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

COMMENTARY NUMBER 883
First-Quarter 2017 GDP, Consumer Liquidity

April 29, 2017

Weaker-than-Expected First-Quarter GDP Real Growth of 0.69%
Was Suggestive of Stalling Economic Activity

Headline Growth Likely Faces Downside Revisions in the Next Two Months

Final Sales (GDP Net of Inventory Change) Rose to 1.62% from 1.07%

Better-Quality Series Show Continuing, Protracted Economic Collapse, with
No Recovery of Pre-Recession Highs and No Economic Expansion

First-Quarter 2017 Velocity of Money
Rose Minimally for M3, Declined for M1 and M2

Renewed Stresses on Consumer Liquidity

PLEASE NOTE: The next regular Commentary, *Thursday, May 4th, will cover the March 2017 Trade Deficit and Construction Spending, followed by another missive on Friday, May 5th, covering April Employment and Unemployment. Please telephone me at (707) 763-5786, if you have questions or if you would like to talk.*

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Softening GDP Growth Remained Far Shy of Economic Reality. Slackening, headline first-quarter 2017 GDP growth was dominated by sharp declines in inventory building, auto sales, weather-driven utility usage and government spending, offset by surging investment in residential and nonresidential structures and equipment, healthcare spending and a small trade surplus. Where available first-quarter construction-spending and the trade-deficit details are incomplete but otherwise consistent with a quarterly contraction, instead of expansion (see *Commentary No. 878*), negative revisions to the headline "advance" first-quarter GDP estimate are likely in the next two months of updated reporting.

Where some available details are running opposite their headline GDP components, contracting construction spending and a deteriorating quarterly trade picture could generate enough in downside revisions to push the weaker-than-expected headline 0.7%, real quarterly GDP growth to "unchanged" or into an outright small contraction. As reviewed and graphed in the regular *Underlying Economic Reality* section of the *Executive Summary* (see also the *Opening Comments* of *Commentary No. 876* and the *No. 859 Special Commentary*), the full economic Recovery and the post-third-quarter 2011 Economic Expansion indicated by the headline real GDP numbers, remain illusions.

Unhappy Implications for the U.S. Dollar and the Domestic Stock Market. Nonetheless, deteriorating, underlying economic fundamentals still will tend to weaken growth patterns in the headline GDP, moving the economic consensus towards a weakening outlook for business conditions. That appears to be in play, at the moment, with major implications for Federal Reserve policy, specifically frustrating FOMC efforts to raise interest rates and to back away from quantitative easing.

Instead, intensifying, headline economic weakness and faltering business conditions most likely will push the Fed back towards quantitative easing, in response to resulting liquidity stresses on the banking system. As will be reviewed in *Commentary No. 886* of May 12th, the implications for U.S. dollar strength are heavily negative, with resulting sharp upside pressures likely for domestic U.S. inflation and for prices of the precious metals gold and silver. Flight from the dollar increasingly should hit domestic equity prices.

Where stock prices have pushed to new highs, both U.S. stocks and the U.S. dollar already are well beyond foreseeably-sustainable levels. Near-term good news increasingly has turned mixed-to-negative, with near-term economic difficulties increasingly in play through at least the end of 2017. Tied to the shifting circumstances remain a befuddled Fed and global currency-market sensitivities to the long-range sovereign solvency issues facing the United States, discussed in *No. 859 Special Commentary*. As near-term, headline domestic economic weakness/contraction increasingly dominates the data, risk remains particularly high of a massive shift against the U.S. dollar. That likely would take the domestic equity markets with it, as it did in 1987.

Today's *Commentary* (April 29th). These ***Opening Comments*** and ***Executive Summary*** respectively review the general economic outlook, and provide summary detail on the first-estimate of first-quarter GDP, as well as an update to Consumer Liquidity.

The ***Reporting Detail*** (beginning page 25) provides more-extensive analysis and graphics tied to the GDP estimate.

The *Hyperinflation Watch* (beginning page 23) updates the velocity of money for Money Supply M1, M2 and M3 (the ShadowStats Ongoing Measure), reflecting headline first-quarter GDP and related money supply details.

The ***Week, Month and Year Ahead*** (beginning page 32) previews next week's reporting of the March trade deficit and construction spending and the employment and unemployment detail for April 2017.

Executive Summary: Gross Domestic Product (GDP)—First-Quarter 2017, "Advance" or First-Estimate—Slowest Growth since First-Quarter 2014 Contraction. Following a fourth-quarter gain of 2.08%, the "advance" estimate of real first-quarter 2017 GDP growth was 0.69%, on an annualized quarterly basis. Coming in below market expectations of 1.0%, the gain was statistically-insignificant, and it likely will suffer downside revisions in the next two months. It also was the weakest quarterly GDP showing since the contraction of 1.18% (-1.18%) in first-quarter 2014.

Headline year-to-year real growth in first quarter 2017 was minimally weaker at 1.92%, versus 1.96% in fourth-quarter 2016.

Plots of the historical GDP levels as well as annual GDP changes are found in *Graphs 23* to *28* in the *Reporting Detail*, along with related *Graphs 1* to *4* and a set of comparative *Graphs 5* to *9*, later in this *Executive Summary*.

First-Quarter 2017 GDP, First Estimate - Growth Distribution. The first estimate of first-quarter 2017 GDP at 0.69% reflected combined growth patterns from four sub-categories. The annualized growth contribution from each sub-category of consumer spending, business/residential investment, trade deficit and government spending is additive, summing in combination to the total headline change in GDP, where 0.23% + 0.69% + 0.07% - 0.30% = 0.69%. *Commentary No. 876* of March 30th detailed the growth-distribution for the previous reporting of fourth-quarter 2016 GDP.

Regrouped by general product line, the BEA estimated that the headline first-quarter gain of 0.69% [previously 2.08% in fourth-quarter 2016] GDP included a growth-rate contribution of 0.03% [previously 0.97% in fourth-quarter] from services, a negative contribution of 0.13% (-0.13%) [previously a 0.67% fourth-quarter contribution] from goods and a 0.80% contribution [previously a 0.44% fourth-quarter contribution] from structures, with a rounding differential.

Contributing Growth Factors. Headline first-quarter 2017 GDP growth was dominated by a sharp decline in inventory building, declining auto sales, weather-induced declining utility usage and declining government spending, offset by surging investment in structures and equipment, healthcare and a small trade surplus.

- ***Consumer Spending Contributed 0.23% to First-Quarter 2017 Growth, Fourth-Quarter 2016 Growth Contribution Was 2.40%.*** The consumer spending category was dominated by declining motor vehicle sales (with some offset from recreational vehicles), declining energy consumption and surging healthcare.

- ***Business/Residential Investment Contributed 0.69% to First-Quarter 2017 Growth, Fourth-Quarter 2016 Growth Contribution Was 1.40%.*** Contrary to public and private indicators (see *Commentary No. 878*), real estate investment in both residential and nonresidential structures surged in the quarter, along with investment in equipment. Those areas more than offset a negative growth contribution of 0.93% (-0.93%) from declining inventory growth. Accordingly, headline final sales—GDP net of inventory change—rose to an annualized quarterly growth rate of 1.62%, versus a 1.07% fourth-quarter 2016 increase.

- ***Net Exports Contributed 0.07% to First-Quarter 2017 Growth, Subtracted 1.82% (-1.82%) from Fourth-Quarter 2016 GDP Growth.*** Also running counter to more-negative indications, net-export activity turned positive, quarter-to-quarter, reflecting what should prove to be a faux trade surplus in the quarter (see *Commentary No. 878*).

- ***Government Spending Subtracted 0.30% (-0.30%) from First-Quarter 2017 Growth, Fourth-Quarter 2016 Growth Contribution Was 0.03%.*** Federal government spending subtracted 0.13% (-0.13%) from the headline first-quarter GDP growth, largely in reduced defense spending. The negative contribution of 0.17% (-0.17%) in state and local government spending was in the nebulous and irregularly-volatile "investment" area.

Implicit Price Deflator (IPD). The first estimate of first-quarter 2017 GDP inflation, or the implicit price deflator (IPD), showed an annualized quarterly change of 2.25%, versus an annualized 2.10% in fourth-quarter 2016. Year-to-year, the headline first-quarter 2017 IPD inflation was 2.01%, versus 1.56% in fourth-quarter 2016. Generally, the stronger the pace of relative inflation used in deflating nominal economic data (not adjusted for inflation), the weaker will be the resulting inflation-adjusted "real" growth, and vice versa. Extended detail and CPI-U comparisons follow in the *Reporting Detail*.

Gross National Product (GNP) and Gross Domestic Income (GDI). Standardly, the first estimates of first-quarter GNP and GDI are not published until the release of the second estimate of first-quarter GDP (May 26th). That circumstance is due to quality issues with the available data for the "advance" and second estimates of the year-end data, a problem also common to the headline GDP reporting (see the *Reporting Detail*).

Underlying Economic Reality. *[Much of the following section is repeated from earlier* Commentaries, *but the detail reflects the latest developments and economic reporting (also see the* ECONOMY *section of* No. 859 Special Commentary *of January 8th, incorporated here by reference.)]*

Despite the booming 3.51% real annualized GDP growth in third-quarter 2016, the revised fourth-quarter gain of 2.08% and the headline gain of 0.69% in first-quarter 2017 detail, realistic, underlying U.S. economic activity has continued in a deepening-to-flattening and as-yet-unrecognized "new" recession. Headline monthly reporting activity in better-quality subsidiary economic series continues to confirm that general direction (the ShadowStats contention remains that the "new" downturn is in reality just a continuation of the economic crash into 2009). Such is despite the Trump Administration attempting to

generate new economic stimulus. Assuming legislative cooperation from Congress, and given basic economic lead times, the first major, positive impact on the economy from that would be in early-to-mid-2018, at the earliest. Interim economic activity and even headline GDP reporting still should turn lower in the next several quarters.

Discussed in *Commentary No. 823*, the 2016 GDP 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" or double-dip recession, which likely still will be clocked from December 2014. While that should happen eventually, the focus now should be on the rapidly weakening economy in the months ahead (first-quarter 2017 GDP downside revisions, initial second-quarter 2017 GDP reporting and accompanying 2017 annual benchmark revisions, since first-quarter 2014), which still should trigger a "formal" recession recognition.

Beyond the smoothing gimmicks of the 2016 benchmarking, the prior year's 2015 GDP annual benchmark revisions coverage—in *Commentary No. 739*—noted that annual benchmarkings increasingly were reshaping the GDP-reporting history into a post-2007 collapse pattern of successive multiple dips. By the next "comprehensive" GDP benchmark revision in July 2018 (a restatement of activity back to 1929), 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 in *No. 859 Special Commentary*. Again, the present, unofficial "new" recession or multiple-dip downturn remains likely to be timed from December 2014, even 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 *Commentary No. 823*).

Headline Aggregate GDP Remains Heavily Overstated versus Underlying Reality. Formal headline GDP activity continues to run well above economic reality as signaled by a number of better-quality business indicators, as reviewed here and in *No. 859 Special Commentary*. A sampling of those indicators—plotted in this section—includes such varied series as domestic freight activity (*Graph 5*), industrial production of consumer goods (*Graph 6*), U.S. petroleum consumption (*Graph 7*), total real U.S. construction spending (*Graph 8*) and the employment-population ratio (*Graph 9*). Either the GDP reporting is wrong, or most other major economic series are wrong (see *Commentary No. 876* and *Commentary No. 877*).

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 headline post-2009 "recovery."

Accordingly, the broad ShadowStats economic outlook has not changed, and, again, the gist of most of following text remains along the lines as expounded upon in *No. 859*. The details and numbers here, however, are updated for the latest headline information. In combination, these various collapsing economic indicators eventually should engender a formal recession call, irrespective of the timing of actual, if any, headline quarterly contractions in real GDP, or what likely was related political gaming of the GDP data up through year-end 2016.

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 late-2014, early-2015. 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 (see *Graphs 2* and *4*).

Discussed in the next section on *Updated Consumer Liquidity Conditions*, with liquidity-strapped consumers unable to fuel sustainable growth in consumption, a full business recovery could not have taken place since 2009. A "Recovery" and renewed economic "Expansion" (see *Commentary No. 875* for definitions) 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. Reviewed and graphed in the *Opening Comments* of *Commentary No. 876*, the full economic Recovery and post-third-quarter 2011 Expansion indicated by headline real GDP numbers, remains an illusion. In scope, it is not supported by other major economic series. It is a statistical mirage 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 also tell that story, updated for the first estimate of first-quarter 2017 GDP, as well as reflecting a sampling of 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—fully recovered and in economic expansion—since third-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 or IPD), the "advance" estimate of first-quarter 2017 GDP currently stands 12.3% above its pre-recession peak-GDP estimate of fourth-quarter 2007. Again, no other major economic indicators are showing recovery or expansion close to the GDP's. None of the series covered in this section and in *No. 859* has shown a significant recovery.

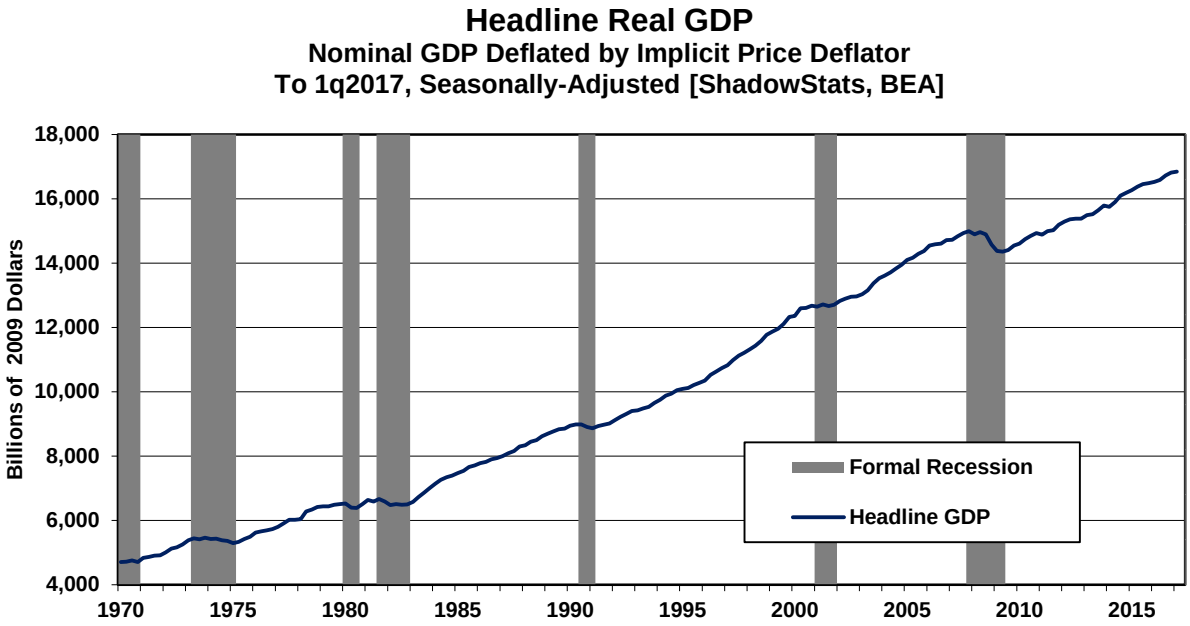
In contrast, the "corrected" GDP version, in the second graph of each set (*Graphs 2* and *4*), shows first-quarter 2017 GDP activity to be down by 7.4% (-7.4%) from its pre-recession peak of first-quarter 2006. Noted in *General Commentary No. 867* and *Commentary No. 869*, headline Industrial Production and related Manufacturing series already were rivaling the Great Depression in terms of the number of quarters of non-Expansion.

