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

COMMENTARY NUMBER 957

May 2018 New Orders for Durable Goods, Third Estimate of First-Quarter GDP

July 1, 2018

May 2018 New Orders for Durable Goods Declined Month-to-Month,
Both Before and After Consideration of Inflation and Commercial Aircraft Orders

First-Quarter 2018 Gross Domestic Product (GDP) Annualized Real Growth
Revised Lower to 1.99% (Previously 2.17%, Initially 2.32%),
Versus 2.89% in Fourth-Quarter 2017

Hitting GDP Growth, Revised First-Quarter 2018 Net Exports Turned Negative,
Moving into Alignment with Underlying Real Merchandise Trade Deficit Reporting

Upwardly-Revised Gain in the Nebulous "Intellectual Properties" Category of
Fixed Investment Boosted Revised GDP Growth by 0.50% (Previously by 0.29%)

Contracting Consumer Goods and Housing Elements in the GDP
Reflect Mounting Liquidity Stresses and Faltering Consumer Optimism

First-Quarter Gross Domestic Income (GDI) Growth, Purported GDP-Equivalent,
Revised Higher to 3.57% (Previously 2.80%), Versus 1.05% in Fourth-Quarter,
Boosted by a Sharp Upside Revision to Nonfinancial-Industry Corporate Profits

First-Quarter Gross National Product (GNP), the Broadest National Income Measure,
Slowed to 1.91% (Previously 2.00%), down from 2.71% in Fourth-Quarter

Better-Quality Economic Measures Show Continuing Economic Non-Expansion;
Some Hit Likely to Historical GDP Growth in Pending Revisions

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PLEASE NOTE: A July 3rd Commentary will review May Construction Spending and the Annual Benchmark Revisions to that series, followed by a Commentary on July 6th, with at least headline coverage of June Employment and Unemployment and the May Trade Deficit.

Consumer Liquidity Watch No. 2 was posted on June 29th. The initial posting of the standalone *Hyperinflation Watch*, covering June Monetary Conditions, is slated for late-day July 5th.

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

COMMENTARY-TRANSITION UPDATE. Previously noted, ShadowStats is transitioning to more-concise, more-frequent and more-timely publication of its *Commentaries*. All material, analysis and commentary that standardly have been covered and reviewed will continue. The full formatting transition should be completed by mid-July.

Today's Commentary incorporates into the GDP and New Orders reporting most of the new formatting and structural changes needed to make the missives more concise and easier to follow, including a *Table of Contents* that links to the key *Reporting Detail* sections and graphs.

The previous *Executive Summary* section has been replaced with opening summaries in each major section of the *Reporting Detail*, along with increased usage of tables. What had been regular *Commentary* sections of the *Consumer Liquidity Watch* (*CLW*) and *Hyperinflation Watch* (*HIW*) now are updated and posted as separate entities, when meaningful new data become available or circumstances change. The latest *Watches* are available on the ShadowStats Web site and by link from current *Commentaries*, with updates advised by e-mail.

Your comments and suggestions always are invited.

Best wishes to all for a Most Happy Fourth of July! John Williams (707) 763-5786

Today's (July 1st) *Opening Comments* provides a brief overview of the latest headline reporting..

The ***Reporting Detail*** reviews the May New Orders for Durable Goods, the third-estimate of First-Quarter 2018 Gross Domestic Product (GDP) and the second estimates of the related Gross Domestic Income (GDI) and Gross National Product (GNP).

The ***Consumer Liquidity Watch*,** updated on June 29th for faltering measures of the June 2018 consumer outlook, and for Sentier Research's May 2018 estimate of Real Monthly Median Household Income, is available by link at *Consumer Liquidity Watch - No. 2*.

The ***Week, Month and Year Ahead*** provides background on recent *Commentaries* and previews releases of May 2018 Construction Spending and the related benchmark revisions, the May Trade Deficit and June Employment and Unemployment, all to be released in the week ahead.

Commentary No. 957 contents, including graphs and tables, are indexed and linked on following page.

Contents – Commentary No. 957 Major Sections and Graphs

OPENING COMMENTS

Ahead of the Grand Benchmarking, Last-Reporting of Old-Style GDP Softened Some

GDP Growth Slowed Anew, Durable Goods Orders and Production Fell and Consumer Liquidity Tightened, as the Economic "Boom" Began to Show Signs of Faltering. Discussed in *Consumer Liquidity Watch No. 2*, the U.S. consumer is in an intensifying liquidity bind, and that continued to be reflected in the final revision to first-quarter GDP consumption detail. The U.S. consumer directly moves the 72.9% of GDP that represents personal consumption expenditures and residential investment. The balance of the economy generally is driven ultimately by providing support to that underlying consumer activity.

