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

COMMENTARY NUMBER 947

First-Quarter GDP, March New-Orders for Durable Goods, New- and Existing-Home Sales

April 27, 2018

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The Consumer Suffered Heavily in First-Quarter 2018, Reflected in Contracting Goods Consumption and Unchanged Residential Investment

It Is the U.S. Consumer Who Fundamentally Drives the Economy, Not the Healthcare, Insurance or Financial-Services Industries

Consumer Liquidity Conditions Bode Poorly for Near-Term Activity

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Major Downside Benchmark Revisions Loom for Series Such as New Orders for Durable Goods and Retail Sales, and a Widened the Trade Deficit; Beware the GDP Comprehensive Benchmark Revision in July

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PLEASE NOTE: The next regular Commentary, planned for Friday, May 5th, will cover April 2018 Employment and Unemployment, the full March 2018 Trade Deficit and Construction Spending.

Best wishes — John Williams (707) 763-5786

Today's (April 27th) *Opening Comments and Executive Summary.* The ***Opening Comments*** reviews some issues with the headline first-quarter GDP and related economic conditions, while the ***Executive Summary*** (page 5) provides highlights of the "advance" estimate of First-Quarter 2018 GDP, March 2018 New Orders for Durable Goods and New- and Existing-Home Sales.

The ***Reporting Detail*** (page 30) reviews in greater depth the headline GDP, New Orders and Home Sales.

The ***Hyperinflation Watch*** (page 48) updates the velocity of money (the turnover of the nominal money supply in the nominal GDP), in the context of the "advance" estimate of First-Quarter 2018 GDP and the latest Federal Reserve Board revisions, reporting and ShadowStats estimates of the money supply.

The ***Consumer Liquidity Watch*** (page 51) updates current liquidity conditions for the initial estimate of the Conference Board's Consumer Confidence and the final estimate of University of Michigan's Consumer Sentiment for April 2018.

The ***Week, Month and Year Ahead*** (page 65) provides background on recent *Commentaries* and previews the reports of next week's April Employment and Unemployment estimates, along with the full March Trade Deficit and Construction Spending.

OPENING COMMENTS

Despite the Stronger-Than-Expected 2.3% First-Quarter GDP Growth, Consumer Details Were Seriously Troubled, On Top of Some Contentious Reporting Issues. These *Opening Comments* are supplemented by background and details discussed in the *Executive Summary*, *Reporting Detail* and the *Consumer Liquidity Watch.* This morning's (April 27th) headline First-Quarter 2018 GDP reflected troubled consumer spending, an unusually soft monthly (and quarterly) trade deficit and some unusually sharp variations between GDP and CPI inflation. In combination, these factors showed not only rapidly deteriorating economic activity, but also the potential for what easily could have been, and still may become, much weaker headline real growth in first-quarter activity, even a quarterly contraction.

As to the inflation games, consider the *Implicit Price Deflator* section in the *Executive Summary* (page 7). Where there usually is some positive correlation between the headline quarterly inflation rates of the Implicit Price Deflator (IPD) used to deflate the headline GDP, and the Consumer Price Index (CPI-U) commonly used to deflate broad economic measures such as retail sales, the correlation was negative this quarter. The 0.56% differential between the CPI-U and the IPD quarterly changes was enough to reduce the headline, annualized real first-quarter GDP growth rate from 2.32% to 1.76%.

U.S. Consumers *Are* the U.S. Economy, and They are In Trouble. The U.S. economy is based on and reflects the wellbeing, needs and activities of its residents, the "consumer." All other economic factors are some variation or derivative of consumer needs including, but not limited to basic survival, family and procreation; food, shelter and clothing; life, liberty and the pursuit of happiness. When the consumer is in trouble covering the basics, generally so too is the broad economy in trouble.

Discussed in the *Consumer Liquidity Watch* (page 51), consumer liquidity constraints of recent years have prevented normal functioning of the economy, including lack of full recovery from the Great Recession, and now, those conditions are deteriorating anew. Where the consumer expenditures accounted directly for 72.9% of the headline real first-quarter GDP, 38.8% of that direct consumer spending went into goods and residential investment, covering, among other items basic food, shelter and clothing.

First-Quarter 2018 Consumer Goods Consumption Declined in a Manner Not Seen Since Coming Out of the Great Recession, While Residential Investment Was Flat. What happened in first-quarter 2018 was that consumer real purchases of goods declined quarter-to-quarter by an annualized 1.1% (-1.1%), a decline for only the second time since purportedly exiting the Great Recession in 2009. The first time was in second-quarter 2011, but that annualized quarterly decline was a softer 0.8% (-0.8%). Separately, Residential Investment was flat quarter-to-quarter in the current reporting.

Those consumption elements are basic to consumer survival, and the headline first-quarter weakness was consistent with First-Quarter 2018 Real Retail Sales (see *Commentary No. 946*), and with First-Quarter 2018 Existing Home Sales (see the later discussions in the *Executive Summary* and *Reporting Detail*).

The effect of the weakness in goods consumption and in new residential investment was to reduce the headline annualized real aggregate GDP growth by 0.24% (-0.24%), all on the goods side. The plus-side for the consumer was in services, particularly in the areas of healthcare (contributed 0.38% of the GDP growth rate) and Financial Services and Insurance (contributed 0.34% of the GDP growth). The problem remains that when the consumer starts cutting back on the basics, other areas will tend to take even bigger hits. The warning signs are out for deepening trouble ahead for headline U.S. economic activity.

March 2018 "Advance" Goods Trade Deficit Pulled Back Sharply; First-Quarter 2018 Now Appears Likely to Be Worst Real Merchandise Trade Shortfall Since 2006. Based on a better-than-consensus "advance" estimate of the March 2018 Trade Balance (Deficit) in Goods, combined with the full reporting already in place for January and February 2018, ShadowStats estimates that the real Merchandise-Trade Deficit continued to widen for first-quarter 2018, but at slower pace than before. The two-month reporting trend had the first-quarter 2018 real-Merchandise-Trade Deficit on track for its worst showing in the history of the series. Backing off that record pace of deterioration, the first-quarter deficit now looks like the worst showing since third-quarter 2006, although it still is not far from that worst-ever mark, seen previously in fourth-quarter 2005. In contrast, the fourth-quarter 2017 deficit was the worst such showing since first-quarter 2007. *Graph OC-1* plots the latest estimates.

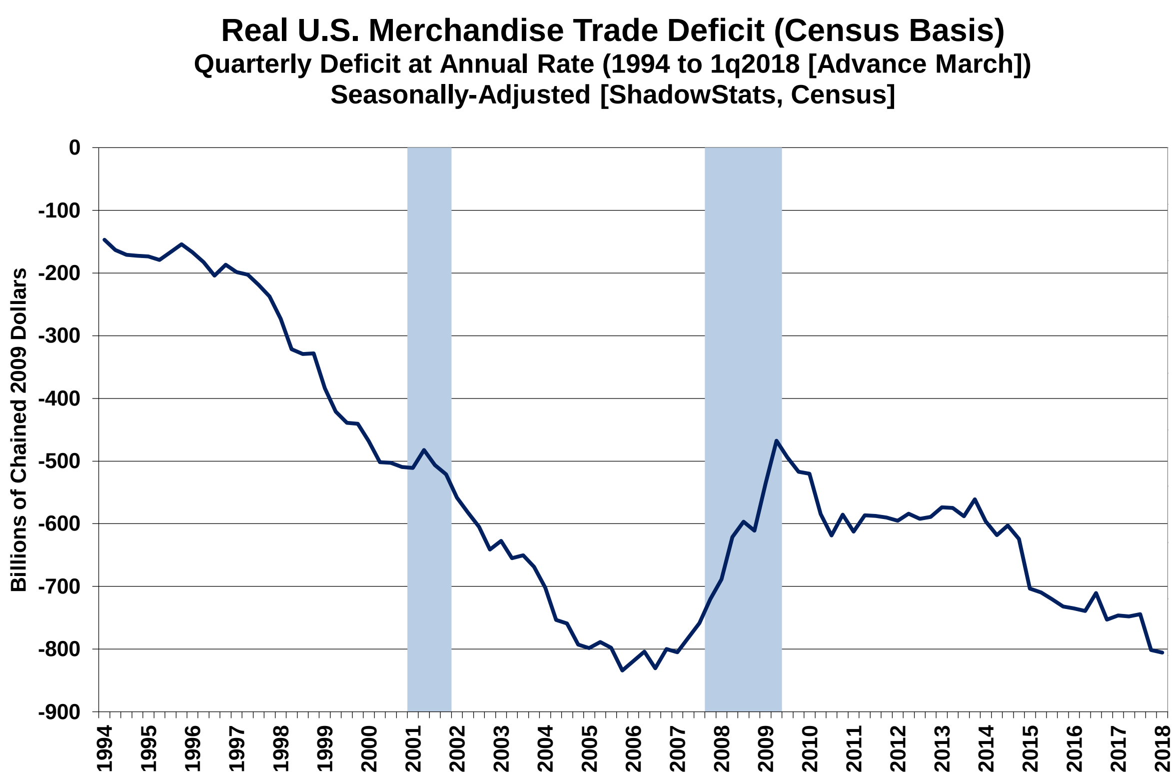
That said, initial Net Export details published along with the headline First-Quarter 2018 GDP reflect a quarterly narrowing, not a widening in the real goods deficit as suggested here. The full month's reporting on May 3rd will determine where this is going in the month ahead. Sometimes there are large revisions between the "advance" and "final" monthly estimates, but based on the current trade detail, it looks like a real widening in the Real Merchandise-Trade Deficit for first-quarter 2018.

Again, the initial headline estimate for the full first-quarter 2018 deficit will be published on Thursday, May 3rd (see *Pending Economic Releases* in the *Week, Month and Year Ahead* section for details).

The "advance" March 2018 trade deficit in goods was released April 26th by the Census Bureau and the Bureau of Economic Analysis. It came in at a nominal monthly deficit of $68.037, versus the full-February reporting of $75.875 billion [revised from the "advance" February deficit of $75.353 billion], as covered in *Commentary No. 944* and *Commentary No. 943*.

The net improvement in the "advance" monthly goods deficit was split fairly even between an increase in exports and a decline in imports, in all categories, except for automobiles, where automotive exports declined and imports increased. Those patterns are suggestive of some possible seasonal-adjustment issues with the advance numbers. Separately, where some domestic weakness in consumer demand could be inferred from the weaker imports of consumer goods, these numbers are early estimates, again sometimes subject to large revisions in the subsequent, full-month's headline reporting.

Graph OC-1: Real U.S. Merchandise Trade Deficit (1994 to 1q2018, Including "Advance" March 2018)



EXECUTIVE SUMMARY: Gross Domestic Product (GDP)—First-Quarter 2018 "Advance" Estimate—Slowed to Overstated 2.3% Annualized Growth, Amidst Collapsing Consumer Activity. Broad, headline U.S. economic growth, as measured by the GDP, slowed in the initial first-quarter 2018 estimate to an annualized real quarterly growth rate of 2.32%, down from 2.89% in fourth-quarter 2017, confounding my ShadowStats' forecast for an outright, real quarterly contraction, at least for the moment. Discussed in the *Opening Comments*, however, the U.S. consumer is in an intensifying liquidity bind, as shown in the headline first-quarter GDP consumption detail (see also the *Consumer Liquidity Watch*). Separately, there were unusual reporting issues with understating of this quarter's GDP inflation—the implicit price deflator—boosting related inflation-adjusted real growth (see the following *Implicit Price Deflator* section). In addition, there are issues with the initial headline trade-deficit estimate for the quarter, discussed in the *Opening Comments*. Headline activity in the GDP, as well as in subsidiary monthly economic series, likely will slow sharply, both in revisions and in new headline detail (eventually into outright quarterly contractions), again, as discussed in the *Opening Comments*.

First-Quarter 2018 GDP (including two subsequent monthly revisions) will be the last reporting of this series before its overhaul and redefinitions in the July 27th comprehensive, annual GDP benchmarking, discussed in the *Opening Comments* of *Commentary No. 946*.

Headline "Advance" or First Estimate of First-Quarter 2018 GDP. Detailed in *Table 1*, the headline "advance" estimate of First-Quarter 2018 GDP slowed to annualized real quarterly growth of 2.32%, from 2.89% in fourth-quarter 2017, 3.16% in third-quarter 2017, 3.06% in second-quarter 2017, 1.24% in first-quarter 2017 and 1.76% in fourth-quarter 2016.

Not shown in the table are the year-to-year real growth rates of 2.86% in first-quarter 2018, 2.58% in fourth-quarter 2017, 2.30% in third-quarter 2017, 2.21% in second-quarter 2017, 2.00% in first-quarter 2017 and 1.84% in fourth-quarter 2016. The average real annualized and annual GDP growth rate over the last forty years has been 1.7% for both measures.

Table 1 shows the breakout of GDP growth by quarter, by economic sector and by general product sector. As noted in th *Opening Comments*, consumer weakness was seen particularly in the negative contribution to the headline GDP growth rate of 0.24% (-0.24%) in the Goods Sector under Personal Consumption Expenditures, and the lack of any growth contribution from Residential Investment, a subcomponent of Fixed Investment in Gross Private Domestic Investment.

Quarterly growth came from increased Inventories, where quarterly Final Sales (GDP less Inventory Change) weakened to 1.89% in first-quarter 2018, from 3.42% in fourth-quarter 2017. Almost half the aggregate quarterly growth came from Services, particularly in sub-sector areas of Healthcare, contributing 0.38% to the total, and Financial Services and Insurance, contributing 0.34% to the total.

The annualized growth contribution from each sub-category of consumer spending, business/residential investment, trade deficit (net exports) and government spending is additive, summing in combination to the total headline change in GDP, where 0.73% + 1.19% +0.20% +0.20% = 2.32%. Again, further breakout and monthly shifts in revisions are shown in *Table 1*.

Regrouped by the general nature of product-sector activity, the headline first-quarter 2018 GDP gain of 2.32% encompassed positive growth-rate contributions of 1.10% from the services sector, 0.88% from the goods sector and 0.34% from the structures sector (again, see *Table 1* for recent historical comparisons).

Table 1: "Advance" Estimate of First-Quarter 2018 GDP, Growth Distribution versus Recent Quarters

Annualized Quarterly Real Growth in Headline Gross Domestic Product Growth Contribution by Consumption and Product Sector	1st-Q 2018 First Estimate	4th-Q 2017	3rd-Q 2017	2nd-Q 2017	1st-Q 2017	4th-Q 2016
CONTRIBUTING ECONOMIC SECTOR						
Personal Consumption Expenditures						
- Goods	-0.24%	1.67%	0.97%	1.16%	0.15%	1.03%
- Services	0.97%	1.08%	0.52%	1.08%	1.17%	0.97%
Gross Private Domestic Investment						
- Fixed Investment	0.76%	1.31%	0.40%	0.53%	1.27%	0.28%
- Change in Private Inventories	0.43%	-0.53%	0.79%	0.12%	-1.46%	1.06%
Net Exports of Goods and Services	0.20%	-1.16%	0.36%	0.21%	0.22%	-1.61%
Government Consumption/Investment	0.20%	0.51%	0.12%	-0.03%	-0.11%	0.03%
GDP Annualized Real Growth	2.32%	2.89%	3.16%	3.06%	1.24%	1.76%
Final Sales, GDP Less Inventories	1.89%	3.42%	2.37%	2.94%	2.70%	0.70%
CONTRIBUTING PRODUCT SECTOR						
Goods	0.88%	0.78%	2.74%	2.10%	-0.47%	0.88%
Services	1.10%	1.18%	0.93%	1.32%	0.91%	0.61%
Structures	0.34%	0.93%	-0.51%	-0.36%	0.80%	0.27%
GDP Annualized Real Growth	2.32%	2.89%	3.16%	3.06%	1.24%	1.76%
Sources: Bureau of Economic Analysis (BEA), ShadowStats.						

Implicit Price Deflator Showed Weaker Annualized Inflation as the CPI-U Soared. Discussed in the *Reporting Detail*, the Implicit Price Deflator (IPD)—the GDP inflation measure—softened in first-quarter 2018 activity, showing an annualized quarterly inflation rate of 1.98%, down from 2.34% in fourth-quarter 2017. In contrast, the headline, seasonally-adjusted Consumer Price Index (CPI-U) showed a first-quarter 2018 inflation rate of 3.51%, up from 3.31% in fourth quarter 2016.

To the extent there is a relationship between those two series—there usually is—the total negative relative swing in annualized first-quarter versus fourth-quarter inflation of 0.56% from the CPI-U to the IPD was enough to have reduced the headline, annualized real first-quarter GDP growth rate from 2.32% to 1.76%. Shown in the reporting detail, the relative changes first-quarter versus fourth-quarter in the annual IPD (1.85% versus 1.86%), and the CPI-U (2.25% versus 2.12%) for those same two quarters were not large. Such are the benefits and the dangers of using annualized quarterly rates of change. Again, as noted in the *Public Commentary on Inflation Measurement*, the lower the inflation rate used in deflating an economic series, the stronger will be the resulting, inflation-adjusted "real" growth.

Underlying Economic Reality. *[Note: With natural-disaster-related disruptions largely playing out or having wound down coming into the first-quarter 2018, this text largely has been repeated from* Commentary No. 943*, which covered the prior, third estimate of fourth-quarter 2017. All details and graphs have been updated to reflect the latest developments and the "advance" headline reporting of First-Quarter 2018 GDP (also, for background, see prior* Commentary No. 946*, the* Economy *section of* Special Commentary No. 935, No. 859 Special Commentary*, and related headline issues raised in* Special Commentary No. 888, Commentary No. 887, Special Commentary No. 885, Commentary No. 877, Commentary No. 876 *and* Commentary No. 900*, all incorporated here by reference).*

The consumer-base of the U.S. economy remains troubled, with faltering confidence and mounting liquidity issues as discussed in the *Consumer Liquidity Watch* on page 51, and as discussed in today's *Opening Comments*.

With relatively softer annualized real first-quarter 2018 growth in the GDP coming in somewhat below the 40-year series average 2.7% annualized and annual growth of the series, such reflects some minimal back off from the transient, one-time boosts to fourth-quarter activity from the systemic disruptions and distortions tied to a particularly violent and destructive 2017 Atlantic Hurricane and California Wildfire seasons. That said, while headline growth GDP was positive, underlying real-world U.S. economic activity continued in a deepening-to-flattening and as-yet-unrecognized "new" recession.

Distortions, aside, headline monthly reporting activity in better-quality subsidiary economic series have continued to confirm a still unfolding, renewed contraction (the ShadowStats contention remains that the "new" downturn is in reality just a continuation of the economic crash into 2009, from which the aggregate real-world economy never fully recovered, again, see *Commentary No. 946* and *Commentary No. 942-B*). While the July 2017 GDP benchmarking did show some slowing in previously-reported 2016 and 2017 growth, activity in 2014 and 2015—otherwise heavily revised to downside in series-specific benchmarkings (again, see *Commentary No. 900*)—revised higher with that GDP benchmarking.

This ongoing, low-level, non-recovering stagnation/new downturn in the real-world economy remains in place despite some corrective regulatory actions, tax reform and developing movement on the trade front and an unbalanced spending/budget deficit bill. Nonetheless, continuing efforts by the Trump Administration to enact new policies aimed at generating economic stimulus programs, such as investment in infrastructure have not been well orchestrated with a still largely uncooperative Congress. Nonetheless, tax reforms indeed should generate some stimulus for business activity along with the recently enacted budget deal. Assuming eventual, coordinated and meaningful legislative movement in the Congress—despite continuing, significant political discord—and given basic economic lead times, the first major, positive impact on the economy, from any actions now, would be well after the 2018 Congressional election, perhaps mid-to-late 2019.

The continuing, nonsensical, headline economic boom stories in the popular press largely have been generated partially as a result of the now-waning hurricane distortions boosting recovery-related consumption and production, seen in the headline fourth-quarter GDP, with likely some lingering effects into first-quarter 2018. Beyond the one-shot, current hurricane-related boosts straddling third- and fourth-quarter 2017 GDP, underlying headline economic reporting and even headline GDP growth should turn lower/negative in the next several quarters, perhaps still beginning with downside revisions to first-quarter 2018. Such had been signaled by a number of pre-hurricane indicators (see *Commentary No. 903*, *Commentary No. 936* and *Commentary No. 937*, and as discussed in today's *Opening Comments*).

Benchmark Revisions and Perpetual GDP Overstatement. Formal recognition of a "new" recession could follow this year, even though its onset quarterly contraction—first-/second-quarter 2018—likely will have been exacerbated by hurricane-distorted relative boosts to activity in fourth-quarter 2017.

Headline GDP overstatement has been a common issue in recent years. Discussed back 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 recognized as having begun around December 2014, perhaps with the pending, comprehensive 2018-benchmarking overhaul. *Commentary No. 902-B* offered similar comments on the 2017 benchmarking.

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.

With the "comprehensive" GDP benchmark revision pending on July 27, 2018 (a restatement of activity back to 1929), potentially more-honest, post-2007 historical GDP reporting could be confirming a non-recovering, multiple-dip economic collapse including a "new" or ongoing downturn post-fourth-quarter 2014. The Bureau of Economic Analysis (BEA) recently posted its *Background Briefing* on the pending GDP revisions. Some of the factors in play already have hit the production data, in its revision (as suggested in *Commentary No. 942-B*).

These background circumstances also should encompass the evolving, current 2018 downturn in broad, domestic economic activity, discussed in *Special Commentary No. 935*. 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, albeit not imminent, 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 *Special Commentary No. 935*. 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 or contributed significantly to the headline post-2009 faux ongoing economic recovery and expansion.

Accordingly, the broad ShadowStats economic outlook has not changed a bit, fundamentally, and, again, the gist of most of following text remains along the lines as expounded upon in *Special Commentary No. 935*. The details and numbers here, again, are updated for the latest headline information. In combination, these various collapsing, non-recovering and non-expanding 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 may be political/financial-market gaming of the GDP data and other headline numbers, such as the unemployment rate.

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 the still highly-questionable data on the Affordable Care Act (ACA) and related healthcare spending—a consistent, fundamental pattern of faltering historical activity, again, is shown in the accompanying "corrected" GDP graphs (see *Graphs 2* and *4*).

Discussed in today's *Consumer Liquidity Watch*, 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. Today's accompanying graphs tell that story, updated for the first estimate of first-quarter 2018 GDP, as well as 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 used with the headline GDP, for the new headline detail available for first-quarter 2018. Updated for the new numbers, 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 traditionally 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 first estimate of first-quarter 2018 GDP currently stands 16.0% [previously 15.3% based on fourth-quarter 2017 GDP] above its pre-recession peak estimate of fourth-quarter 2007. Again, no other major economic indicators show recovery or expansion close to the GDP's, as discussed in the *Opening Comments* of prior *Commentary No. 946*. None of the series covered in this section or in *No. 859* has shown a significant recovery to pre-recession highs, let alone formal economic expansion.

In contrast, the "corrected" GDP version, in the second graph of each set (*Graphs 2* and *4*), shows the first-estimate of first-quarter 2018 GDP activity still to be down by 6.3% (-6.3%) from its pre-recession peak of first-quarter 2006. Noted in *General Commentary No. 867*, *Commentary No. 869*, *Commentary No. 926* and *Commentary No. 942-B*, headline Industrial Production and the related Manufacturing series have rivaled, and in the case of Manufacturing, have exceeded the Great Depression in terms of the number of quarters or months 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*.

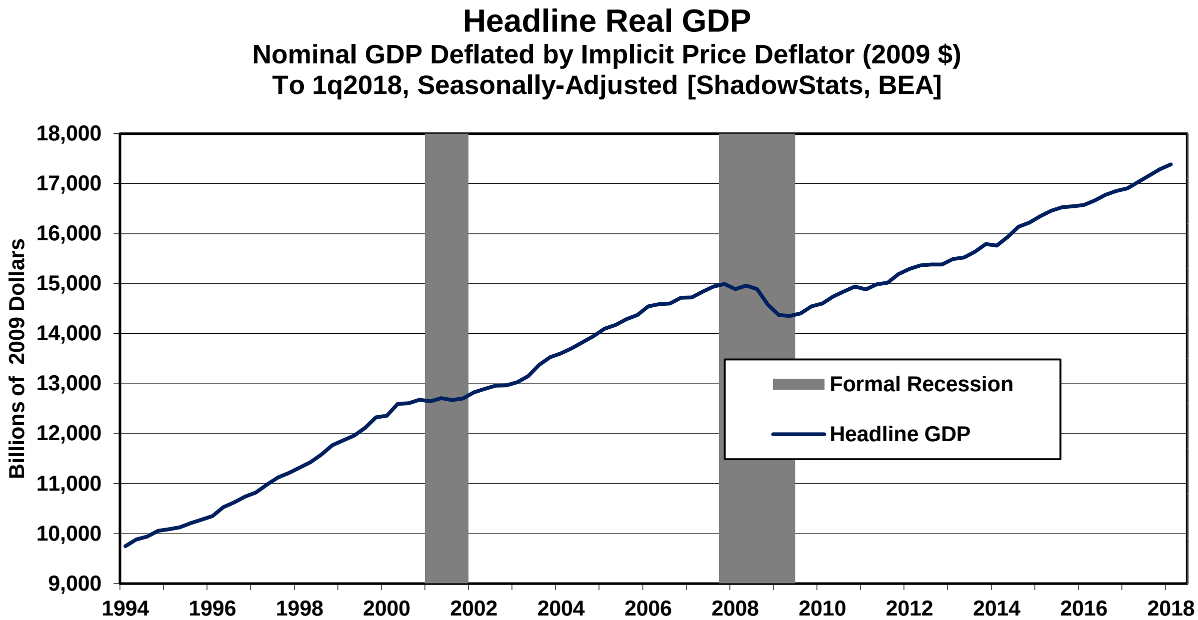
The pattern of economic collapse into 2009, followed by some minimal recovery, low-level stagnation and renewed contraction is seen with many series. As shown in *Graphs 5* to *9* (again also see more-extensive background in *Special Commentary No. 935* and earlier in *No. 859*), better-quality independent 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.

Headline GDP Reporting. The Bureau of Economic Analysis (BEA) reported April 27th, that the first or "advance" estimate of First-Quarter 2018 GDP showed an annualized quarterly gain of 2.32% versus 2.89% in fourth-quarter 2017, 3.16% in third-quarter 2017, 3.06% in second-quarter 2017 and 1.24% in first-quarter 2017. Year-to-year growth was 2.86% versus 2.58% in fourth-quarter 2017, versus 2.30% in third-quarter 2017, versus 2.21% in second-quarter 2017 and 2.00% in first-quarter 2017. For the full-year 2017, annual GDP growth was 2.25%, versus 1.49% in 2016 and 2.86% in 2015.

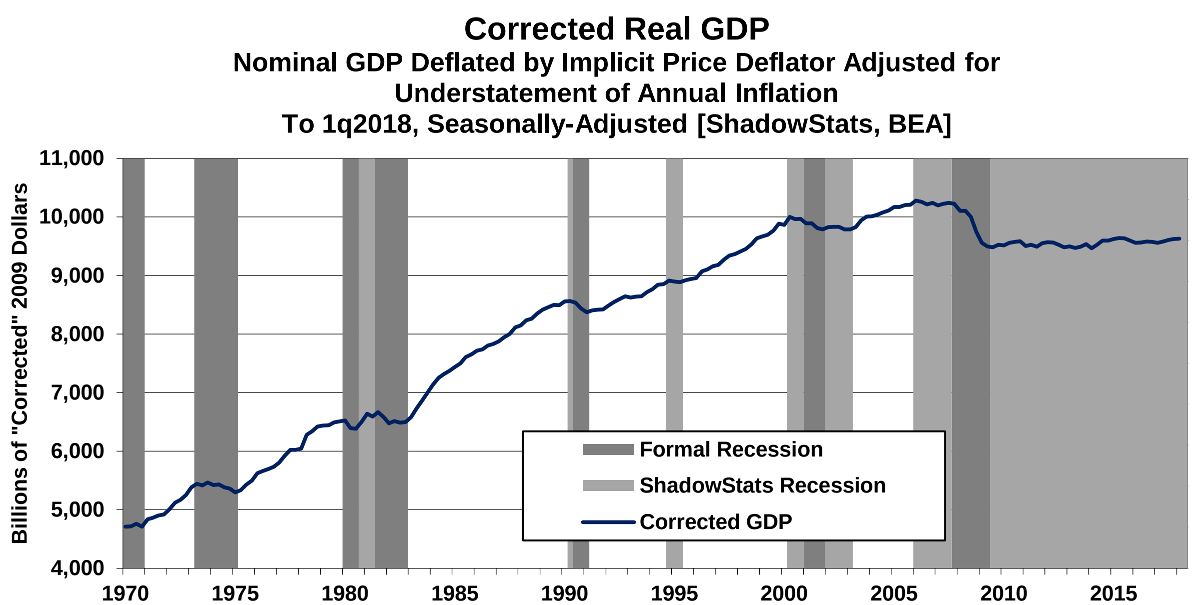
Those details are reflected in *Graphs 1* and *3*, and in *Graphs 30* to *35* in the *Reporting Detail.* With First-Quarter 2018 GDP standing at 16.0% above the pre-2007-recession peak of the series, an incredible (as in not believable) pace of economic expansion, again, not seen otherwise in other major economic reporting, as regularly discussed here. Again, *Graphs 2* and *4*, reflect the ShadowStats alternative estimates of GDP growth, corrected for the understatement of annual inflation used in deflating real GDP growth.

[Graphs 1 to 3 begin on the next page.]