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 *Public Commentary on Inflation Measurement*), 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*.

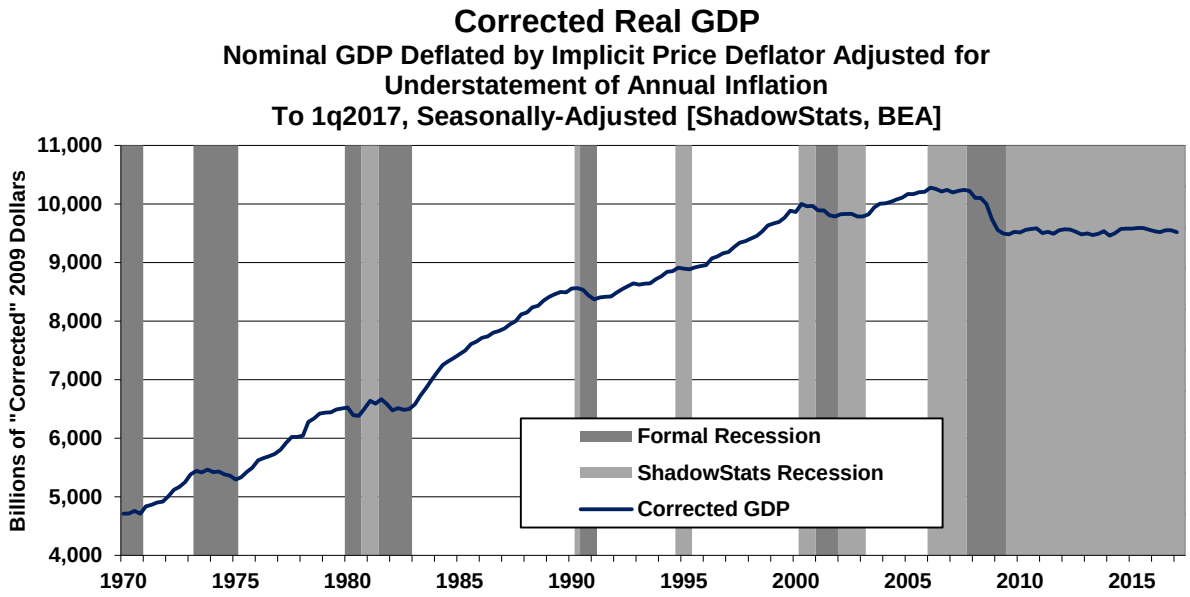
The pattern of economic collapse into 2009, followed by some minimal recovery, low-level stagnation and renewed contraction is seen with many series. As shown in *Graphs 5* to *9* (again see *No. 859*), better-quality independent numbers—including some U.S. government—put the lie to the gimmicked headline reporting that has been massaged for decades by government agencies and consulting academics.

[Graphs 1 to 9 begin on the following page.]

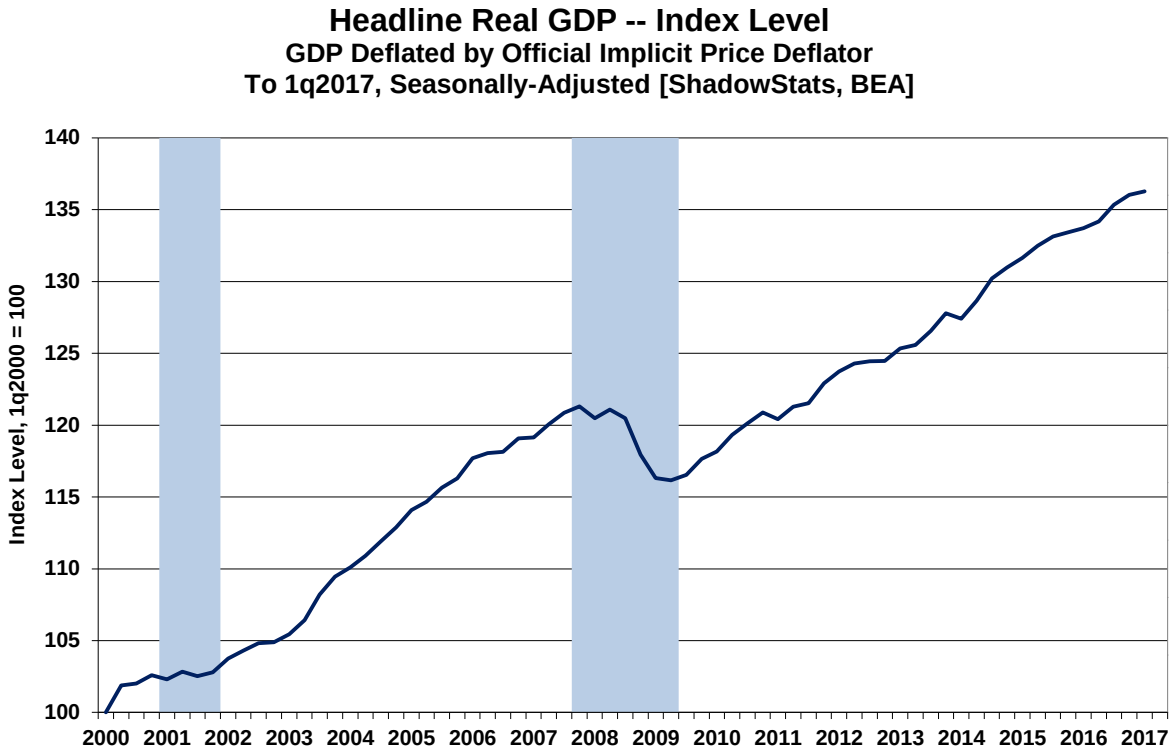
Graph 1: Real GDP Index (1970-2017), First Estimate of First-Quarter 2017



Graph 2: "Corrected" Real GDP (1970-2017), First Estimate of First-Quarter 2017



Graph 3: Real GDP Index – Headline Real GDP through First Estimate of First-Quarter 2017



Comparative Indicators. *Graph 4* of the "corrected" GDP series follows, along with a sampling of comparative economic indicators (see the expanded coverage in *No. 859*). The comparative indicators here generally confirm the story from the "corrected" GDP graph that the economy never recovered from its collapse into 2009 and is either in renewed downturn or in continuing low-level stagnation, albeit some of the latter is slightly up-trending.

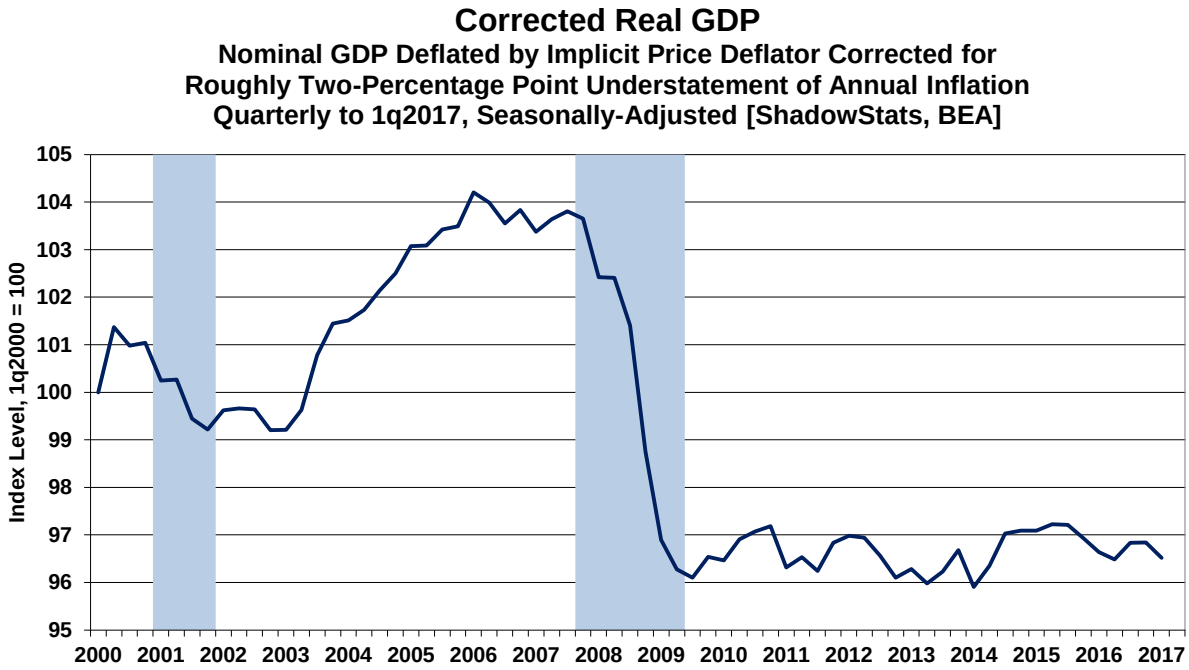
Graph 5 shows the Cass Freight Index™ measure of North American freight volume through February 2017 (see *Commentary No. 875*), used with the permission of Cass Information Systems, Inc. Few measures better reflect the actual flow of goods in commerce than freight activity. As a broad measure of basic 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*. It also tends to follow activity in New Orders for Durable Goods, again, as noted in prior *Commentary No. 882* (see *Graphs 9* and *10* there).

Graph 6 plots the headline level of activity for industrial production of consumer goods, which represents 17% of GDP (see *Commentary No. 881*).

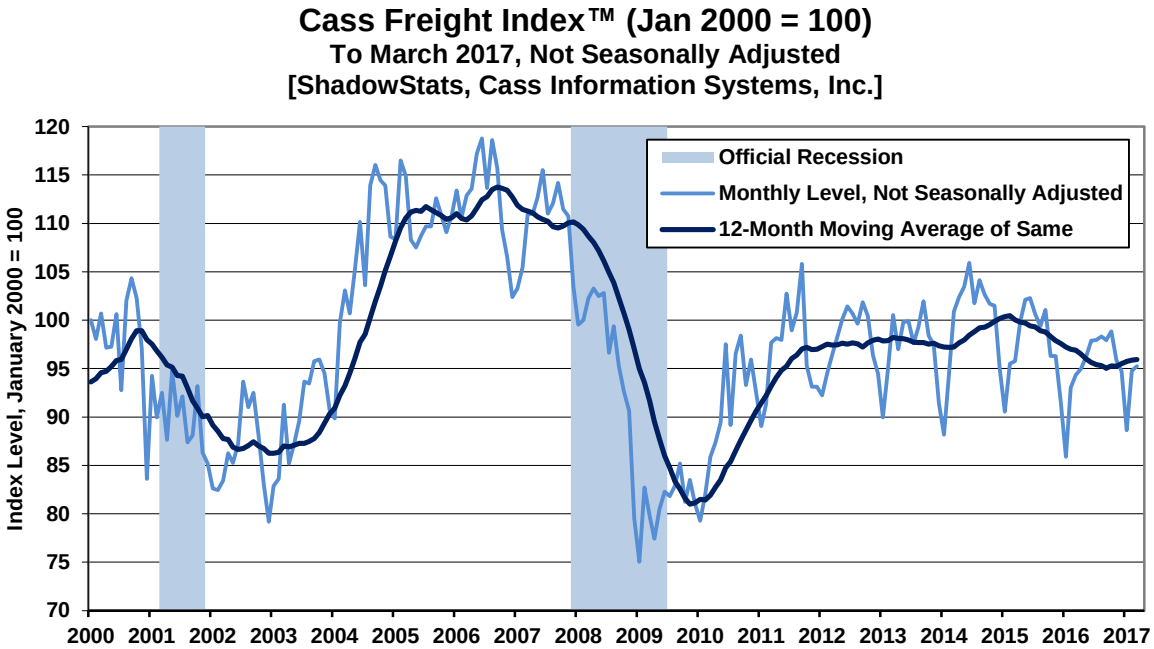
Graph 7 of U.S. Petroleum Consumption and *Graph 8* of inflation-adjusted total U.S. Construction Spending (see *Commentary No. 878*, including everything from roads and office buildings to residential construction) are among the variety of indicators that show patterns of economic collapse into 2009/2011, followed by some minimal (not full) recovery and ongoing stagnation. Ironically, irrespective of the lack of growth in real construction spending in the last couple of years, without the purported strong growth in those areas in the headline detail of the "advance" first-quarter 2017, the annualized rate of first-quarter real growth would have been an annualized contraction of 0.36% (-0.36%).

Graph 9 of the employment-to-population ratio remains a solid indicator of underlying labor conditions in the context of the broad population and long-term discouraged and displaced workers, reflected there through March 2017 (see *Commentary No. 879*).