The third and final estimate of First-Quarter 2018 GDP continued to revise lower, now at 1.99% annualized real growth, the weakest showing since first-quarter 2017. Annualized quarterly contractions within that headline detail continued to include both Consumer Goods Consumption, down by an annualized real 4.4% (-4.4%), and Residential Construction, down by 1.7% (-1.7%). Those circumstances rarely are seen outside of formal recessions, particularly in combination.

Declining goods consumption included automobiles, gasoline and clothing, along with declining purchases of new homes. Where the dominant factor was declining motor vehicle sales, that same sector took big hits in both May New Orders for Durable Goods (see the *Reporting Detail*) and in May Industrial Production (see *Commentary No. 956*). Happily, though, for Retail Sales motor vehicle sales rose in May, having gained in April. All those numbers are seasonally adjusted and net of inflation.

Putting the ever-gimmicked retail sales aside, it appears that the U.S. consumer may be pulling back, a bit, not only from basic areas of goods consumption, but also residential real estate. Apart from the meaningless headline monthly activity in May New-Home Sales, May Existing-Homes Sales showed solid monthly, quarterly and annual declines in activity (again, see *Commentary No. 956*). These circumstances have strongly negative implications for the initial estimate of Second-Quarter 2018 GDP, irrespective of the nature of the coincident release of comprehensive benchmark revisions to that series.

Discussed in the *Reporting Detail*, circumstances continue to favor downside revisions to reporting of real GDP growth in recent years in that July 27th GDP benchmarking.

Caution: As the Federal Reserve continues to tighten domestic liquidity (see *Commentary No. 955*), confirmation of a softening economic trend likely will intensify soon in most series, including the employment and unemployment detail. In turn, a shift in the economy to downside could trigger an unexpected shift in FOMC policy. Circumstances will be updated here as related new material surfaces.

REPORTING DETAIL

New Orders for Durable Goods (May 2018)

New Orders for Durable Goods Declined Month-to-Month, Irrespective of Considerations for Inflation and/or Commercial Aircraft Orders. Reported by the Census Bureau on June 27th, total New Orders for Durable Goods declined month-to-month by 0.57% (-0.57%) in May 2018, having declined by 1.03% (-1.03) [previously down by 1.66% (-1.66%)] in April 2016.

In the context of a narrowed monthly decline of 7.04% (-7.04%) in May for the highly volatile Commercial Aircraft Orders, which were down by a revised 30.28% (-30.28%) [previously by 28.96% (-28.96%)] in April, New Orders for Durable Goods Ex-Commercial Aircraft were down by 0.13% (-0.13%) in month, having gained by a revised 1.88% [previously up by 1.06%] in April.

Real Durable Goods Orders—May 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 May 2018 PPI series showed headline month-to-month inflation of 0.52%, versus 0.41% in April, 0.41% in March, 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 2.66% in May 2018, versus 2.13% in April 2018, 1.96% in March 2018, 1.72% in February 2018, 1.79% in January 2018 and 1.67% in December 2017 (see *Commentary No. 955*).

Adjusted for that 0.52% month-to-month inflation reading in May 2018 and the respective inflation rates in earlier months, and as reflected in the accompany graphs, real aggregate durable goods orders in May 2018 declined by 1.08% (-1.08%), having declined by 1.43% (-1.43%) in April and having gained by 2.25% in March. Ex-commercial aircraft, real month-to-month orders declined in May 2018 by 0.64% (-0.64%), having gained 1.47% in April 2018 and having declined by 1.29% (-1.29%) in March.

Real total new orders gained year-to-year by 6.33% in May 2018, versus 6.22% in April 2018 and by 8.99% in March 2018. Ex-commercial aircraft, May 2018 real orders rose year-to-year by 4.92%, versus 5.48% in April and 4.72% in March 2018.

New Table Summarizes the Preceding. *Table 1* found on the next page, summarizes the just presented monthly numbers by category and inflation –adjusted or not-inflation-adjusted status. The *Table* will be expanded and should save on some on the verbiage usually used in describing the monthly results of the New Orders for Durable Goods Series.