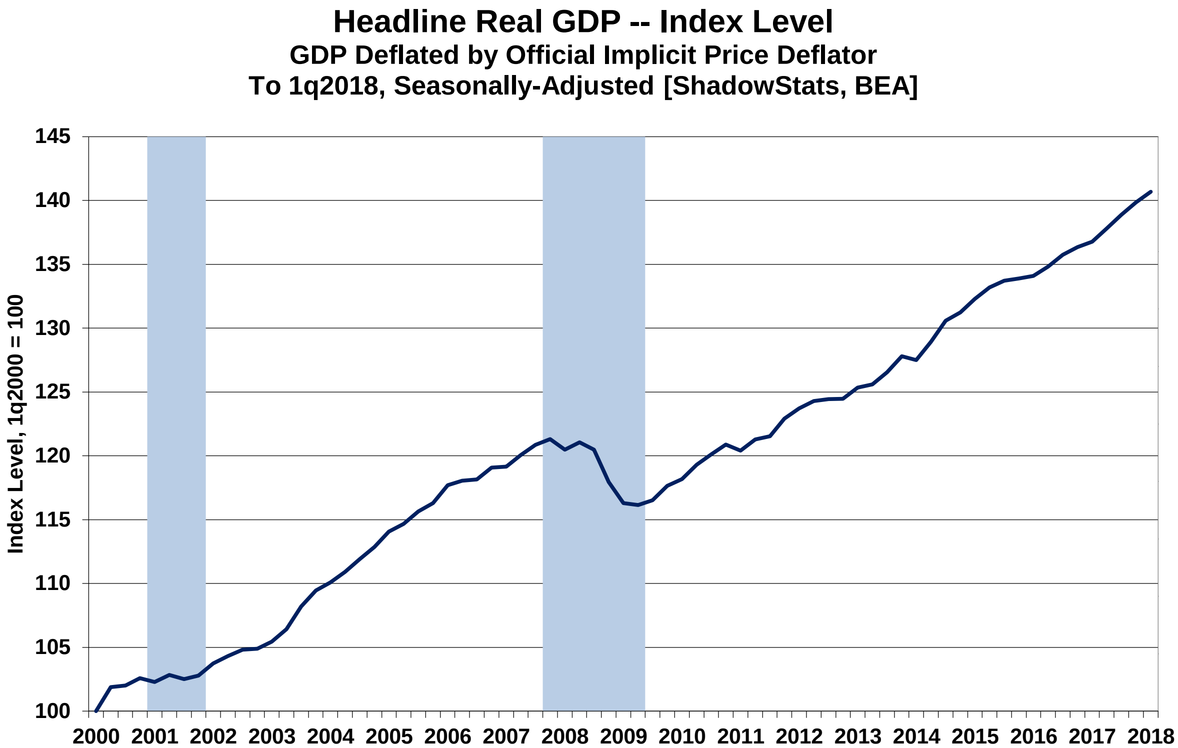
Graph 1: Real GDP (1970 -2018), First-Estimate of First-Quarter 2018



Graph 2: "Corrected" Real GDP (1970 -2018), First-Estimate of First-Quarter 2018



Graph 3: Real GDP Index – Headline Real GDP through First-Estimate of First-Quarter 2018



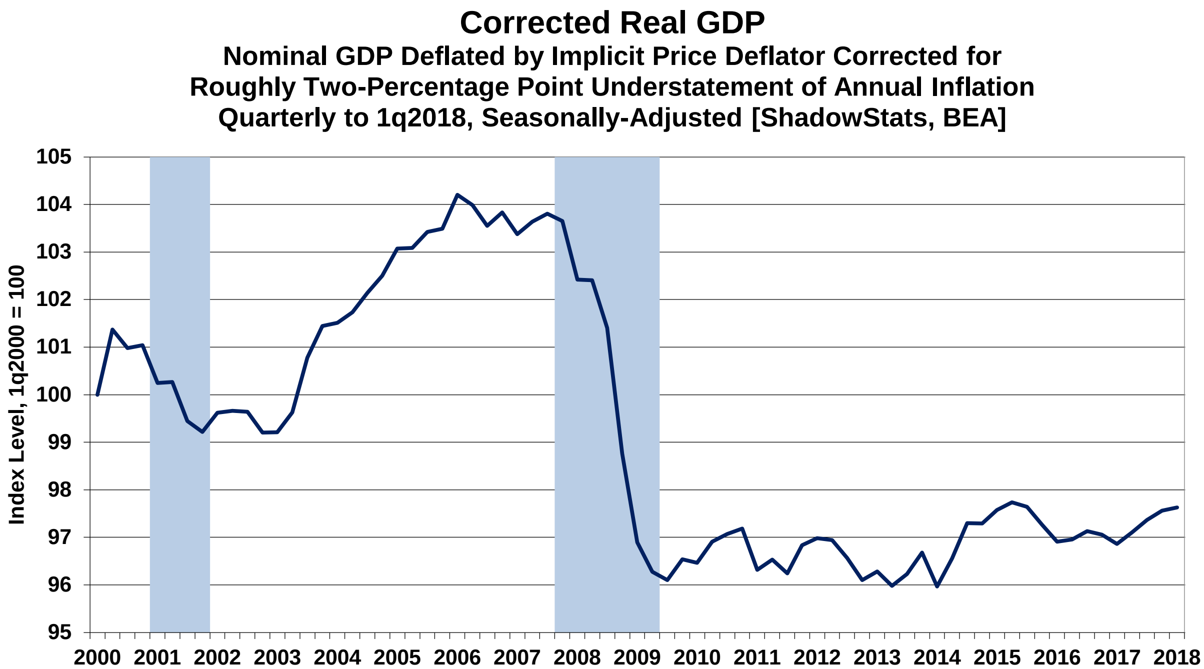
Comparative Indicators. The following *Graph 4* of the "corrected" GDP series is shown along with an example of the regular, comparative economic indicators, which generally confirm the broad story from the "corrected" GDP graph that the economy never recovered from its collapse into 2009 and is either in renewed downturn or continuing low-level stagnation, albeit some of the latter is slightly up-trending.

The comparative *Graph 5* shows the Cass Freight Index™ measure of North American freight volume through March 2018, used with the permission of Cass Information Systems, Inc. Few measures better reflect the actual flow of goods in commerce than freight activity (see the *Opening Comments* of prior *Commentary No. 946* as well as related coverage in the section following, which reviews March 2018 New Orders for Durable Goods). 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*.

Graph 6 plots March 2018 Manufacturing of Consumer Goods from *Commentary No. 946*, in the context of downside benchmark revisions to Industrial Production as detailed in *Commentary No. 942-B*. Those revisions likely foreshadow looming downside benchmark revisions to headline GDP on July 27th. *Graph 7* of U.S. Petroleum Consumption, and *Graph 8* of inflation-adjusted total U.S. Construction Spending, which includes 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/downturn.

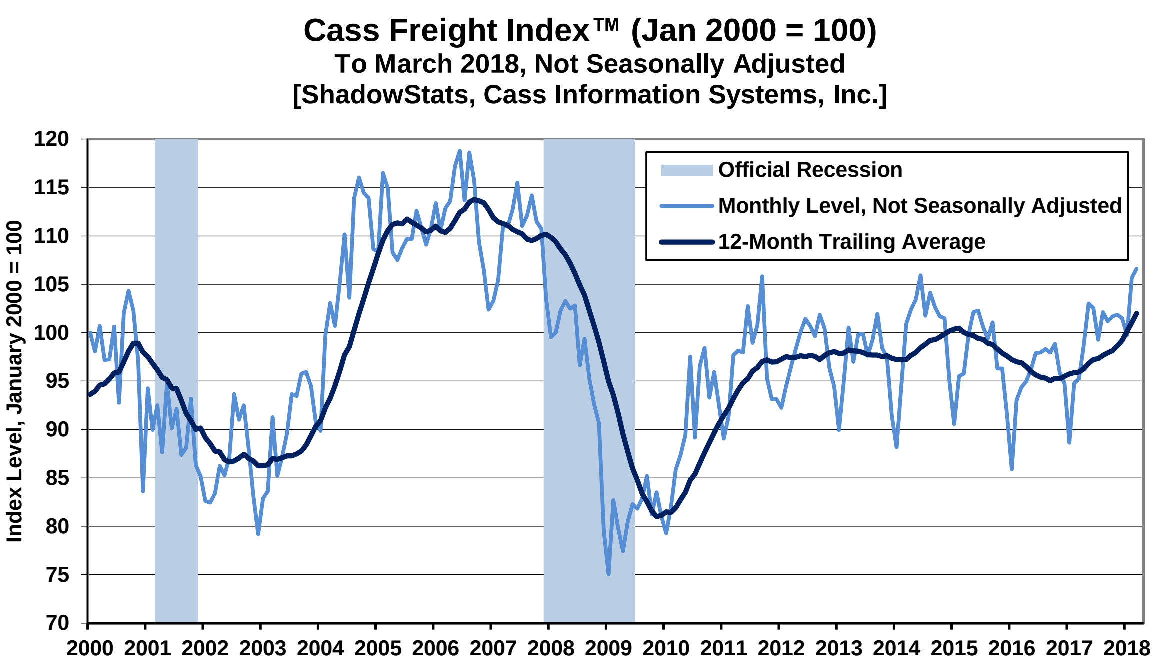
Graph 9 of the employment-to-population ratio also remains a solid indicator of underlying labor conditions in the context of the broad population and long-term discouraged and displaced workers, reflected there through March 2018.

Graph 4: "Corrected" Real GDP Index (2000 - 2017), First-Estimate of First-Quarter 2018



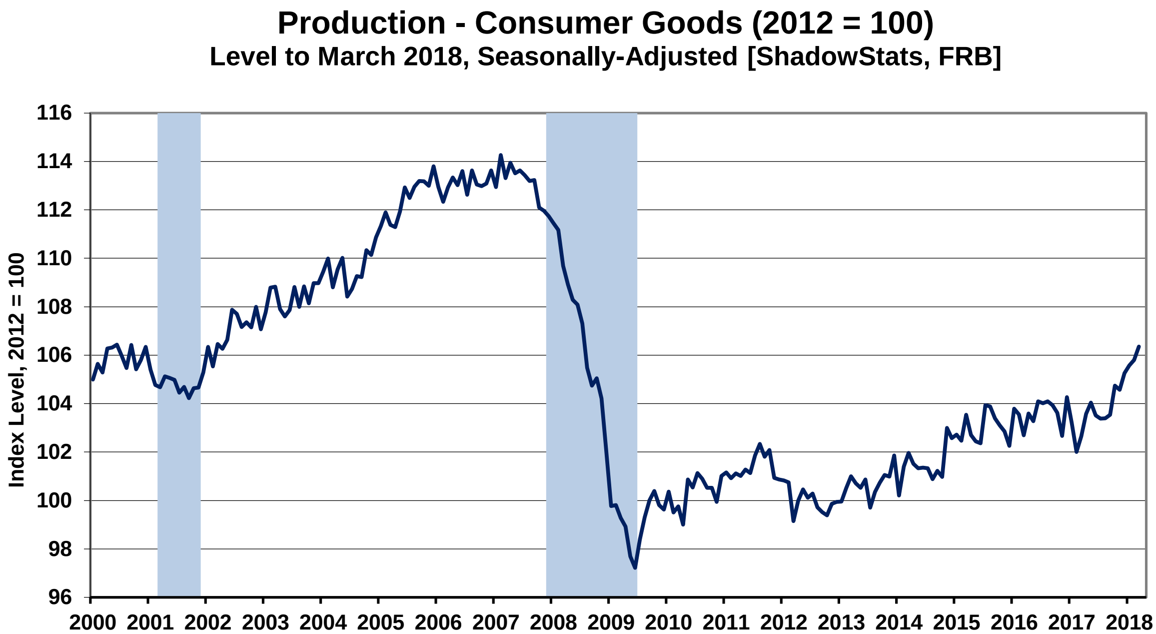
Graph 5: CASS Freight Index™ Moving-Average Level (2000 to March 2018)

(Same as later Graph 16 and Graph OC-1 in [Commentary No. 946](#))

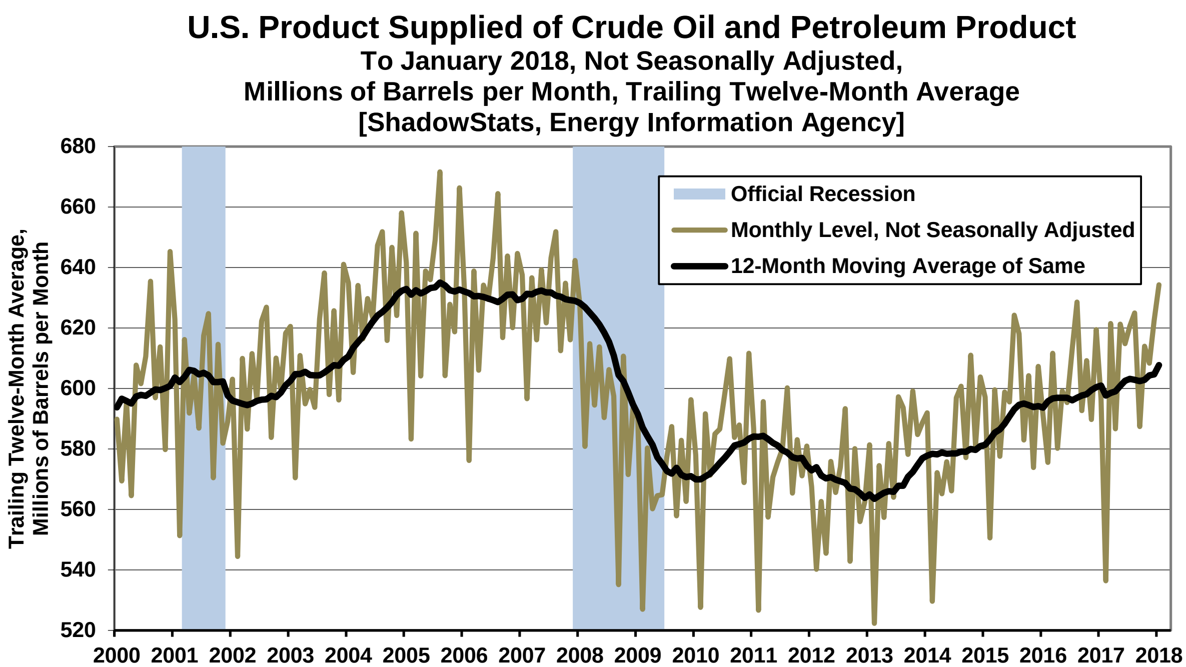


Graph 6: U.S. Industrial Production, Manufacturing - Consumer Goods (2000 to March 2018)

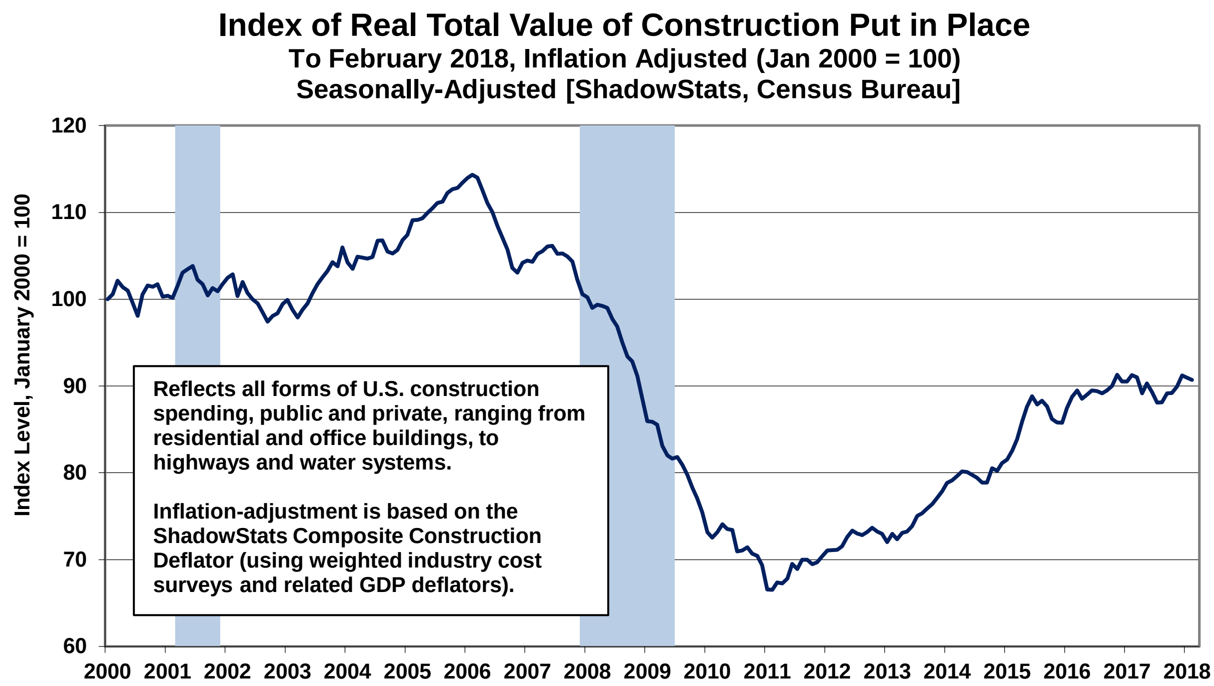
(Same as Graph Benchmark 10 in Commentary No. 946)



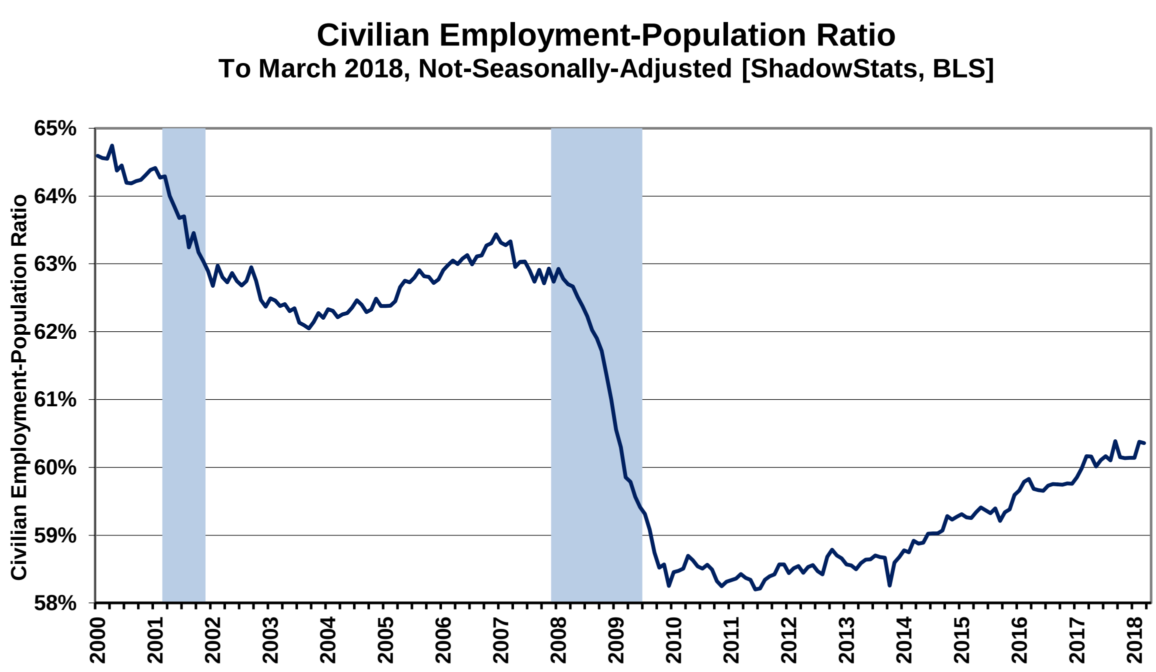
Graph 7: U.S. Petroleum Consumption (2000 – January 2018)



Graph 8: Real Total U.S. Construction Spending (2000 – February 2018)
(See Graph 31 in [Commentary No. 944](#))



Graph 9: Civilian Employment-Population Ratio (2000-March 2018)
(See Graph 14 in [Commentary No. 944](#))



New Orders for Durable Goods—March 2018—Net of Volatile Aircraft Orders and Inflation, Orders Contracted Month-to-Month and Were Flat Quarter-to-Quarter. Aggregate New Orders for Durable Goods rose by 2.6% month-to-month in March 2018, boosted by a 44.5% jump in Commercial Aircraft Orders and a 0.4% monthly jump in related inflation. Net of the highly volatile aircraft orders and inflation, New Orders for Durable Goods contracted by 0.5% (-0.5%) in March 2018. Related, real first-quarter 2018 orders, ex-aircraft, were virtually flat, up at an annualized quarterly pace of just 0.1%, having slowed sharply from the disaster-recovery-boosted, annualized quarterly gain of 10.1% in fourth-quarter 2017.

Net of inflation, real New Orders for Durable Goods rose month-to-month by 2.1% in March, again down by 0.50% (-0.50%) ex-Commercial Aircraft, continuing a decade-long period of economic non-expansion. Respectively, those series remained shy of recovering their pre-2007 recession highs by 5.7% (-5.7%) and by 6.0% (-6.0%).

Despite the recent, disaster-recovery-induced, smoothed upside bias, the six-month moving average of those series should begin to flatten out meaningfully in the months ahead, along with the continued unwinding of the natural-disaster impacts as preliminarily seen in the first-quarter 2018 detail. Such will be reflected increasingly in *Graphs 10* and *11*, going forward.

***Summary Headline Detail*.** Total nominal New Orders for Durable Goods gained month-to-month by 2.6% in March 2018, versus a 3.5% gain in February, having declined by 3.6% (-3.6%) in January, in the context of minimal revisions. Nominal annual growth rose by 9.5% in March 2018, versus 9.3% in February 2018 and 7.0% in January 2018.

Net of inflation and the volatile commercial aircraft orders, new orders contracted month-to-month by 0.5% (-0.5%) in March 2018, having gained 1.7% in February and having declined by 2.5% (-2.5%) in January. Annual change was 4.2% in March 2018, 6.3% in February 2018 and 4.1% in January 2018.

More-extensive coverage of these monthly numbers and related revisions follow in the *Reporting Detail*, while the related graphs follow here.

May 17th Benchmarking Likely Will Be Negative. Discussed in the Industrial Production Benchmarking coverage (see *Commentary No. 942-B*) and in today's *Reporting Detail*, the pending May 17th benchmark revisions to the new orders series likely will be negative, given the close relationship between the production and orders series and the nature of a number of common, underlying benchmarking sources for both series.

Graphs of Inflation-Adjusted and Smoothed Durable Goods Orders. Updated for the headline March 2018 numbers, *Graphs 10* and *11* show the monthly detail, as well as the six-month moving-average activity for both the aggregate new orders series and the same series net of the irregularly-volatile commercial-aircraft orders. The broad pattern of smoothed, real activity generally remained at a low-level of non-recovered stagnation, albeit still uptrending, given the now-passing natural-disaster distortions.

The moving-average levels in *Graphs 10* and *11* turned lower into year-end 2014, and after an uptick in mid-2015—some smoothed bounce-back—the trend turned down anew into late fourth-quarter 2015, with continued minor fluttering into third-quarter 2016, and initially a small uptick in fourth-quarter 2016 activity continuing on the upside into early-2017. That all was much reduced by the annual benchmarking of May 18, 2017. With subsequent softening headline monthly detail into May 2017 new orders, orders then were boosted by irregularly-surging commercial aircraft orders in June 2017, with reverse impact from a sharp decline in similar orders in July and a renewed surge in aircraft orders in August and a continued gain in September. The small pullback in October 2017 aircraft orders was offset by subsequent rebounds in November and December, followed by a decline in January 2018 largely offset by gains in both February and March.

Starting with August and September of 2017, however, broad orders activity also was spiked by the natural-disaster-recovery as previously discussed, a pattern that appears now to have passed its peak.

New Orders, Production and North American Freight Activity. ShadowStats concentrates on the inflation-adjusted real New Orders for Durable Goods series, ex-commercial aircraft, as a leading indicator to the dominant Manufacturing sector of Industrial Production, and in the context of activity reflected in the Cass Freight Index™. Comparative levels and annual growth patterns are plotted in *Graphs 12* to *17*, with the related, extended discussion found in the *Reporting Detail* of prior *Commentary No. 946*.

None of these series has recovered its pre-recession high of 2007; all continue in non-recovered, non-expanding, low-level stagnation, shy of recovering their pre-recessions peaks by 6.1% (-6.1%) for real new orders, ex-commercial aircraft, by 5.4% (-5.4%) for the manufacturing component of industrial production, and by 7.4% (7.4%) for the Cass Freight Index™, a reliable private indicator of real-world economic activity and shifting business patterns. Again, we thank Cass Information Systems for their permission to use the data.

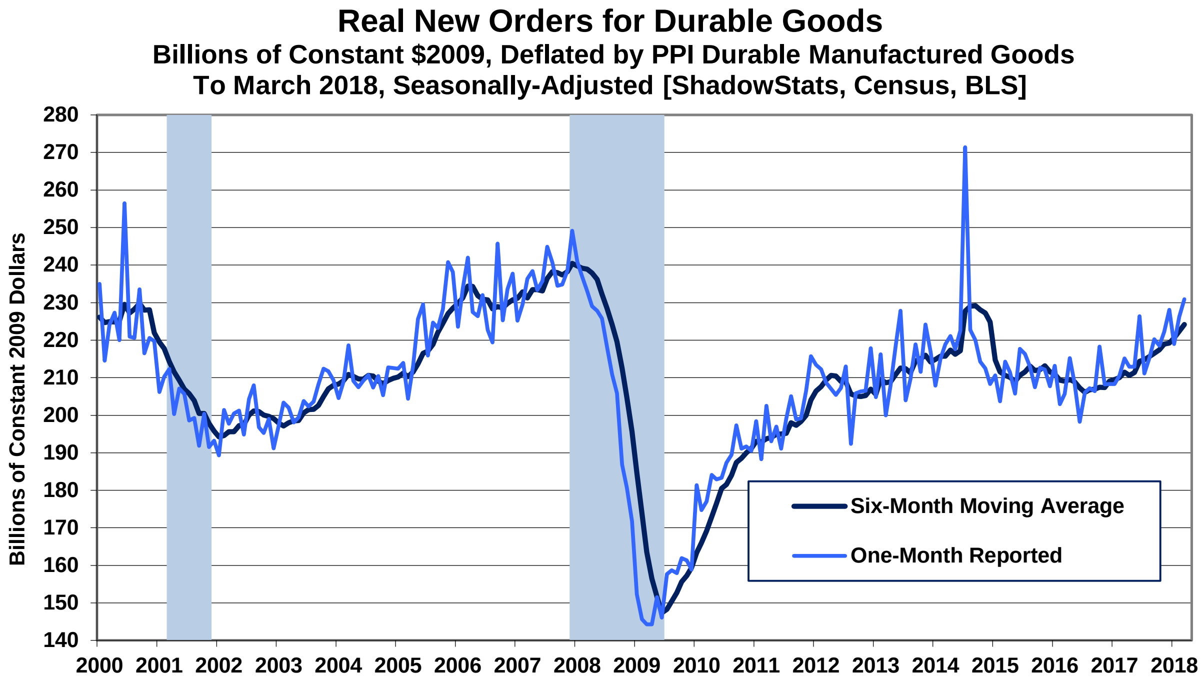
Where moving off the low-level of positive annual growth seen in *Graph 13* might suggest a near-term bottoming in orders (discussed in *General Commentary No. 867*), such partially is an artefact of roughly two-percentage-points understatement of the inflation used in deflating the headline durable goods series, an issue addressed later with *Graphs 18* to *21*.

Again, shown in *Graphs 12* to *17*, year-to-year change in the ex-commercial aircraft durable goods orders series generally has led the broad pattern of annual growth reflected in the headline level of annual change in the manufacturing sector of industrial production, a series that also suffers inflation-reporting distortions (see the inflation discussion in the Industrial Production coverage in *Commentary No. 946*).

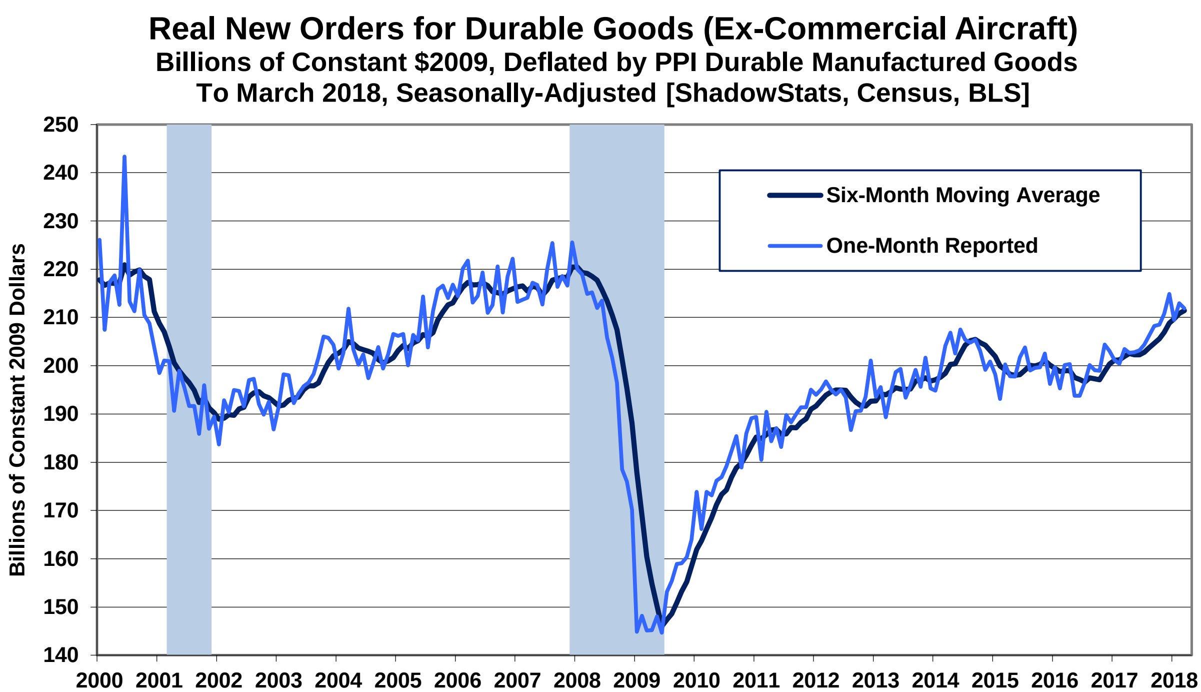
[Graphs 10 to 17 begin on the next page.]

