several key terms used related to GDP reporting:

Gross Domestic Product (GDP) is the headline number and the most widely followed broad measure of U.S. economic activity. It is published quarterly by the Bureau of Economic Analysis (BEA), with two successive monthly revisions, and with an annual revision in the following July.

Gross Domestic Income (GDI) is the theoretical equivalent to the GDP, but the popular press generally does not follow it. Where GDP reflects the consumption side of the economy and GDI reflects the offsetting income side. When the series estimates do not equal each other, which almost always is the case, since the series are surveyed separately, the difference is added to or subtracted from the GDI as a "statistical discrepancy." Although the BEA touts the GDP as the more accurate measure, the GDI is relatively free of the monthly political targeting the GDP goes through.

Gross National Product (GNP) is the broadest measure of the U.S. economy published by the BEA. Once the headline number, now it rarely is followed by the popular media. GDP is the GNP net of trade in factor income (interest and dividend payments). GNP growth usually is weaker than GDP growth for net-debtor nations. Games played with money flows between the United States and the rest of the world tend to mute that impact on the reporting of U.S. GDP growth.

Real (or **Constant Dollars**) means the data have been adjusted, or deflated, to reflect the effects of inflation.

Nominal (or **Current Dollars**) means growth or level has not been adjusted for inflation. This is the way a business normally records revenues or an individual views day-to-day income and expenses.

GDP Implicit Price Deflator (IPD) is the inflation measure used to convert GDP data from nominal to real. The adjusted numbers are based on "Chained 2009 Dollars," as introduced with the 2013 comprehensive revisions, where 2009 is the base year for inflation. "Chained" refers to the substitution methodology, which gimmicks the reported numbers so much that the aggregate of the deflated GDP sub-series missed adding to the theoretically-equivalent deflated total GDP series by \$105.5 billion in "residual," as of the second estimate of second-quarter 2016.

Quarterly growth, unless otherwise stated, is in terms of seasonally-adjusted, annualized quarter-to-quarter growth, i.e., the growth rate of one quarter over the prior quarter, raised to the fourth power, a compounded annual rate of growth. While some might annualize a quarterly growth rate by multiplying it by four, the BEA uses the compounding method, raising the quarterly growth rate to the fourth power. So a one percent quarterly growth rate annualizes to $1.01 \times 1.01 \times 1.01 \times 1.01 = 1.0406$ or 4.1%, instead of $4 \times 1\% = 4\%$.

Annual growth refers to the year-to-year change of the referenced period versus the same period the year before.

Gross Domestic Product (GDP). Published October 28th, by the Bureau of Economic Analysis (BEA), the "advance" or first estimate of third-quarter 2016 GDP showed a statistically-insignificant, real

(inflation-adjusted), annualized, quarterly headline gain of 2.90% +/- 3.5% (95% confidence interval). Distribution of third-quarter 2016 GDP growth by major category is detailed in the *Opening Comments*. The current headline detail remains in the context of the July 29th annual GDP benchmark revisions discussed in *Commentary No.* 823.

The initial estimate of third-quarter growth came in above consensus expectations, a politically fortuitous circumstance. In addition to a large, positive growth contribution from a purportedly narrowing trade deficit, the headline gain of 2.90% was spiked by a positive change in inventories. Final Sales (GDP net of inventory change) grew at an annualized real quarterly pace of 2.29% in third-quarter 2016, down from 2.57% in second-quarter 2016.

The headline third-quarter 2016 annualized real growth of 2.90%, followed gains of 1.42% in second quarter 2016, 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015.

Graphs 18 and *20* plot headline levels of real quarterly GDP activity, respectively showing short-term (since 2000) and long-term (since the historical onset of the quarterly GDP series in 1947) perspectives.

Shown in *Graphs 19* and *21*, headline year-to-year real GDP growth in third-quarter 2016 rose to 1.50%, from 1.28% in second-quarter 2016, but it was down from 1.57% annual growth in first-quarter 2016, and 1.88% in fourth-quarter 2015. Through second-quarter 2016 reporting, real annual growth had been in continual decline since the near-term peak of 3.31% in first-quarter 2015, the post-recession high annual growth for the series. A sharp downtrend in annual growth is common at the onset of formal recessions.