Table 1: Summary Detail of May 2018 New Orders for Durable Goods

New Orders for Durable Goods (May 2018 Reporting)					
Month	Nominal Millions of Current Dollars			Real Millions of Constant 2009 Dollars	
	Total New Orders	Commercial Aircraft	Ex-Commercial Aircraft	Total New Orders	Ex-Commercial Aircraft
Mar 18	252.760	22.845	229.915	228.939	208.247
Apr 18	250.169	15.928	234.241	225.673	211.304
May 18	248.755	14.807	233.948	223.233	209.945
	Percent Change			Percent Change	
	Mo/Mo	Mo/Mo	Mo/Mo	Mo/Mo	Mo/Mo
Mar 18	2.73%	60.76%	-0.83%	2.25%	-1.29%
Apr 18	-1.03%	-30.28%	1.88%	-1.43%	1.47%
May 18	-0.57%	-7.04%	-0.13%	-1.08%	-0.64%
Prior M/M					
Mar 18	2.70%	60.73%	-0.86%		
Apr 18	-1.66%	-28.96%	1.06%		
	Yr/Yr		Yr/Yr		
Mar 18	11.19%		6.84%		
Apr 18	8.54%		7.80%		
May 18	9.22%		7.77%		
Prior Y/Y					
Mar 18	11.15%		6.80%		
Apr 18	7.82%		6.89%		
Sources: Commerce Department, ShadowStats					

Graphs of Inflation-Adjusted and Smoothed Durable Goods Orders Freight Activity and Recent Benchmark Revisions. Headline May 2018 New Orders for Durable Goods declined versus upwardly revised initial reporting for April activity on May 25th, which in turn was in the context of annual benchmark revisions (through March 2018) published on May 17th. Those revisions were discussed in *Commentary No. 951* and *Commentary No. 950*, and are reviewed in summary detail in the next "Benchmarked Orders ..." section on page 16, along with updated *Graphs 13* to *15*.

In the context of those benchmark revisions, *Graphs 1* and *2* 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, but uptrending stagnation.

The moving-average levels in *Graphs 1* and *2* 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 2017 and 2018, although softened by the downside benchmark revisions (again see *Graphs 13* to *15*). Starting with August and September of 2017, however, broad orders activity also was spiked by natural-disaster recovery, a pattern that now to has 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 3* to *8*, the related, extended discussion found in the *Opening Comments* of *Commentary No. 956*.

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 6.9% (-6.9%) for real new orders, ex-commercial aircraft, by 6.0% (-6.0%) for the manufacturing component of industrial production, and by 5.7% (5.7%) 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 4* 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 9* to *12*.

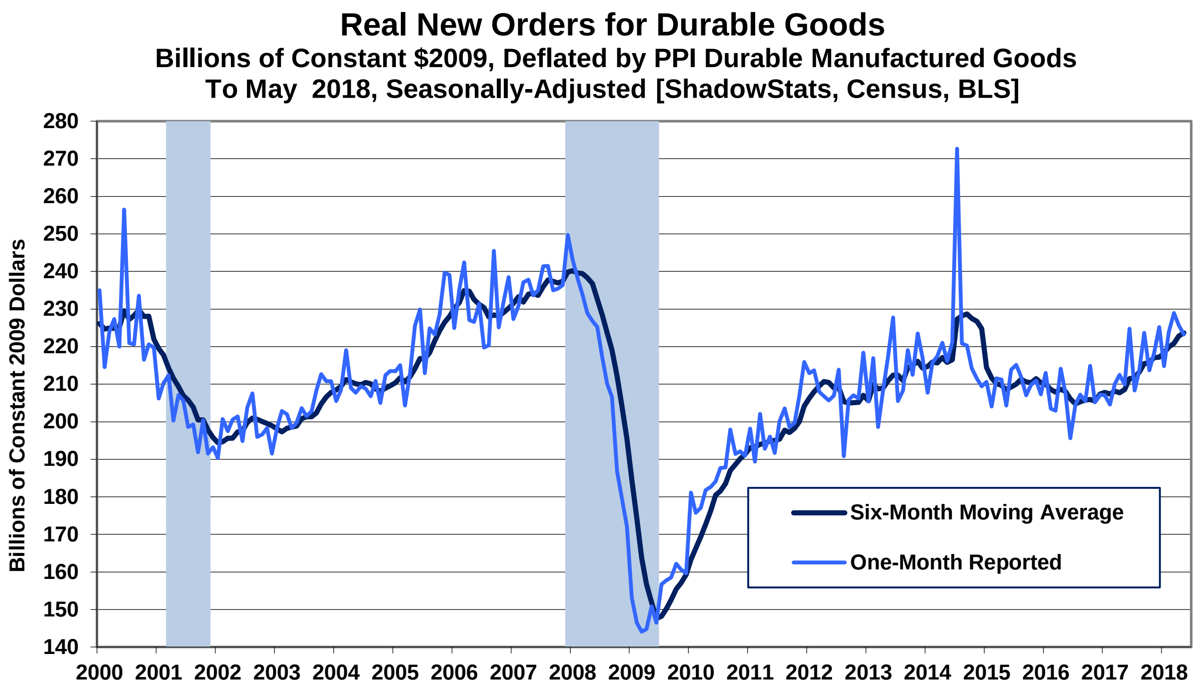
Again, shown in *Graphs 3* to *8*, year-to-year change in the ex-commercial aircraft durable goods orders series generally has led the broad pattern of annual growth reflected in the headline level of annual change in the manufacturing sector of industrial production, a series that also suffers inflation-reporting distortions (see the inflation discussion in the Industrial Production coverage in *Commentary No. 950*).