Headline New Orders Detail, Aggregate and Ex-Commercial Aircraft

Graph 10: Real Total New Orders for Durable Goods to Date

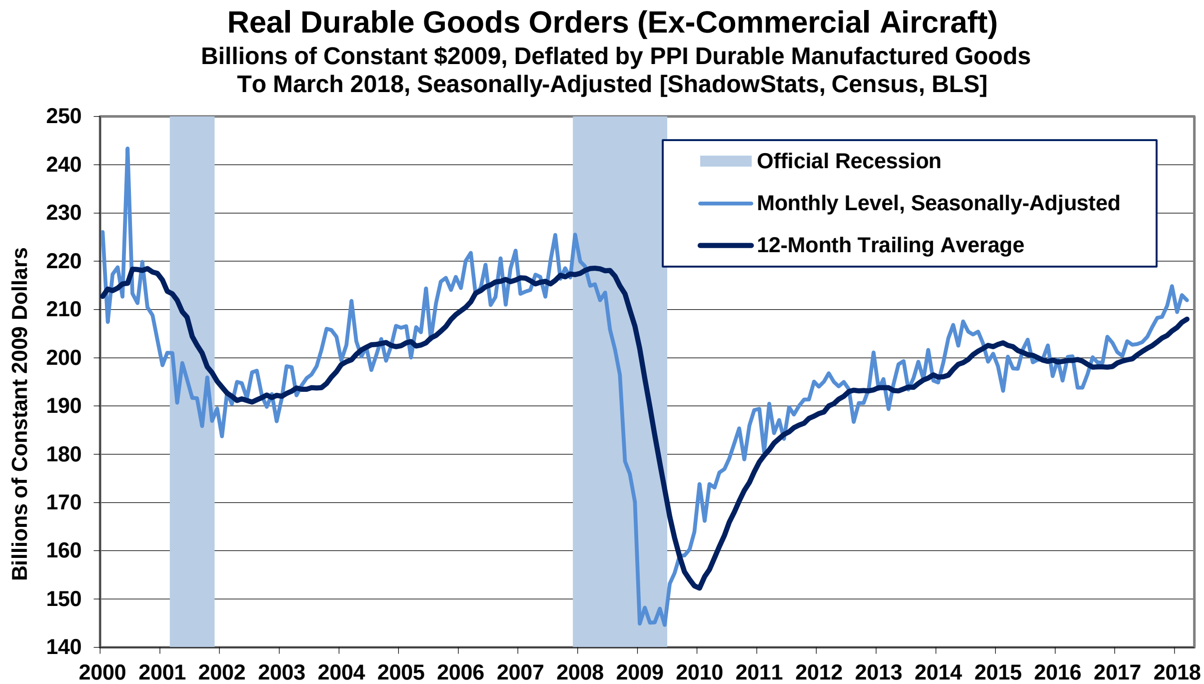


Graph 11: Real New Orders for Durable Goods – Ex-Commercial-Aircraft Orders to Date

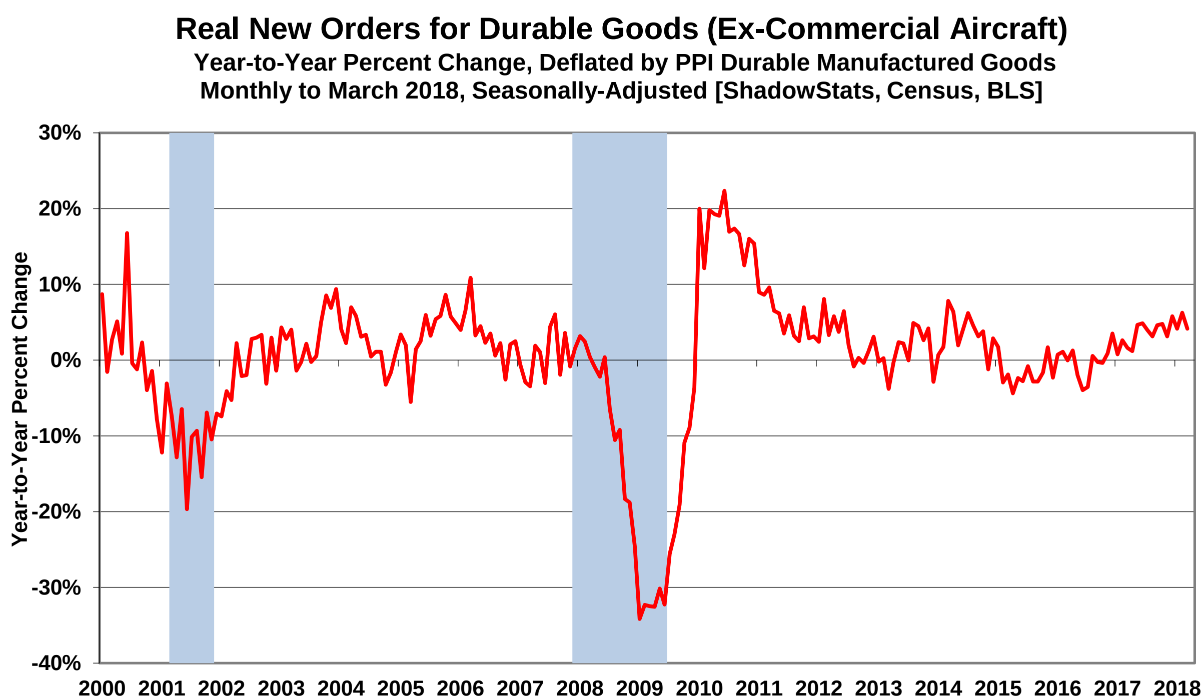


Comparative New Orders, Production and North American Freight Activity

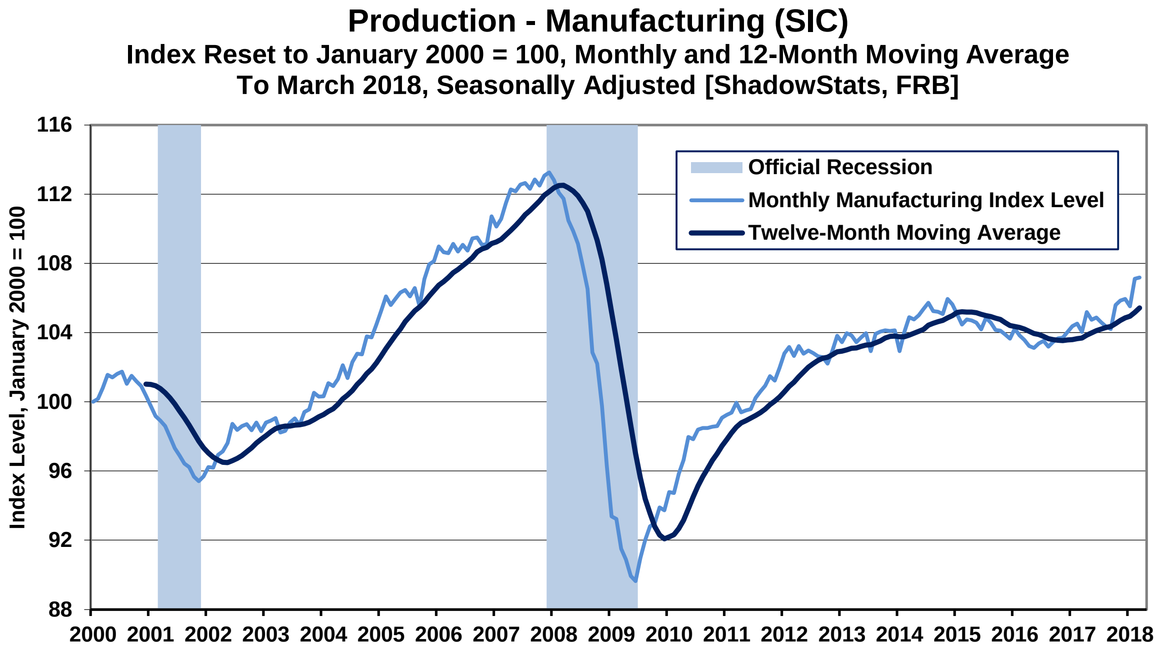
Graph 12: Real New Orders for Durable Goods – Ex-Commercial-Aircraft Orders to Date



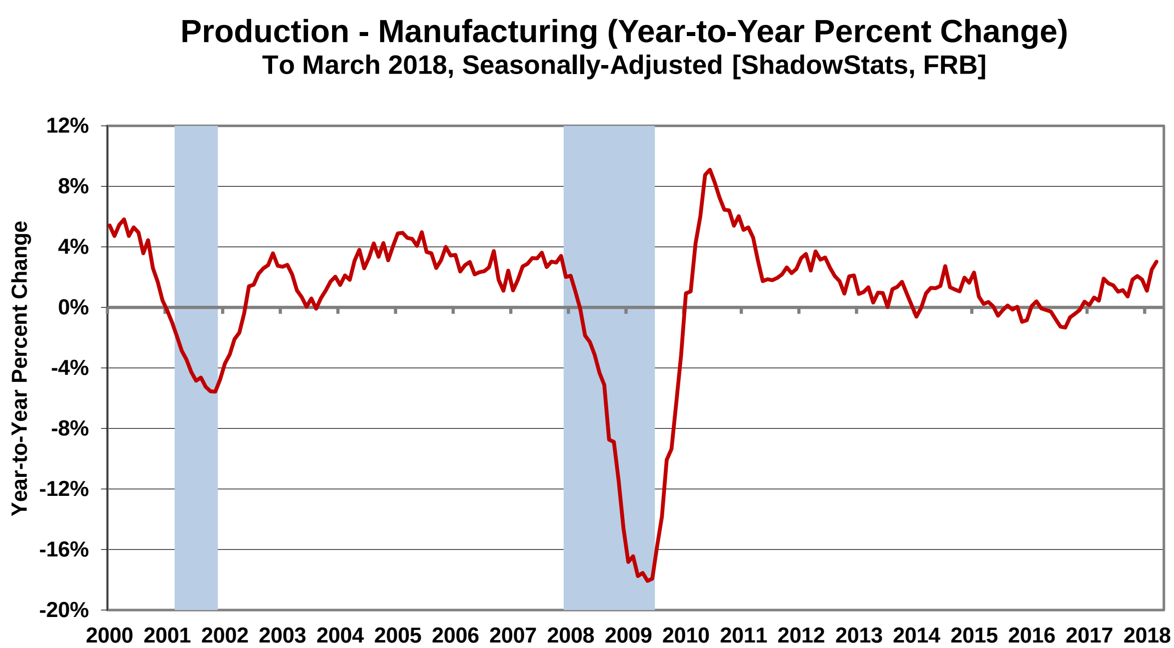
Graph 13: Year-to-Year Percent Change, Real New Orders for Durable Goods – Ex-Commercial Aircraft to Date



Graph 14: Industrial Production-Manufacturing, 12-Month Moving-Average Level (2000 to March 2018)
(Same as Graph OC-2 in Commentary No. 946)

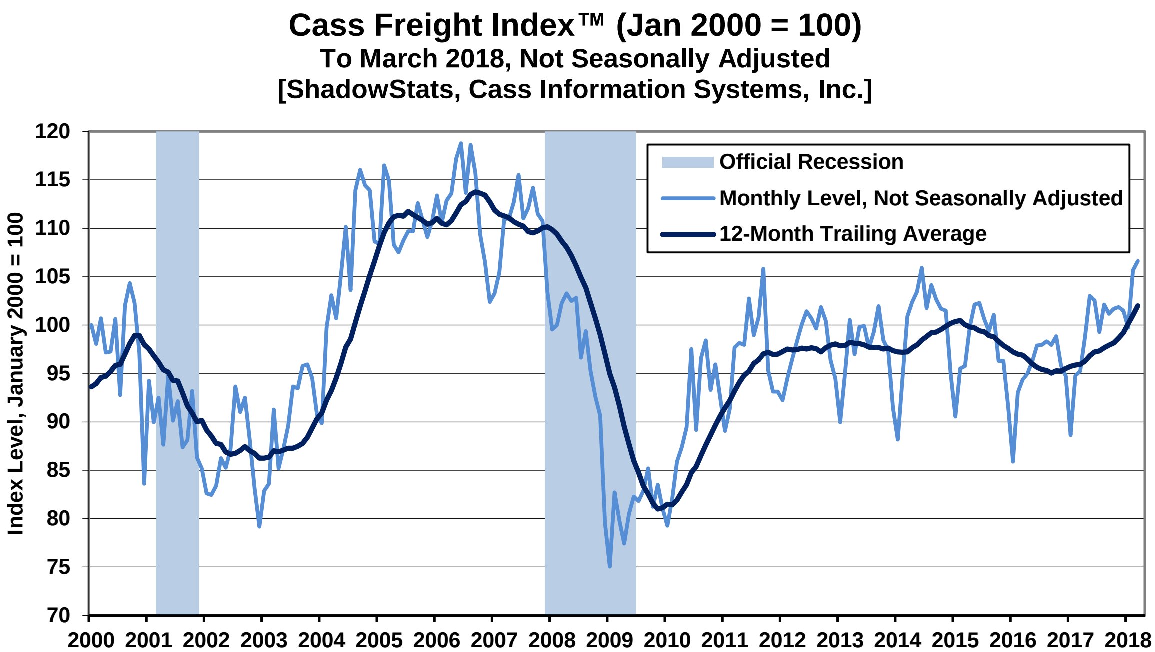


Graph 15: Manufacturing, Year-to-Year Percent Change (2000 to March 2018)
(Same as Graph OC-4 in Commentary No. 946)



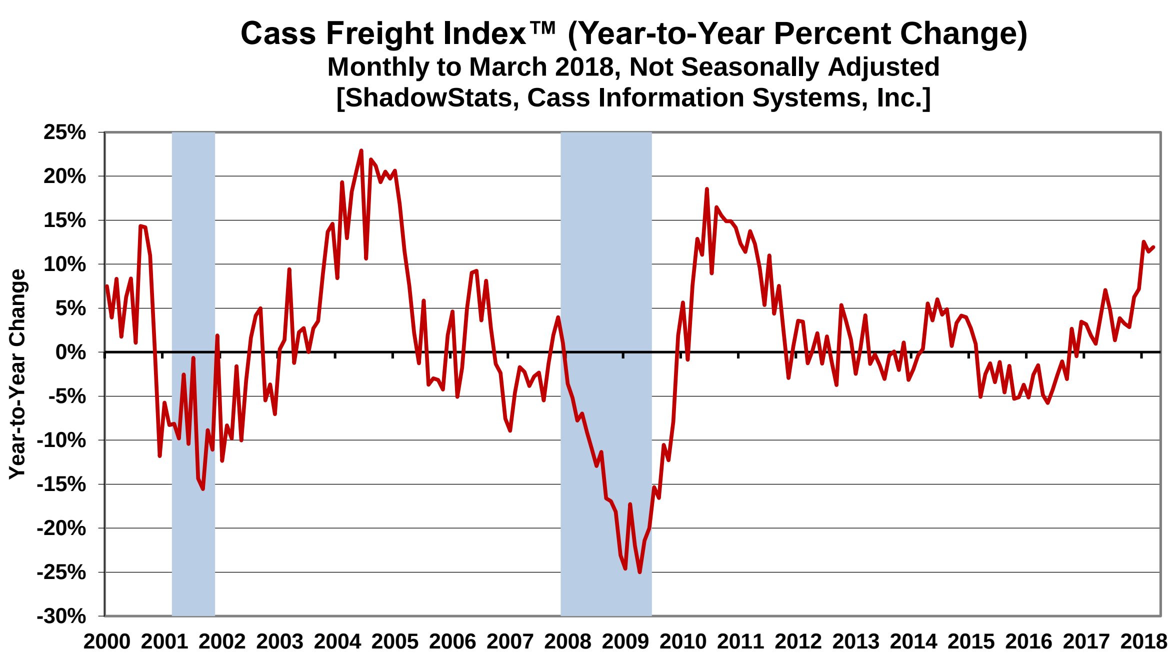
Graph 16: CASS Freight Index ™ Moving-Average Level (2000 to March 2018)

(Same as the preceding Graph 5 and Graph OC-1 in Commentary No. 946)



Graph 17: CASS Freight Index, Monthly Year-to-Year Percent Change (2000 to March 2018)

(Same as Graph OC-3 in Commentary No. 946)



Broad Patterns of New Orders Activity. There has been a general pattern of stagnation or bottom-bouncing evident in the orders of recent years—clearly not the booming recovery seen in official GDP reporting. The real monthly and six-month moving-average levels of new orders in March 2018 remained below both the pre-2007 recession high, as well as the pre-2000 recession high for the series. The pattern of low-level stagnation and fluctuating trend in the annual inflation-adjusted series since mid-2014—net of the irregular aircraft-order effects—again is one that most commonly precedes and/or coincides with a recession, as is the current circumstance. Again, the series remains in non-recovered, non-expanding, low-level stagnation.

The Real New Orders Series "Corrected" for Inflation Understatement. As with other economic series distorted by deflation using official government inflation measures, headline estimates of inflation-adjusted growth in new orders for durable goods generally are overstated, due to the understatement of official inflation. Among other issues, that understatement comes from the government's use of hedonic-quality adjustments—quality issues usually not perceived by the users or consumers of the involved products—in justifying a reduced pace of headline inflation used in deflating some series (see *Public Commentary on Inflation Measurement*).

As done for other series such as Industrial Production and Retail Sales (see the *Executive Summary of Commentary No. 946*, and the GDP (see today's *Executive Summary*), ShadowStats publishes an experimental, corrected-inflation version of the graph of real New Orders for Durable Goods. Real activity, in this case, is corrected for the understatement of the inflation used in deflating the new orders series with the headline PPI inflation for manufactured durable goods (see the *Reporting Detail*).

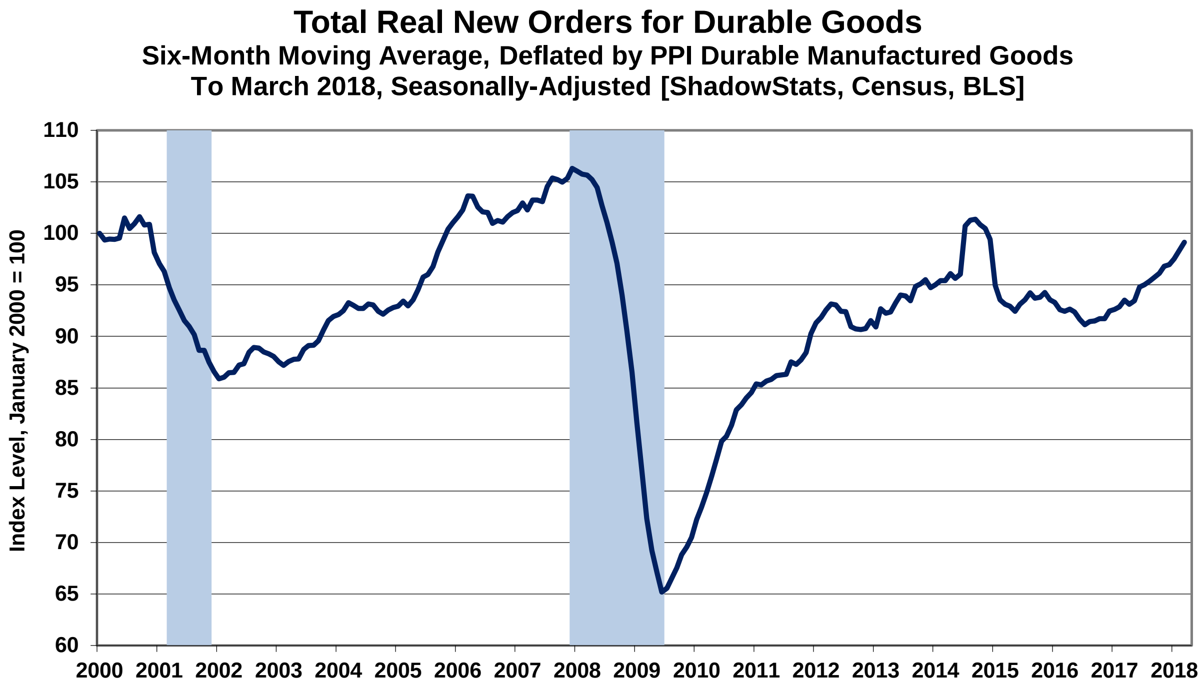
Two sets of graphs follow. The first set (*Graph 18* and *Graph 19*) shows the aggregate series or total durable goods orders; the second set (*Graph 20* and *Graph 21*) shows the ex-commercial aircraft series. The aggregate orders series in *Graphs 18* and *19* includes the monthly commercial aircraft orders. Placed years in advance, aircraft orders are a better indicator of long-range production activity, than they are as a near-term leading indicator of production activity. Again, *Graphs 20* and *21* are shown net of those volatile commercial aircraft orders.

The first graph in each of the two sets shows the official six-month moving average, the same heavy dark-blue line shown in *Graph 10* and *Graph 11*, along with the light-blue thin line of monthly detail. The second graph in each set is the same six-month, moving-average series shown in the first graph, but it has been re-deflated to correct for the ShadowStats estimate of the understatement of the PPI manufactured durable goods inflation measure used in the headline-deflation process. The "corrected" graphs all are indexed to January 2000 = 100.

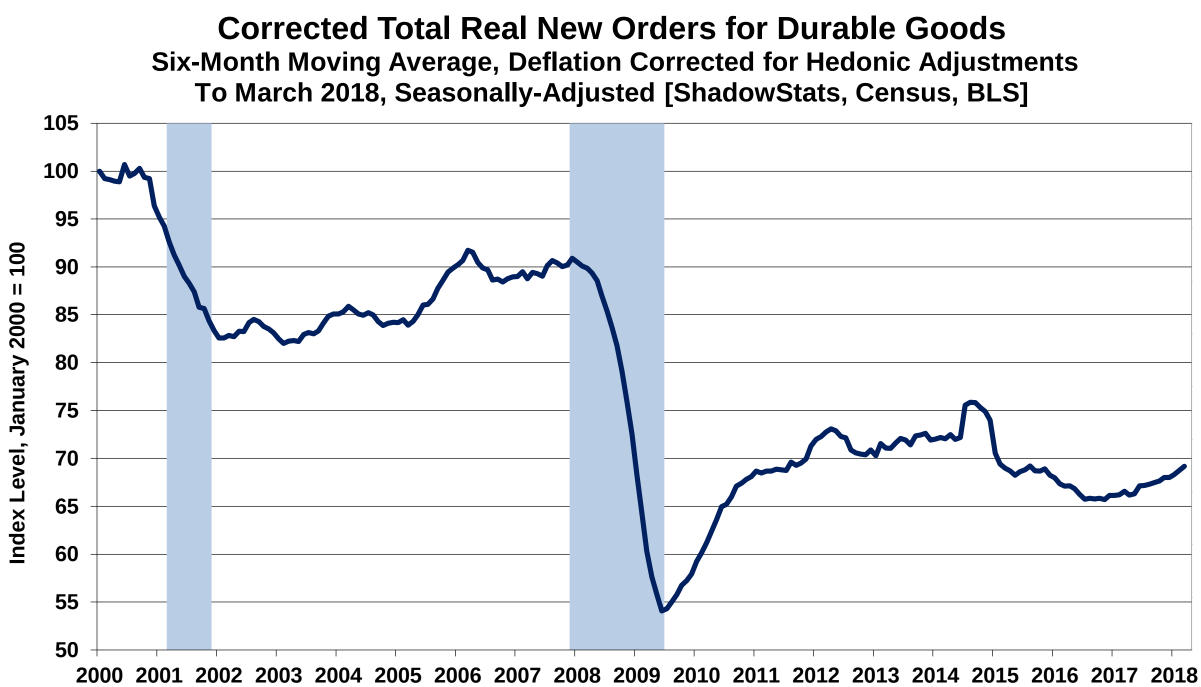
[Graphs 18 to 21 begin on the next page.]

Smoothed Real Series and Real Series Corrected for Inflation Understatement

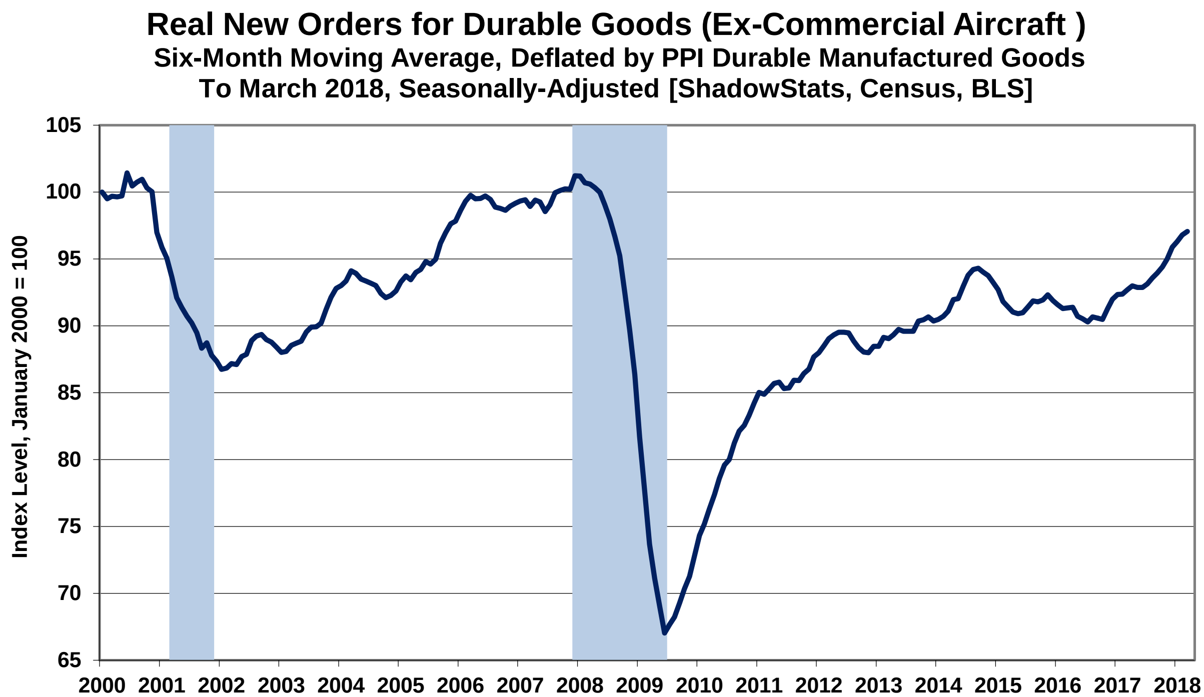
Graph 18: Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



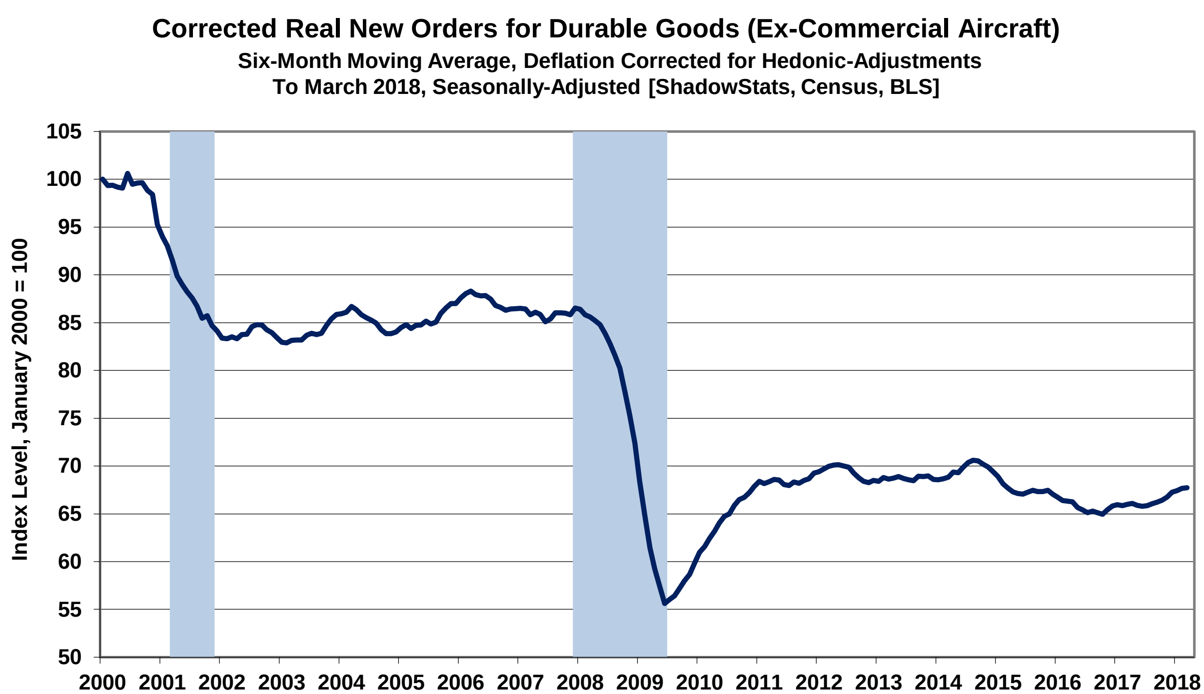
Graph 19: Corrected Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



Graph 20: Index of Durable Goods Orders – Ex-Commercial Aircraft, 6-Month Moving Average



Graph 21: Corrected Index of Durable Goods Orders – Ex-Commercial Aircraft, 6-Month Moving Average



New- and Existing-Home Sales—March 2018—Existing Sales in Quarterly and Annual Contractions, New Sales Boom in Amidst Continuing Nonsense-Volatility. March New-Home Sales rallied in the context of unstable prior-period revisions and virtually meaningless month-to-month headline reporting. Based on two months of reporting through February 2018, New Home Sales had been on track for a first-quarter 2018 contraction off 22.1% (-22.1%); with three months of reporting in hand, amidst volatile revisions and new headline detail, initial first-quarter activity reflected annualized quarter-to-quarter surge of 55.7%. March 2018 headline new-sales rose by 4.0% month-to-month, and year-to-year by 8.8% with respective, unusually-broad 95% confidence intervals of +/- 22.6% month-to-month and +/- 20.3% year-to-year.