The current-cycle trough in annual change was in second-quarter 2009 (see *Graphs 19* and 21), reflecting a year-to-year decline of 4.09% (-4.09%). That was the deepest year-to-year contraction for any quarterly GDP in the history of the series, which began with first-quarter 1947 (1948 in terms of available year-to-year detail). *Graph 19* shows current year-to-year quarterly detail, from 2000-to-date, where *Graph 21* shows the same series in terms of its full quarterly, year-to-year history back to 1948.

Implicit Price Deflator (IPD). The first estimate of third-quarter 2016 GDP inflation, or the implicit price deflator (IPD), showed annualized quarterly change of 1.49%, versus an annualized 2.29% in second-quarter 2016, 0.46% in first-quarter 2016, 0.91% in fourth-quarter 2015, 1.22% in third-quarter 2015, 2.25% in second-quarter 2015 and 0.04% in first-quarter 2015.

As general guidance, the weaker the inflation rate used in deflating an economic series, the stronger will be the resulting inflation-adjusted growth, and vice versa. The downside movement in the third-quarter versus second-quarter 2016 IPD of 0.80% was worth a relative, parallel boost in real growth versus nominal growth for third-quarter 2016 relative to the second-quarter 2016.

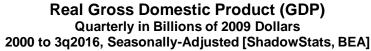
Year-to-year, headline third-quarter 2016 IPD inflation was 1.29%, versus 1.22% in second-quarter 2016, 1.21% in first-quarter 2016, 1.10% in fourth-quarter 2015, 1.00% in third-quarter 2015, 1.11% in second-quarter 2015 and 1.10% in first-quarter 2015.

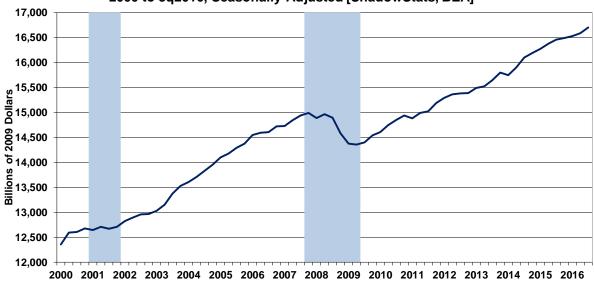
For purposes of comparison, the seasonally-adjusted Consumer Price Index CPI-U rose by an annualized 1.63% in third-quarter 2016, versus a gain of 2.54% in second-quarter 2016, a decline of 0.31% (-0.31%) in first-quarter 2016, a 0.77% gain in fourth-quarter 2015, a 1.38% gain in the third quarter, a 2.44% gain in the second quarter and a quarterly contraction of 2.86% (-2.86%) in the first quarter of 2015.

Unadjusted, year-to-year quarterly CPI-U inflation showed a year-to-year third-quarter 2016 gain of 1.12%, versus a second-quarter 2016 gain of 1.05%, a first-quarter 2016 gain of 1.08%, a fourth-quarter 2015 gain of 0.47%, a third-quarter 2015 gain of 0.11%, an annual contraction of 0.04% (-0.04%) in second-quarter 2015 and a year-to-year decline of 0.06% (-0.06%) in first-quarter 2015 (see *Commentary No. 841*).

[Graphs 18 to 21 begin on the next page]

Graph 18: Quarterly GDP in Billions of 2009 Dollars (2000 to 2016), First Estimate of Third-Quarter 2016





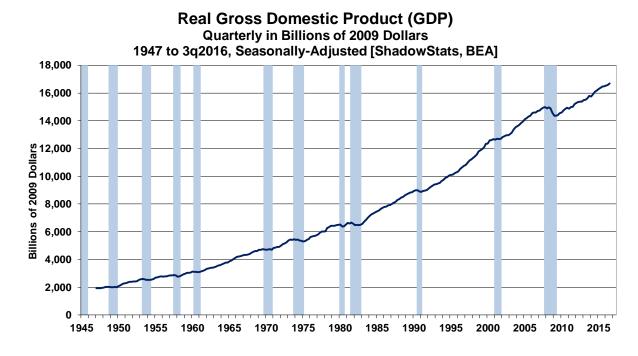
Graph 19: Quarterly GDP Real Year-to-Year Change (2000 to 2016), First Estimate of Third-Quarter 2016