Graphs of Inflation-Adjusted and "Corrected" Smoothed Durable Goods Orders. Three sets of inflation-adjusted graphs (*Graphs 1* to *2* and *4*, *Graphs 9* and *10*, and *Graphs 11* and *12*) follow. 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 1* and *2*) 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.

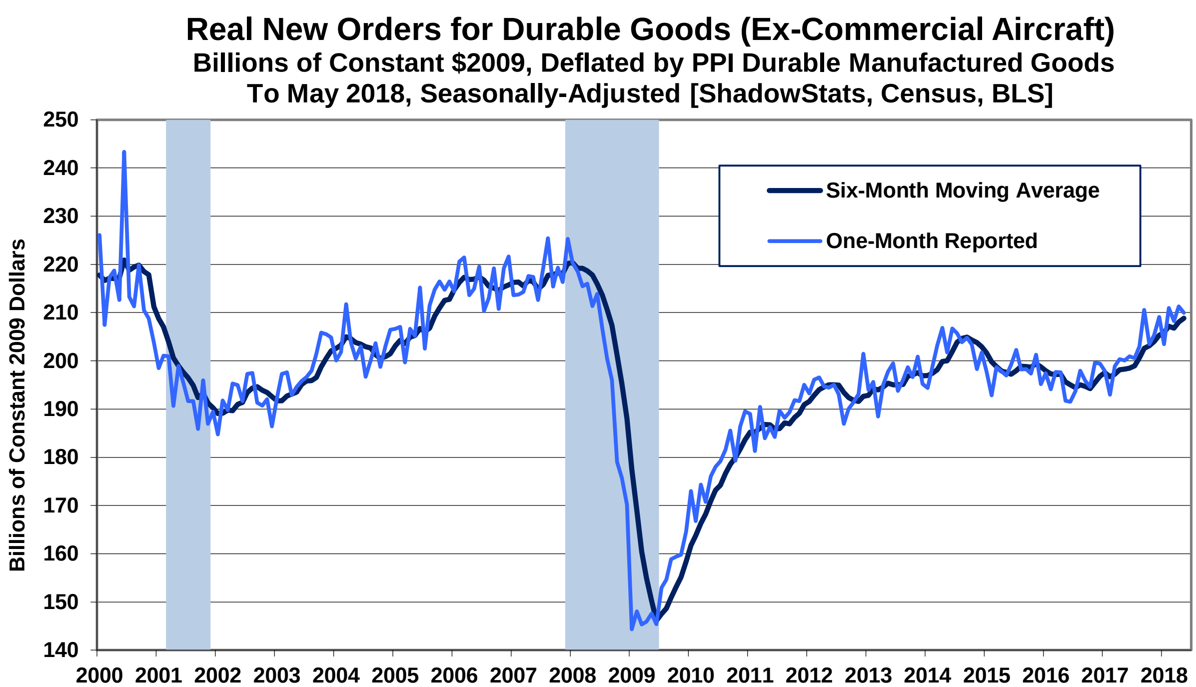
The second set of graphs (*Graphs 9* and *10*) shows the patterns of six-month moving averages of historical, headline real new orders for durable goods (net of official inflation), as well as that pattern "corrected" for understatement of that inflation (and for the corresponding overstatement of official, inflation-adjusted growth). The third set of graphs (*Graphs 11* and *12*) shows largely the same patterns, although they are for the aggregate durable goods orders series, net of commercial aircraft orders.