New-Homes Sales, published by the Census Bureau and HUD, reflects contract signing. The series remained shy of recovering its pre-recession peak by 50.0% (-50.0%).

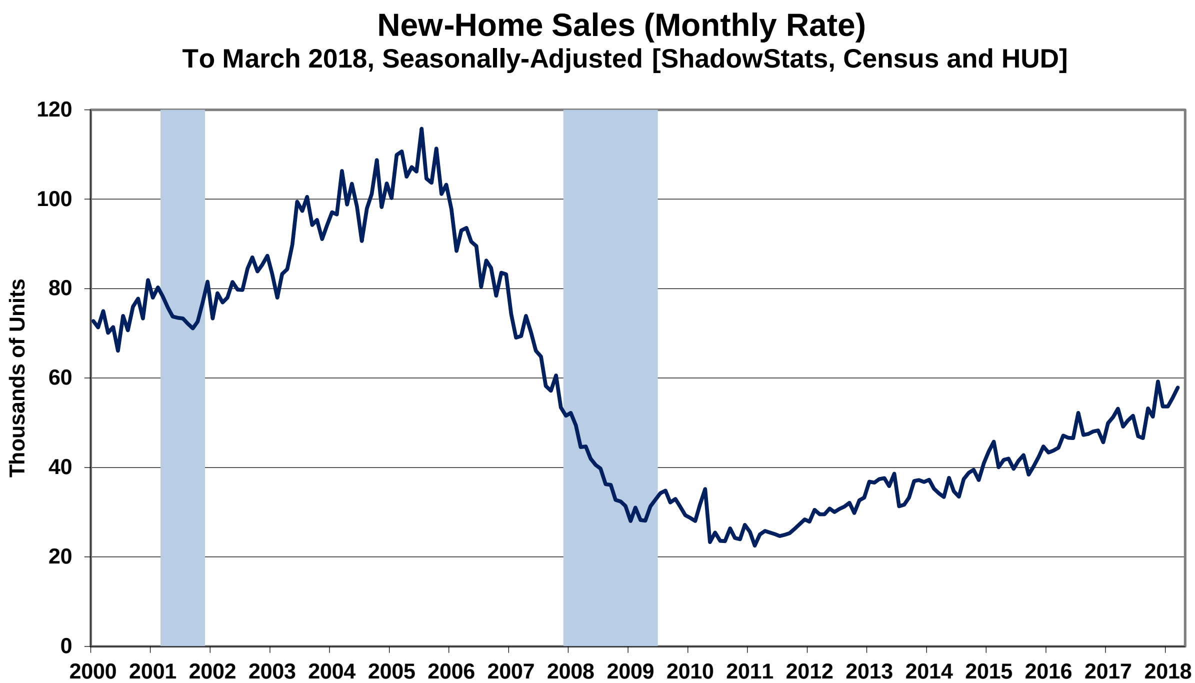
Reflecting a somewhat different circumstance, Existing-Home Sales, published by the National Association of Realtors (NAR), reports actual closings of home sales. That series remained shy of recovering its pre-recession peak by 20.3% (-20.3%) in March 2018. In the context of no prior-period revisions. March sales rose 1.08% month-to-month, but declined year-to-year by 1.23% (-1.23%), versus February's monthly and annual gain of 1.09% and 2.97%. First-quarter 2018 activity contracted at an annualized pace of 6.06% (-6.06%), down by 1.67% (-1.67%) year-to-year.

See the Reporting Detail *for expanded coverage on both the New-Home Sales and Existing Home Sales numbers and related survey details.*

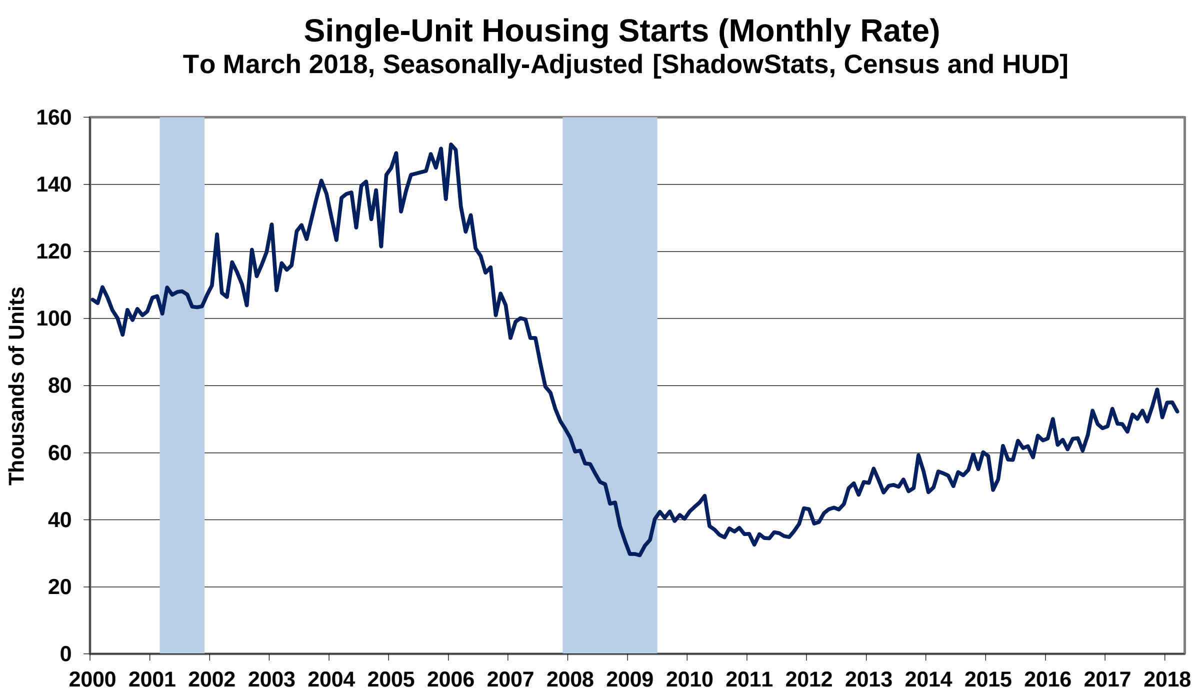
Graphs 22 to *29*, reflect the latest plots of New-Homes Sales and the related Single Unit Housing Starts series, as well as the latest plots of Existing-Home Sales and the related aggregate Housing Starts Series, where both those latter series include multiple-unit structures. See prior *Commentary No. 946* for the detail on the Housing Starts numbers and graphs.

[Graphs 22 to 29 begin on the next page.]

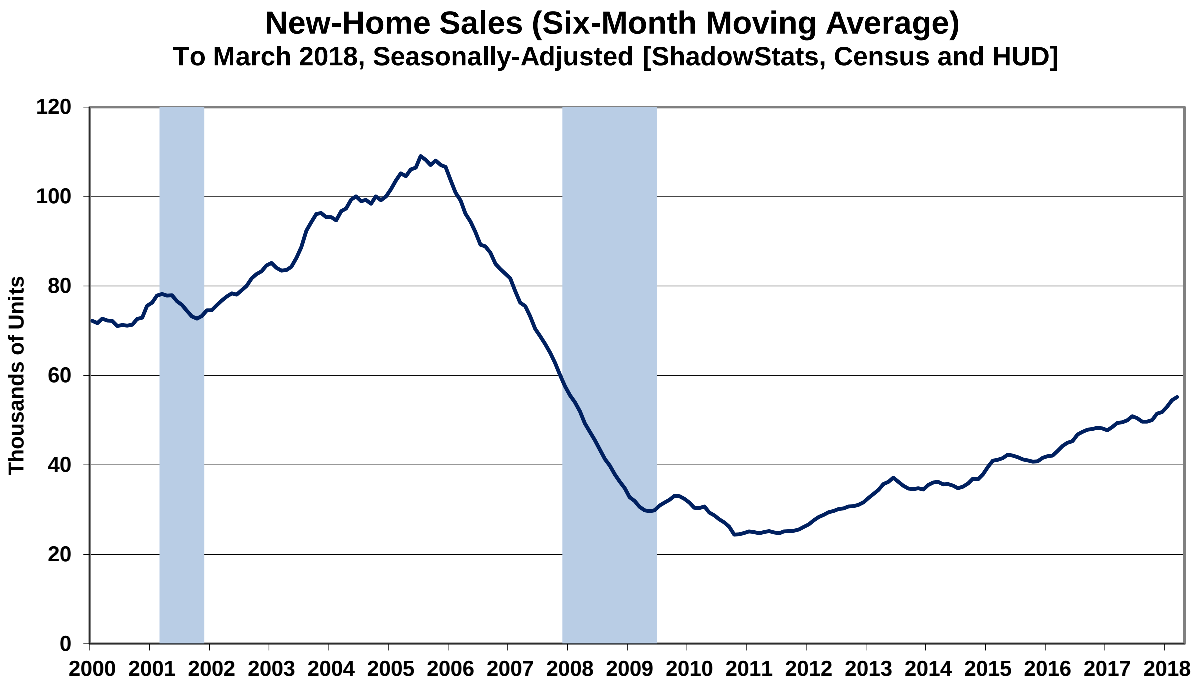
Graph 22: New-Home Sales (Monthly Rate of Activity)



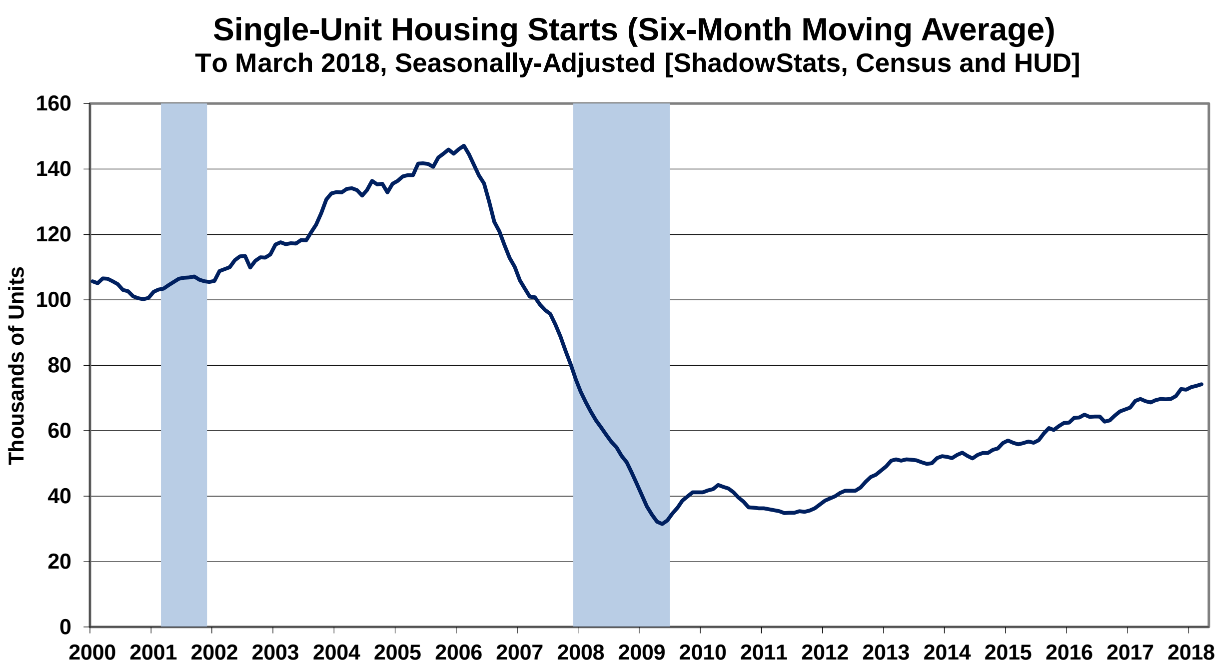
Graph 23: Single-Unit Housing Starts (Monthly Rate of Activity)



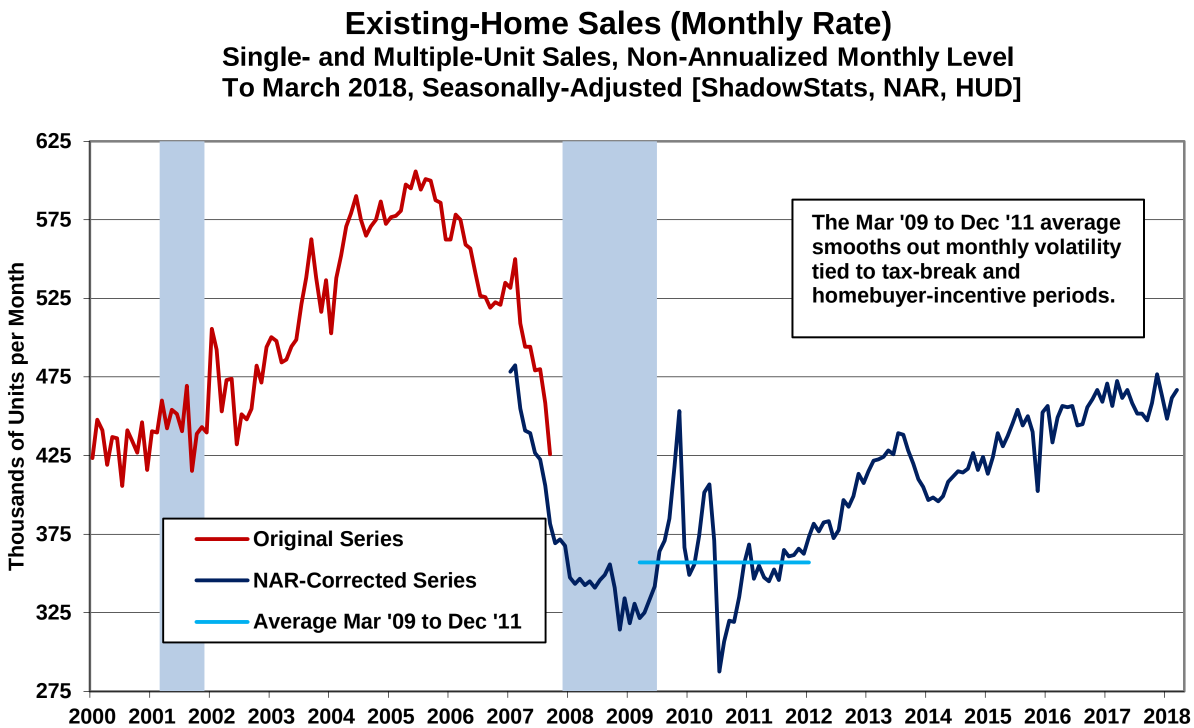
Graph 24: New-Home Sales (Six-Month Moving Average)



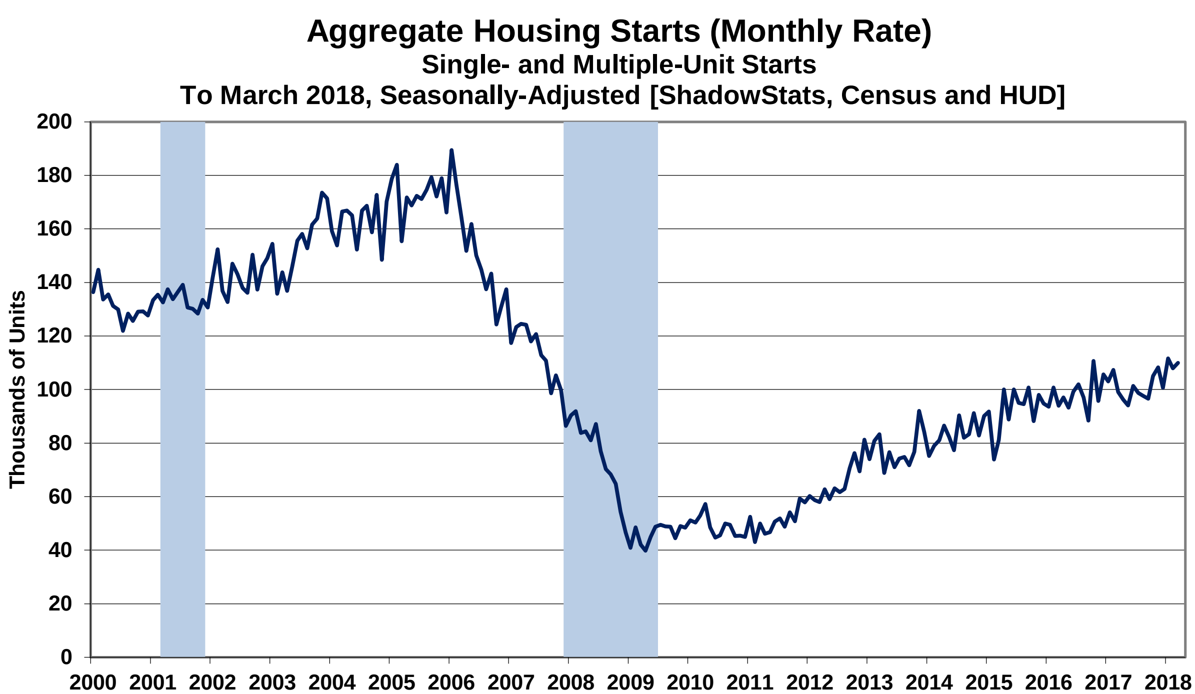
Graph 25: Single-Unit Housing Starts (Six-Month Moving Average)



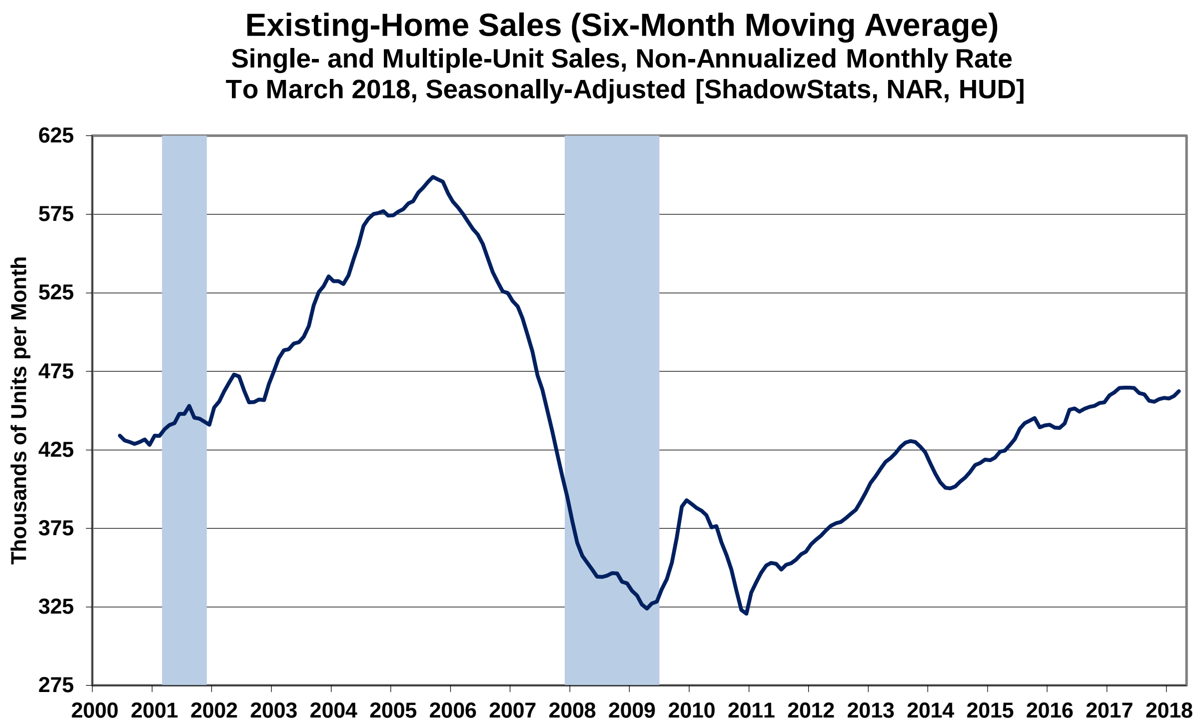
Graph 26: Existing-Home Sales (Monthly Rate of Activity)



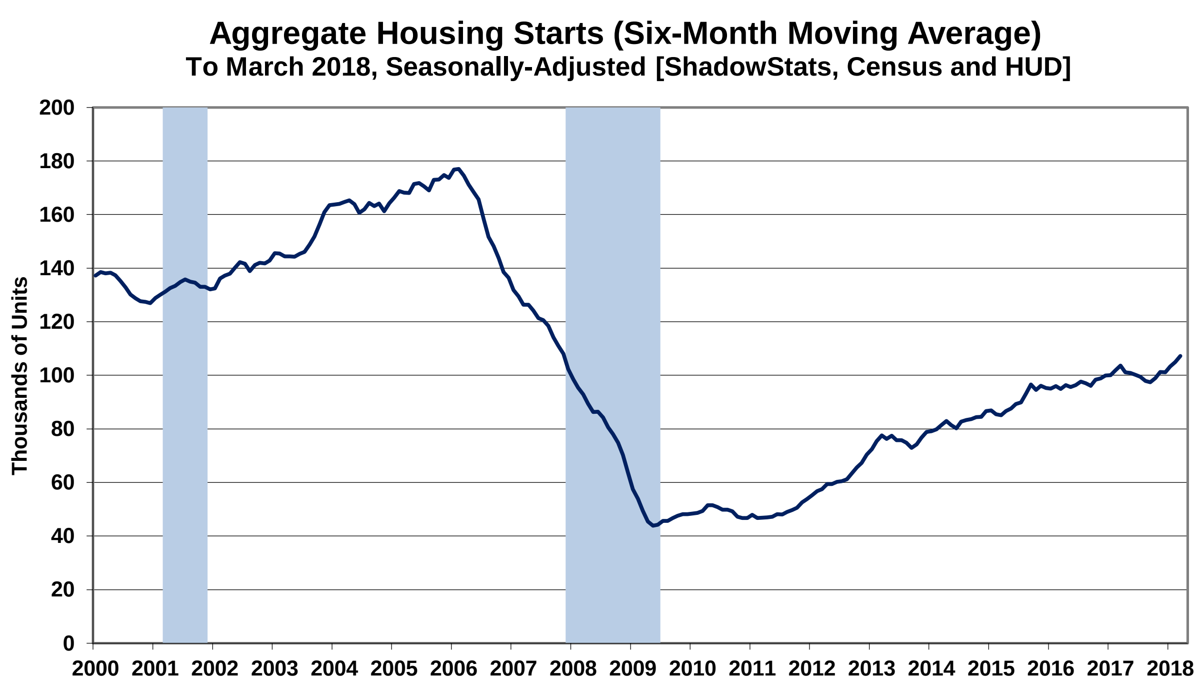
Graph 27: Aggregate Housing Starts (Monthly Rate of Activity)



Graph 28: Existing-Home Sales (Six-Month Moving Average)



Graph 29: Aggregate Housing Starts (Six-Month Moving Average)



[Extended analysis and graphs of the GDP, New Orders for Durable Goods and New- and Existing-Home Sales follow in the **Reporting Detail**, *beginning on the next page.]*

REPORTING DETAIL

GROSS DOMESTIC PRODUCT—GDP (First-Quarter 2018, "Advance" or First-Estimate)

Reflecting Intensified Consumer-Liquidity Woes, the "Advance" Estimate of First-Quarter 2018 GDP Softened to 2.32%, versus 2.89% in Fourth-Quarter 2017. First-Quarter 2018 GDP activity slowed to an annualized real quarterly gain of 2.32%, from 2.89% in fourth-quarter 2017 and 3.16% in third-quarter 2017, still above headline consensus expectations of 2.0%. As usual, these numbers were without much real-word meaning.

Although headline fourth-quarter growth slowed from the ten-quarter high level of third-quarter 2017 activity, fourth-quarter GDP remained bloated from disaster recovery. First-quarter 2018 activity slowed sharply, but it remained well above consensus and did not come close to being flat for the quarter, let alone show an outright contraction, as I predicted with ShadowStats. Nonetheless, the headline details did not reflect happy conditions for the U.S. consumer, as discussed into today's *Opening Comments*, *Executive Summary* and the *Consumer Liquidity Watch.*

Consider that the annualized first-quarter 2018 contraction of 1.1% (-1.1%) in the dominant Goods sector, of the dominant Personal Consumption Expenditures component, of the aggregate GDP was the worst performance there since the end of the last recession. Separately, unusual headline reporting patterns in inflation and the trade deficit appear to have helped boost the headline real first-quarter GDP growth significantly, again, also as discussed in today's *Opening Comments*. Downside revisions to the first-quarter GDP detail and intensifying weakness going forward in many of the key, underlying series are good bets going forward.

***Heavily Followed but of Extremely Poor Quality*.** Heavily biased to the upside, by understated inflation used in deflating real GDP activity, as introduced with various changes to reporting methodology during the various Bush and Clinton administrations (see the *Public Commentary on Inflation Measurement*), among other issues, this most-politically-sensitive of popularly-followed economic series, the GDP, usually does not reflect properly or accurately the changes to the underlying economic fundamentals and the measures that drive the broad economy. Again, as discussed and reflected in the graphs of the *Executive Summary*, various separately-reported measures of real-world economic activity show that the general economy began to turn down in 2006 and 2007 and plunged into 2009. That plunging economy entered a protracted period of stagnation thereafter—never fully "Recovering," never entering a phase of formal economic "Expansion." It began to turn down anew in late-2014, still in ongoing stagnation/ downturn irrespective of any late-2017 hurricane distortions (see *Commentary No. 902-B* and *Commentary No. 900*).

On occasion, special factors such as natural disasters will distort the regular patterns of quarterly economic activity, as is the recent circumstance, tied to Hurricanes Harvey, Irene and Nate and to the California wildfires in the latter-third of 2017. Those circumstances aside, 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 reporting quality deteriorated anew, sharply in both the 2016 and 2017 benchmarkings (see the *Opening Comments* of *Commentary No. 902-B*, *Commentary No. 823*, and *Special Commentary No. 885*, entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*. The pending "comprehensive" benchmarking the series, back to 1929, to be published on July 27th, however, showed catch up with some missed downside corrections to the series, particularly in 2011, as discussed briefly in *Commentary No. 942-B* and *Commentary No. 946*.

[Notes on GDP-Related Nomenclature and Definitions follow on the next page.]

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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.*

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Gross Domestic Product (GDP). Published Friday, April 27th, by the Bureau of Economic Analysis (BEA), the "advance" or first estimate of annualized First-Quarter 2018 Gross Domestic Product (GDP) real growth came in at 2.32% +/- 3.5% (95% confidence interval), exceeding market expectations of 2.0%, but below the forty-year average of annualized quarterly growth of 2.7%. That annualized real fourth-quarter growth rate was against an unrevised 2.89% in fourth-quarter 2017, 3.16% in third-quarter 2017, 3.06% in second-quarter 2017 and 1.24% in first-quarter 2017.

Graphs 30 and *32* 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 31* and *33*, headline year-to-year real GDP growth in the first estimate of first-quarter GDP was 2.86%, somewhat above the forty-year annual average growth of 2.7%, versus 2.58% in fourth-quarter 2017, 2.30% in third-quarter 2017, 2.21% in second-quarter 2017, 2.00% in first-quarter-2017.