Quarterly Real Gross Domestic Product

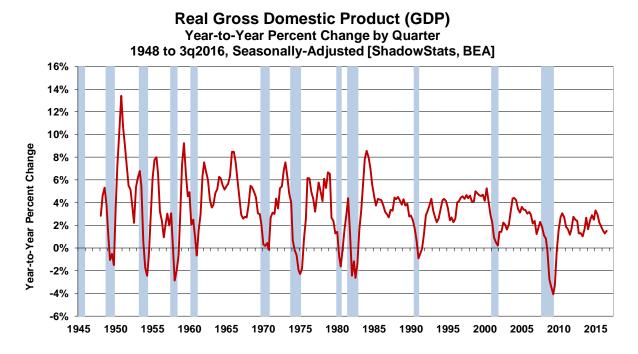
Year-to-Year Change, 1q2000 to 3q2016 [ShadowStats, BEA]



Graph 20: Quarterly GDP in Billions of 2009 Dollars (1947-2016), First Estimate of Third-Quarter 2016



Graph 21: Year-to-Year GDP Real Change (1948-2016), First Estimate of Third-Quarter 2016



Gross National Product (GNP) and Gross Domestic Income (GDI). Standardly, the first estimates of third-quarter GNP and GDI are not published along with the "advance" or first headline estimate of third-quarter GDP. That circumstance is due to quality issues with the available "advance" data, a problem also

common to the GDP reporting. Initial third-quarter 2016 estimates of GNP and GDI will follow on November 30th, along with the second estimate of, first revision to the third-quarter GDP. Previously reported details on the GNP and GDI are found in *Commentary No. 836*.

GNP remains the broadest measure of U.S. economic activity, where GDP is GNP net of trade flows in factor income (interest and dividend payments). As a reporting gimmick aimed at boosting the headline reporting of economic growth for net-debtor nations such as the United States, international reporting standards were shifted some decades back to reporting headline GDP instead of what had become a relatively weaker GNP. Headline, annualized real second-quarter 2016 GNP growth stood at 2.16%, versus an "unchanged" 0.00% [a fractional annualized quarterly contraction of 0.003% (-0.003%)] in first-quarter 2016.

GDI is the theoretical income-side equivalent to the consumption-side GDP estimate. The GDP and GDI are made to equal each other, every quarter, with the addition of a "statistical discrepancy" to the GDI-side of the equation. Second-quarter 2016 GDI contracted at an annualized 0.18% (-0.18%), against a gain of 0.81% in first-quarter GDI.

ShadowStats-Alternate GDP. The ShadowStats-Alternate GDP estimate for third-quarter 2016 GDP was a year-to-year contraction of 1.9% (-1.9%), versus the first estimate of the third-quarter annual real headline GDP gain of 1.5%. That was against a ShadowStats 2.0% (-2.0%) annual decline estimate for second-quarter 2016, versus the official headline gain of 1.3% in second-quarter 2016 GDP.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the statistically-insignificant 2.9% annualized, headline quarter-to-quarter gain in third-quarter 2016 was much weaker, net of all the happy assumptions, regular reporting gimmicks and some short-term political gaming coming into the headline detail (see the *Opening Comments*). Actual quarterly contractions appear to have been a realistic possibility for inflation-adjusted GDP in most quarters since the official, second-quarter 2009 end to the 2007 recession.