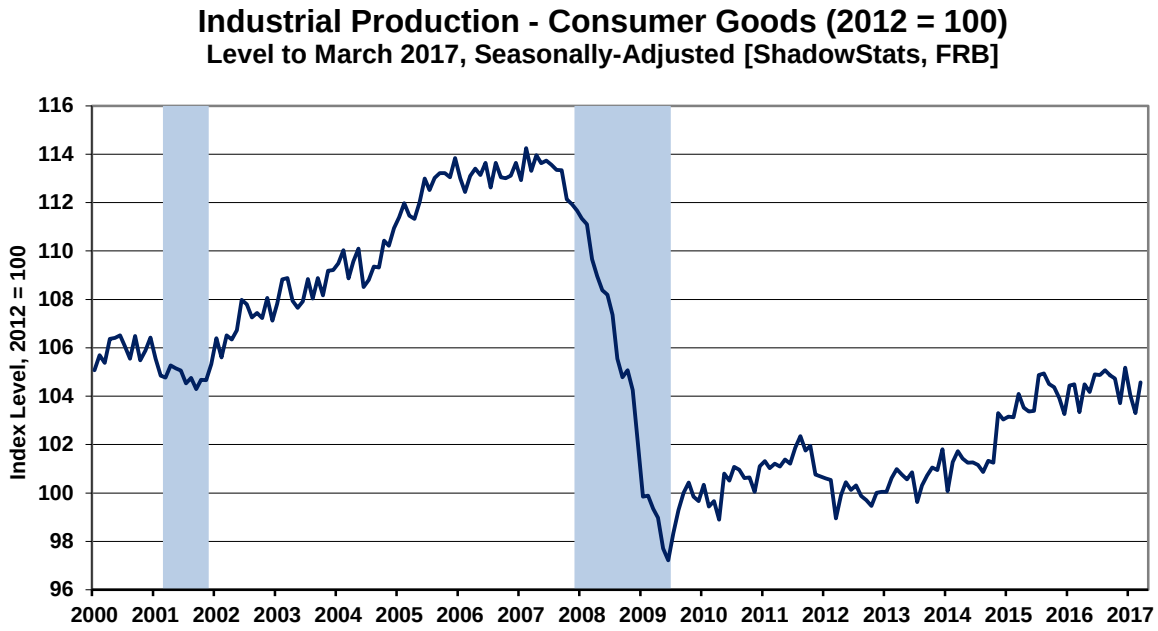
Graph 4: "Corrected" Real GDP Index (2000-2017), First Estimate of First-Quarter 2017



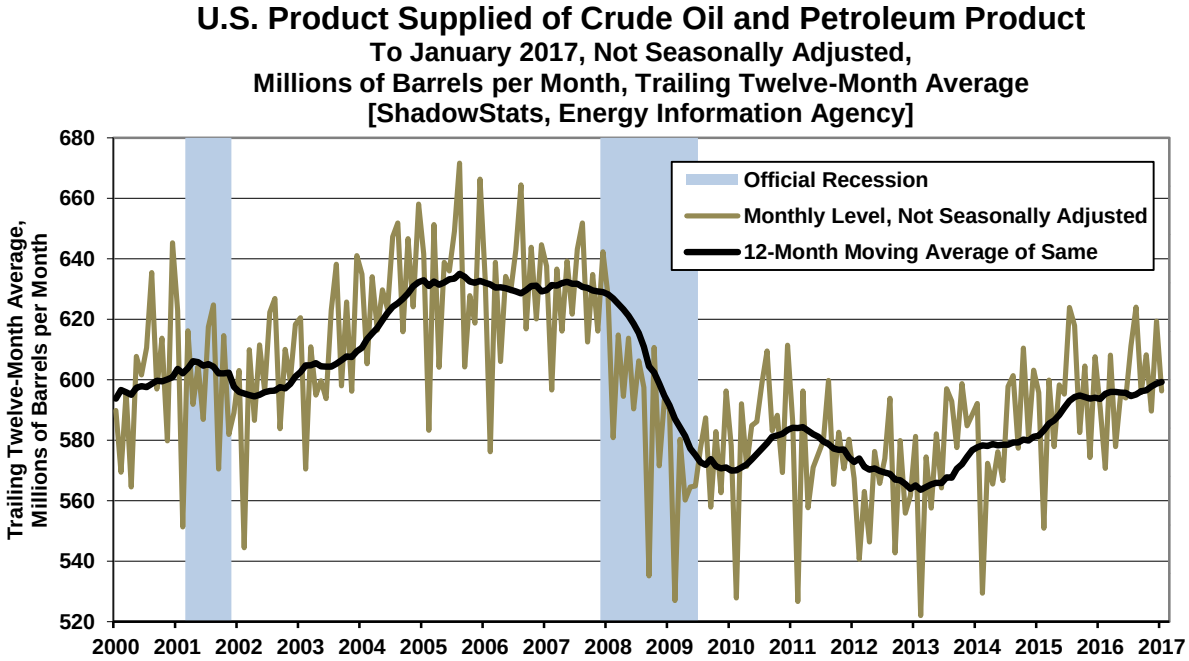
Graph 5: Cass Freight Index ™ (2000-March 2017)



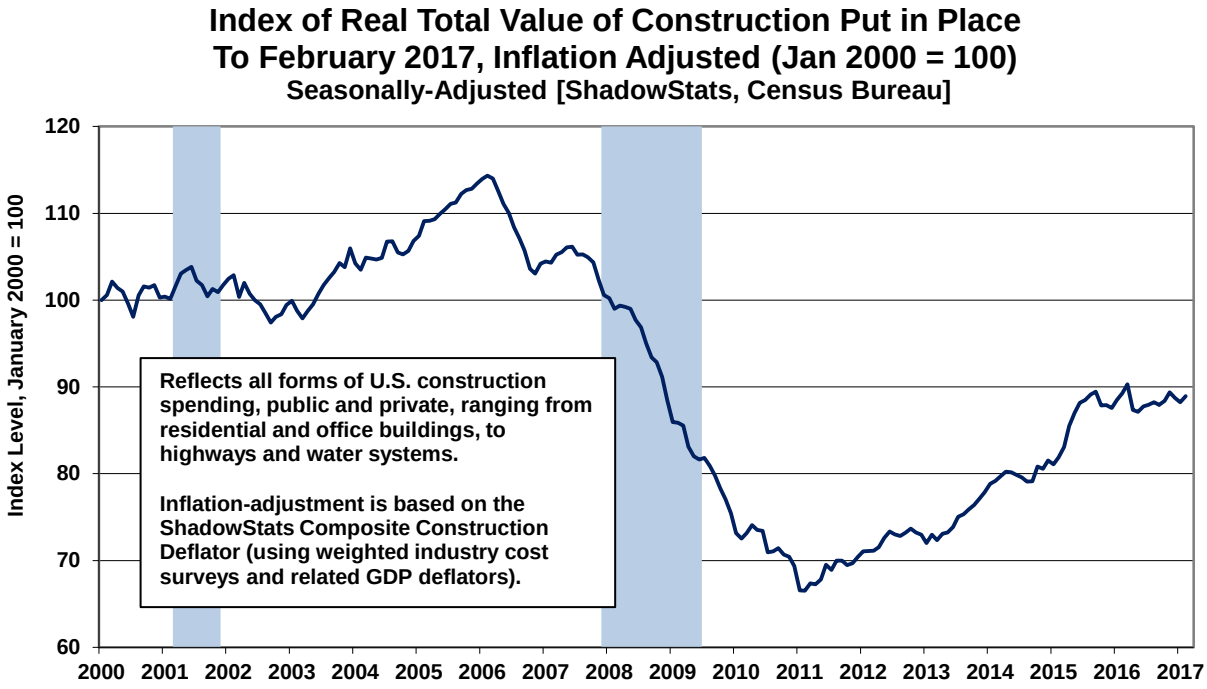
Graph 6: Industrial Production – Consumer Goods (2000-2017)



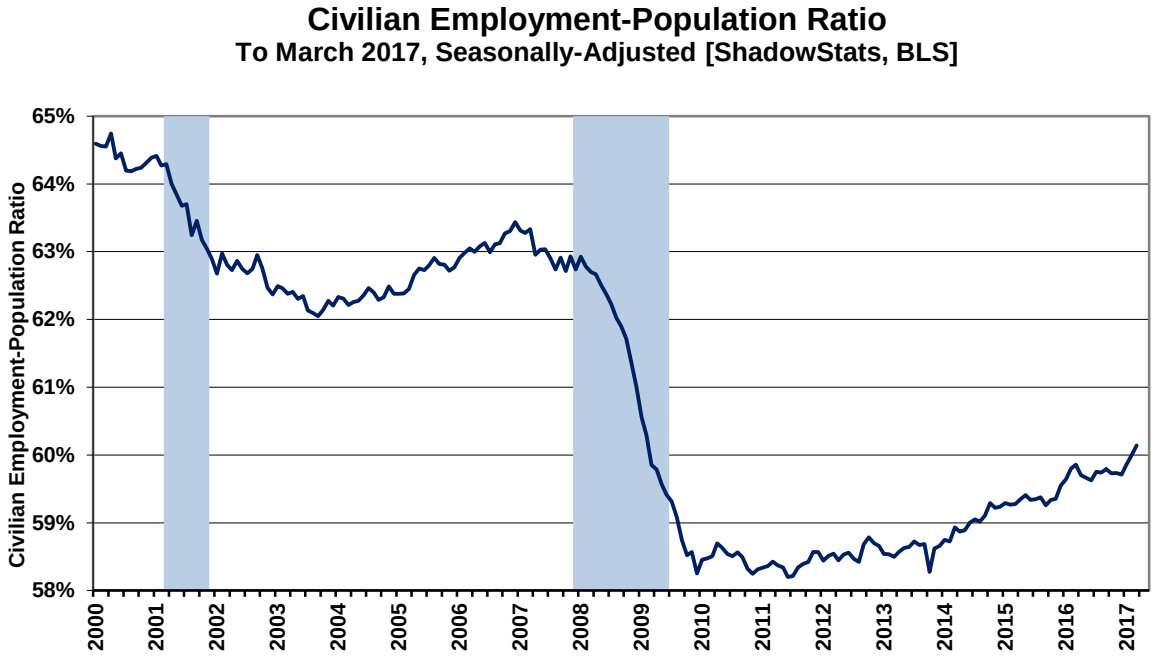
Graph 7: U.S. Petroleum Consumption (2000 – 2017)



Graph 8: Real Total U.S. Construction Spending (2000 - 2017)



Graph 9: Civilian Employment-Population Ratio (2000-2017)



Updated Consumer Liquidity Conditions—Income and Credit Stresses Mount Amidst Peaking Optimism. The U.S. consumer faces re-intensifying financial stresses, which may have begun to affect headline Retail Sales activity (see discussion *Commentary No. 880*). On the income side, Real Average Weekly Earnings are in annual and quarterly contraction, while historically low-level Median Real Monthly Household Income has remained stagnant. Consumer Credit also is faltering as if it is back in the second-half of 2012, again, when headline GDP growth stalled. Perhaps not-so-coincidentally, the "advance" estimate of annualized first-quarter 2017 real GDP growth at 0.69% is closing in on the annualized growth rates of 0.48% and 0.09% seen in the last two quarters of 2012.

This general discussion of Consumer Liquidity Conditions has been updated for the March 2017 reading on the real median monthly household income number from www.SentierResearch.com, released yesterday, April 27th (see *Graph 13*), and for the full-month April 2017 readings of the Conference Board's Consumer-Confidence and the University of Michigan Consumer-Sentiment measures (see *Graphs 10* to *12*), released respectively on April 25th and April 28th.

The material here updates Consumer Liquidity Conditions last covered in *Commentary No. 880* and as fully reviewed in the *CONSUMER LIQUIDITY* section of *No. 859 Special Commentary.*

***Liquidity Issues Limit Economic Activity*.** Severe and persistent constraints on consumer liquidity of the last decade or so drove economic activity into collapse through 2009, and those conditions have prevented meaningful or sustainable economic rebound, recovery or ongoing growth since. The limited level of, and growth in, sustainable real income, and the inability and/or unwillingness of the consumer to take on new debt have remained at the root of the liquidity crisis and ongoing economic woes.

These same pocket-book issues contributed to the anti-incumbent electoral pressures in the 2016 presidential race. The post-election environment showed a near-term surge in consumer optimism to levels generally not seen since before the formal onset of the recession in in 2002, let alone 2007, while underlying liquidity conditions and economic reality continued to remain shy of consumer hopes. Accompanying details reflect February 2017 and fourth-quarter 2016 readings of consumer credit and obligations, stressed real median monthly household income in March 2017 and those elevated, but faltering April confidence and sentiment numbers.

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 of the hard ones—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. Having stagnated briefly, real monthly median household income generally has begun to falter, along with a developing pickup in consumer inflation.

Still, the broad underlying consumer liquidity fundamentals simply have not supported, and still do not support a turnaround in general economic activity. Never truly recovering post-Panic of 2008, limited growth in household income and credit have eviscerated and continue to impair broad, domestic U.S. business activity, which feeds off the financial health and liquidity of consumers.

This circumstance remains in play in the context of that post-election surge in consumer expectations that now has exceeded pre-recession levels. Nonetheless, underlying liquidity conditions and reality—particularly income and credit—remain well shy of consumer hopes and needs.

The combined issues here have driven the housing-market collapse and ongoing stagnation in consumer-related real estate sales and construction activity, and have constrained both nominal and real retail sales. The related, personal-consumption-expenditure and residential-construction categories accounted for 73.0% of the headline real, first-quarter 2017 U.S. GDP.

Yet, with the better-quality economic indicators and underlying economic reality never having recovered fully from the collapse into 2009, consumers again are pulling back on consumption, as evidenced by a renewed slowdown in broad a broad array of measures highlighted in the prior section. Underlying reality is evident in more-meaningful series—not the GDP—irrespective of the transient, gimmicked boosts to, and current headline slowing in, that most worthless of economic indicators.

April Consumer Confidence and Sentiment Measures Begin to Falter. This detail incorporates full-April 2017 reporting for the Conference Board's Consumer-Confidence and the University of Michigan's Consumer-Sentiment measures. Reflected in *Graphs 10* and *11*, both confidence and sentiment rose in September and plunged in October, likely reflecting concerns as to the direction of the presidential race. Post-election, both measures rallied sharply, reflecting a surge in consumer optimism. Both series now, however, appear to have topped and are beginning to pull back.

The Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index® (*Graph 10*), and the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph 11*), again, both soared post-election, took breathers in January 2017, boomed into March but have declined minimally in April. The three-month moving averages in both series have broken pre-recession highs, with the Consumer-Confidence Index® at levels not seen since before the 2001 recession.