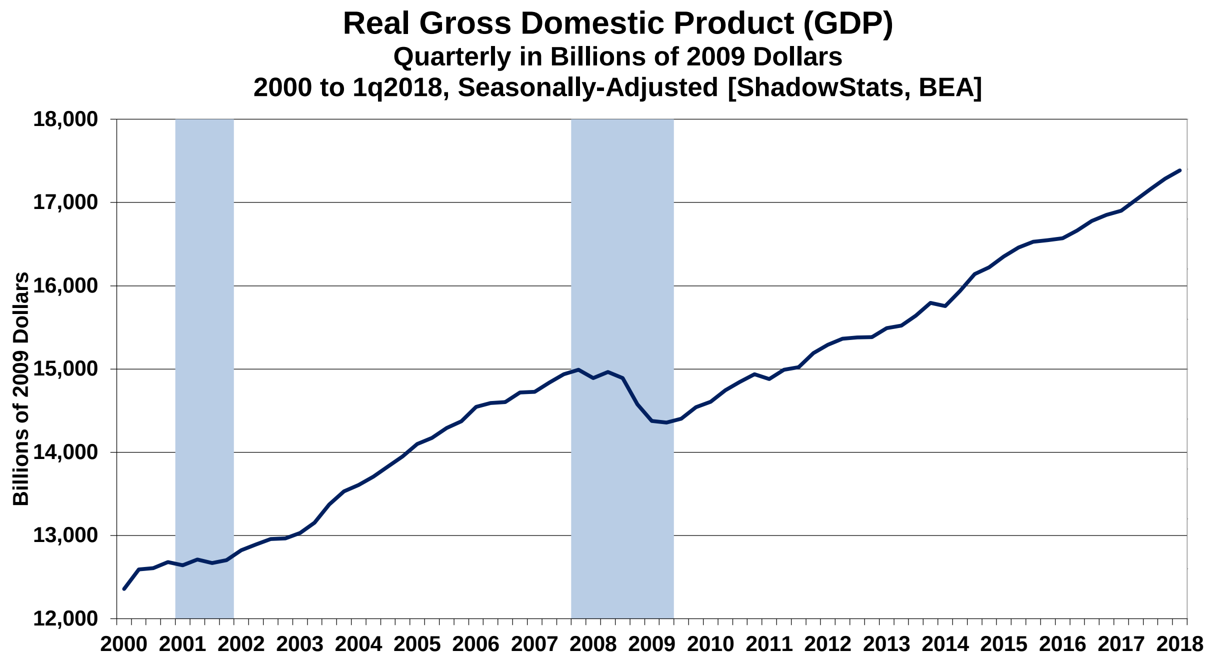
Graphs 34 and *35* respectively show the levels of annual real GDP activity, as well as annual percent change, as estimated beginning in 1929.

Reflected in *Graph 35*, the annual-average real GDP growth in 2017 rebounded some to 2.27%, versus 1.49% in 2016, 2.86% in 2015 and 2.57% in 2014. The annual growth rate of 1.49% in 2016 was the slowest pace of annual growth in the post-2009 "recovery."

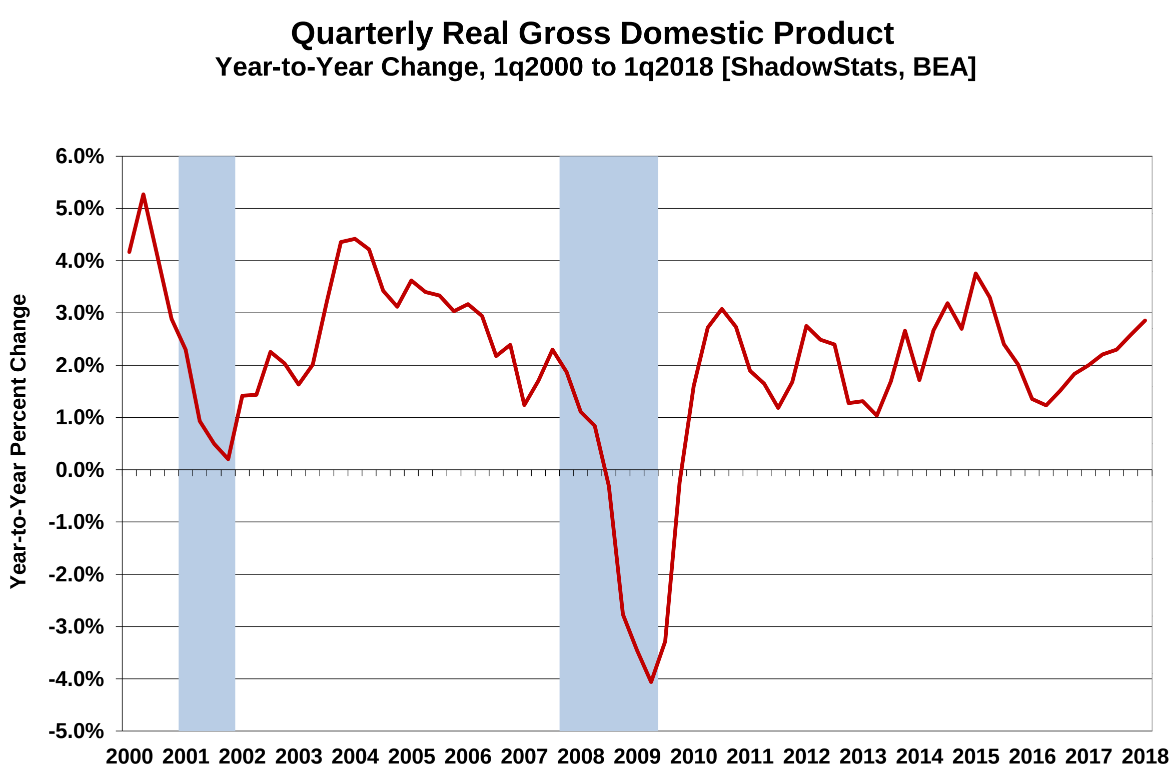
The current-cycle trough in quarterly annual change was in second-quarter 2009 (see *Graphs 31* and *33*), reflecting a year-to-year decline of 4.09% (-4.09%). That was the deepest year-to-year contraction for any quarterly GDP in the history of the series, which began with first-quarter 1947 (1948 in terms of available year-to-year detail). *Graph 31* shows the revised current year-to-year quarterly detail, from 2000-to-date, where *Graph 32* shows the same series in terms of its full quarterly, year-to-year history back to 1948. Shown in *Graph 35*, the annual 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%).

[Graphs 30 to 35 begin on the next page.]

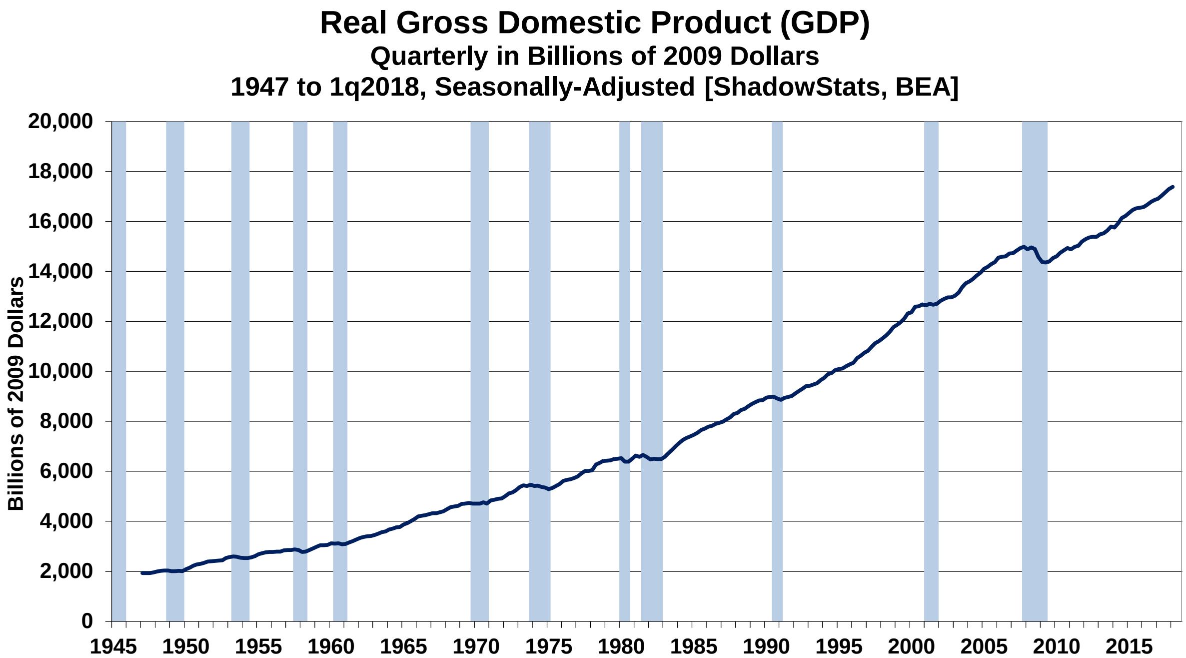
Graph 30: Quarterly GDP in Billions of 2009 Dollars (2000 to 2018), First-Estimate of First-Quarter 2018



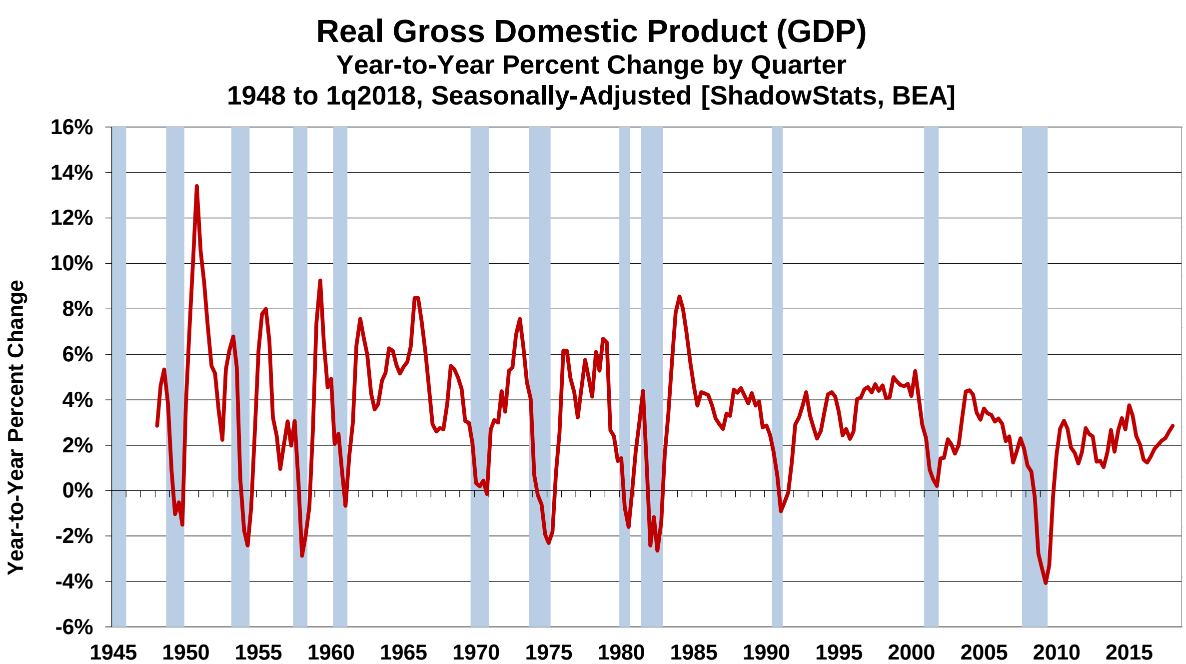
Graph 31: Quarterly GDP Real Year-to-Year Change (2000 to 2018), First-Estimate of First-Quarter 2018



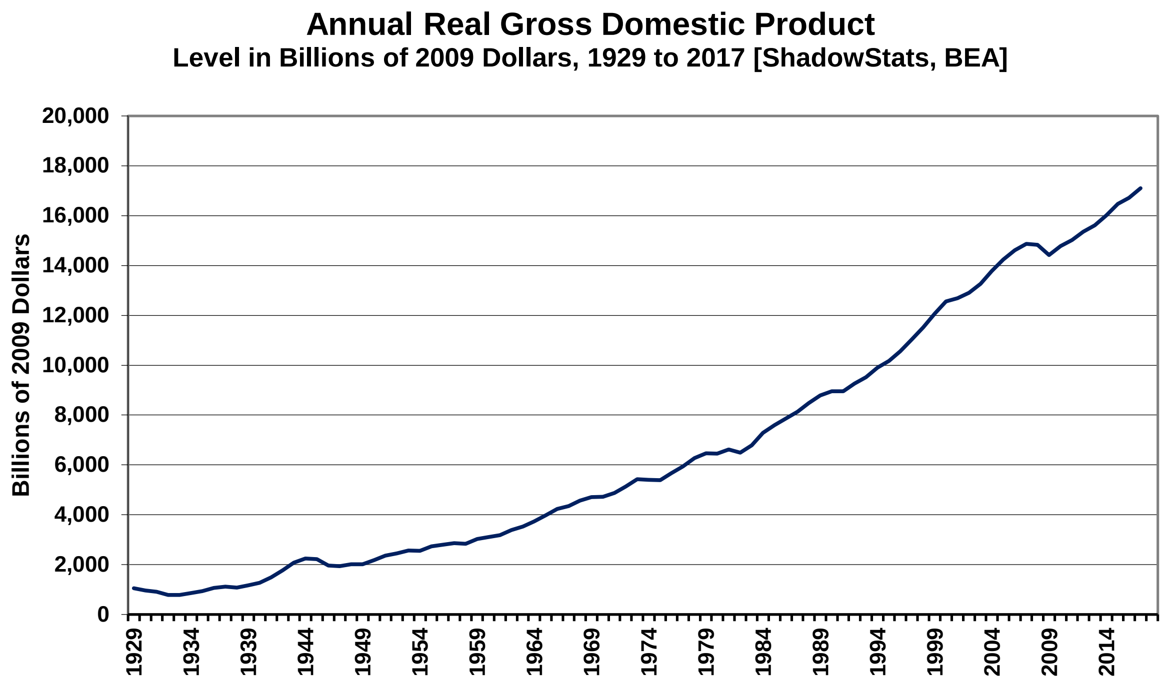
Graph 32: Quarterly GDP in Billions of 2009 Dollars (1947-2018), First-Estimate of First-Quarter 2018



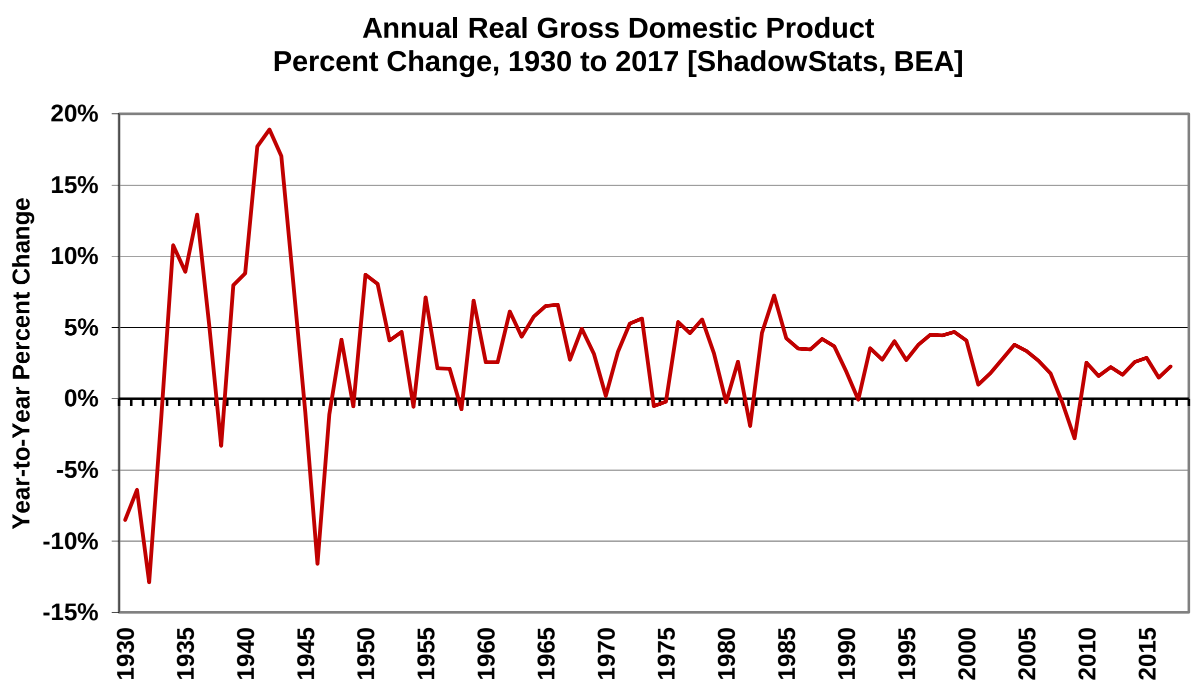
Graph 33: Year-to-Year GDP Real Change (1948-2018), First-Estimate of First-Quarter 2018



Graph 34: Annual GDP in Billions of 2009 Dollars (1929-2017)



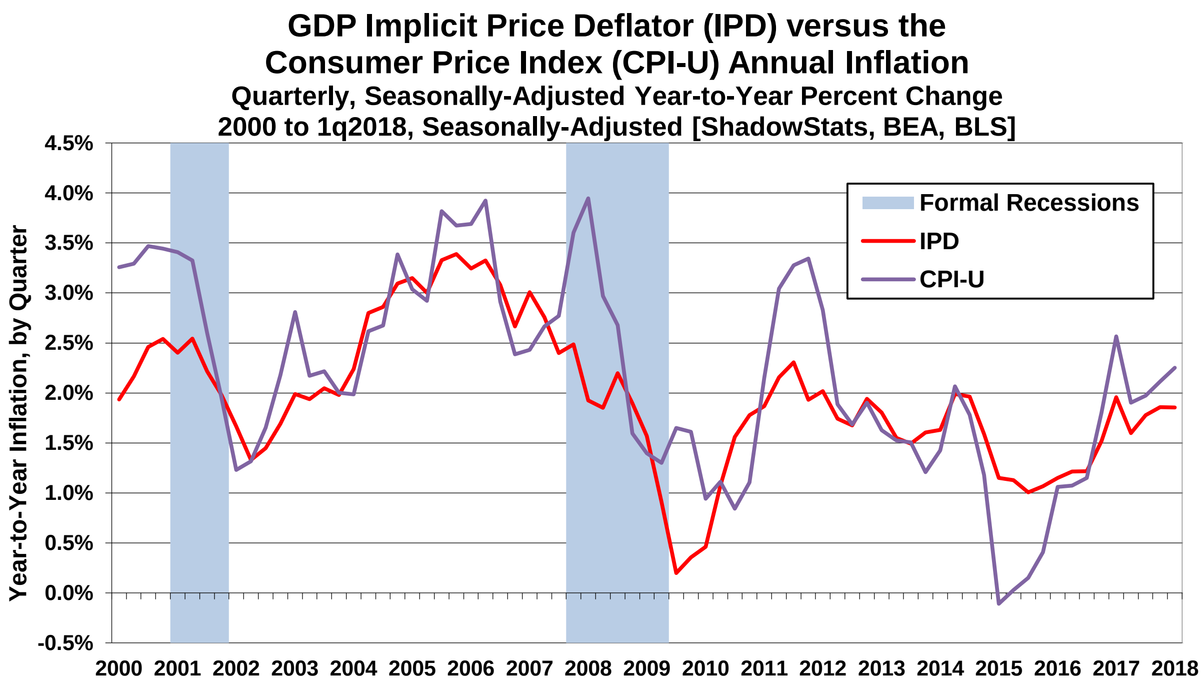
Graph 35: GDP Real Annual Percent Change (1930-2017)



Implicit Price Deflator (IPD). The first estimate of first-quarter 2018 GDP inflation, or the implicit price deflator (IPD) was an annualized quarter-to-quarter 1.98%, versus 2.35% in fourth-quarter 2017, 2.09% in third-quarter 2017, 1.01% in second-quarter 2017, 2.00% in first-quarter 2017, 2.03% in fourth-quarter 2016, 1.37% in third-quarter 2016, 2.43% in second-quarter 2016, and 0.25% in first-quarter 2016. 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 first estimate of first-quarter 2018 IPD inflation was 1.85%, versus annual gains of 1.86% in fourth-quarter 2017, 1.78% in third-quarter 2017, 1.60% in second-quarter 2017, 1.96% in first-quarter 2017, 1.52% in fourth-quarter 2016, 1.22% in third-quarter 2016, 1.21% in second-quarter 2016, 1.15% in first-quarter 2016. In terms of full-year, average annual inflation, the 2017 IPD inflation was an unrevised 1.80%, versus 1.28% in 2016.

Graph 36: Yr-to-Yr Inflation, First-Estimate, First-Quarter 2018 IPD versus CPI-U (2000-2018)



For purposes of comparison, the seasonally-adjusted Consumer Price Index CPI-U showed an annualized pace of inflation in first-quarter 2019 of 3.51%, having gained 3.31% in fourth-quarter 2017, 2.13% in third-quarter 2017, 0.10% in second-quarter 2017, 2.96% in first-quarter 2017, 2.74% in fourth-quarter 2016, 1.84% in third-quarter 2016, 2.66% in second-quarter 2016 and 0.07% in first-quarter 2016 .

Seasonally-adjusted, year-to-year quarterly CPI-U inflation, consistent with the way the seasonally-adjusted, headline real GDP is worked, showed annual gains of 2.25% in first-quarter 2018, versus 2.16% in fourth-quarter 2017, 1.97% in third-quarter 2017, 1.90% in second-quarter 2017, 2.57% in first-quarter 2017, 1.80% in fourth-quarter 2016, 1.15% in third-quarter 2016, 1.07% in second-quarter 2016 and 1.05% in first-quarter 2016 (see *Graph 31*).

Unadjusted, year-to-year quarterly CPI-U inflation showed annual gains of 2.21% in first-quarter 2018, versus 2.12% in fourth-quarter 2017, 1.96% in third-quarter 2017, 1.91% in second-quarter 2017, 2.54% in first-quarter 2017, 1.80% in fourth-quarter 2016, 1.12% in third-quarter 2016, 1.05% in second-quarter 2016 and 1.08% in first-quarter 2016. In terms of full-year, average annual inflation, the 2017 CPI-U inflation was 2.13% versus 1.26% in 2016.

Gross National Product (GNP) and Gross Domestic Income (GDI). Initial first-quarter 2018 estimates of GNP and GDI will not be released until next month (May 30th), due to a lack of available, significant underlying detail, a problem common to the headline GDP detail, as well, which was released, as usual, despite its generally-meaningless headline detail.

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.

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.

That said, at last reporting, annualized real fourth-quarter 2017 GNP was 2.71%, versus 3.65% in third-quarter, 2.77% in second-quarter 2017, 0.94% in first-quarter 2017. Real year-to-year growth was 2.51% in fourth-quarter 2017, versus 2.48% in third-quarter 2017, 2.22% in second-quarter 2017 and 2.18% in first-quarter 2017.

Annualized real fourth-quarter 2017 real GDI growth plunged to 0.87%, from 2.44% in third-quarter 2017, versus 2.28% in second-quarter 2017 and 2.68% in first-quarter 2017. Real year-to-year growth in fourth-quarter 2017 GDI was 2.07%, versus 1.42% in third-quarter 2017, 1.83% in second-quarter 2017 and 1.30% in first-quarter 2017.

ShadowStats Alternate GDP. The ShadowStats-Alternate GDP first-quarter 2018 GDP, first estimate, was a year-to-year decline of 1.3% (-1.3%), versus an annual GDP headline gain of 2.9% at the first-decimal point. That was against a ShadowStats annual decline of 1.6% (-1.6%) in fourth-quarter 2017 and an annual real headline GDP gain then of 2.6%.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the heavily bloated, overstated, initial estimate of an annualized, headline quarter-to-quarter gain of 2.3% in first-quarter 2018 likely was much weaker in reality, net of all the happy assumptions, regular reporting gimmicks and largely “unrecognized” data distortions from recent hurricane activity. Specifically, as the hurricane disruptions to the data increasingly resolve themselves, first-quarter 2018 headline GDP reporting remains at high risk of an outright quarterly contraction.

Real-world quarterly contractions appear to have been a realistic possibility for bloated, headline 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 still-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 *Special Commentary No. 935* 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, highlighted in the Alternate Data tab on the GDP on the www.ShadowStats.com home page.

NEW ORDERS FOR DURABLE GOODS (March 2018)

New Orders for Durable Goods Contracted Month-to-Month and Were Flat Quarter-to-Quarter, Ex-Inflation and Volatile Commercial Aircraft Orders. Aggregate New Orders for Durable Goods rose by 2.56% month-to-month in March 2018, boosted by a 44.46% jump in Commercial Aircraft Orders and a 0.41% monthly jump in related inflation. Net of the highly volatile aircraft orders and inflation, New Orders for Durable Goods contracted by 0.50% (-0.50%) in March 2018, having gained 1.67% in February and declined by 2.50% (-2.50%) in January.

In context of the now passing, recent natural-disaster-recovery boosts and a resulting "boom" to headline fourth-quarter 2017 aggregate new orders at annualized real quarterly growth rate of 14.48%, that slowed to 4.41% in first-quarter 2018. More meaningfully, where annualized real quarterly growth for new orders, ex-commercial-aircraft distortions had been boosted to 10.12% in fourth-quarter 2017, the quarterly change slowed to virtually flat in first-quarter 2018, up at an annualized real quarterly pace of 0.13%.

Net of inflation, aggregate real New Orders for Durable Goods rose month-to-month by 2.09% in March, again down by 0.50% (-0.50%) ex-Commercial Aircraft, continuing a decade-long period of economic non-expansion. Respectively, those series remained shy of recovering their pre-2007 recession highs by 5.71% (-5.71%) and by 6.05% (-6.05%).

As to recent unusual influences on monthly order activity, consider that in the initial reporting of August 2017 new orders for durable goods, meaningful impact from late-August Hurricane Harvey was not obvious, but that changed with the headline September 2017 detail. September new orders included not only impact from mid-September's Hurricane Irene, but also late changes to August detail, which included upside revisions to new orders for motor vehicles (likely Houston-area flood losses), with those orders holding at a continued high level in September. October 2017 motor vehicle orders continued to rise, and the November 2017 detail showed a further uptick, but orders flattened out thereafter into December and January. Motor vehicle orders jumped, however, in February and flattened out anew in March 2018, possibly reflecting a refilling of inventories that were drained by the surging demand for disaster-related replacement vehicles.

Of some note, the underlying revisions in the benchmarking detail published for the related Industrial Production series reflected a significant reduction in motor vehicle manufacturing since 2015, a pattern that likely will be repeated in the pending benchmarking of the new orders series (see *Graphs Benchmark-13* and *14* in *Commentary No. 942-B*).

Separately, extreme monthly volatility in defense orders for aircraft and other capital goods (a meaningful surge seen in December, a plunge in January, surge in February and some back off in March 2018) occasionally will provide monthly aberrations, as more frequently seen with commercial aircraft orders. Where ShadowStats will does view and account for the headline, large swings in commercial aircraft orders, it does not view the headline data, separately, net of defense-orders volatility.

All that said, total nominal New Orders for Durable Goods gained month-to-month by 2.6% in March 2018, having gained by an upwardly revised 3.5% in February 2018 and having declined by a somewhat deeper 3.6% (-3.6%) in January 2018. Other than for the recent, but now waning hurricane-related disruptions to the monthly data, the month-to-month changes have been dominated by continuing large swings in the irregularly-volatile, commercial-aircraft orders. Orders for commercial aircraft rose by 44.5% in March 2018, following an upwardly revised 39.1% in February, having dropped by an unrevised 27.9% (-27.9%) in January. Ex-commercial aircraft, nominal new orders were "unchanged" at 0.0%, down by 0.04% (-0.04%) at the second decimal point, having gained by 1.9% in February and having declined by 2.1% (-2.1%) in January. Given related month-to-month PPI-component inflation (March monthly inflation rose to 0.4%, versus 0.2% in February and 0.4% in January), the inflation-adjusted real monthly changes, ex-commercial aircraft, reflected a monthly contraction of 0.5% (-0.5%) in March 2018, a monthly gain of 1.7% in February and a monthly decline of 2.5% (-2.5%) in January.

Discussed later, the extremely volatile, commercial aircraft orders are booked years into the future and are indicative more of longer-term, rather than shorter-term prospects for manufacturing activity. Accordingly, ShadowStats concentrates on the inflation-adjusted real New Orders for Durable Goods series, Ex-Commercial Aircraft (see *Graph 11* in the *Executive Summary*), as a leading indicator to broad economic activity reflected in the dominant Manufacturing sector of Industrial Production, and in the context of activity reflected in the Cass Freight Index™. None of those series has recovered its pre-recession high of 2007; all continue in non-recovered, non-expanding, low-level stagnation. See the comparative annual growth patterns in *Graphs 12* to *17* and discussion in the *Executive Summary*.

There is no underlying economic expansion underway in new orders and related series, despite heavy touting to the contrary in the popular media. Expansion reflects growth beyond the pre-recession peak of an economic series. The happy hype in the press and on Wall Street primarily reflects a purported expansion in headline Gross Domestic Product (GDP) currently (first-quarter 2018) at 16.0% (see today's GDP coverage in the *Executive Summary* and the *Opening Comments* discussion in prior *Commentary No. 946*). That said, underlying fundamental economic activity, such as seen in the March 2018 real New Orders for Durable goods series, again, was down by 5.7% (-5.7%) from recovering its pre-recession high, while the same series, ex-commercial aircraft, was down by 6.0% (-6.0%) from recovering its pre-recession peak.

In the context of last year's May 18, 2017 annual benchmark revisions to the new orders series, which lowered the general level of headline activity in recent years (see *Special Commentary No. 888* and the accompanying *Graph 20* there, updated *Graph 37* here), March 2018 headline detail, again, showed the broad economy in ongoing non-expansion. That also was the case for the Manufacturing sector in Industrial Production (see *Commentary No. 942-B*). Real new orders, ex-commercial aircraft, generally remains the best coincident/leading indicator to Industrial Production (*i.e.,* Manufacturing) and to the general economy.

Smoothed with six-month moving averages, and adjusted for inflation, both of the highly volatile new orders series (total and ex-commercial aircraft) generally have remained in long-term, non-recovering, low-level, downtrending stagnation, which recently had started to show some minimal uptrend, then downtrend—some fluttering—flattening-out, particularly when viewed with the alternate-inflation detail. Even before allowing for the now-waning, near-term boosts from disaster recovery, those patterns have remained consistent in signaling an ongoing or non-recovering recession (see *Graphs 18* to *21* in the *Executive Summary*).