Adjusted for understated inflation and other methodological changes—such as the inclusion of intellectual property, software and recent accounting for the largely not-measurable and questionable impact of the Affordable Care Act (ACA)—the business collapse that began in 2006/2007 is ongoing; there has been no meaningful economic rebound. The "corrected" real GDP graphs (see *Graphs 2* and 4 in the *Opening Comments*), updated from 2014 Hyperinflation Report—Great Economic Tumble – Second Installment, are based on the removal of the impact of hedonic quality adjustments that have reduced the reporting of official annual GDP inflation by roughly two-percentage points. It is not the same measure as the ShadowStats-Alternate GDP, here, which reflects reversing additional methodological distortions ("Pollyanna Creep") of recent decades.

WEEK AND MONTH AHEAD

Near-Term Headline Economic Deterioration Should Intensify, Increasingly Frustrating Fed Provocateurs, Pummeling the U.S. Dollar and Boosting Gold, Silver and Oil Prices. Despite an upside-gimmicked headline pre-election GDP report, market expectations for business activity should continue to deteriorate, amidst otherwise intensifying, negative headline economic reporting. Irrespective of continuing talk by some FOMC members of a near-term rate hike, an ongoing and deepening domestic economic downturn promises intensified stress on systemic liquidity. That circumstance ultimately dooms the U.S. central bank to an intensified quantitative easing, post-election. The circumstance remains in play even if the FOMC hikes rates at its December meeting.

<u>Commentary No. 843</u> offered a <u>Special Comment</u> on background economic circumstances and the election, following up on *No. 841*. Headline related details from September new- and existing-home sales and from new orders for durable goods reporting also were reviewed. That followed <u>Commentary No. 842</u>, which assessed the negative shifts in monthly, quarterly and annual growth patterns of the housing-starts series.

Noted in <u>Commentary No. 841</u>, consumer inflation has started to rebound, along with higher gasoline prices, yet the economy continues to falter as indicated in September freight activity, and as seen in the headline detail of September housing starts. The <u>Special Comments</u> in <u>No. 841</u> also looked a little deeper into the likely impact of unusually protracted and negative economic conditions on the presidential election and on the post-election environment for the U.S. dollar and precious metals.

September industrial production detail disappointed market expectations and deteriorated sharply in the context of downside, prior-period revisions. Such was reviewed in <u>Commentary No. 840</u>. <u>Commentary No. 839</u> provided the opening salvo of comments on the November 8th election and potential aftermath for the economy and the markets. Consumer liquidity conditions also were updated, along with a review of September 2016 nominal Retail Sales and the PPI.

September employment and unemployment circumstances were covered in <u>Commentary No. 838</u>. Fedpolicy retrenchment should remain very much alive, shifting towards that renewed quantitative easing, in the post-election environment, as discussed in the <u>Opening Comments</u> of <u>No. 839</u>, and those of <u>Commentary No. 837</u> and <u>Commentary No. 835</u>, which respectively also reviewed the August trade deficit and construction spending, and August durable goods orders, home-sales activity and the most-recent FOMC inaction.

Underlying consumer liquidity and household income conditions were updated fully in *Commentary No.* 833, along with continuing discussion of FOMC options and the latest consumer inflation detail.

The general trend in weakening expectations for business activity and movement towards looming recession recognition, reflect an ongoing broad spectrum of market-disappointing headline data, such as seen in the industrial production detail (*No. 840*) and in <u>Commentary No. 832</u>. Earlier FOMC considerations also were covered in <u>Commentary No. 831</u>, while the initial payroll benchmark revision for 2016 was discussed in <u>Commentary No. 830</u>.

Broad economic and systemic details detail otherwise have been reviewed recently in <u>Commentary No. 827</u>, <u>Commentary No. 826</u>, <u>Commentary No. 825</u>, <u>Commentary No. 824</u>, <u>Commentary No. 823</u>, <u>Commentary No. 822</u>, <u>Commentary No. 821</u>, <u>Commentary No. 820</u>, <u>Commentary No. 818</u>, <u>Commentary No. 817</u>, <u>General Commentary No. 811</u>, <u>Supplemental Commentary No. 807-A</u>, <u>Commentary No. 796</u>, <u>Commentary No. 796-A</u>, <u>Commentary No. 796</u> and <u>No. 777 Year-End Special Commentary</u>.