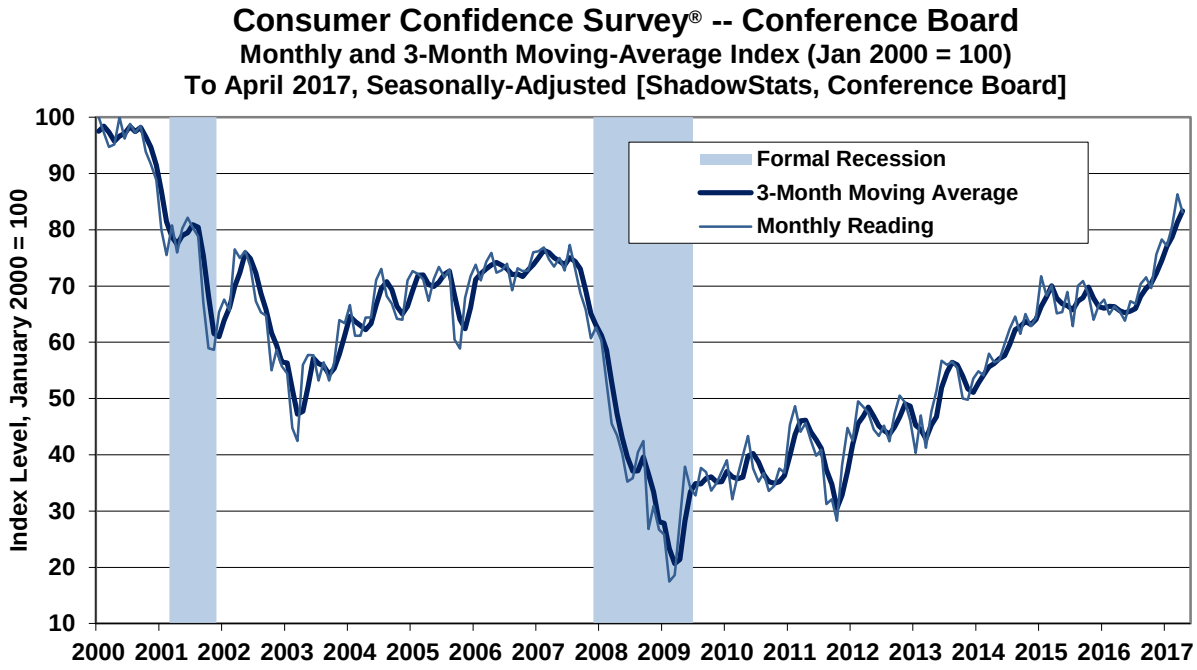
Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs 10* to *12* reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board's Consumer Confidence Index® is set with 1985 = 100, while the University of Michigan's Consumer Sentiment Index is set with January 1966 = 100.

The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in *Commentary No. 764*), and often are highly volatile month-to-month, as a result. With what should become increasingly-negative, unstable and uncertain headline financial and economic reporting in the months ahead—beyond the initial change-in-government euphoria—successive negative hits to both the confidence and sentiment readings remain increasingly likely in the near future.

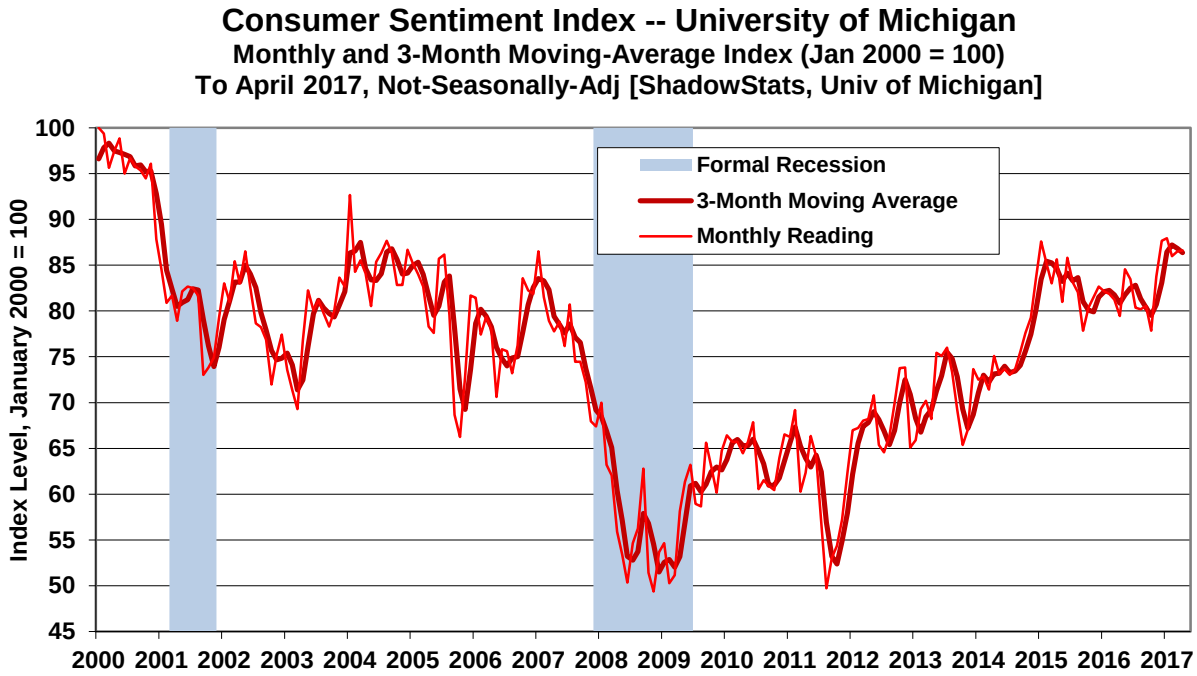
Smoothed for irregular, short-term volatility, the two series still generally had held at levels seen typically in recessions, until the post-2016 election circumstance. Suggested in *Graph 12*—plotted for the last 47 years—the latest readings of Confidence and Sentiment recently have recovered levels seen in periods of normal, positive economic activity of the last four decades, with their six-month moving averages at levels last seen going into the 2001 recession. Broadly, though, the harder, financial consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth as suggested by headline GDP growth in 2014, for second-and third-quarter 2015 and for third-quarter 2016. Beyond having happy feelings about the future, Consumers still need actual income, cash-in-hand or credit in order to increase their spending.

[Graphs 10 to 12 begin on the following page.]

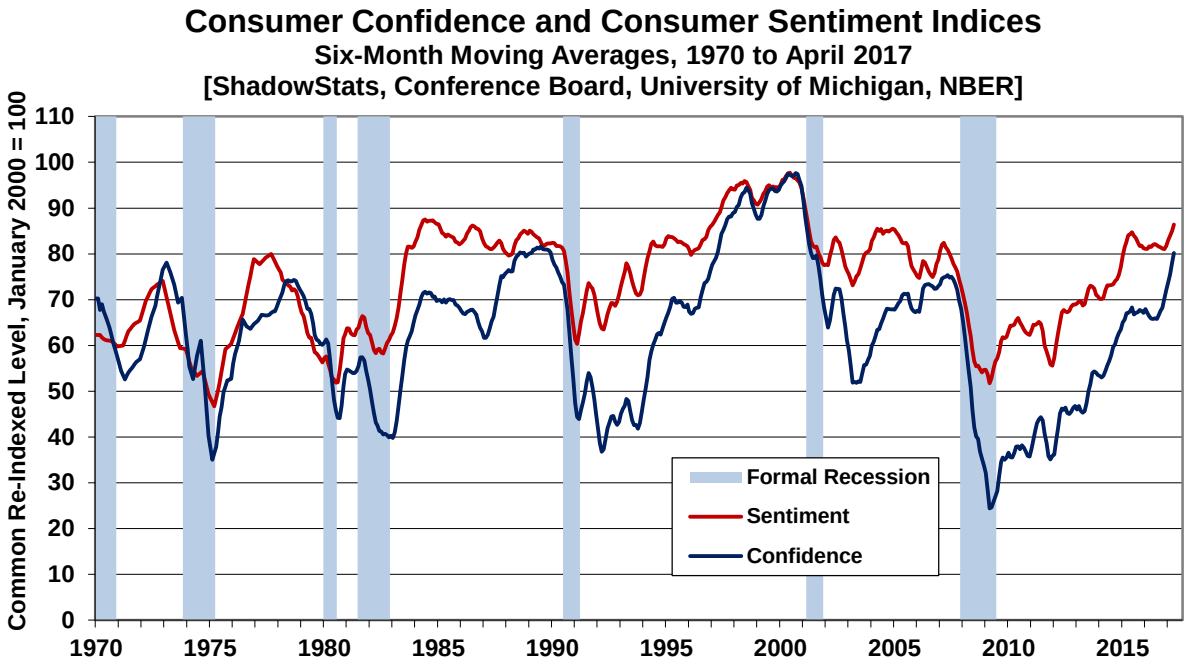
Graph 10: Consumer Confidence (2000 to 2017)



Graph 11: Consumer Sentiment (2000 to 2017)



Graph 12: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2017)



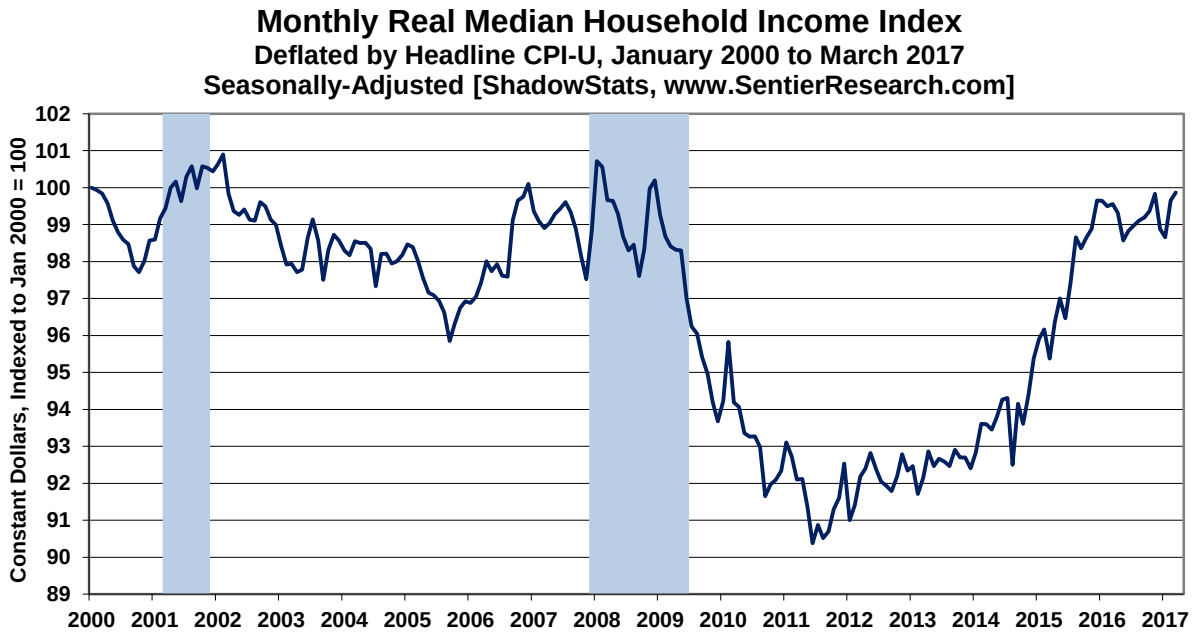
March 2017 Real Median Household Income Was "Statistically Unchanged." In the context of the faltering gains in consumer optimism, www.SentierResearch.com reported that March Real Median Household Income was "statistically unchanged" versus February. Consider that the circumstance reflected a 0.29% monthly boost to real monthly income from the headline decline of 0.29% (-0.29%) in the March 2017 CPI-U inflation, where the resulting, month-to-month real gain of 0.22% in median income was statistically-insignificant. That means the corresponding change in nominal median monthly household income was an outright decline of 0.07% (-0.07%) in March 2017. The headline real monthly income number not only remained minimally below pre-recession levels, but also below the January 2000 initial reading for the series. The March monthly change of 0.22% followed a statistically-significant 1.01% gain in February, having declined by 0.23% (-0.23%) in January. The series also rose by 0.31% year-to-year in March 2017, having gained 0.16% in February 2017 and declined by 0.99% (-0.99%) in January 2017. Plotted in accompanying *Graphs 13* and *14*, those details showing ongoing stagnation both in terms of level and year-to-year change.

Where low or negative headline CPI-U inflation and related spikes in inflation-adjusted real income had resulted from collapsing gasoline prices in 2014, that process began to reverse in the latter part of 2016, although it came back and hit the March 2017 data hard.

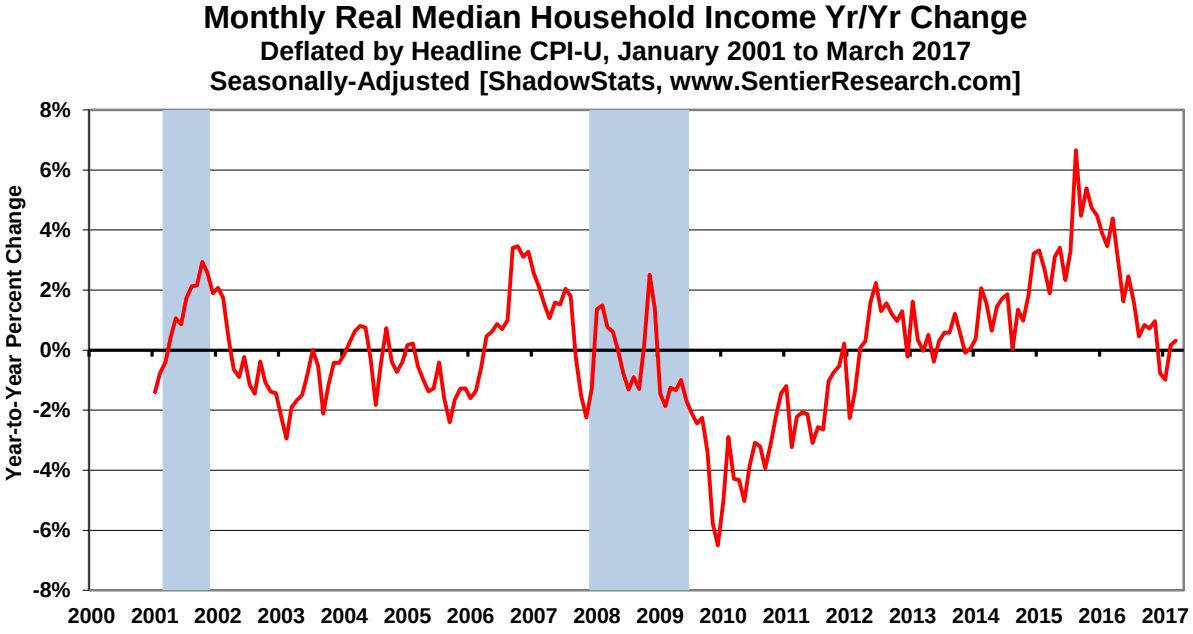
On a monthly basis, when headline GDP purportedly started its solid economic recovery in mid-2009, the monthly household income number nonetheless plunged to new lows. Again, the income series had been in low-level stagnation, with the post-2014 uptrend in the inflation-adjusted monthly index boosted specifically by collapsing gasoline prices and related, negative headline CPI-U consumer inflation. The index approached pre-recession levels in the December 2015 reporting, but it remained 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 generally picks up at an accelerating pace.