Headline Nominal Detail—March 2018. The Census Bureau reported April 26th, that the regularly-volatile, seasonally-adjusted, nominal level of aggregate New Orders for Durable Goods rose by 2.56% in March 2018, having gained a revised 3.53% [previously 3.10%] in February 2018, having declined in January by a revised 3.60% (-3.60%) [previously 3.53% (-3.53%), initially 3.68% (-3.68%)]. Unrevised nominal new orders gained 2.72% in December 2017, by 1.74% in November, having declined by 0.41% (-0.41%) in October and having gained 2.40% in September.

Year-to-year, March 2018 nominal durable goods rose by 9.51%, following revised gains of 9.28% [previously 8.91%] in February 2018, 7.00% [previously 7.07%, initially 6.83%] in January 2018, and unrevised annual gains of 11.35% in December 2017, 8.70% in November 2017, 1.96% in October 2017 and 8.61% in September 2017. All those preceding headline details, however, were before consideration of the irregular volatility in commercial-aircraft orders, let alone inflation.

Before and after consideration of irregular and unstable month-to-month commercial-aircraft orders in the headline reporting of real new orders, the smoothed trends of broad activity generally continued to show an uptrending, albeit non-recovered pattern of stagnation, with that somewhat fluttering uptrend, boosted recently by disaster-recovery effects. The headline-inflation-adjusted real series, and that same series corrected for the understatement of official inflation, again, are discussed and graphed in the *Executive Summary*.

The corrected-inflation-adjusted series—net of commercial aircraft orders—has remained relatively flat, in a pattern of low-level stagnation, albeit uptrending (again exacerbated by now-waning disaster-recovery effects). In parallel with the other plotted series, the corrected series still shows an unfolding economic contraction of a nature that usually precedes or coincides with a recession or deepening business downturn.

Detail Net of Volatility in Commercial-Aircraft Orders. The reporting of extreme contractions and surges in commercial-aircraft orders is seen in an irregularly-repeating process throughout the year, and that often dominates changes in headline monthly durable goods orders. These extremely volatile aircraft orders are booked years into the future and are indicative more of longer-term, rather than shorter-term prospects for manufacturing activity.

In March 2018, a monthly gain of 44.46% in aircraft orders contributed to pushing headline aggregate orders to a monthly gain of 2.56%, from what otherwise would have been a monthly contraction of 0.04% (-0.04%). That followed a revised monthly aircraft order gains of 39.14% [previously 25.51%] in February, a revised decline of 27.89% (-27.89%) [previously 27.88% (-27.88%), initially down by

28.38% (-28.38%)] in January following unrevised gains of 16.12% in December 2017 and 14.07% in November, a contraction of 15.79% (-15.79%) in October, monthly gains of 33.90% in September and 33.47% in August, a July monthly decline of 71.07% (-71.07%), a monthly aircraft-order surge of 129.20% in June and a monthly decline in May of 1.37% (-1.37%).

Net of commercial-aircraft orders, month-to-month and seasonally-adjusted, March 2018 nominal new orders declined by 0.04% (-0.04%), versus a gain of 1.91% in February a decline of 2.10% (-2.10%) in January, versus gains of 1.99% in December 2017, 1.13% in November, 0.47% in October, 1.03% in September, 1.04% in August, 0.51% in July, 0.26% in June and 0.65% in May. Year-to-year and seasonally-adjusted, March 2018 new orders ex-aircraft rose by 6.26%, having gained a revised 8.10% in February 2018, a revised 5.99% in January 2018, and unrevised annual gains of 7.36% in December 2017, 5.05% in November 2017, 6.74% in October 2017, 6.51% in September 2017, 4.74% in August 2017, 5.59% in July 2017, 6.70% in June 2017 and 6.55% in May 2017.

Real Durable Goods Orders—March 2018. ShadowStats uses the PPI component inflation measure "Durable Manufactured Goods" for deflating the new orders for durable goods series. Published only on a not-seasonally-adjusted basis, the related March 2018 PPI series showed headline month-to-month inflation of 0.41%, versus 0.23% in February and 0.41% in January, having been "unchanged" at 0.00% in December 2017 from November. Related year-to-year annual inflation was 1.96% in March 2018, versus 1.72% in February 2018, 1.79% in January 2018 and 1.67% in December 2017 (see *Commentary No. 945*).

Adjusted for that 0.41% month-to-month inflation reading in March 2018 and the respective inflation rates in earlier months, and as reflected in the graphs in the *Executive Summary* section, real aggregate durable goods orders in March 2018 gained by 2.09%, having gained by 3.29% in February and having declined by 4.00% (-4.00%) in January. Ex-commercial aircraft, real month-to-month orders declined by 0.50% (-0.50%) in March 2018, having gained by 1.67% in February, and having declined in January by 2.50% (-2.50%).

Real total new orders gained by 7.34% year-to-year in March 2018, versus annual gains of 7.43% in February 2018 and 5.12% in January 2018. Ex-commercial aircraft, March 2018 real orders rose year-to-year by 4.16%, versus 6.27% in February 2018 and 4.13% in January 2018.

Real Quarterly Change, Ex-Commercial Aircraft. Where the inflation-adjusted series (ex-commercial aircraft) is the best leading, broad economic indicator out of these data, following are the annualized real quarterly changes in that series. Beginning at the onset of eventually what still should become recognized as a formal recession or renewed downturn, the real ex-commercial aircraft orders series showed annualized quarterly declines of 7.92% (-7.92%) in fourth-quarter 2014 and 7.36% (-7.36%) in first-quarter 2015. Annualized real change was a gain of 3.87% for second-quarter 2015, a gain of 3.46% in third-quarter 2015 and an annualized contraction of 2.59% (-2.59%) in fourth-quarter 2015 activity.

First-quarter 2016 orders showed an annualized real contraction of 2.22% (-2.22%), with the series declining at an annualized real pace of 4.74% (-4.74%) in second-quarter 2016. For third-quarter 2016, the annualized real series (ex-commercial aircraft) showed an annualized quarterly gain of 5.46%, fourth-quarter 2016 activity showed an annualized quarterly gain of 7.35%.

First-quarter 2017 showed an annualized contraction of 0.94% (-0.94%). Year-to-year, first-quarter 2017 orders rose by 1.67%. Second-quarter 2017 activity rose at an annualized quarterly pace of 2.49%, up by 3.54% year-to-year. Third-quarter 2017 annualized quarterly growth was 6.94%, with year-to-year growth at 3.90%.

Based on the fourth estimate of full fourth-quarter 2017 reporting, annualized real quarterly growth was 10.12% [previously 10.03%, 9.92%, initially 10.18%], with year-to-year growth of 4.57% [previously 4.56%, 4.52%, initially 4.60%]. Relative quarterly activity was distorted by the natural-disaster impact and recovery for both third- and fourth-quarter 2017.

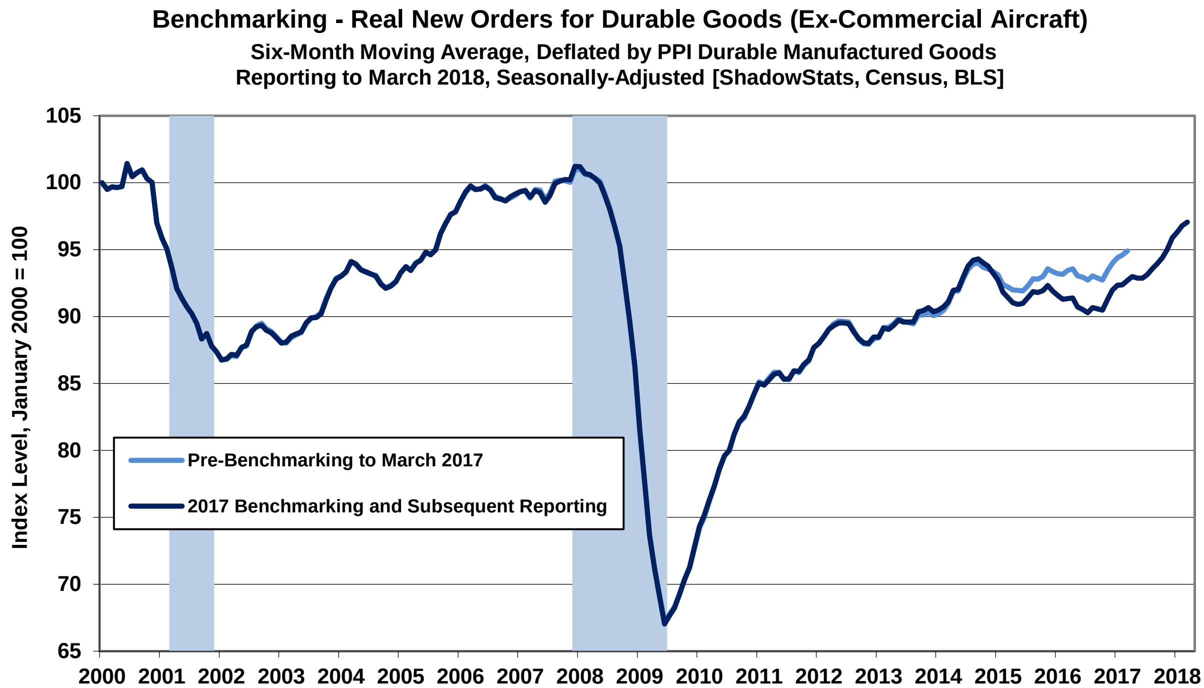
Based on the initial, first full reporting of first-quarter 2018, annualized quarterly growth slowed to a negligible 0.13%, with a year-to-year change of 4.85%. Based solely on the initial reporting of January and February 2018 orders, the early first-quarter 2018 trend was for an annualized real quarter-to-quarter gain of 0.42%, with annual growth of 4.90%. Based solely on the initial January 2018, detail, that initial trend had been for an annualized real quarterly contraction of 3.89% (-3.89%), with year-to-year growth of 3.73%.

Graphs of Inflation-Adjusted and "Corrected" Smoothed Durable Goods Orders. Three sets of inflation-adjusted graphs (*Graphs 10* to *11* and *13, Graphs 18* and *19*, and *Graphs 20* and *21*) are displayed in the *Executive Summary*. The first set shows the headline monthly detail, as well as the six-month moving-average activity for both the aggregate new orders series and the series net of the irregular commercial-aircraft orders. It also shows annual growth for the real series (net of commercial aircraft). The moving-average levels in both the durable goods series (*Graphs 10* and *11*) had turned lower into year-end 2014 and the first two quarters of 2015, with some smoothed bounce-back into third-quarter 2015, followed by renewed downturn into 2016 with a late-year uptick continuing into March 2017, which largely was revised away with the May 2017 benchmarking and now in uptrending stagnation, boosted by disaster recovery. It should revise lower, anew, in the upcoming annual benchmark revisions.

The second set of graphs (*Graphs 18* and *19*) shows the patterns of six-month moving averages of historical, headline real new orders for durable goods (net of official inflation), as well as that pattern "corrected" for understatement of that inflation (and for the corresponding overstatement of official, inflation-adjusted growth). The third set of graphs (*Graphs 20* and *21*) shows largely the same patterns, although they are for the aggregate durable goods orders series, net of commercial aircraft orders.

Caution: Benchmarking Scheduled for May 17, 2018; Non-Comparability of the Regular Headline Month-to-Month Data. The Census Bureau plans its annual benchmark revision to 2017 New Orders for Durable Goods data for release on May 17, 2018 (see the *Press Release*). As an example of the regular, annual downside restatement of recent activity in this series, consider accompanying *Graph 37*. It shows the net revisions to the six-month moving average of real New Orders for Durable Goods (ex-commercial aircraft) from last year's May 18, 2017 benchmark revisions and subsequent reporting through the March 2018 headline detail, versus the pre-benchmarking detail. For a more-substantive review of the last two years of benchmark revisions to New Orders for Durable Goods, and the parent Manufacturers' Shipments series, see *Special Commentary No. 888*, also see *Commentary No. 942-B* for discussion on the negative implications for the New Orders for Durable Goods series, based on the recently-released, downside revisions to the production series. Both series rely on related-background detail and related-underlying surveys for their results.

Graph 37: Benchmark Revisions to Real Total New Orders for Durable Goods, Ex-Commercial Aircraft.



Current durable goods reporting remains subject to many of the same upwardly-biased sampling assumptions and concurrent-seasonal-adjustment problems commonly seen in the pre-revision reporting as well as with retail sales, and payroll and unemployment reporting. Unusual seasonal-factor volatility raises issues as to the significance of reported seasonally-adjusted monthly and annual changes. While those issues were brought into balance, for a period of eight days, with the annual benchmark revision to durable goods orders through March 2017 on May 18, 2017 (again see *No. 888*), that consistency ceased with the May 26th release of headline April 2017 detail.

For all monthly reporting from the April 2017 detail until the benchmarking pending on May 17, 2018, unpublished historical revisions calculated along with current headline month's seasonal adjustments, and with each month to follow, make all historical reporting prior to the current headline month (March 2018) inconsistent with the currently-published headline historical numbers.

NEW HOME SALES (March 2018)

New-Home Sales Jumped by 4.0% in March 2018, on Top of Unstable Upside Revisions Since December 2017, Still Shy by 50.0% (-50.0%) of Recovering Its Pre-Recession Peak. The regularly-extreme, headline month-to-month volatility usually reported for New Home Sales, whether the headline change is a gain or a contraction, most frequently includes a 95% confidence that stretches noticeably beyond zero in the opposite direction of the headline change. For example, the headline monthly gain of 4.0% for March 2018 had a 95% confidence interval around it of +/- 22.6% [all confidence intervals here are at the 95% level].

That means the Census Bureau's surveying and analysis indicated with 95% confidence that the actual monthly change in the New Home Sales fell somewhere between a monthly decline of 17.4% (-17.4%) and a monthly gain of 26.6%, with the most likely change a gain of 4.0%. On a year-to-year basis, the annual sales gain was estimate 8.8% with a 95% confidence interval of +/- 20.3%,

As headlined, March 2018 activity remained shy of recovering its pre-recession high by 50.0% (-50.0%). With the month-to-month volatility smoothed over six months, the series remained in low-level, albeit uptrending, non-recovered stagnation.

Census Bureau Promises More Stable Reporting After Revisions on May 23rd. As with its reporting of March Housing Starts and Building Permits (see *Commentary No. 946*), the Census Bureau again emphasized pending methodological changes that should improve the reporting stability of this series, to be published coincident with the annual seasonal-adjustment revisions and headline April 2018 reporting on May 23, 2018. From the April 24th *Press Release*, page 2:

> **NOTICE:** With the April 2018 release, seasonally adjusted estimates of housing units sold, housing units for sale, and the months' supply of new housing will be revised back to January 2013. With each April release, seasonally adjusted data will now be revised for the current year and the previous five years. ***Research has shown that this revision span should produce more reliable seasonally adjusted time series*** [ShadowStats emphasis].

Headline Relative March Gain Was Muted by an Upside February Revision. Released April 24th, by the Census Bureau and the Department of Housing and Urban Development, the highly volatile and unstable New-Home Sales series, which counts new-home sales contracts signed (as opposed to the count of home sales closed in the Existing-Home Sales series), gained month-to-month in March 2018 by 4.0% (see early comments on the 95% confidence interval). Net of an upside revision to February 2018 activity, that 4.0% monthly gain would have been 12.3%.

In the context of broadly upside revisions to headline monthly activity since December 2017, the March 2018 monthly gain of 4.0%, followed a revised February monthly gain of 3.6% [previously a decline of 0.6% (-0.6%)] and a revised monthly "unchanged" at 0.0% [previously declines of 4.7% (-4.7%), initially 7.8% (-7.8%)] in January and a revised decline of 9.4% (-9.4%) [previously 8.2% (-8.2%), 7.6% (-7.6%), and initially 9.3% (-9.3%)] in December 2017.

Year-to-year change in March 2018 sales was 8.8% [see earlier discussion on confidence intervals], versus revised annual gains of 8.5% [previously 0.5%] in February 2018, 7.5% [previously 3.8%, initially a decline of 1.0% (-1.0%)] in January 2018, and 17.5% [previously 19.2%, 17.3%, initially 14.1%] in December 2017.

First-Quarter 2018 Growth Now Shows a Quarter-to-Quarter Boom. Reflecting continued unstable and broadly meaningless monthly swings, Third-Quarter 2017 annualized change declined by an unrevised 11.2% (-11.2%), with Fourth-Quarter 2017 activity surging at a revised annualized pace of 56.6% [previously 59.5%, 51.6%, initially 38.9%]. Where the early trend for First-Quarter 2018, based on January and February detail was an annualized contraction of 22.1% (-22.1%), that now is an annualized quarterly gain of 55.7%, based on the initial full reporting of the quarter. Disaster-recovery effects only have exacerbated the usual extreme volatility in this series.

Smoothed with a six-month moving average, however, this series, again, remained in low-level, non-recovering stagnation, which recently had turned to a downtrend and flattened out, but now is showing a slight uptrend with the latest data machinations (see *Graph 24* in the *Executive Summary*).

Consumer Liquidity Constraints. The extreme liquidity bind besetting consumers continues to constrain residential real estate activity (see the *Consumer Liquidity Watch*). Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including real-estate activity. That circumstance—in the last ten-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

Where the private housing sector never recovered from the business collapse of 2005 into 2009, there remains no chance of a near-term, sustainable turnaround in home-sales activity, without a fundamental upturn in consumer- and banking-liquidity conditions. That does not appear to be in the offing, despite any short-lived, near-term boosts to activity from disaster recovery or the inability of the Census Bureau to report its headline monthly data with any meaningful stability.

Graphs 22 to *25* in the *Executive Summary* plot the New-Home Sales series (single-unit sales) along with comparative graphs of the related Single-Unit Housing Starts series (see *Commentary No. 946*). *Graphs 26* to *29* plot the Existing-Home Sales series, along with comparative graphs of the related Housing Starts series (both those series reflect multiple- as well as single-unit sales activity).

EXISTING HOME SALES (March 2018)

March Existing-Sales Rose by 1.1% in the Month, but Declined by 1.2% (-1.2%) Year-to-Year, Down by 6.1% (-6.1%) Quarter to Quarter, Shy of Its Pre-Recession Peak by 23.0% (-23.0%). Monthly Existing-Home Sales increased by 1.1% in March 2018, on top on an unrevised monthly gain of 3.0% in February 2018, but those gains were not enough to offset the recent sales decline of 3.2% (-3.2%) in January 2018 and 2.8% (-2.8%) in December 2017. Although annual growth also was unrevised, holding at 1.1% in February 2018, it dropped anew by 1.2% (-1.2%) year-to-year in March 2018, having dropped year-to-year by 4.8% (-4.8%) in January 2018. That January 2018 annual decline remained the steepest since August 2014.

Nonetheless, as shown in *Graph 26* in the *Executive Summary*, November 2017 Existing Home Sales was at the highest level of the post-2006 revamped series (blue line), but still well below the pre-recession peak in the original series (red line). That said, smoothed for six-month moving averages, the existing-home sales series had been in uptrending stagnation into 2017, which recently shifted to fluttering, relatively-flat stagnation, reflected in *Graph 28* (see also *Graphs 27* and *29* of the Housing Starts series, where both series reflect activity in terms of single- and multiple-housing units).

Existing-Home Sales Continued in Smoothed, Flat Stagnation. Released by the National Association of Realtors (NAR) on April 23rd, Existing-Home Sales (closings of home sales, as opposed to the count of contract signings for New-Home Sales, reported by the Census Bureau) rose month-to-month by 1.08% in March 2018, having gained 2.97% in February, and having declined month-to-month by 3.24% (-3.24%) in January and by 2.80% (-2.80%) in December 2017, following monthly gains of 4.00% in November and 2.42% in October.

March 2018 year-to-year change was a contraction of 1.23% (-1.23%), following an annual gain of 1.09% in February 2018, an annual plunge of 4.78% (-4.78%) in January 2018 and annual gains of 0.91% in December 2017, 2.14% in November 2017 and an annual decline of 0.54% (-0.54%) in October 2017.

Based on initial full reporting of the quarter, first-quarter 2018 Existing Homes Sales contracted at an annualized pace of 6.06% (-6.06%), which followed an annualized quarterly gain of 14.82% in fourth-quarter 2017 and unrevised consecutive quarterly contractions of 9.94% (-9.94%) and 3.97% (-3.97%) respectively in third-quarter 2017 and second-quarter 2017.

Distressed Sales Held at 4% as a Proportion of Total Sales, With March All-Cash Sales Dropping to 20%. In the context of continuing consumer liquidity constraints discussed in the *New-Home Sales* section, the NAR estimated the portion of March 2018 sales in "distress" at 4% (3% in foreclosure, 1% short sales), the same as seen in February 2018, but down from 6% (5% in foreclosure, 1% short sales) in March 2017. The NAR began surveying such detail in October 2008. Consider, though, that October 2008 conditions already were more than three years into the housing-market collapse.

Consistent with mounting consumer liquidity constraints and faltering-to-mixed optimism discussed in today's *Consumer Liquidity Watch*, sales in foreclosure at 3% still is roughly 50% higher than the pace of the recent survey low of 2%. Industry numbers show foreclosure prospects still to be a meaningful problem.

Reflecting ongoing lending problems and continuing stresses within the financial system, including related banking-industry and consumer-solvency issues, as well as the ongoing influx of speculative investment money into the existing-housing market, the NAR estimated all-cash sales declined to 20% of transactions in March 2018, from 24% in February 2018 and against 23% in March 2017 detail.

Graphs 26 to *29* in the *Executive Summary* plot the Existing-Home Sales series, along with comparative graphs of the related Housing Starts series. *Graphs 22* to *25* plot the New-Home Sales series along with comparative graphs of the related Single-Unit Housing Starts series.

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

HYPERINFLATION WATCH

VELOCITY OF MONEY

First-Quarter 2018 Velocity of Money Declined Minimally for M1, Gained Minimally for M2 and M3. In the context of the initial, somewhat stronger nominal, annual growth in First-Quarter 2018 GDP and somewhat weaker nominal annual growth in First-Quarter 2018 Money Supply measures, the velocity of money in the First-Quarter 2018 was slightly higher the broader moneys measures M2 and M3, versus Fourth-Quarter 2017. The pace of money supply velocity for fourth-quarter M1, however, slowed minimally, having been down or flat for the last ten quarters, suggestive of somewhat greater physical cash relative to the GDP in the system, although that could be offshore. Velocity is a measure of how many times the money supply turns over in a year, versus the broad economy (GDP).

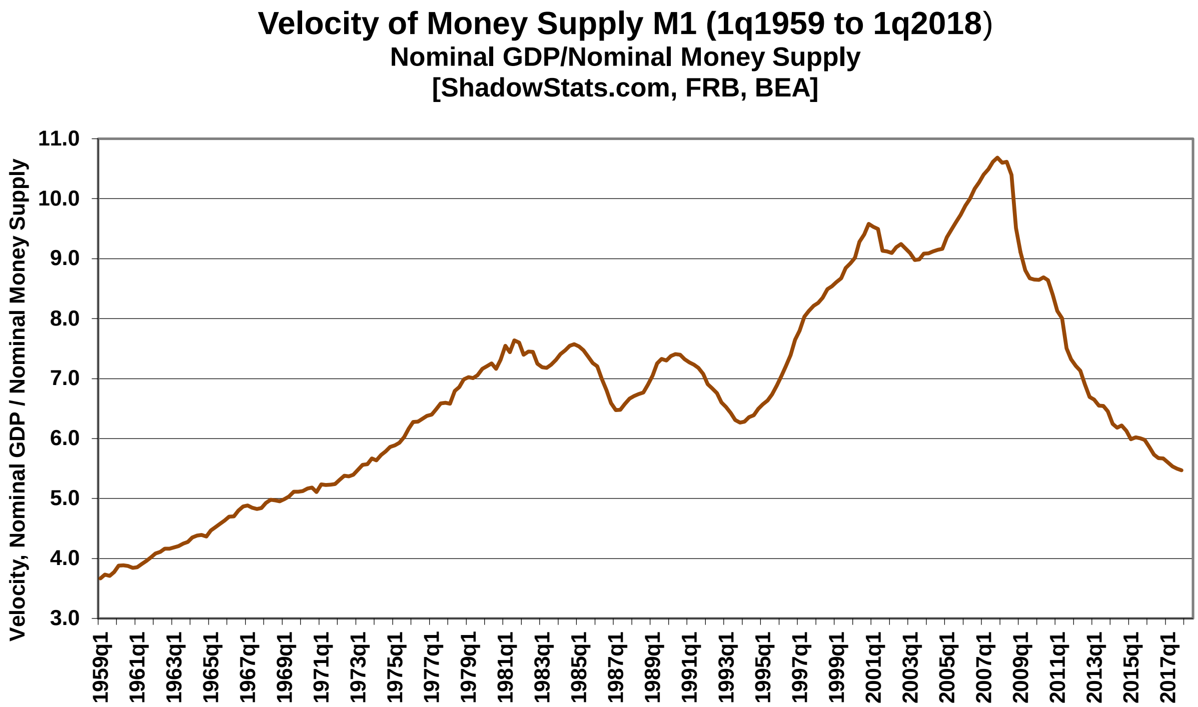
Velocity is calculated simply as the ratio of the nominal GDP to the nominal money supply measure. Nominal GDP is in the numerator and the nominal money measure is in the denominator of the velocity ratio. Slowing velocity indicates a relatively slower pace of nominal economic growth versus the money 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 had been declining since late-2014, except for the flattening or small increase seen in the broader measures in the last two quarters.

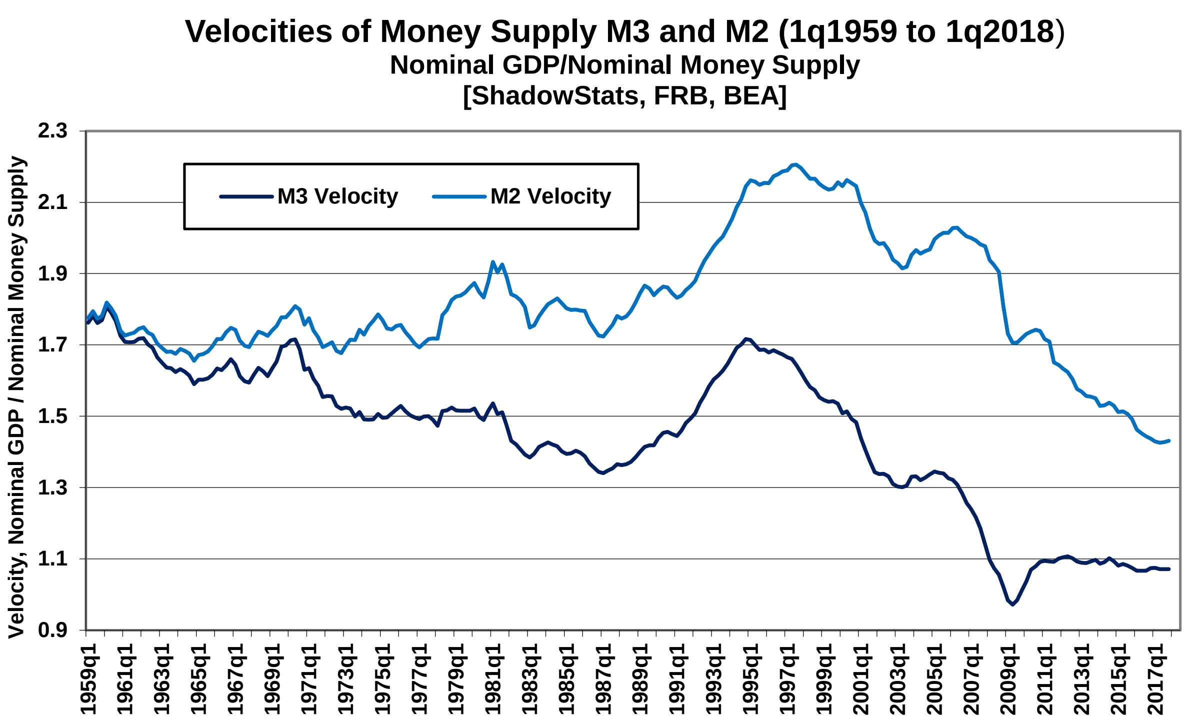
Consider that perhaps 70% or more of the cash-in-circulation component of that M1 (with cash accounting for about 42% of M1) could be physically outside the United States, per the Federal Reserve. Where that has been an increasing trend, a true measure of domestic M1 velocity well could be showing a 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 had intensified. 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. More recently, M3 had started to rise anew, with M1 and M2 annual growth rates starting to reverse. Since third-quarter 2017, however, all three monetary aggregates have been showing sharply slowing pace of annual growth rates, in tandem.

Graph HW-1: Velocity of Money Supply M1 through 1q2018



Graph HW-2: Velocities of Money Supply M2 and M3 through 1q2018



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*, with headline money supply estimates for March 2018 in *Commentary No. 944*, to be updated for April in next *Commentary No. 948*.

[The* Consumer Liquidity Watch *begins on the next page.]