Headline New Orders Detail, Aggregate and Ex-Commercial Aircraft

Graph 1: Real Total New Orders for Durable Goods to Date

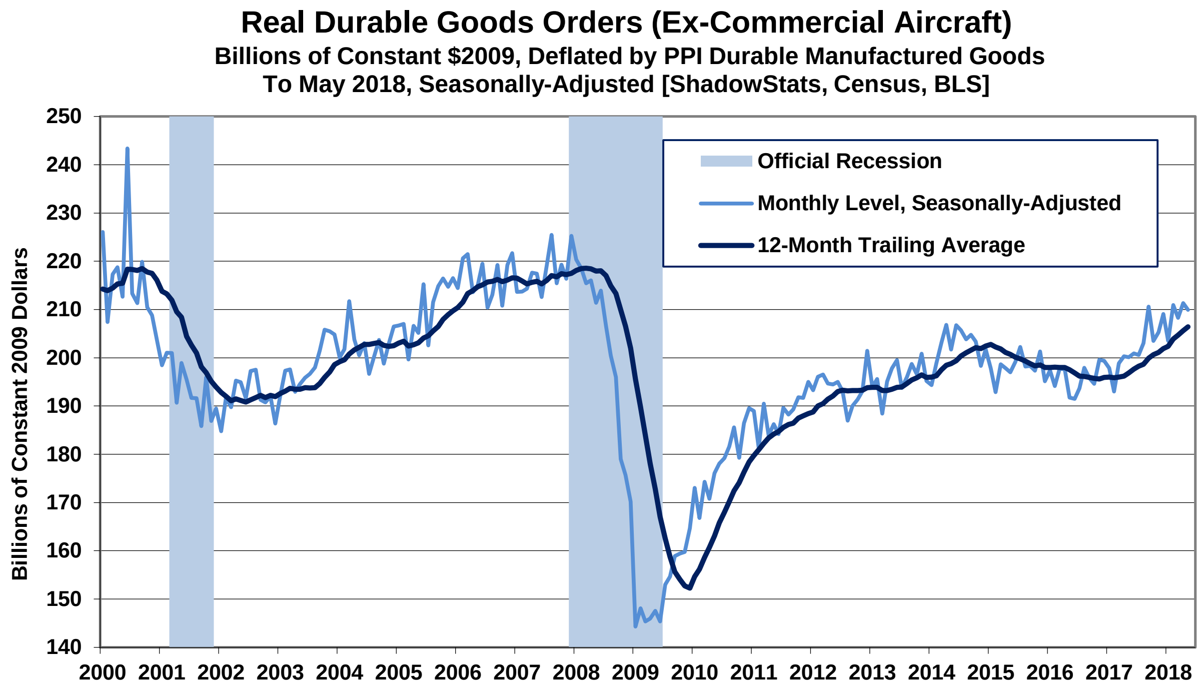


Graph 2: Real New Orders for Durable Goods – Ex-Commercial-Aircraft Orders to Date