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 changing gasoline prices have reversed, pushing headline consumer inflation higher.

Graph 13: Monthly Real Median Household Income (2000 to 2017) Index, January 2000 = 100



Graph 14: Monthly Real Median Household Income (2000 to 2017) Year-to-Year Change

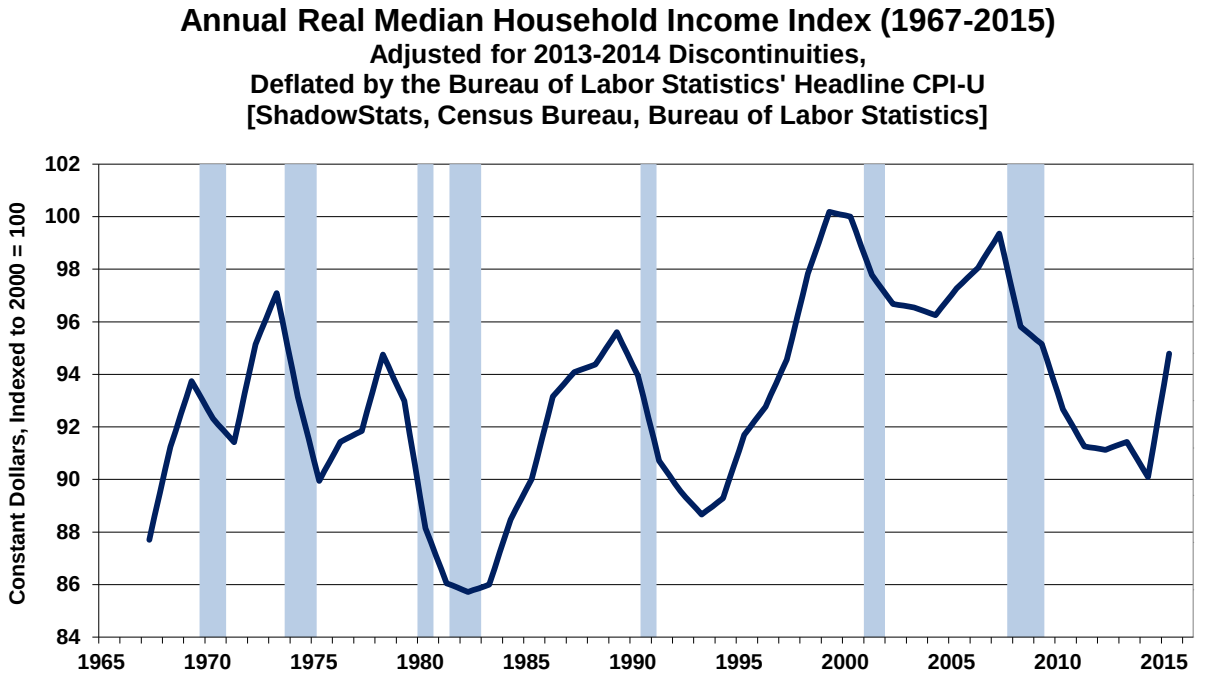


This measure of real monthly median household income generally can be considered as a monthly version of the annual detail shown in *Graph 15*, which was updated nine months ago for 2015 detail (see the full

analysis of the 2015 annual household income reporting in *Commentary No. 833*). The relative jump seen in the headline annual 2015 median income, despite formal adjustment for discontinuities in the recent annual reporting, was due largely to series redefinitions, not due to a sudden change in consumer liquidity, other than as tied to the collapse in gasoline prices and a related spike in the inflation-adjusted numbers. The level of real annual median household income for 2015, not only was below that seen at the purported trough of the economic collapse into 2009, but also it was below levels seen in the early-1970s and the late 1980s.

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 Bureau numbers, again, shown in *Graph 15*, with 2014 real annual median household income having hit a ten-year low, and, again, with the historically-consistent 2015 annual number still holding below that seen when the collapsing economy hit its purported trough in 2009.

Graph 15: Annual Real Median U.S. Household Income (1967 to 2015)



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. The Median Household Income surveying results are broadly consistent with Real Average Weekly Earnings, now through March 2017.

Real Average Weekly Earnings Declined Year-to-Year and Contracted Quarter-to-Quarter for the Second, Consecutive Quarter. March 2017 real average weekly earnings were published by the Bureau of Labor Statistics on April 14th (see *Commentary No. 880*). In the production and nonsupervisory

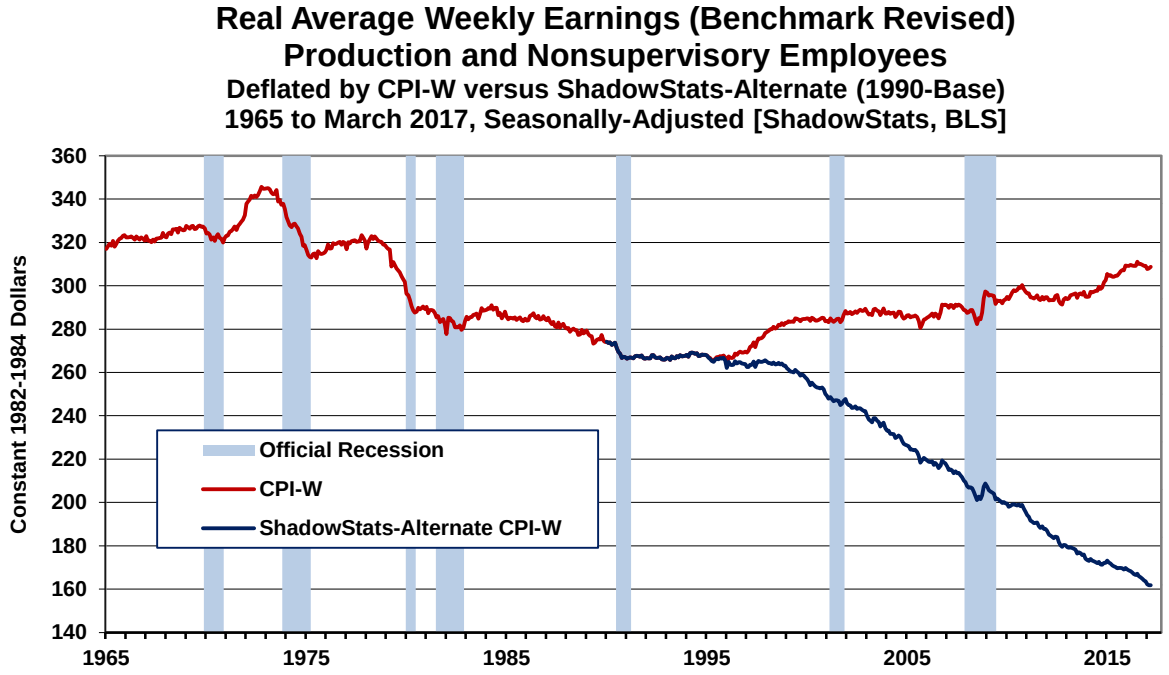
employees category—the only series for which there is a meaningful history, the regularly-volatile real average weekly earnings gained 0.25% month-to-month in March 2017, versus a revised 0.07% gain in February and a revised decline of 0.47% (-0.47%) in January, the sixth consecutive monthly decline for the series.

Year-to-year, the adjusted March 2017 annual detail declined for the fourth straight month, down by 0.31% (-0.31%),versus an unrevised 0.39% (-0.39%) annual decline in February 2017 and a revised decline of 0.46% (-0.46%) in January 2017. First-quarter 2017 real earnings contracted at an annualized quarterly pace of 1.53% (-1.53%), the second, consecutive quarter-to-quarter contraction.

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

Graph 16 plots the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI Measure, 1990-Base (blue-line). When inflation-depressing methodologies of the 1990s began to kick-in, the artificially-weakened CPI-W (also used in calculating Social Security cost-of-living adjustments) helped to prop up the reported real earnings. Official real earnings today still have not recovered their inflation-adjusted levels of the early-1970s, and, at best, have been in a minimal uptrend for the last two decades (albeit spiked recently by negative headline inflation). Deflated by the ShadowStats (1990-Based) measure, real earnings have been in fairly-regular decline for the last four decades, which is much closer to common experience than the pattern suggested by the CPI-W. See the *Public Commentary on Inflation Measurement* for further detail.

Graph 16: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date



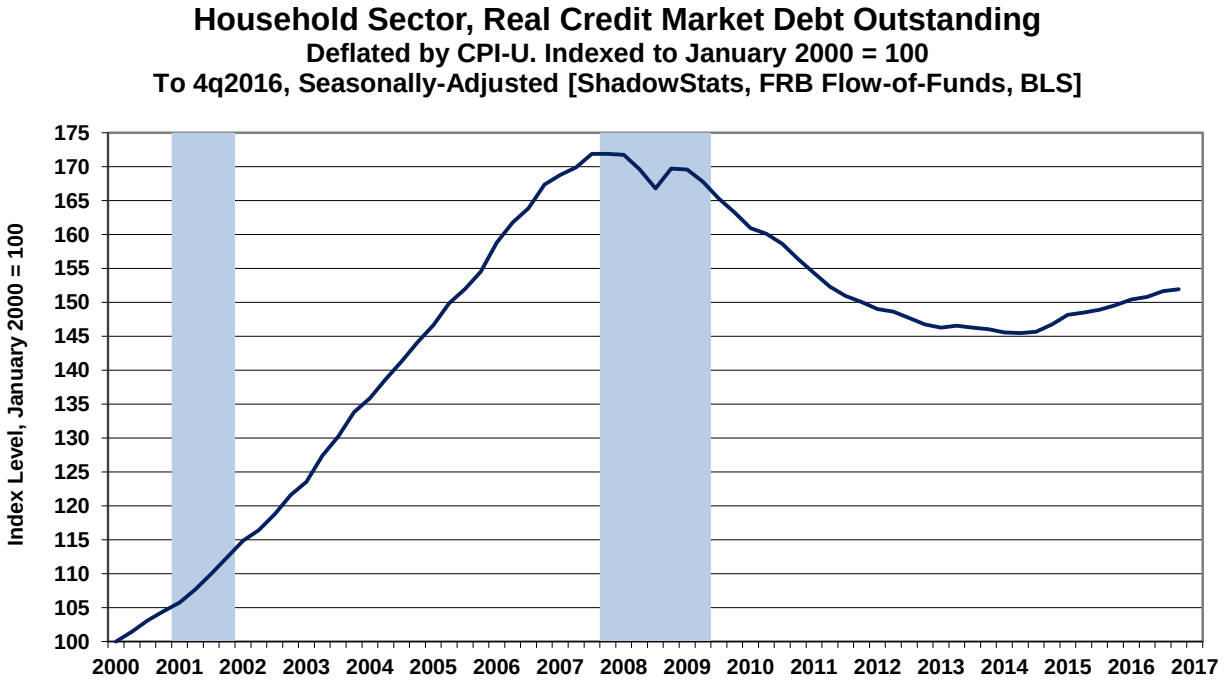
Consumer Credit Has Continued to Tighten—Seasonally-Adjusted Monthly Growth Turned Flat-to-Minus. The final four graphs on consumer conditions address consumer borrowing. Debt expansion can help make up for a shortfall in income growth. The ShadowStats analysis usually focuses on the particular current weakness in consumer credit, net of what has been rapidly expanding government-sponsored student loans. Where detail on that series is only available not-seasonally-adjusted, the following graphs are so plotted.

Nonetheless, the aggregate series also is smoothed for seasonal adjustment. In real terms, the adjusted series rarely declines month-to-month in a growing economy. On top of stagnant month-to-month growth in December 2016, it declined by 0.26% (-0.26%) in January 2017, bouncing back by 0.28% in February. The last time there had been a monthly decline was in September 2012, down by 0.13% (-0.13%). Smoothed for a three-month moving average of monthly change, the series rarely drops below 0.10%, in a growing economy. February 2017 was at 0.04%. The last time growth was seen below 0.10% was in September and October of 2012, with September at the near-term trough of 0.05%.

The significance of that timing, as also seen for the historic parallels for the quarterly and annual contractions in Real Average Weekly Earnings (*Graph 16*), is that headline real GDP growth stalled in the second-half of 2012, with annualized real quarterly GDP growth at 0.48% in third-quarter 2012, and at 0.09% in fourth quarter 2012.

Returning to the regular ShadowStats assessment of consumer credit, consider *Graph 17* of *Household Sector, Real Credit Market Debt Outstanding*. Household debt declined in the period following the Panic of 2008, and it has not recovered fully, based on the Federal Reserve's flow-of-funds accounting through fourth-quarter 2016. Household Sector, Real Credit Market Debt Outstanding in fourth-quarter of 2016 still was down by 11.6% (-11.6%) from its pre-recession peak of third-quarter 2007. Third-quarter 2016 was down by 11.8% (-11.8%) from the peak.

Graph 17: Household Sector, Real Credit Market Debt Outstanding (2000 through Fourth-Quarter 2016)



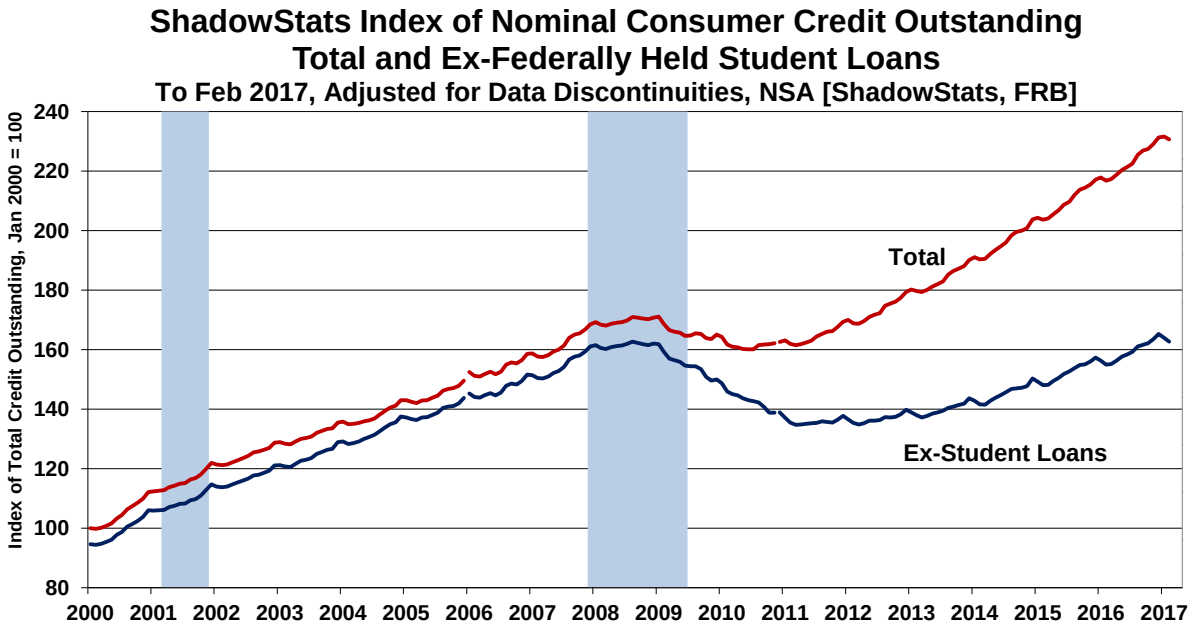
The series includes mortgages, automobile and student loans, credit cards, secured and unsecured loans, etc., all deflated by the headline quarterly CPI-U. The level of real debt outstanding has remained stagnant for several years, reflecting, among other issues, lack of normal lending by the banking system into the regular flow of commerce. The slight upturn seen in the series through 2015 and into 2016 was due primarily to gasoline-price-driven, negative CPI inflation, which continued to impact the system through second-quarter 2016. Current activity also has reflected continued relative strength from student loans, as shown in the *Graphs 18* to *20*.