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CONSUMER LIQUIDITY WATCH

CONSUMER LIQUIDITY, INCOME, CREDIT AND RELATIVE OPTIMISM. *[Updated for the initial April estimate of the Conference Board's Consumer Confidence, the final estimate of April 2018 Consumer Sentiment out of the University of Michigan and the opening paragraphs.]*

Consumer Consumption Falters as Real Earnings Contract and as Credit Growth and Optimism Weaken. Reflected in today's headline First-Quarter 2018 GDP detail, faltering consumer consumption of goods and residential real estate (see the *Executive Summary* and *Reporting Detail*), largely are a function of mounting financial stress on the U.S. consumer, with headline Real Average Weekly Earnings contracting quarter-to-quarter in first-quarter 2018 and with annual growth in real Consumer Credit continuing to slow in the latest headline monthly detail. These factors likely are driving the early signs of a downturn in consumer optimism, along with taking a toll in softening personal consumption expenditures—including retail sales—and broad economic activity. In combination, the various factors should exacerbate concerns as to any ongoing, positive direction in broad economic activity.

Weakening consumer liquidity conditions had been mirrored in weakening, headline economic activity coming into the series of major natural disasters that disrupted the economy, beginning in August 2017. Intensifying weakness had included Payroll-Employment, Real Retail Sales, Housing and Construction, and the Manufacturing/Production sector, generally pre-natural disaster activity.

Net of what have been mixed, but significant, hurricane and later-wildfire distortions, initial hits to activity were followed by related and transient economic boosts from recovery, replacement and restoration activity, particular in fourth-quarter 2017. Funded by insurance payments and savings liquidation, those distortions increasingly have passed into the latest headline economic data. Against artificially bloated fourth-quarter 2017 activity, first-quarter 2018 economic activity continues to show signs of mounting weakness (see *Commentary No. 940* and today's *Opening Comments*. Such effects are discussed in the separate analyses of relevant series in covered in the regular *ShadowStats Commentaries*. Where there are current signals of faltering consumer liquidity (see Consumer Credit Outstanding and Real Earnings), headline consumer optimism has begun to move off recent highs, along with softening underlying economic reality. The initial release of the Conference Board's March 2018 Consumer-Confidence Index®, took a hit the context of a downside revision to February's prior reading, as did the "advance" April 2018 Sentiment, versus March.

Monthly series that have faced the most severe, disaster-triggered reporting disruptions, where headline details have yet to stabilize or correct, still include Household Survey Employment and Unemployment. Retail Sales and Industrial Production (Manufacturing) appear to have stabilized, and broadly have begun to soften anew, but they still need to subside to levels stable with normal consumption activity and inventories. Despite the minimally slower Fourth-Quarter 2017 GDP growth, the series remains heavily bloated from the disaster-distortions. Odds for an outright quarterly contraction in real First-Quarter 2018

GDP have abated some for the initial reporting, but the series remains likely to show much weaker-than expected growth in its initial reporting on April 27th, and an outright headline contraction in first-quarter 2018 contraction within the next several months of reporting/revisions (see today's *Opening Comments*).

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 underlying pocketbook issues contributed to the anti-incumbent electoral pressures in the 2016 presidential race. The post-election environment showed a near-term surge in both the consumer confidence and sentiment measures to levels generally not seen since before the formal onset of the recession in 2001, let alone 2007. Yet, underlying liquidity conditions, economic reality and lack of positive actions out of the government to turn the economy meaningfully, so far, all have continued to remain shy of consumer hopes, and those numbers have begun to stumble in recent detail.

A temporary liquidity boost fueled by recent disaster effects, such as insurance payments or savings drawdowns to fund replacement of storm-damaged assets, are of a one-time nature and short-lived in terms of ongoing economic impact. The underlying, fundamental longer-term liquidity issues remain in place. Nonetheless, mirroring the disaster-fueled economic hype in the popular press, consumer optimism had rallied strongly, albeit, again, now faltering or mixed, as discussed shortly.

Including the various consumer-income stresses discussed in *Special Commentary No. 888*, broad, underlying consumer-liquidity fundamentals simply have not supported, and still do not support a fundamental turnaround in general economic activity—a post "Great Recession" expansion—and broadly are consistent with a "renewed" downturn in that non-recovered economic activity. Indeed, 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 is driven by the relative financial health and liquidity of consumers. These underlying liquidity conditions and reality—particularly income and credit—remain well shy of average consumer hopes and needs, irrespective of the new tax laws.

The combined issues here have driven the housing-market collapse and ongoing, long-term stagnation in consumer-related real estate sales and construction activity, and have constrained both nominal and real retail sales. Related, personal-consumption-expenditure and residential-construction categories accounted for 73.1% of the headline real, Fourth-Quarter 2017 U.S. GDP.

Net of short-lived disaster distortions (insurance payments, savings liquidations), with the better-quality economic indicators and underlying economic reality never having recovered fully from the collapse into 2009, consumers increasingly should pull back on consumption in the months ahead. Underlying reality is evident in more-meaningful economic indicators—not the GDP—irrespective of the transient boosts from disasters or political gimmicks, discussed recently in *General Commentary No. 929* and the *Executive Summary* of *Commentary No. 928*.

Anecdotal Evidence of Business and Consumer Uncertainty Continue to Indicate a Seriously-Troubled Economy and Very Dangerous Financial Markets. Against what appears to be a headline economic consensus that all is right again, with the U.S. economy and financial markets, underlying real-world common experience suggests a much different outlook. Regularly discussed here, ongoing non-recovery, low-level stagnation and signs of renewed downturn remain patterns common to key elements of headline U.S. economic activity. Consider factors ranging from housing sales and broad construction activity, to headline reporting of domestic manufacturing (and revisions), as well as those series that are heavily gimmicked, such as the Gross Domestic Product (GDP), also regularly discussed and dissected here.

Similar signals of such economic stress are seen in patterns of activity that move along with the real-world broad economy. They range from indicators such as freight volume and domestic consumption of petroleum to factors such as levels of real consumer debt outstanding, real average weekly earnings and measures of employment stress in the broad economy. Those stresses are reflected in historically-low levels of the employment-population ratio and the labor-force participation rate. With the liquidity-starved U.S. consumer driving three-quarters of the GDP, there is no way for the broad economy to boom—happy Retail Sales headlines aside—without some meaningful shift in underlying consumer circumstances. Links to background discussions in these various areas are found in the *Recent Commentaries* section of the *Week, Month and Year Ahead*, along with links to background discussions on the quality of the more-politicized GDP (*Commentary No. 938*) and employment/unemployment details discussed in the *Supplemental Labor-Detail Background* of *Commentary No. 939*.

Beyond assessing headline economic numbers, ShadowStats also looks at anecdotal evidence, including comments by subscribers and clients, who live in the real world. Two broad observations have come from a number of recent conversations. First, real estate activity appears to be slowing in recently strong areas. Second, a number of major companies are "sitting on their hands," holding back on issuing new contracts to third-party vendors in areas such as upgrading computer systems and other consulting. The companies cite the slowdown in contracts as "due to uncertainty," an issue, as well with the U.S. consumer, where that uncertainty encompasses:

- Unfolding circumstances in the Washington, D.C. political arena.
- Where the manic financial markets are headed.
- Ultimately, what is, or will be, happening to near-term business activity?

Economic reporting, and business and financial-market stories sometimes receive happy year-end spikes in the press. That circumstance was supplemented in late-2017 by near-term hurricane boosts to, and distortions of, some current economic activity, such as the November Retail Sales reporting. The latter circumstance should prove fleeting. The underlying, broadly-faltering U.S. economy should be dominating headline economic reporting, once again, and all too soon, most likely in the next couple of months. That said, albeit reflecting some of the headline economic hype in the popular press, headline consumer optimism remains strong.

Consumer Optimism: Consumer Sentiment and Confidence Have Backed Off Recent Peak. Having hit peak activity in February 2018 the Conference Board's Consumer-Confidence Index® (Confidence) measure pulled back in March and remained lower in its initial April 2018 (released April 24th). The University of Michigan's Consumer Sentiment Index (Sentiment) peaked in March 2018 and also turned down in its full reporting for April 2018. Though revised slightly higher in its final April estimate, this morning, April 27th, that Sentiment still was down sharply month-to-month.

Reflected in *Graphs CLW-1* and *CLW-2*, Confidence and Sentiment monthly readings had jumped sharply to multi-year highs in February 2018, despite mounting financial-market and economic uncertainties, with early-March Sentiment jumping anew. Following a downside revision to the February 2018 reading, which still remained at its strongest reading since 2000, the March 2018 reading fell back below its level of November 2017. The still-strong numbers here for both Confidence and Sentiment remain above their, pre-2007 recession peaks. Other than for the recent months of stronger Confidence readings, Confidence is at its highest level since May 2000, but remain down from that May 2000 peak by 11.1% (-11.1%).

On a monthly basis the final April 2018 Sentiment measure has backed off sharply. Although still at a high level, it is below a number of monthly levels seen back over the last year, currently down from what once was its comparative prior peak of January 2004 by 4.8% (-4.8%).

For both the Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index® (*Graph CLW-1*), and the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph CLW-2*), the three-month moving averages also remain above pre-2007 recession highs, yet the still-high moving averages have slowed in their gains, having begun to falter along with the softening detail and related headline consumer activity.

Pre-election, September 2016 Confidence and Sentiment jumped and then plunged in October 2016, likely reflecting concerns as to the direction of the presidential race. Post-election, both measures rallied sharply, reflecting surges in consumer optimism into early-2017. Both series then topped and pulled back, with mixed numbers into August and September 2017, but with the October 2017 Sentiment measure showing a large jump, purportedly because consumers were willing to accept diminished prospects for their living standards (see *Commentary No. 916*)? Nonetheless, the Sentiment measure retrenched in November and December. The Conference Board blamed hurricane impact in Texas and Florida for its downturn in September 2017 Confidence, but those numbers exploded into October and November 2017, again reversing largely with December's headline downturn.

Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs CLW-1* to *CLW-3* 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.

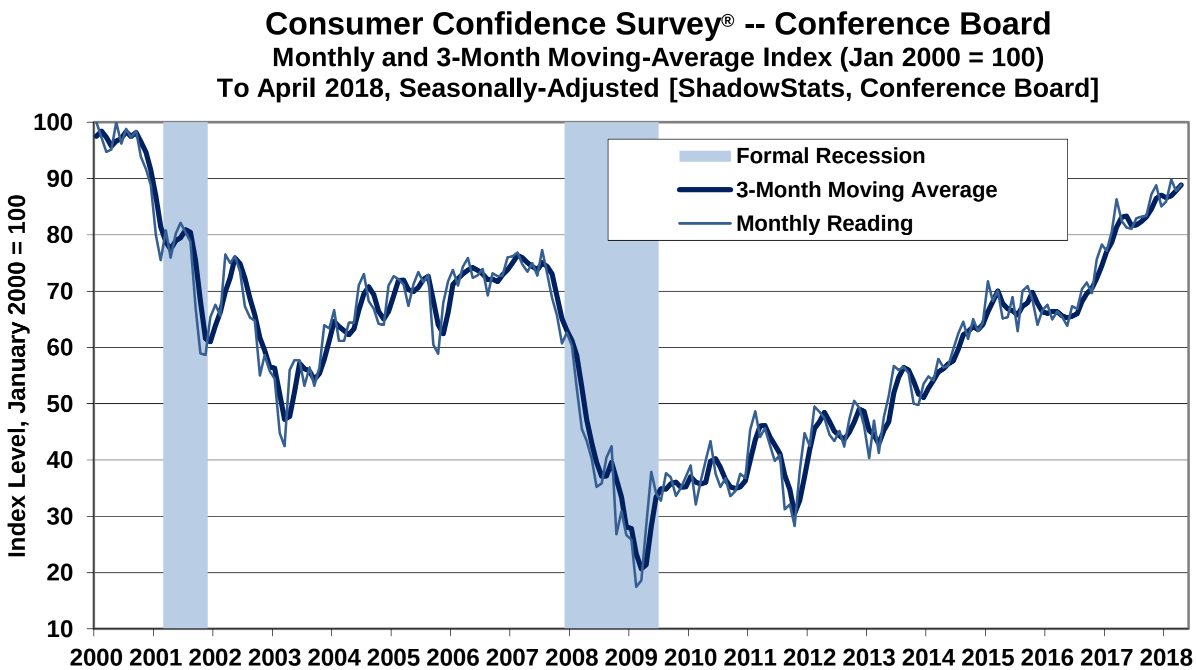
The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in *Commentary No. 764*), and often are highly volatile month-to-month, as a result. Recent press has been highly positive on the headline economic and employment news, reflecting short-lived hurricane boosts to activity particularly on unemployment (not payroll employment), retail sales and industrial production. As headline financial and economic reporting in the next month or two turn increasingly-negative and unstable, so too should the surging "optimism." Increasingly, a downturn in consumer outlook should take hold, despite any euphoric headlines, reflecting some deep-seated consumer liquidity issues.

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 into fourth-quarter 2017. In current environment of what had been surging optimism, beyond having happy feelings about the future, consumers still need actual income, cash-in-hand or credit in order to increase their spending.

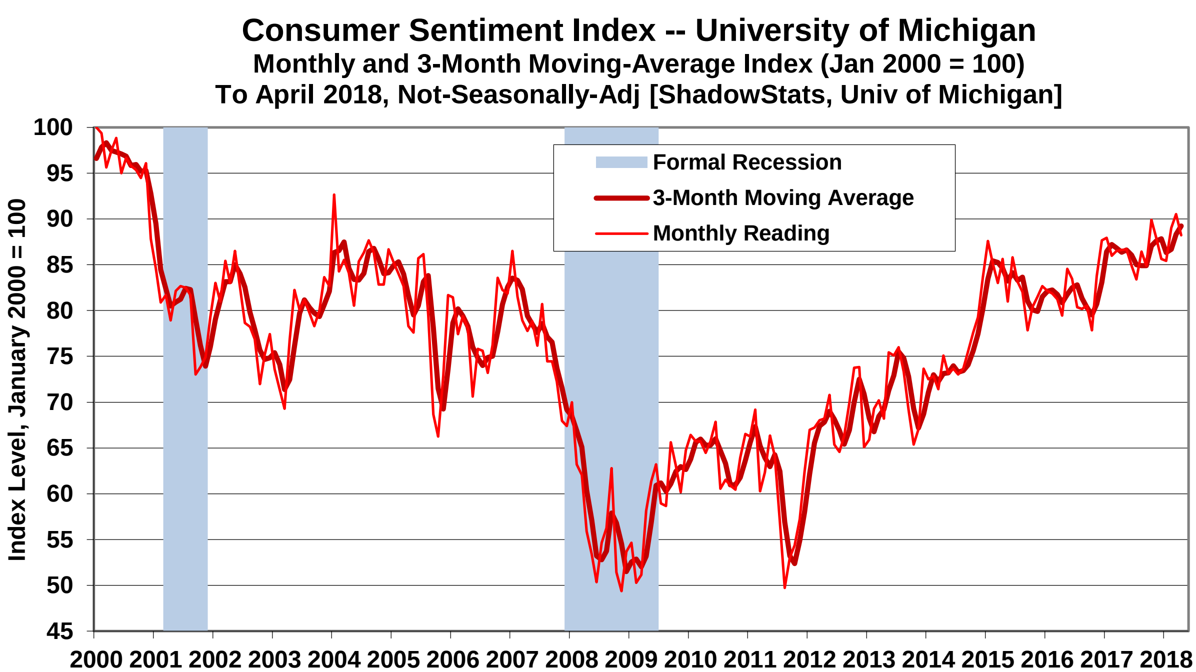
Smoothed for irregular, short-term volatility, the two series still generally had held at levels seen typically in recessions, until the post-2016 election circumstance. Suggested in *Graph CLW-3*—plotted for the last

48 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, although increasingly, they appear to be topping out.

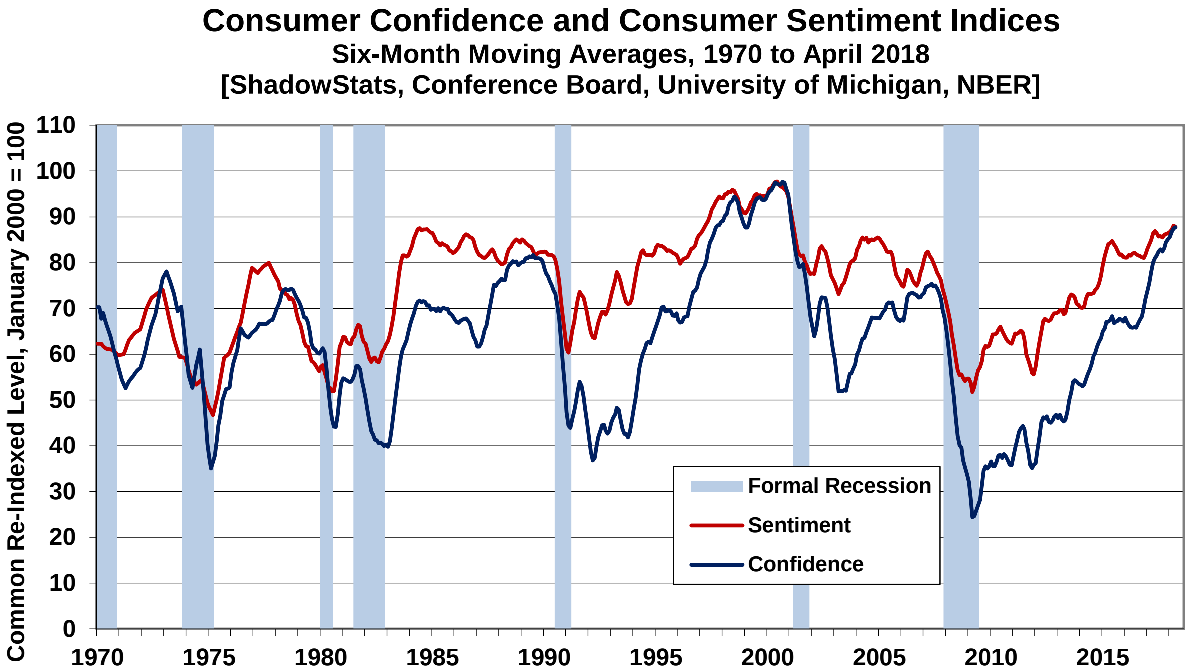
Graph CLW-1: Consumer Confidence (2000 to 2018)



Graph CLW-2: Consumer Sentiment (2000 to 2018)

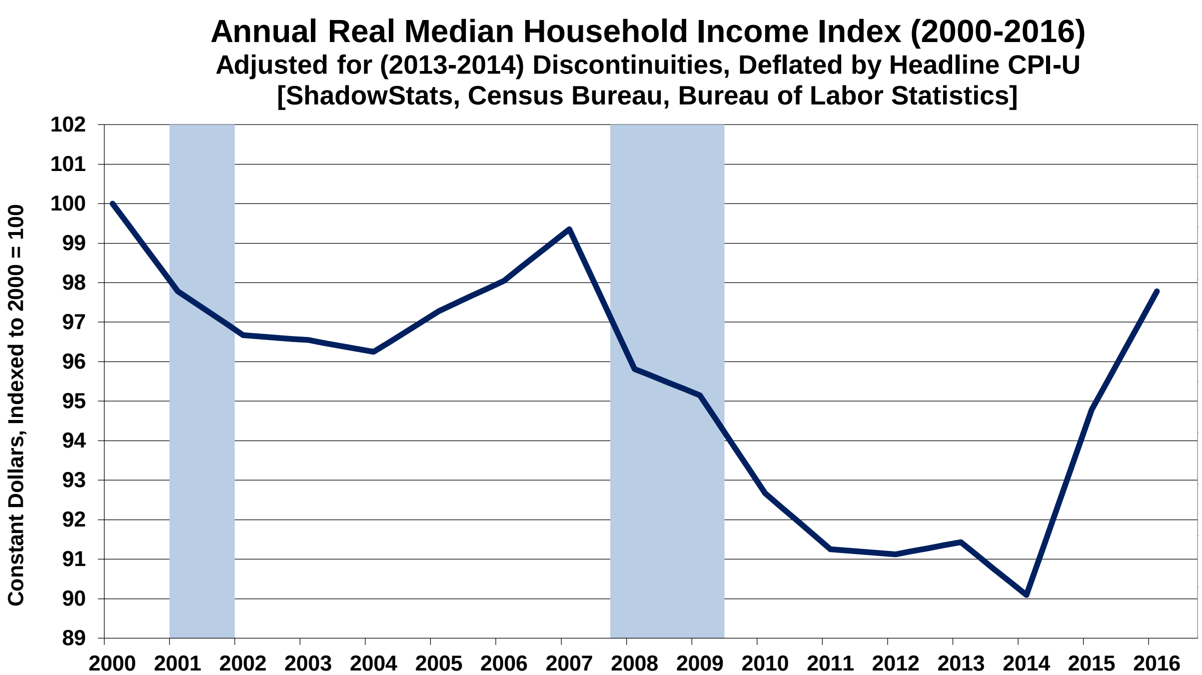


Graph CLW-3: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2018)



2016 Annual Real Median Household Income Still Was Below Its 2007 Pre-Recession High, Below Activity in the Late-1990s, About Even with the Mid-1970s. The measure of real monthly median household income, which was provided by www.SentierResearch.com, generally can be considered as a monthly version of the annual detail shown in *Graph CLW-4*, based on the most-recent annual detail released by the Census Bureau and as discussed the *Opening Comments* of *Commentary No. 909*.

Graph CLW-4: Annual Real Median U.S. Household Income (1967 to 2016)



Last Monthly Estimate Showed Stagnating Monthly Real Growth. Last reported by Sentier Research, in what appears to have been the final estimate for the series, May 2017 Real Median Household Income was statistically unchanged, despite a boost from falling gasoline prices. Discussed in *General Commentary No. 894*, and in the contexts of then-faltering gains in post-election consumer optimism, and inflation-adjusted activity boosted by declining headline Consumer Price Index (CPI-U) inflation (weakened by seasonally-adjusted gasoline price declines), May 2017 Real Median Monthly Household Income was "statistically unchanged" (a statistically-insignificant monthly gain of 0.10%). That followed a statistically-significant monthly gain of 1.00% in April 2017. Shown in *Graph CLW-4,* such enabled May 2017 real monthly median household income to hold a level regained in April and otherwise last seen in February 2002. Year-to-year real median household income rose to 2.44% in May 2017, the highest level since June 2016, following an annual gain of 1.57% in April 2017 (see *Graph CLW-5*).

Where real monthly median income plunged into the headline trough of the economic collapse in 2009, it did not then rebound in tandem with the headline GDP activity. When the GDP purportedly started its solid economic recovery in mid-2009, the monthly household income numbers nonetheless plunged to new lows, hitting bottom in 2011. The income series then held in low-level stagnation, until collapsing gasoline prices and the resulting negative CPI-U inflation drove a post-2014 uptrend in the inflation-adjusted monthly income index. 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 until recent months. Real median household income had the potential to resume turning down anew, as the headline pace of monthly consumer inflation picked up anew, with the August 2017 CPI.

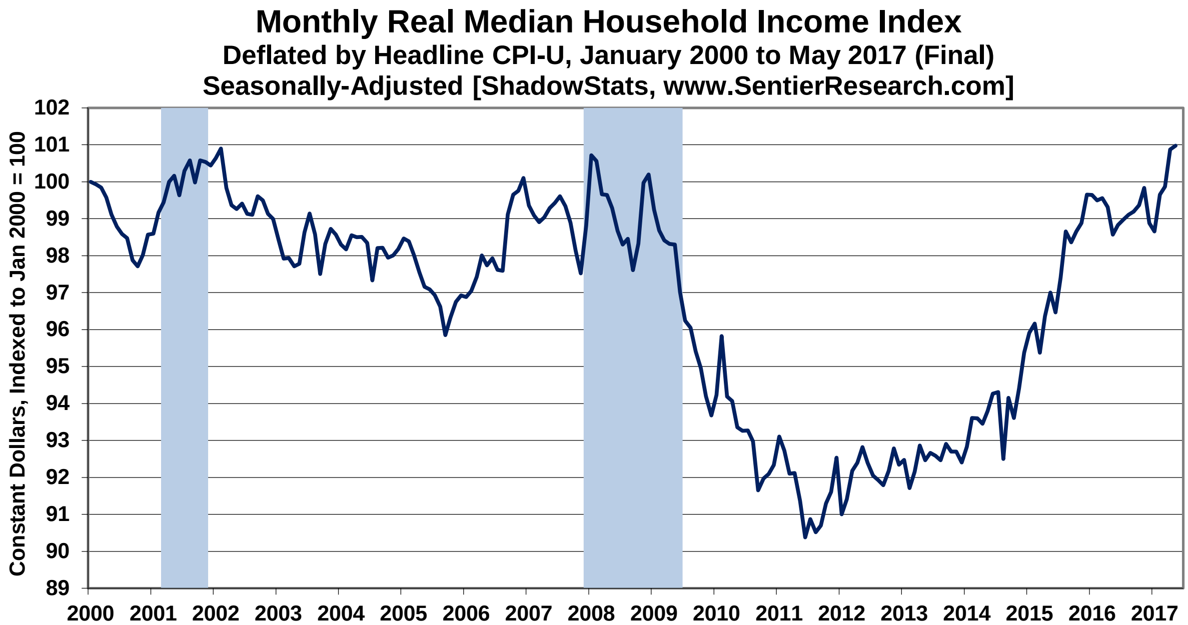
Nonetheless, the most-recent recent "rebound" reported in the series still left consumers financially strapped. Where lower gasoline prices had provided some minimal liquidity relief to the consumer, indications are that any effective extra cash largely was used to help pay down unsustainable debt or other obligations, not to fuel new consumption. Except for mixed gyrations in first-half 2017, the effects of changing gasoline prices in the headline CPI-U generally had reversed, pushing headline consumer inflation higher and beginning to push real income lower.

Differences in the Monthly versus Annual Median Household Income**.** The general pattern of relative monthly historical weakness has been seen in the headline reporting of the annual Census Bureau numbers, again, shown in *Graph CLW-4,* with 2014 real annual median household income having hit a ten-year low, and, again, with the historically-consistent 2015 and 2016 annual number still holding below the 2007 pre-recession high.

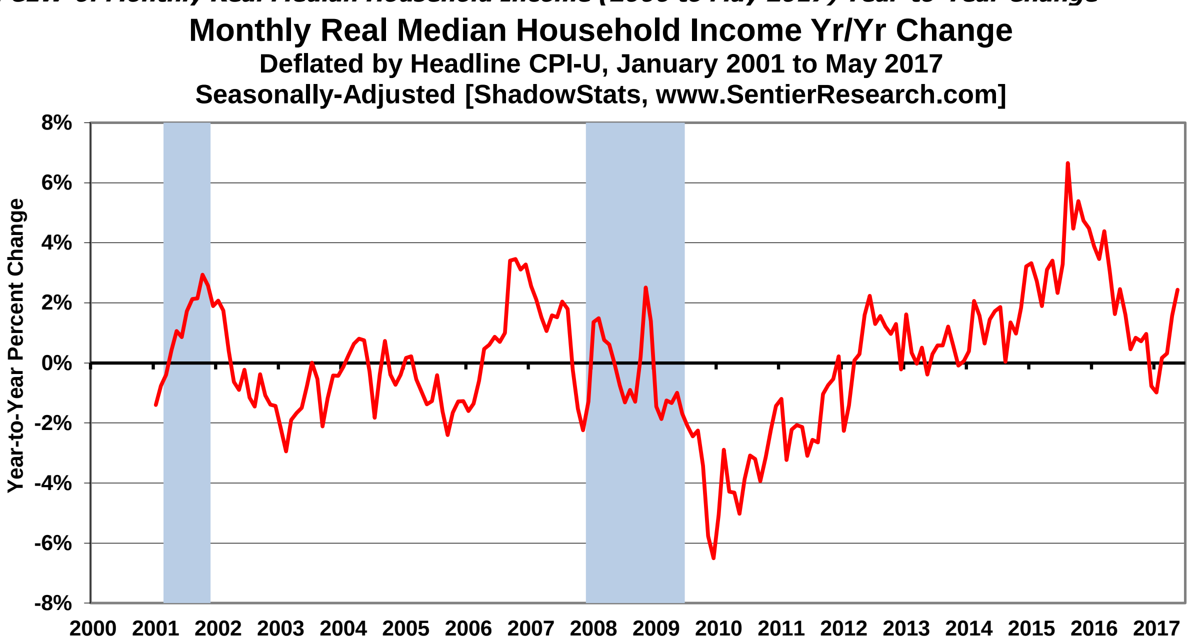
The Sentier numbers had suggested a small increase in 2014 versus 2013 levels, low-inflation induced real increases in 2015 and 2016. Allowing for the direction difference in 2014, and continual redefinitions and gimmicks in the annual series (again, see the *Opening Comments* of *Commentary No. 909*) the monthly and annual series had remained broadly consistent, although based on separate questions within the Consumer Population Series (CPS), as conducted by the Census Bureau.

Where Sentier used monthly questions surveying current annual household income, the headline annual Census Bureau 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.