Negative market reactions had surfaced in trading of the U.S. dollar and in related financial markets, with some upside pressure on gold, silver and oil prices, subsequent to recent, weaker-than-expected headline economic data or suggestions of a less-aggressive tightening stance by the Fed. Then, Fed rate-hike jawboning put a temporary flutter into those market movements, placing some Fed-desired support under the U.S. currency. The downside spike to gold prices on October 4th was considered in *Commentary No.* 837 and was discussed further in *No.* 841, in the context of the evolving domestic political conditions.

Again, though, the fundamental liquidity issues facing the Fed remain dominated by perpetual U.S. economic non-recovery and a renewed, intensifying downturn. Even if the Fed should raise rates in the near future, ongoing negative economic pressures still will mount, forcing the U.S. central bank back into a position of having to support domestic financial- and banking-system liquidity needs. Effectively, the Fed will have no way out other than to return to some form of expanded quantitative easing, post-election.

Temporary jawboning aside, market reactions increasingly should reflect a renewed sense of Federal Reserve impotence in the wake of the latest no rate hike, with bleak longer-term implications for the U.S. dollar. While anything is possible, Fed tightening on November 2nd—the last formal opportunity prior to the November 8th election—appears to be out of consideration, with market expectations for a rate hike now centering on December 2016. Nonetheless, renewed quantitative easing increasingly should become the target of post-election speculation, as the deepening recession continues to unfold.

Rapidly weakening, regular monthly economic reporting should continue and result in much worse-than-expected—increasingly negative—reporting for at least the next several quarters of GDP (and GDI and GNP). Although such is not in place with the headline, "advance" reporting of third-quarter 2016, with the exception of second-quarter 2016 GDI.

CPI-U consumer inflation—intermittently driven lower in 2015 and early-2016 by collapsing prices for gasoline and other oil-price related commodities—has seen its near-term, year-to-year low. Headline monthly March to June 2016 detail moved into positive headline territory, in tandem with rising gasoline prices. CPI inflation was "unchanged"—minimally negative—with a switch to positive seasonal adjustments for gasoline prices only partially offsetting the unadjusted monthly drop in gasoline prices in July. August CPI was boosted by "core" inflation, while the September CPI was spiked by gasoline prices and positive seasonal adjustments. The October CPI looks to be similarly destined. Going forward, a weakening U.S. dollar increasingly should boost inflation, with a related upturn in oil prices,

gasoline and other commodities. The <u>Public Commentary on Inflation Measurement</u> reviews fundamental reporting issues with the headline CPI.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. Significant reporting-quality problems remain with most major economic series. Beyond the pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended to understate actual inflation and to overstate actual economic activity, ongoing headline reporting issues are tied largely to systemic distortions of monthly seasonal adjustments.

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

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

Combined with ongoing allegations in the last year or two of Census Bureau falsification of data in its monthly Current Population Survey (the source for the BLS Household Survey), these issues have thrown into question the statistical-significance of the headline month-to-month reporting for many popular economic series (see *Commentary No. 669*). John Crudele of the *New York Post* continues his investigations in reporting irregularities: *Crudele Investigation*, and as just updated on October 24th: *Crudele*. In the 1990s, the Census Bureau and BLS played political-reporting games with the nature of statistical sampling size in "inner cities" in the Census Bureau surveying tied to the monthly Household Surveys and the annual piggy-backed Poverty Survey. Such had major distorting impact on the headline data, and it may be in the works, again.

PENDING RELEASES:

Construction Spending (September 2016). The Commerce Department will release its estimate of September 2016 construction spending on Tuesday, November 1st. Detail will be covered in ShadowStats *Commentary No. 845* of November 4th. As usual, headline monthly changes should not be statistically-significant. Irrespective of almost perpetually-positive market expectations for this series, the detail generally should continue in down-trending stagnation, particularly in real terms, net of inflation.