Shown through the latest reporting (February 2017), *Graph 18* of monthly Consumer Credit Outstanding is a subcomponent of *Graph 17* on real Household Sector debt. Where *Graph 18* reflects the nominal reporting, not adjusted for inflation, inflation-adjusted real activity for the monthly Consumer Credit Outstanding is shown both in terms of level (*Graph 19*) and in terms of year-to-year change (*Graph 20*).

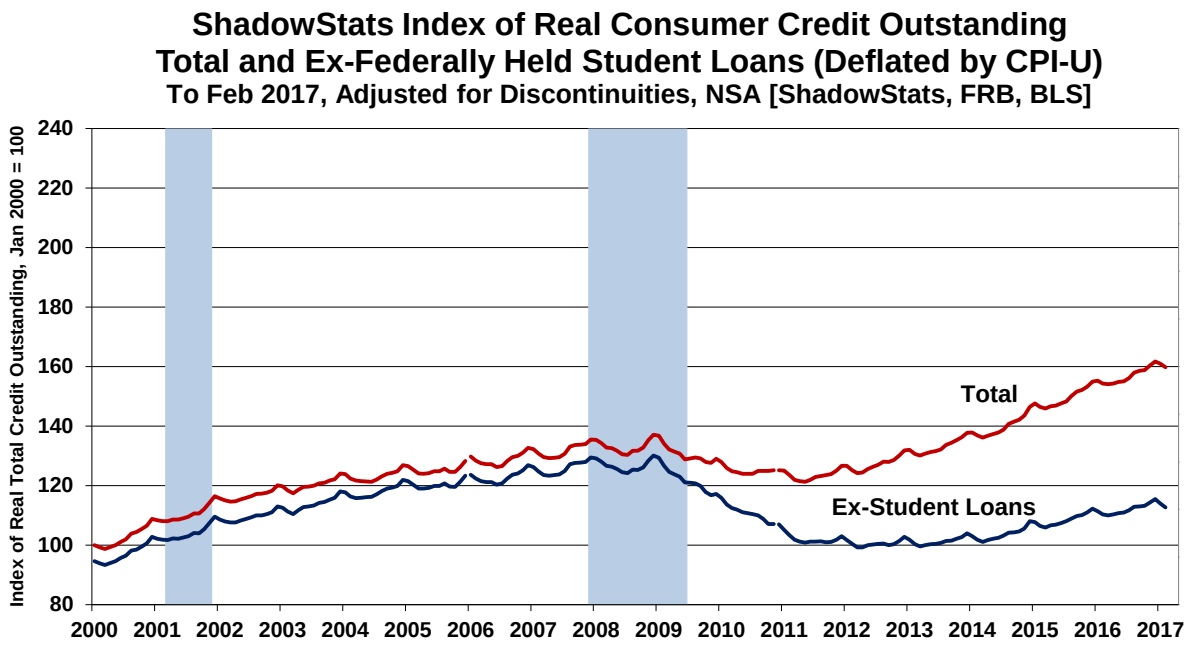
Post-2008 Panic, growth in outstanding consumer credit has continued to be dominated by growth in federally-held student loans, not in bank loans to consumers that otherwise would fuel broad consumption or housing growth. Although in slow uptrend, the nominal level of Consumer Credit Outstanding (ex-student loans) has not recovered since the onset of the recession. These disaggregated data are available and plotted only on a not-seasonally-adjusted basis, with the pattern of monthly levels over one year reflecting some regular, unadjusted seasonal dips or jumps.

Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Although the monthly dip in the not-seasonally-adjusted consumer credit reflects a seasonal decline, the pace of year-to-year growth continues to slow, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in February 2017 was down from its December 2007 pre-recession peak by 12.9% (-12.9%). Year-to-year growth in *Graph 20* tends to resolve most of the monthly distortions in the not-seasonally-adjusted data.

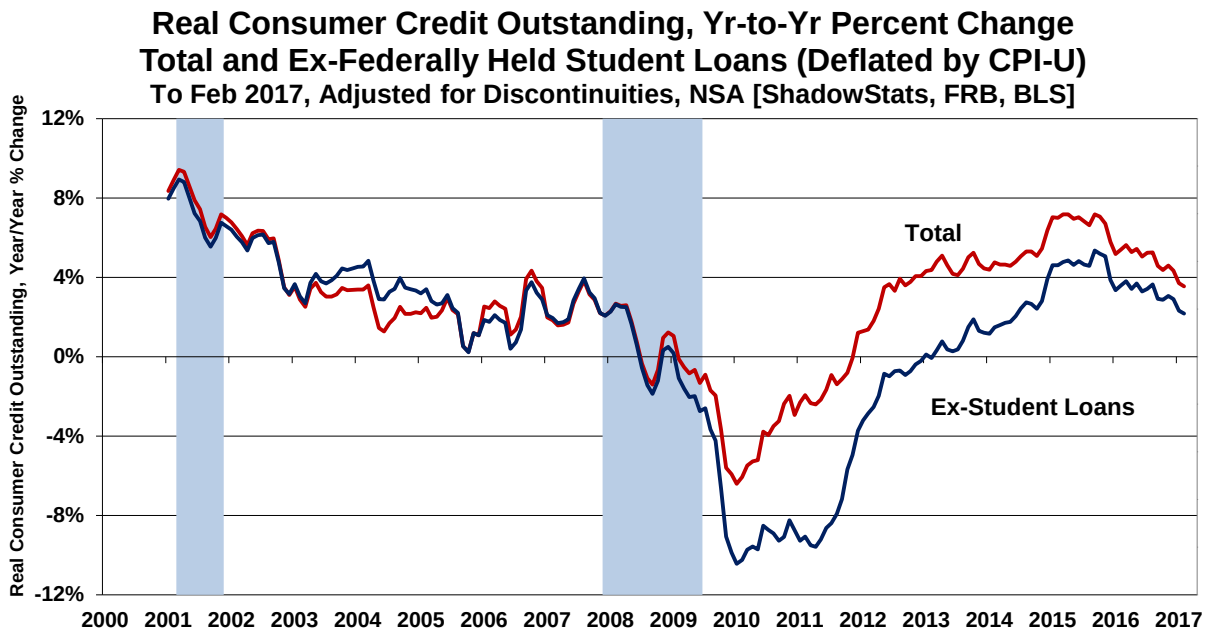
Graph 18: Nominal Consumer Credit Outstanding (2000 to 2017)



Graph 19: Real Consumer Credit Outstanding (2000 to 2017)



Graph 20: Year-to-Year Percent Change, Real Consumer Credit Outstanding (2000 to 2017)



[The* Reporting Detail *contains extended GDP analysis.]

HYPERINFLATION WATCH

VELOCITY OF MONEY

First-Quarter Velocity of Money Rose Minimally for M3, but Declined for M1 and M2. For the third-consecutive quarter, despite slowing quarterly growth in nominal GDP (not adjusted for inflation), quarterly growth slowed even more rapidly for nominal Money Supply M3, to below the GDP pace. Growth rates in the narrower M1 and M2 measures (M3 encompasses M2, M2 encompasses M1), however, were at faster paces, above that of the nominal GDP. As a result, the first-quarter change in the Velocity of Money (GDP/money supply) continued to rise (albeit minimally) in terms of M3, but continued to decline in terms of the narrower M1 and M2 money measures.

Incorporating the headline detail of first-quarter 2017 GDP, as well as the detail from the latest Federal Reserve reporting and continual benchmarking of money-supply-related data, *Graphs 21* and 2*2* 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 to the nominal money supply measure.

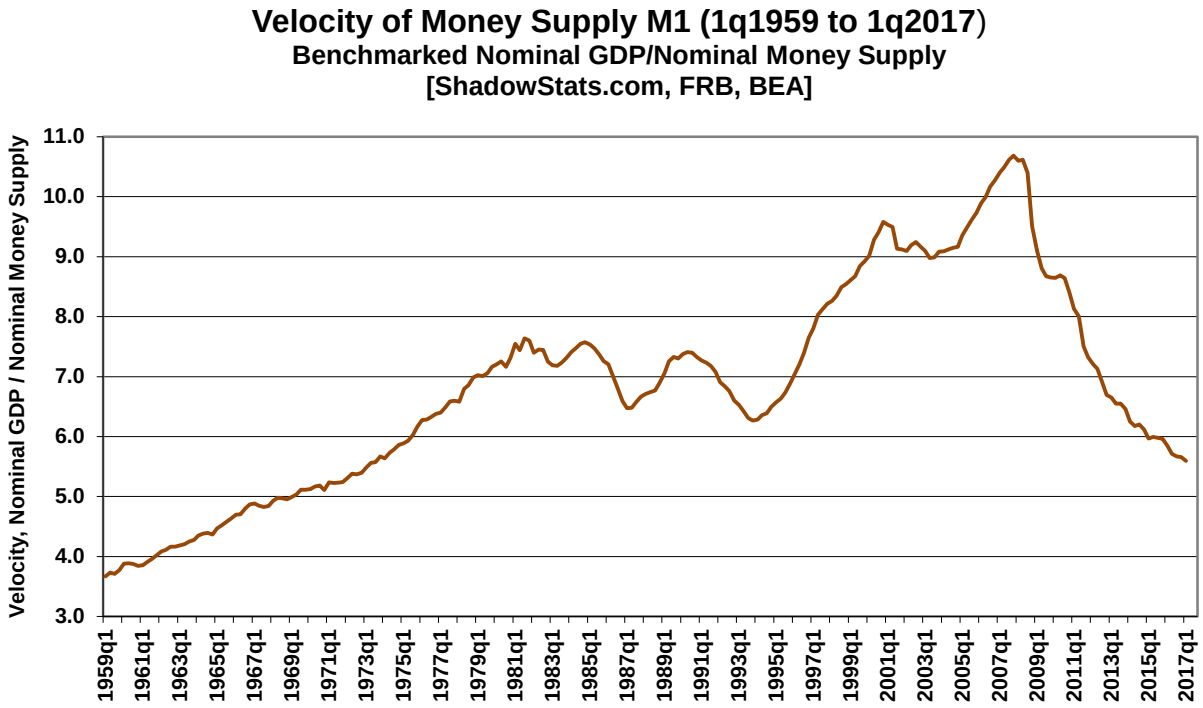
The respective headline velocities of Money Supply M1, M2 and M3 showed similar patterns in third- and fourth-quarter 2016. Where nominal GDP is in the numerator and the nominal money measure is in the denominator of the velocity ratio, slowing velocity indicates a relatively slower pace of nominal economic growth versus the money supply growth, and vice versa.

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, except for the just indicated recent upticks in M3 velocity.

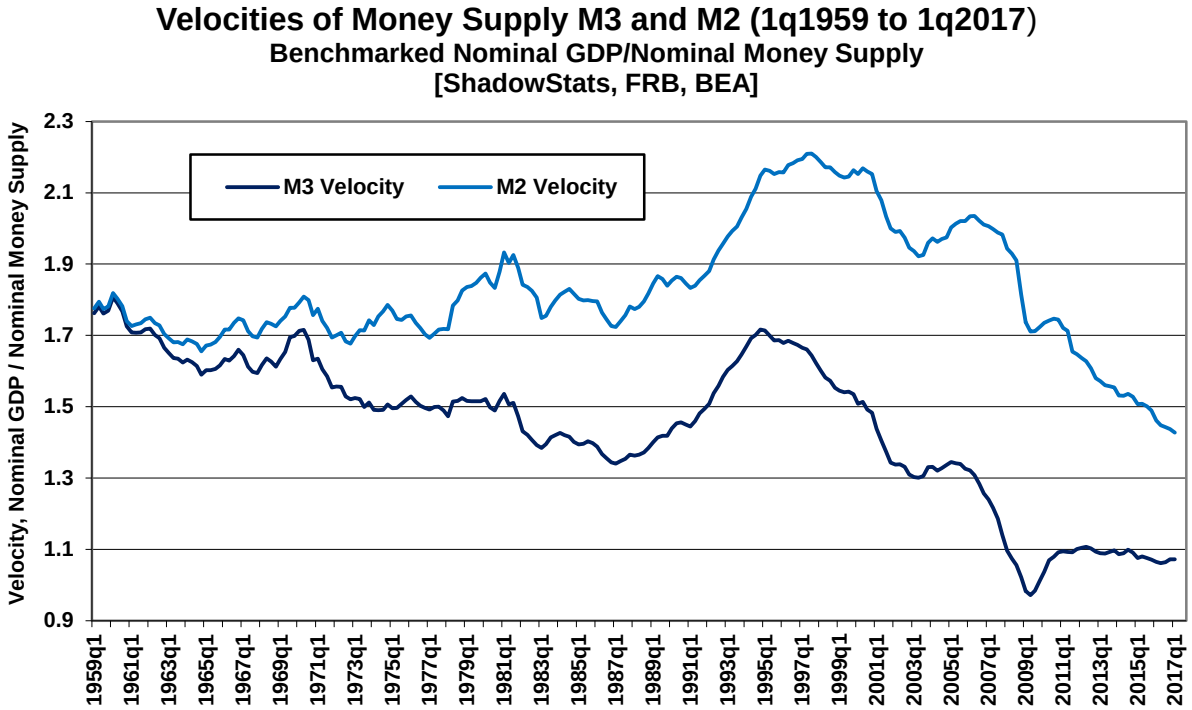
As to M1, consider that perhaps 70% or more of the cash-in-circulation component of that measure (with cash accounting for about 42% of M1) could be physically outside the United States, per the Federal Reserve. Where that has been an increasing trend, a true measure of domestic M1 velocity well could 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 (headline cash accounts for roughly 11% of M2 and 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, a pattern that has intensified. The reason behind that difference was that much of the relatively stronger M1 and M2 growth reflected, and still reflects, 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.