Graph CLW-5: Monthly Real Median Household Income (2000 to May 2017) Index, January 2000 = 100

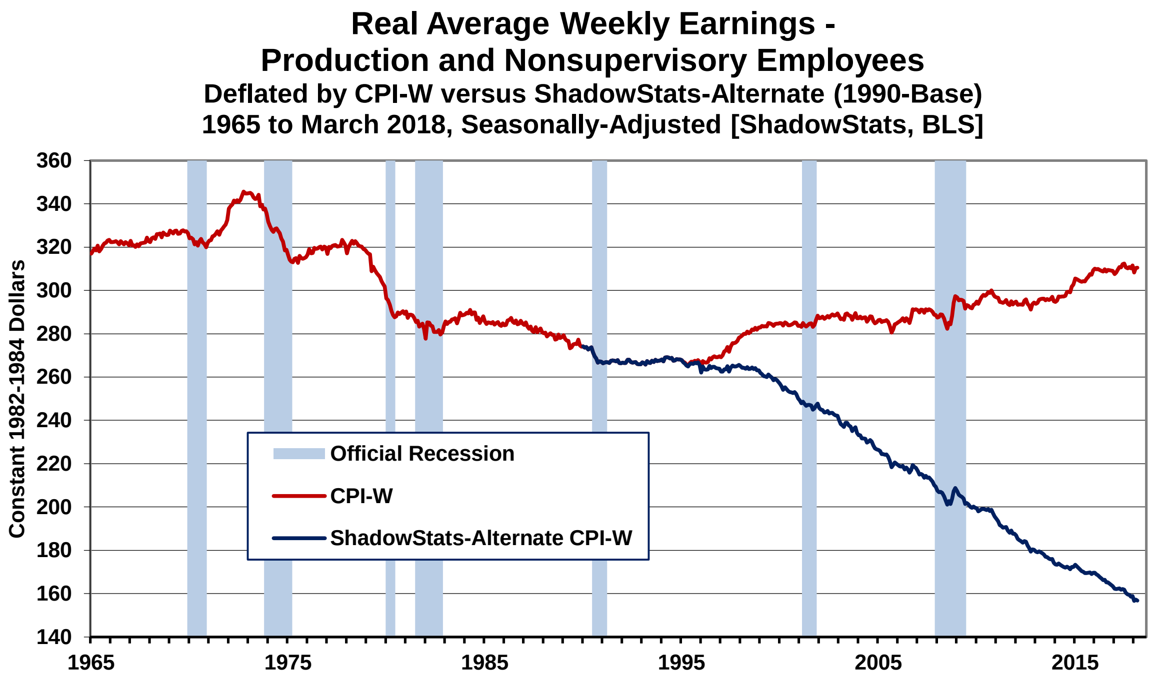


Graph CLW-6: Monthly Real Median Household Income (2000 to May 2017) Year-to-Year Change



Real Average Weekly Earnings—March 2018—Third-Consecutive Quarterly Contraction. For the production and nonsupervisory employees category—the only series for which there is a meaningful history (discussed in today's *Reporting Detail* and plotted here and in *Graph 1* in the *Executive Summary*), real average weekly earnings were unchanged month-to-month at 0.0% in March 2018 having gained 0.7% in February and declined by 1.1% (-1.1%) in January. As result, real earnings contracted quarter-to-quarter in first-quarter 2018 at an annualized pace of 1.5% (-1.5%). Such was the third-consecutive quarterly decline in real earnings for the production and nonsupervisory employees category, the fifth real quarterly contraction of the last six quarters. Separately, real quarterly earnings for all employees also contracted, down at an annualized of pace of 0.3% (-0.3%) in first-quarter 2018, for the second consecutive quarterly contraction. See the *Reporting Detail* for further information.

Graph CLW-7: Real Average Weekly Earnings, Production and Nonsupervisory Employees, 1965-to-Date

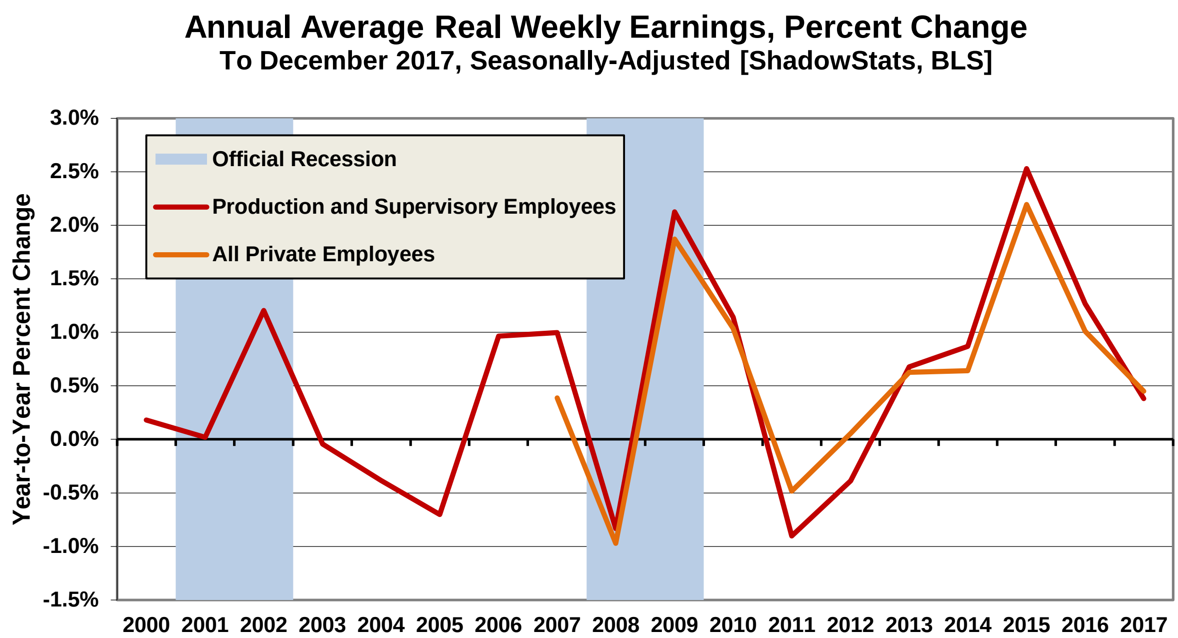


Graph CLW-7 plots the seasonally-adjusted earnings as officially deflated by the BLS (red-line), and as adjusted for the ShadowStats-Alternate CPI Measure, 1990-Base (blue-line). When inflation-depressing methodologies of the 1990s began to kick-in, the artificially-weakened CPI-W (also used in calculating 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.

Shown in *Graph CLW-8*, and as discussed in *Commentary No. 931*, both the "all-employees" and "production and nonsupervisory employees" categories showed a sharply slowing pace in annual growth in 2017. Presumably coming off more-positive economic circumstances, the patterns there are consistent with a renewed economic downturn, not with a new economic boom, and the current pace of decline is greater than the average tax reduction to be seen by consumers in the year ahead.

Not all economic downturns are reflected in the headline economic data. For example, industrial production indicated the U.S. economic downturn intensified in fourth-quarter 2014, enough to qualify as a new recession, which is consistent with the plot in *Graph CLW-8*. See the related discussions in *Commentary No. 928* and *Commentary No. 936*.

Graph CLW-8: Annual Average of Weekly Earnings, Annual Percent Change (2000 to 2017)



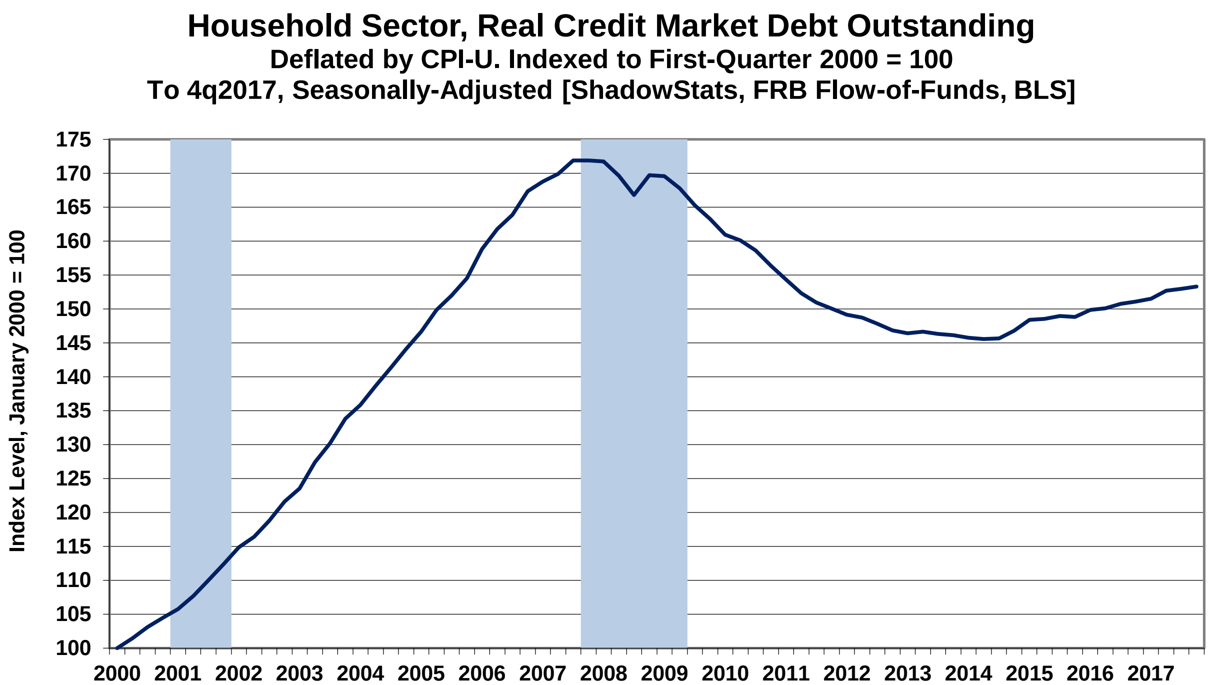
When income growth is inadequate to support consumption growth, consumers often make up the difference in debt expansion. Yet, real Consumer Credit Outstanding has shown a patterns of declining annual real growth for the last several quarters, irrespective of the specific series, as reflected in the plots of real monthly year-to-year change in *Graph CLW-13*.

Consumer Credit: Lack of Expansion in Real Consumer Credit Constrains Economic Growth. The final five graphs on consumer conditions address consumer borrowing. Where debt expansion can help make up for a shortfall in income growth, expansion of consumer debt, which would help fuel expansion in personal consumption, has been nonexistent.

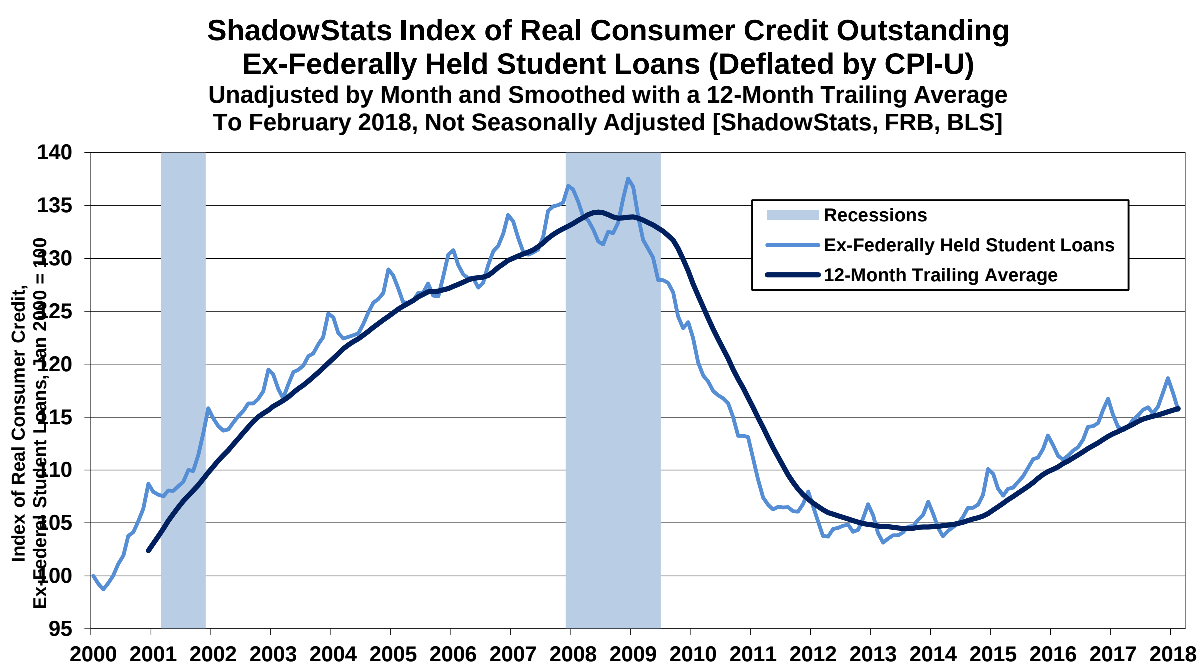
Quarterly Series. Consider *Graph CLW-9* of *Household Sector, Real Credit Market Debt Outstanding*. The level of real household debt declined in the period following the Panic of 2008, reflecting loan defaults and reduced banking lending, and it has not recovered fully, based on the Federal Reserve's flow-of-funds accounting through fourth-quarter 2017, released on March 8th. Household Sector, Real Credit Market Debt Outstanding in fourth-quarter 2017 still was down by 10.8% (-10.8%) from its pre-recession peak of third-quarter 2007. That was against a revised third-quarter 2017 decline of 11.0% (-11.0%) [previously 10.9% (-10.9%)]. The flattened visual uptick at the latest point in *Graph CLW-9* reflected a slowing in real year-to-year change from 1.72% [previously 1.70%] in second-quarter 2017, to 1.48% [previously 1.55%] in third-quarter 2017 and to 1.47% in fourth-quarter 2017. Such completes 41 straight quarters—a full decade-plus—of credit non-expansion, versus its pre-recession peak.

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 and intermittently into fourth-quarter 2017. Current activity also has reflected continuing relative strength from student loans, as shown in the *Graphs CLW-10* to *CLW-13*.

Graph CLW-9: Household Sector, Real Credit Market Debt Outstanding (2000 through Fourth-Quarter 2017)



Graph CLW-10: Real Consumer Credit Outstanding, Ex-Federal Student Loans (2000 to 2018)



Shown for comparative purposes is *Graph CLW-10*, real, not-seasonally-adjusted Consumer Credit Outstanding, Ex-Federally-Held Student Loans, has not recovered on a monthly, let alone the 12-month trailing-average basis used as a surrogate for seasonal adjustment. Discussed in the next section, this measure of consumer credit now has been through 122 months 40-plus quarters of non-expansion. That is reflected on a parallel basis through fourth-quarter 2017 reporting shown in *CLW-9*. Please note that the scale in *Graph CLW-10* is indexed to Consumer Credit Outstanding Ex-Federal Student Loans equal to 100 in January 2000. In *Graphs CLW-11* to *13*, that indexing is applied to the total Consumer Credit Outstanding number, which is greater in amount than its dominant Ex-Federal Student Loans subcomponent.

Monthly Series. Indeed, the ShadowStats analysis usually focuses on the particular current and continuing weakness in monthly levels of consumer credit, net of what has been rapidly expanding government-sponsored student loans. Where detail on that series only is available not-seasonally-adjusted, the following three related graphs and the preceding *Graph CLW-10* are so plotted.

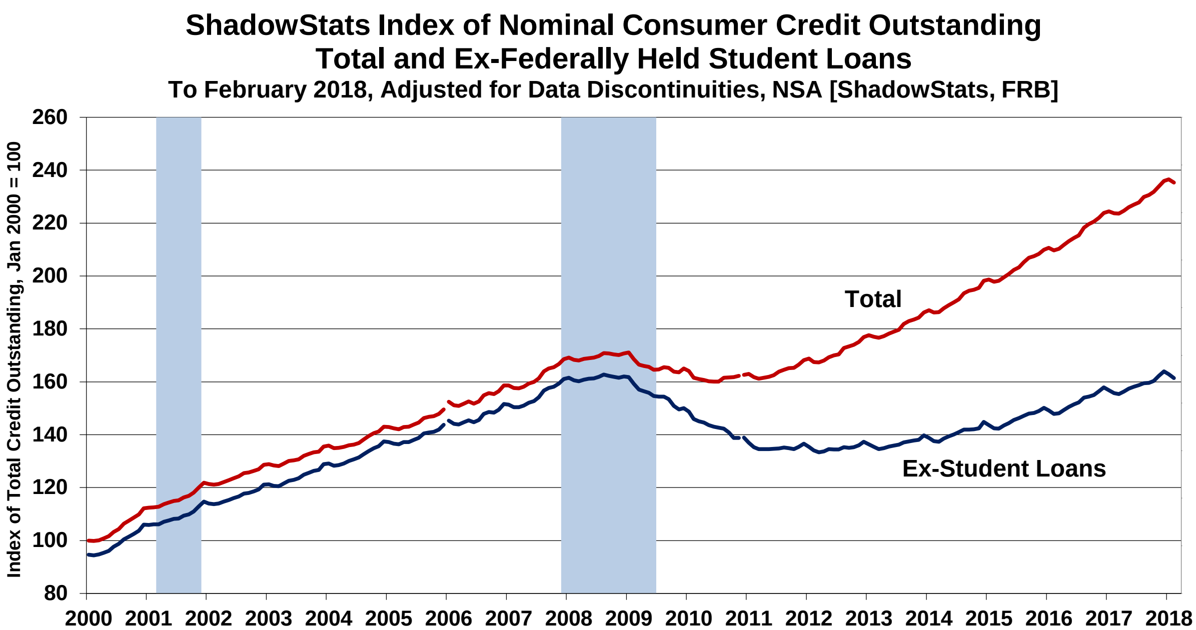
Shown through the February 2018 reading (released April 6th), the headline nominal monthly Consumer Credit Outstanding (*CLW-11*) is a subcomponent of the nominal Household Sector debt. Where *Graph CLW-12* reflects the real or inflation-adjusted activity for monthly Consumer Credit Outstanding terms of both level (*Graph CLW-12*) and year-to-year change (*Graph CLW-13*). *Graphs CLW-12* and *CLW-10* are comparable to the inflation-adjusted Household Sector plot in *Graph CLW-9*.

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 have fueled 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 during one year reflecting some regular, unadjusted seasonal dips or jumps.

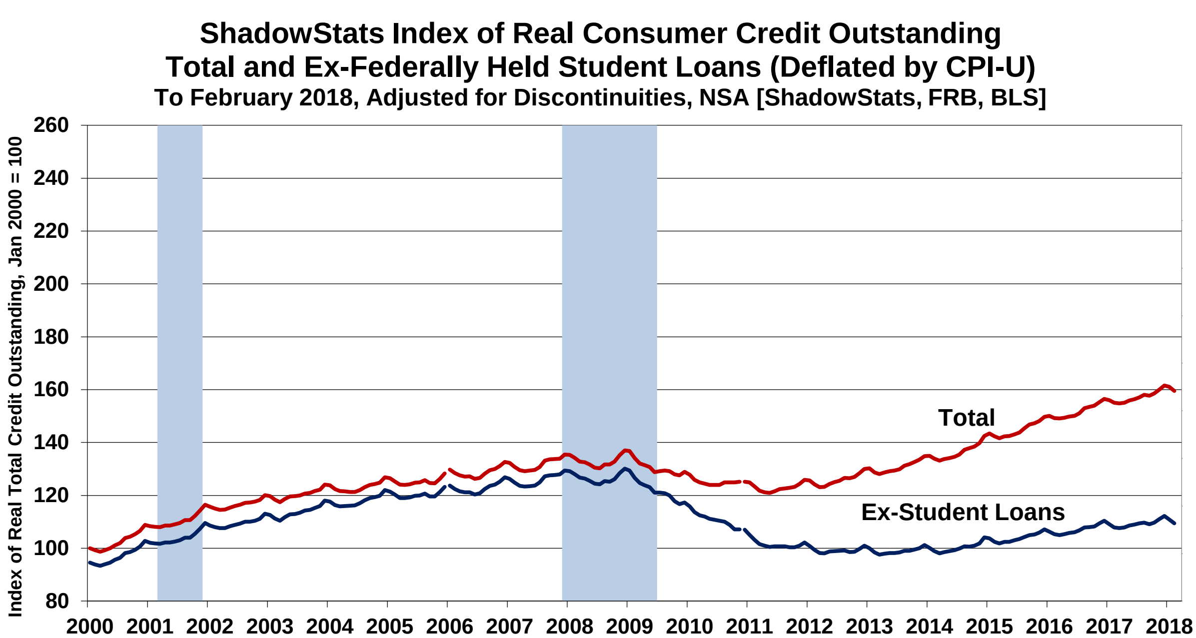
Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Where the recent monthly downside move in the not-seasonally-adjusted real consumer credit reflected something of a seasonal pattern, the pattern of year-to-year growth has been in downtrend, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in February 2018 was down from recovering its December 2007 pre-recession peak by 15.5% (-15.5%). That is 122 months or ten-plus years of non-expansion of credit. Year-to-year real growth shown in *Graph CLW-13* tends to resolve most monthly seasonal distortions in the not-seasonally-adjusted data.

[Graphs CLW-11 to CLW-13 begin on the next page.]

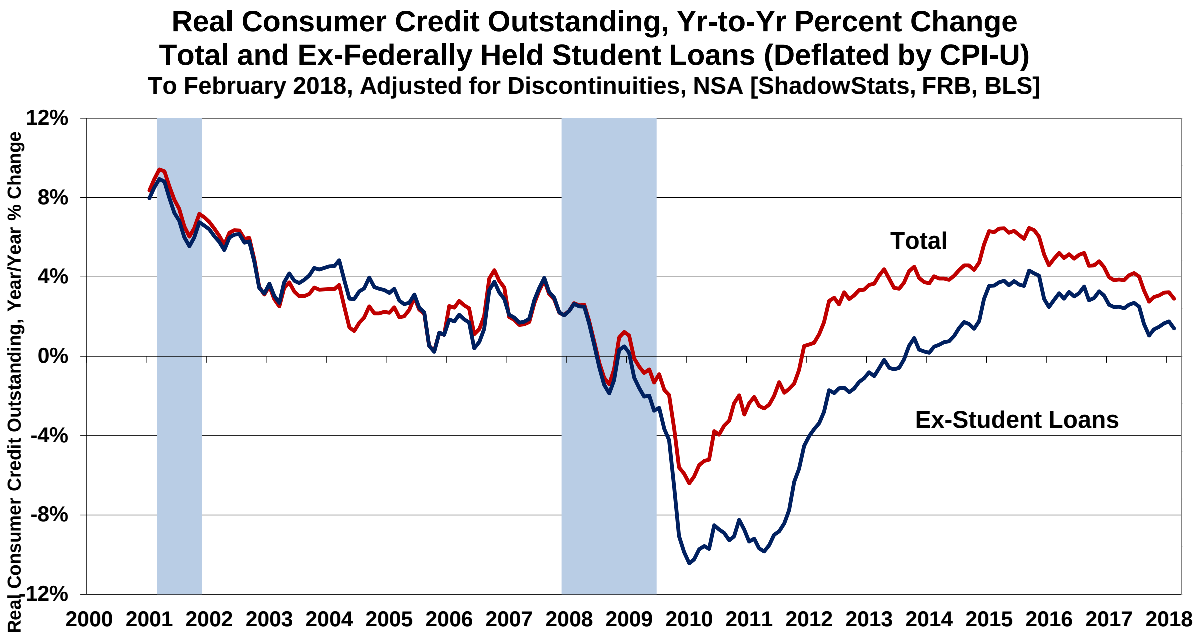
Graph CLW-11: Nominal Consumer Credit Outstanding (2000 to 2018)



Graph CLW-12: Real Consumer Credit Outstanding (2000 to 2018)



Graph CLW-13: Year-to-Year Percent Change, Real Consumer Credit Outstanding (2000 to 2018)



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

WEEK, MONTH AND YEAR AHEAD

U.S. Dollar and Financial-Market Turmoil Remain at High Risk, Amidst Mounting Fiscal Concerns, Consumer Liquidity Issues and Non-Expanding, Real-World Economic Activity. In the context of continued underlying deterioration in basic consumer-liquidity conditions, discussed in today's *Opening Comments* and the *Consumer Liquidity Watch*, the headline first-quarter GDP reflected difficult economic times hitting U.S. consumer activity, where the U.S. consumer remains the fundamental driving force behind the domestic business conditions. Such is despite the headline first-quarter GDP coming in at 2.3%, above consensus expectations for 2.0% growth. The broad outlook has not changed. Weaker economic growth and renewed, faltering economic headlines should follow.

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

The U.S. dollar and financial markets remain at extraordinarily-high risk of intensified, panicked declines, likely in the very near term. Holding physical gold and silver remain the ultimate hedges—stores of wealth—for preserving the purchasing power of one's U.S. dollar assets, during times of high inflation and currency debasement, and/or political- and financial-system upheaval, Please call (707) 763-5786, if you would like to discuss current circumstances, or otherwise.

Best wishes – John Williams

PENDING ECONOMIC RELEASES: Construction Spending (March 2018). The Commerce Department will release its estimate of March 2018 Construction Spending on Tuesday, May 1st. Detail will be covered in *Commentary No. 948* of May 4th. March release should continue to show unchanged or year-to-year contractions in inflation-adjusted real activity. The onset of such an annual downturn in real activity was seen last in the housing collapse of 2006, and it is indicative of the onset of a new recession. Where that should remain the ongoing trend, recovery and rebuilding efforts from hurricane damages still could offer limited, near-term moderation to the increasingly-negative outlook. The annual benchmark revisions to this series, which likely will exacerbate the negative signals for broader economic activity, are due on July 2nd.

U.S. Trade Deficit (March 2018). The Commerce Department and Bureau of Economic Analysis (BEA) will release their full version of the monthly U.S. trade balance for March 2018 on Thursday, May 3rd, to be covered in ShadowStats *Commentary No. 948* of May 4th. Based on the advance estimate of the March goods deficit on April 26th, as discussed in the *Opening Comments*, the initial, final March 2018 deficit should narrow versus February 2018, but given occasional large revisions from the advance- to the final-estimate, and given the unusual nature of the first-quarter GDP's net-export detail, again, as discussed in the *Opening Comments*, almost anything is possible. The broad trend here still should reflect continued trade-deficit deterioration. Likely negative (deeper-deficit) revisions loom with annual benchmarkings, with April 2018 headline details on May 30th for the "advance" estimate, and on June 6th for the full estimate April 2018 estimate.

Employment and Unemployment (April 2018). The Bureau of Labor Statistics (BLS) will publish the headline April labor data on Friday, May 4th, to be covered in *Commentary No. 948* of that date. What should continue to be happy consensus expectations still are due to face some negative shocks. Discussed in *Commentary No. 944*, the heavily-stressed household survey and payroll survey numbers likely will continue under negative pressure. With jobs growth increasing part-time in nature, and with payroll gains, both month-to-month and year-to-year increasingly faltering against consensus expectations. Annual growth in the March payrolls remained at recession levels, a pattern that likely will continue.

Headline details remain open to some continued negative catch-up, with both payroll growth and unemployment levels a fair bet for seeing some negative surprises, again, against likely, positive consensus expectations.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. In the context of historical background provided in *Special Commentary No. 885*: *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*, significant reporting-quality problems remain with most major economic series. Beyond pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended both to understate inflation and to overstate economic activity meaningfully—as generally viewed in the common experience of Main Street, U.S.A.—ongoing, near-term headline reporting issues often reflect 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 have provided particularly unstable headline economic results, with the use of concurrent seasonal adjustments (as seen with retail sales, durable goods orders, employment and unemployment data). While historical seasonal-factor adjustments are revised every month, based on the latest, headline monthly data, the consistent, revamped historical data are not released or reported at the same time. 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 several years 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*). Investigative-financial/business reporter John Crudele of the *New York Post* has written extensively on such reporting irregularities: *Crudele Investigation*, *Crudele on Census Bureau Fraud* and *John Crudele on Retail Sales*.

LINKS TO PRIOR COMMENTARIES AND SPECIAL REPORTS

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

These missive also are built upon writings of prior years, including *No. 777 Year-End Special Commentary* (December 2015), *No. 742 Special Commentary: A World Increasingly Out of Balance* (August 2015) and *No. 692 Special Commentary: 2015 - A World Out of Balance* (February 2015). In turn, they updated the long-standing hyperinflation and economic outlooks published in *2014 Hyperinflation Report—The End Game Begins* – *First Installment Revised* (April 2014) and *2014 Hyperinflation Report—Great Economic Tumble* – *Second Installment* (April 2014).

The two *Hyperinflation* installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic reality are the *Public Commentary on Inflation Measurement* and the *Public Commentary on Unemployment Measurement*.

Recent Commentaries. *[Listed here are* Commentaries *of the last several months or so, plus recent* Special Commentaries *and others covering a variety of non-monthly issues, including annual benchmark revisions, dating back through the beginning of 2017. Please Note: Complete ShadowStats archives back to 2004 are found at www.ShadowStats.com (left-hand column of home page).]* These regular *Commentaries* usually are published at least weekly and update the general economic and financial o-market outlook, as circumstances develop.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Commentary No. 928 (December 22, 2017) covered November 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the third estimate of Third-Quarter 2017 GDP.

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

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

Commentary No. 925 (December 13th) reviewed November 2017 headline detail on the CPI and PPI, along with an update on the FOMC actions and the regular U.S. dollar, gold graphs.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Commentary No. 897 (July 6, 2017) reviewed the headline May 2017 Construction Spending and the annual revisions to same, along the May Trade Deficit, and June The Conference Board Help Wanted OnLine® Advertising and the May Cass Freight Index™.

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

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

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

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

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

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

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

Commentary No. 876 (March 30, 2017) current headline economic activity in the context of formal definitions of the business cycle (no other major series come close to the booming GDP, which is covered in its third revision to fourth-quarter activity). Also the February 2017 SentierResearch reading on real median household income was highlighted.

Commentary No. 875 (March 24, 2017) assessed and clarified formal definitions of the U.S. business cycle, which were expanded upon significantly, subsequently, in *No. 876*. It also provided the standard review of the headline February 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the Cass Freight Index™.

General Commentary No. 867 (February 24, 2017) assessed mixed signals for a second bottoming of the economic collapse into 2009, which otherwise never recovered its level of pre-recession activity. Such was in the context of contracting and faltering industrial production that now rivals the economic collapse in the Great Depression as to duration. Also covered were the prior January 2017 New- and Existing Home Sales.

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

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

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