U.S. Trade Balance (September 2016). The Commerce Department and Bureau of Economic Analysis (BEA) will release their full version of the monthly U.S. trade balance for September 2016 on Friday,

November 4th, which will be covered in *Commentary No. 845* of that date. The full version of the September 2016 deficit will revise the generally worthless October 28th "advance" estimate in merchandise trade, which showed a continued narrowing of the deficit month-to-month, although not with the previous continuing high-level spike in agricultural exports. The headline September and related third-quarter 2016 trade detail will be assessed closely in terms of the initial estimate of a sharp narrowing in the net-export account deficit, which bloated the initial reporting of the third-quarter 2016 GDP. Irrespective of the games being played with the GDP and other pre-election reporting, the trade deficit generally should continue to widen.

Employment and Unemployment (October 2016). The Bureau of Labor Statistics (BLS) will publish its October 2016 labor data on Friday, November 4th. Headline detail will be covered in *Commentary No. 845* of that date. Both the more-inclusive unemployment-rate numbers, as well as the headline payroll-employment details, are open for continuing negative headline surprises, given the ongoing, general weakening tone in a number of business indicators. That said, the pending report is the last chance for what appears to be increasingly-likely, pre-election political gaming of these data.

Given the probable political gimmicking of today's third-quarter GDP reporting, I would not be surprised to see a happy, better-than-consensus reading in the final headline payroll/unemployment numbers before the election. Noted in the *Opening Comments*, though, such gimmicks generally have limited impact on voters, if the voters are not otherwise personally sharing in the good news.

Otherwise, in the context of recent the extreme volatility and inconsistencies in the last several months of payroll and unemployment detail, almost anything is possible with the BLS. Underlying reality remains a much weaker-than-expected economy, which increases the odds of a hefty downside surprise to the headline payroll gain in October. This could be particularly large, given what increasingly appears to be a slowdown in near-term hiring triggered by economic uncertainties surrounding this particularly volatile presidential campaign (see the *Special Comments* in *Commentary No. 843*).

Where the headline unemployment detail remains completely unstable and not comparable month-to-month, due to the inconsistent use of published seasonally-adjusted numbers, that detail is particularly vulnerable to near-term political massaging. The near-term instabilities have been demonstrated in recent reporting, as discussed fully in *Commentary No. 819*. That said, again, anything is possible in the next month, but the Household-Survey data increasingly should trend weaker than expected.

Underlying economic fundamentals continue to weaken, suggesting continued slowing or negative month-to-month growth in headline payrolls, as well as stagnation or deterioration in the broader unemployment rates such as U.6 and particularly the ShadowStats Alternate Unemployment Measure.

PLANNED UPDATES: Comprehensive *Special Report* and **ShadowStats Website.** ShadowStats is updating fully, into one, massive background piece—a *Special Report (Commentary)*—the latest broad outlook for the U.S. and global economies, financial markets and systems, and inflation (U.S. hyperinflation). All of that will be in the context of incorporating and fully revising, wherever necessary, the materials in the *2014 Hyperinflation Report—The End Game Begins*, *2014 Hyperinflation Report—*

<u>Great Economic Tumble</u>, <u>No. 777 Year-End Special Commentary</u> and other intervening missives, including the most-recent *Hyperinflation Outlook Summary* as found in <u>Commentary No. 783</u>.

The various background articles available at the www.ShadowStats.com site also will be updated in the process, including those first published in 2004 as introductory articles to the site. As usual, all original material will remain available to subscribers (all original public material also will remain available to anyone visiting the site).

As to timing, the *Special Report* will follow the November U.S. presidential election, as discussed in the *Special Note to Subscribers* at the beginning of <u>Commentary No. 839</u>. It will include updated, consistent GAAP-based financial detail on the U.S. government's financial condition through September 30, 2015 and initial prospects for the fiscal year ended September 30, 2016.

Updates to the various public materials on the Web site will be staggered through year-end. The introduction of the <u>2004 Primer Series</u> will be first (the link is to the initial background article that addressed among other issues political manipulation of data).

We also will introduce, in conjunction with the *Special Report*, a section with links to books and articles that we and/or our readers have found of particular interest and substance. Many thanks to those who already have submitted recommendations of specific books and publications. Anyone with materials they would like to have considered for inclusion should send details in an e-mail to johnwilliams@shadowstats.com or call John Williams directly at (707) 763-5786.