Graph 21: Velocity of Money Supply M1 through 1q2017



Graph 22: Velocities of Money Supply M2 and M3 through 1q2017



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*.

REPORTING DETAIL

GROSS DOMESTIC PRODUCT—GDP ("Advance Estimate" of First-Quarter 2017)

Underlying Recession Continued in Play, Despite the Still Heavily Bloated GDP Detail. Irrespective of the weaker-than-expected 0.69% annualized, quarterly real growth in the "advance" headline reporting of first-quarter 2017 GDP, underlying reality remained that broad U.S. economic activity never recovered fully from its crash into 2009, never entered a period of formal, new economic expansion, and that it began to turn down anew in December 2014. Those circumstances were reviewed extensively in the *Opening Comments* of *Commentary No. 876*, in today's *Executive Summary* and in the *ECONOMY* section of *No. 859 Special Commentary*.

***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. Discussed in the *Executive Summary*, various separately-reported measures of real-world economic activity have 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 fully, never entering a phase of economic Expansion—and then began to turn down anew in late-2014 (see graphs in the *Executive Summary* and in the *ECONOMY* section of *No. 859 Special Commentary*).

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*).

The 2017 benchmarking scheduled for July 28th, generally should show weaker economic activity than previously reported, since 2014 (the onset period of the pending revisions). It is, however, the comprehensive, full-system benchmarking of July 2018 back through 1929, which offers the opportunity to shift the headline GDP reporting back towards a more-meaningful indicator of near-term economic activity, instead of an instrument of political and financial-market hype.

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 x 1.01 x 1.01 x 1.01 = 1.0406 or 4.1%, instead of 4 x 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 April 28th by the Bureau of Economic Analysis (BEA), the "advance" or first estimate of first-quarter 2017 GDP showed a statistically-insignificant, real (inflation-adjusted), annualized, quarterly headline gain of 0.69% +/- 3.5% (95% confidence interval), down from 2.08% in fourth-quarter 2016. Distribution of first-quarter 2017 GDP growth by major category is detailed in the *Executive Summary*. The current headline detail is in the context of the July 29, 2016 annual GDP benchmark revisions discussed in *Commentary No. 823*, and it is subject to two monthly revisions before the next round of annual GDP benchmarking scheduled for July 28, 2017. That 2017 benchmarking will be coincident with the "advance" or first estimate of second-quarter 2017 GDP.

The first estimate of first-quarter 2017 GDP growth came in below consensus expectations of 1.0%, at a continuing, still-not-credibly-positive pace of headline activity. The headline first-quarter 2017 annualized real growth of 0.69% followed gains of 2.08% in fourth-quarter 2016, 3.51% in third-quarter 2016, 1.42% in second-quarter 2016, 0.83% in first-quarter 2016 and 0.87% in fourth-quarter 2015.

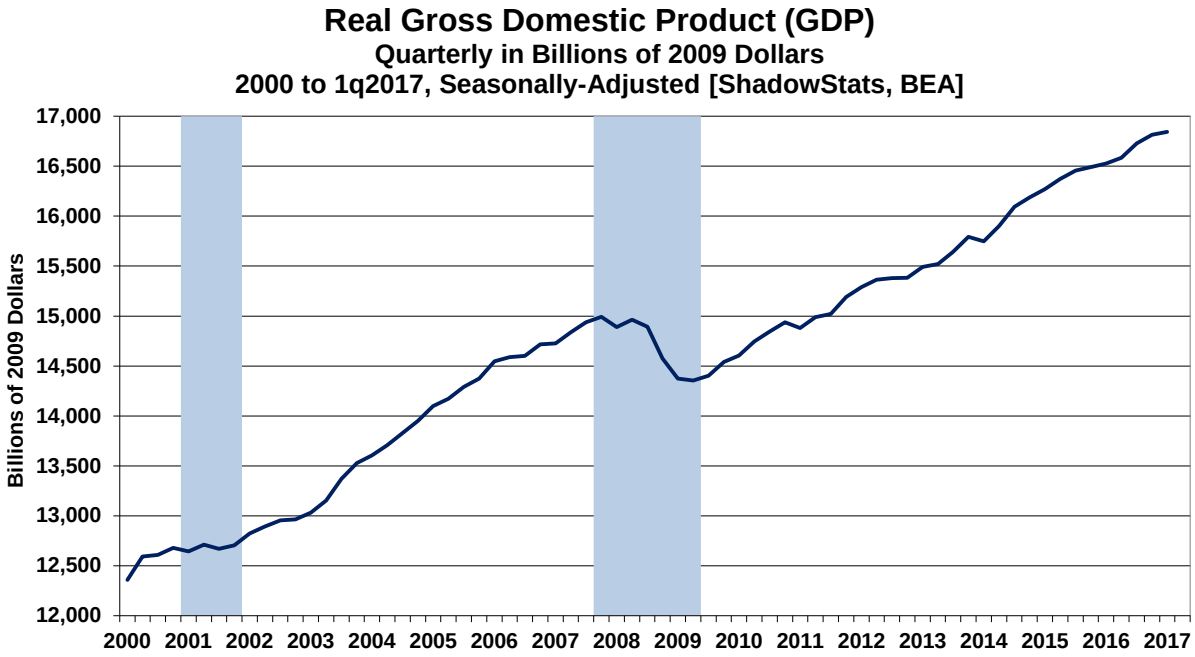
Slackening, headline first-quarter 2017 GDP growth was dominated by a sharp decline in inventory building, declining auto sales, weather-induced declining utility usage and declining government spending, offset by surging investment in residential and nonresidential structures and equipment, surging healthcare spending and a small trade surplus. Where construction spending and the trade deficit details clearly are running opposite their headline GDP components, contracting construction spending and a deteriorating quarterly trade picture should generate enough in downside revisions to push the weaker-than-expected headline 0.7% real quarterly GDP growth to "unchanged" or an outright contraction.

Graphs 23 and *25* 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. *Graph 27* shows the level of annual real GDP activity, as estimated beginning in 1929.

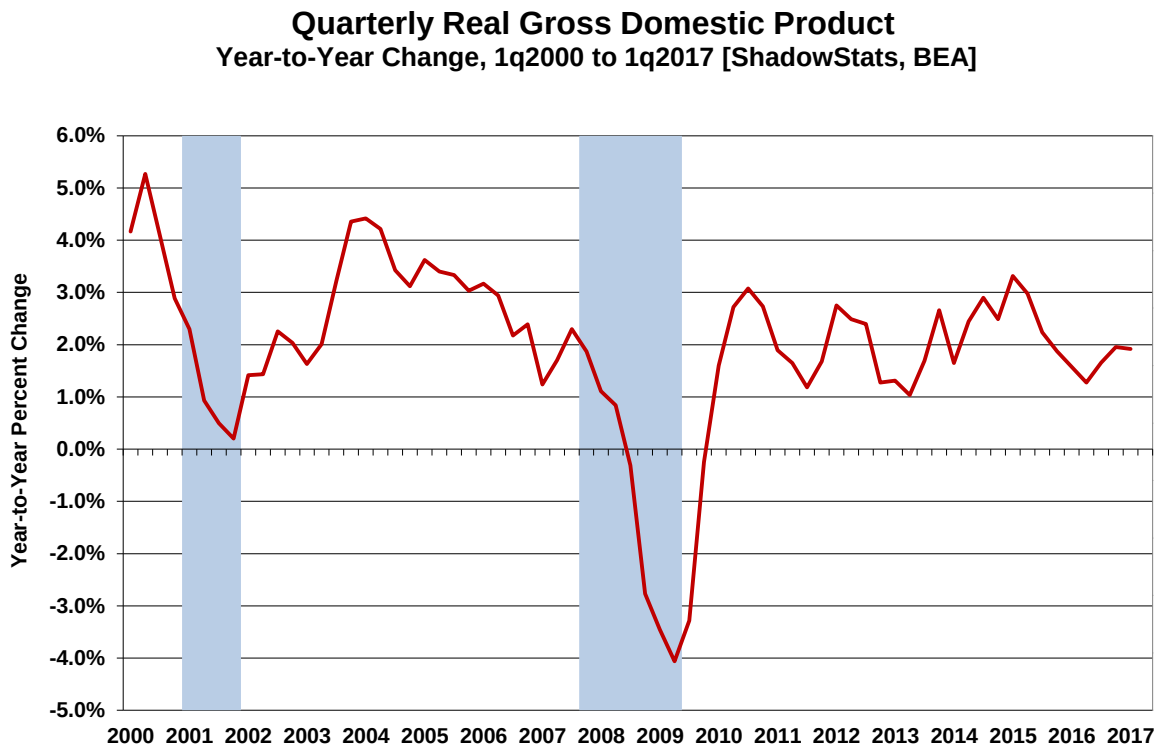
Shown in *Graphs 24* and *26*, headline year-to-year real GDP growth in the "advance" estimate of first-quarter 2017 notched minimally lower to 1.92%, from 1.96% in fourth-quarter 2016 but otherwise was up from 1.65% in third-quarter 2016, 1.28% in second-quarter 2016 and 1.57% in first-quarter 2016. Through second-quarter 2016 reporting, real annual growth had been in a continual slowing pattern 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. Shown in *Graph 28*, annual-average real GDP growth in 2016 slowed to 1.62%, versus 2.60% in 2015, effectively tied with 2011 for slowest pace of annual growth in the post-2009 "recovery."

The current-cycle trough in quarterly annual change was in second-quarter 2009 (see *Graphs 24* and *26*), 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 24* shows current year-to-year quarterly detail, from 2000-to-date, where *Graph 26* shows the same series in terms of its full quarterly, year-to-year history back to 1948. In annual terms (*Graph 28*), the year-to-year decline of 2.78% (-2.78%) in 2009 was the steepest regular annual drop in economic activity since the Great Depression. The 1946 production shutdown and economic reorganization following World War II, however, resulted in an annual GDP decline of 11.58% (-11.58%), minimally narrower than the 1932 annual economic crash of 12.89% (-12.89%).

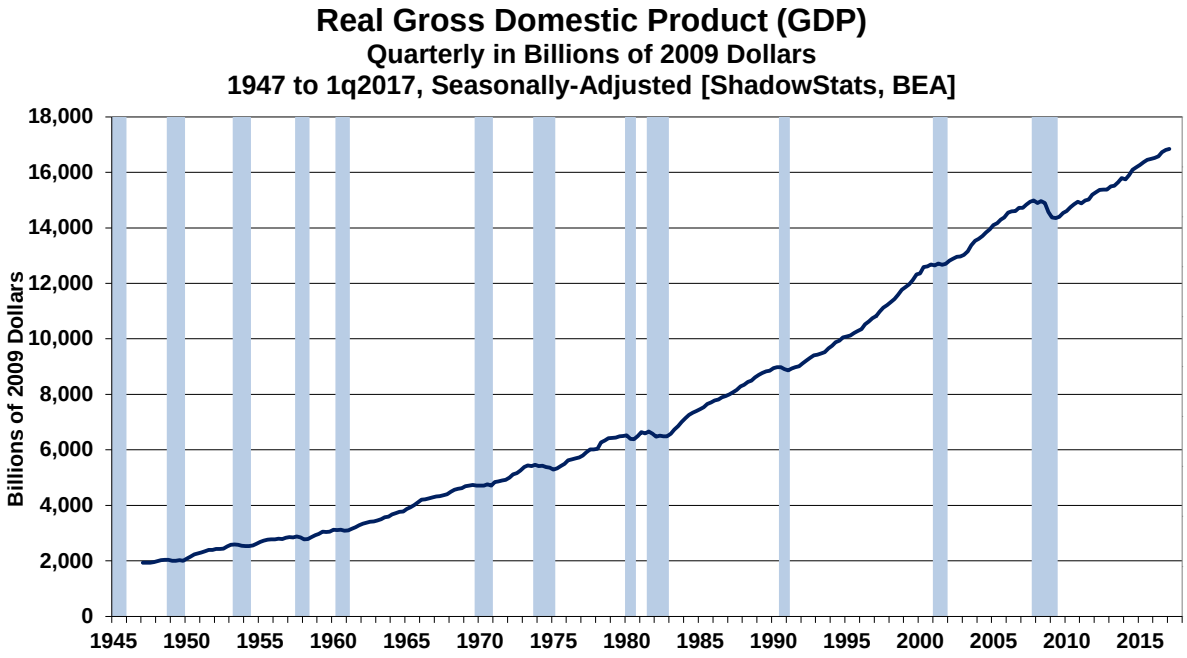
Graph 23: Quarterly GDP in Billions of 2009 Dollars (2000 to 2017), First Estimate of First-Quarter 2017



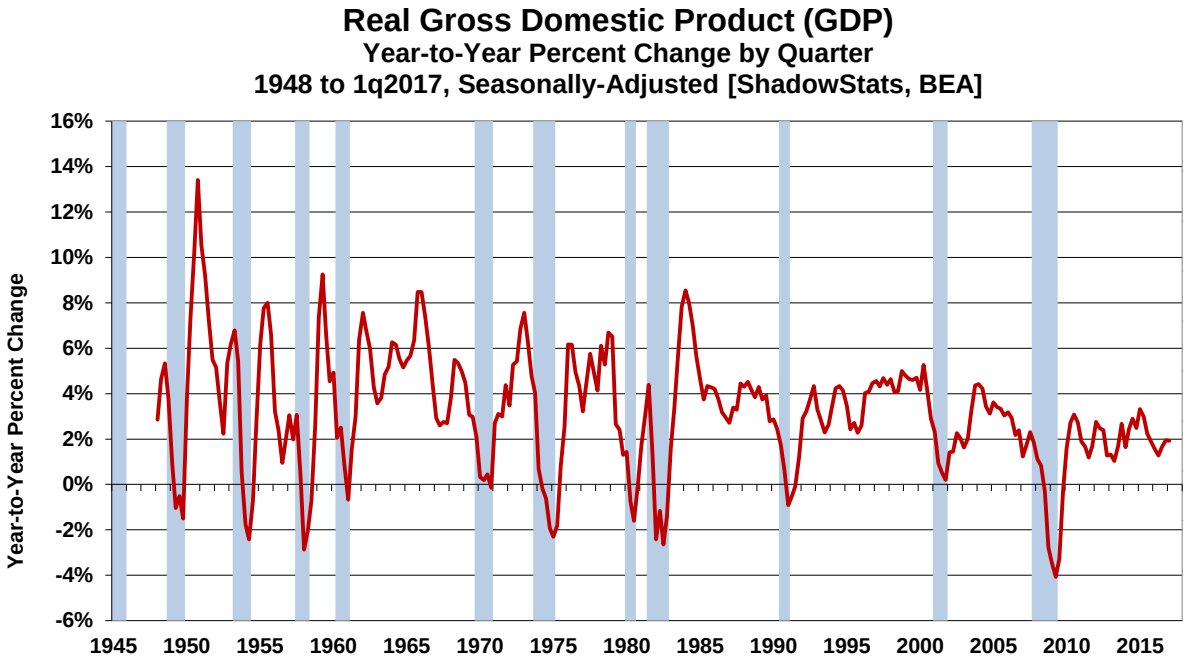
Graph 24: Quarterly GDP Real Year-to-Year Change (2000 to 2017), First Estimate of First-Quarter 2017



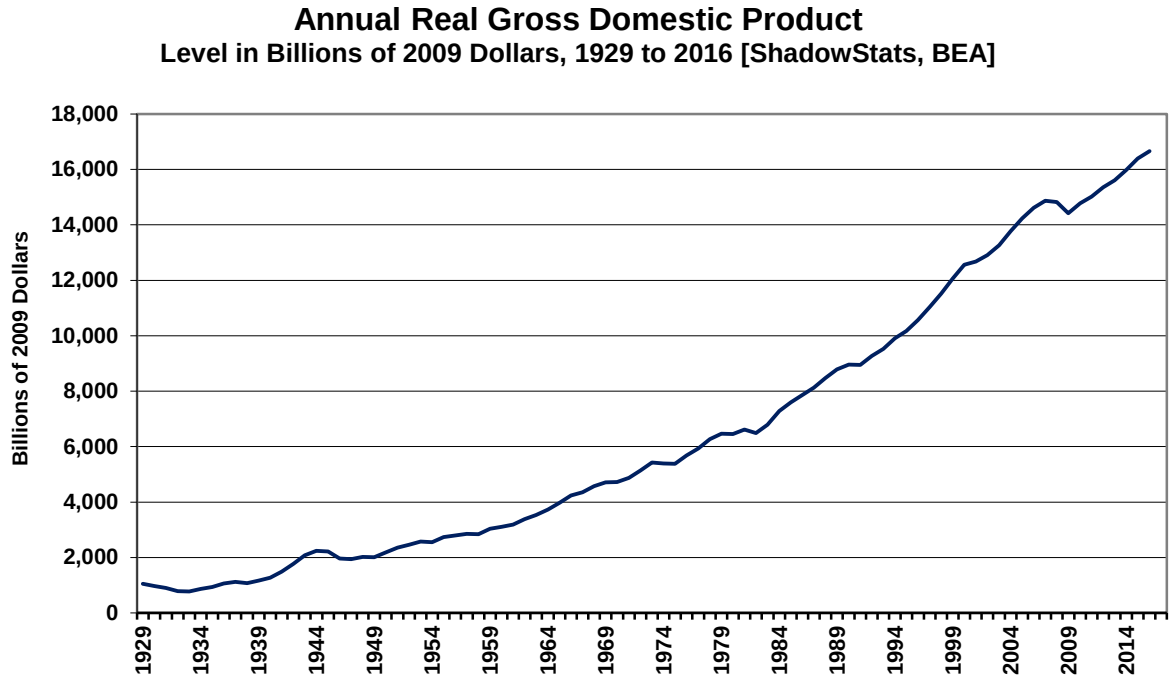
Graph 25: Quarterly GDP in Billions of 2009 Dollars (1947-2017), First Estimate of First-Quarter 2017



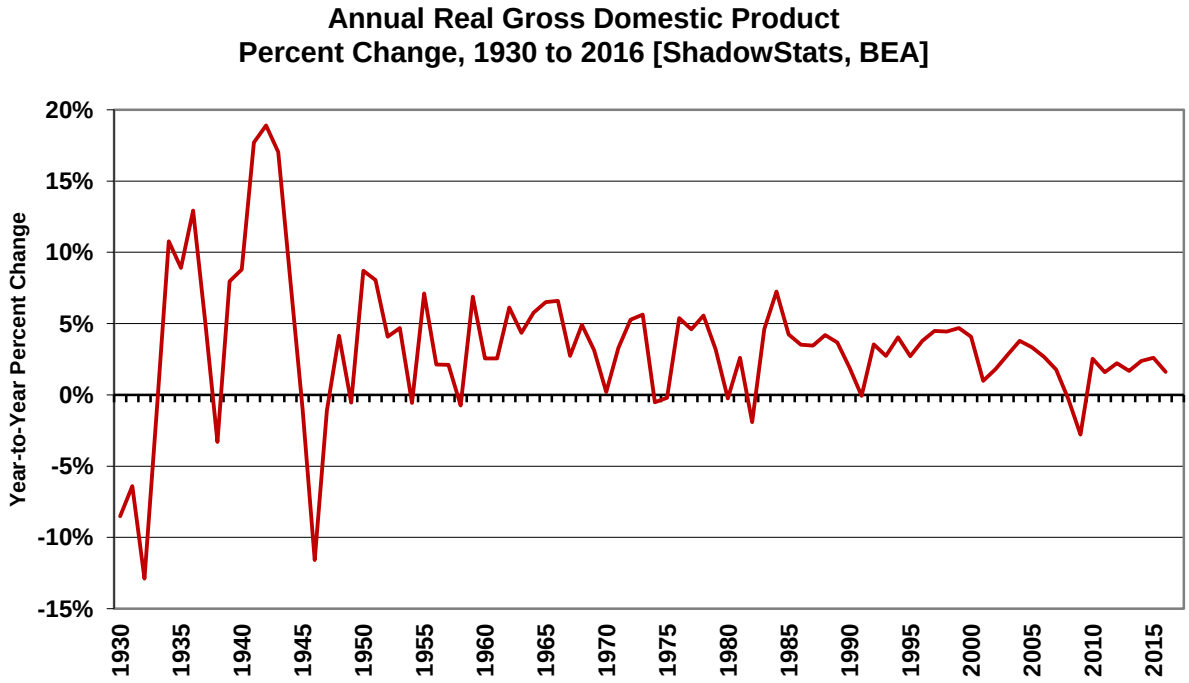
Graph 26: Year-to-Year GDP Real Change (1948-2017), First Estimate of First-Quarter 2017



Graph 27: Annual GDP in Billions of 2009 Dollars (1929-2016)



Graph 28: GDP Real Annual Percent Change (1930-2016)



Implicit Price Deflator (IPD). The first estimate of first-quarter 2017 GDP inflation, or the implicit price deflator (IPD), showed an annualized quarterly change of 2.25%, versus an annualized 2.10% in fourth-quarter 2016, 1.41% in third-quarter 2016, 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.

Year-to-year, the headline first-quarter 2017 IPD inflation was 2.01%, versus 1.56% in fourth-quarter 2016, 1.27% in third-quarter 2016, 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.

In terms of year-over-year, average annual inflation, the 2016 IPD inflation was 1.30%, versus 1.08% in 2015 and 1.79% in 2014.

For purposes of comparison, the seasonally-adjusted Consumer Price Index CPI-U rose by an annualized 3.15% in first-quarter 2017, versus 3.04% in fourth-quarter 2016, 1.78% in third-quarter 2016, 2.33% in second-quarter 2016, 0.11% in first-quarter 2016, 0.35% in fourth-quarter 2015, 1.50% in the third-quarter 2015, 2.35% in second-quarter 2015 and a quarterly contraction of 2.52% (-2.52%) in first quarter of 2015.

Unadjusted, year-to-year quarterly CPI-U inflation showed annual gains of 2.54% in first-quarter 2017, 1.80% in fourth-quarter 2016, 1.12% in third-quarter 2016, 1.05% in second-quarter 2016, 1.08% in first-quarter 2016, 0.47% in fourth-quarter 2015, 0.11% in third-quarter 2015, and quarterly contractions of 0.04% (-0.04%) in second-quarter 2015 and 0.06% (-0.06%) in first-quarter 2015.

In terms of year-over-year, average annual inflation, the 2016 CPI-U inflation was 1.26%, versus 0.12% in 2015 and 1.62% in 2014 (see prior *Commentary No. 862* and *Commentary No. 866*).

Gross National Product (GNP) and Gross Domestic Income (GDI). Standardly, the first estimates of first-quarter GNP and GDI are not published until the release of the second estimate of first-quarter GDP (May 26th). That circumstance is due to quality issues with the available data for the "advance" and second estimates of the year-end data, a problem also common to the headline GDP reporting (see the *Reporting Detail*).

ShadowStats-Alternate GDP. The ShadowStats-Alternate GDP first-quarter 2017 GDP estimate is a year-to-year contraction of 1.9% (-1.9%), versus an initial estimate of a first-quarter 2017 annual real headline GDP gain of 1.9%. That circumstance was against a ShadowStats 1.8% (-1.8%) annual-decline estimate for fourth-quarter 2016, versus the official headline annual gain of 2.0% in fourth-quarter 2016 GDP.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the statistically-insignificant, annualized, headline quarter-to-quarter gain of 0.7% in first-quarter 2017 was much weaker, net of all the happy assumptions, regular reporting gimmicks and any short-term political gaming coming into the headline detail. 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, as discussed in today's *Opening Comments and Executive Summary*. The "corrected" real GDP *Graphs 2* and *4* in the *Executive Summary* (see also the *ECONOMY* section in *No. 859 Special Commentary* and *2014 Hyperinflation Report—Great Economic Tumble*), 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, MONTH AND YEAR AHEAD

Downturn in the Economy Should Intensify in Headline Reporting, Compromising Fed Policies, Pummeling the U.S. Dollar and Boosting the Price of Gold. Discussed in today's *Opening Comments*, the developing downshift in economic expectations increasingly should move market expectations for Federal Reserve policy away from rate hikes and the normalization of the Fed's balance sheet, towards renewed quantitative easing. The problem for the U.S. central bank remains that faltering domestic economic activity stresses banking-system solvency. Aside from formal pronouncements of the Fed's obligations to maintain healthy domestic economic and inflation conditions, the central bank's primary function, in practice, always has been to keep the banking system afloat. The near-absolute failure of that function in 2008 remains the primary ongoing and unresolved problem for the Fed, and it is one of the ongoing primary issues preventing the return of U.S. economic activity to normal functioning.

The outlook for future FOMC activity remains as updated in the *Opening Comments* and *Hyperinflation Watch* of *Commentary No. 880*, and previously reviewed in *Commentary No. 873*. Such will be updated fully in *Commentary No. 886* of May 12th. The circumstances and outlook remain as broadly outlined in *No. 859 Special Commentary*.

Otherwise, the following discussion has changed little from recent comments. As reflected in common experience, actual U.S. economic activity generally continues in stagnation or downturn, never having recovered fully its level of pre-economic-collapse (its pre-2007-recession peak). While the latest headline GDP shows economic expansion of 12.3% since that series recovered its 2007-pre-recession high in 2011, no other "recovered" economic series has come close to showing that expansion either in terms of magnitude or in the purported brevity of the depression. Most of the better-quality series have remained

in continuing, not-recovered status, in a period of protracted downturn that now rivals that of the Great Depression (see *Commentary No. 869*). With new signals in hand of intensifying, near-term economic woes, the FOMC soon should shift policies, once again, reverting to some form of quantitative easing, in an effort to address related, intensifying solvency risks in the domestic banking system.

Discussed in *No. 859 Special Commentary*, the Trump Administration continues to face extraordinarily difficult times, but has a chance to turn the tide on factors savaging the U.S. economy and on prospects for long-range U.S. Treasury solvency and for stability and strength in the U.S. dollar. Any forthcoming economic stimulus faces a nine-month to one-year lead-time—now moved fully into 2018—before it meaningfully affects the broad economy. Needed at the same time are a credible plan for bringing the U.S. long-term budget deficit (sovereign solvency issues) under control, and action to bring the Federal Reserve under control and/or to reorganize the banking system. These actions broadly are necessary to restore domestic-economic and financial-system tranquility (again, see *No. 859*).

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

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

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

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

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

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

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

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

Commentary No. 879 covered March 2007 Employment and Unemployment, Help-Wanted Advertising and Money Supply M3, the ShadowStats Ongoing Measure.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PENDING RELEASES: Construction Spending (March 2017). The Commerce Department will release its estimate of March 2017 construction spending on Monday, May 1st. Detail will be covered in the ShadowStats *Commentary No. 884* of May 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 flat-to-downtrending stagnation, particularly in real terms, net of inflation. The initial estimate of full first-quarter 2017 real activity likely will have negative implications for the second-estimate of first-quarter 2017 GDP.

U.S. Trade Deficit (March 2017). The Commerce Department and Bureau of Economic Analysis (BEA) will release their full version of the monthly U.S. trade balance for March 2017 on Thursday, May 4th, covered in ShadowStats *Commentary No. 884* of that date. That estimate will revise the often worthless "advance" estimate in merchandise trade, which showed a minimal widening of $0.9 billion the month-to-month goods deficit for March, as released April 27th. To the extent that the "advance" number has any credibility, the deficit narrowed due to the monthly decline in exports exceeding the decline in imports.

Where the first estimate of first-quarter 2017 GDP just showed a nonsensical narrowing of the real trade deficit (published underlying reporting has indicated some widening of the deficit), headline March detail will provide the initial full estimate of the first-quarter trade deficit, with likely negative implications for the second estimate of first-quarter 2017 GDP on May 26th.

Employment and Unemployment (April 2017). The Bureau of Labor Statistics (BLS) will publish its headline April 2017 labor data on Friday, May 5th, to be covered in ShadowStats *Commentary No. 885* of that date. Both the more-inclusive unemployment-rate numbers, as well as the headline payroll-employment details, are open for negative headline surprises, given the ongoing, general stagnant-to-weakening tone in a number of the better business indicators. Where the headline payroll gain of 98,000 in the March detail was a downside shock to the markets, a rebound to average levels of recent months appears to be expected.

Underlying Reality Remains to the Downside of Expectations. In the context of recent the extreme volatility and inconsistencies in payroll and unemployment detail, almost anything remains within possible BLS reporting. Hinted at by the "advance" first-quarter GDP estimate, underlying reality remains a much weaker-than-expected economy, which increases the odds of negative surprises to the headline reporting of both the payroll and household-survey detail, against what likely will be relatively strong consensus expectations.