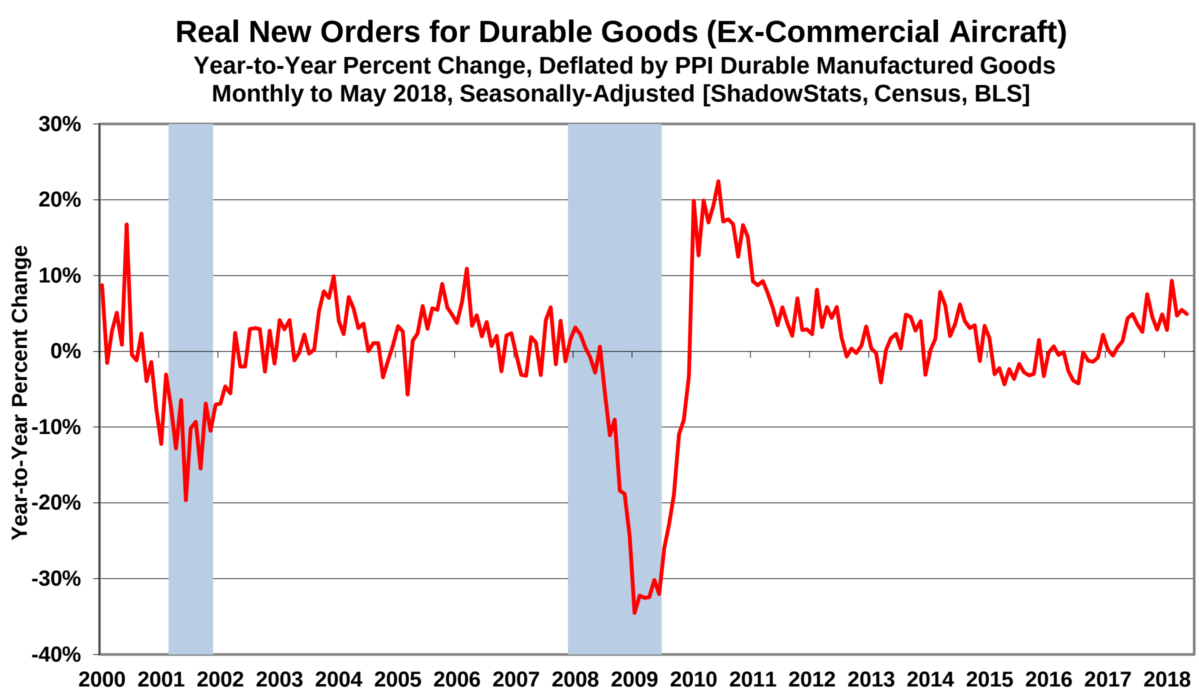


Comparative New Orders, Production and North American Freight Activity

Graph 3: Real New Orders for Durable Goods – Ex-Commercial-Aircraft (2000 to May 2018)

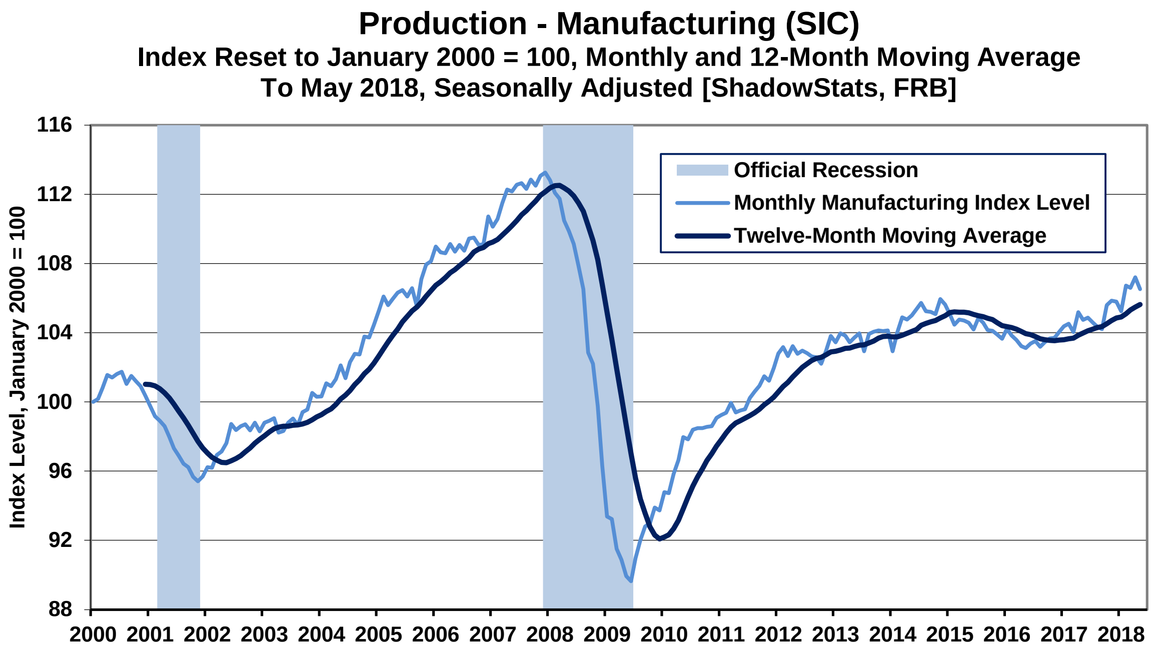


Graph 4: Yr-to-Yr % Change, Real New Orders for Durable Goods – Ex-Commercial Aircraft (2000 to May 2018)



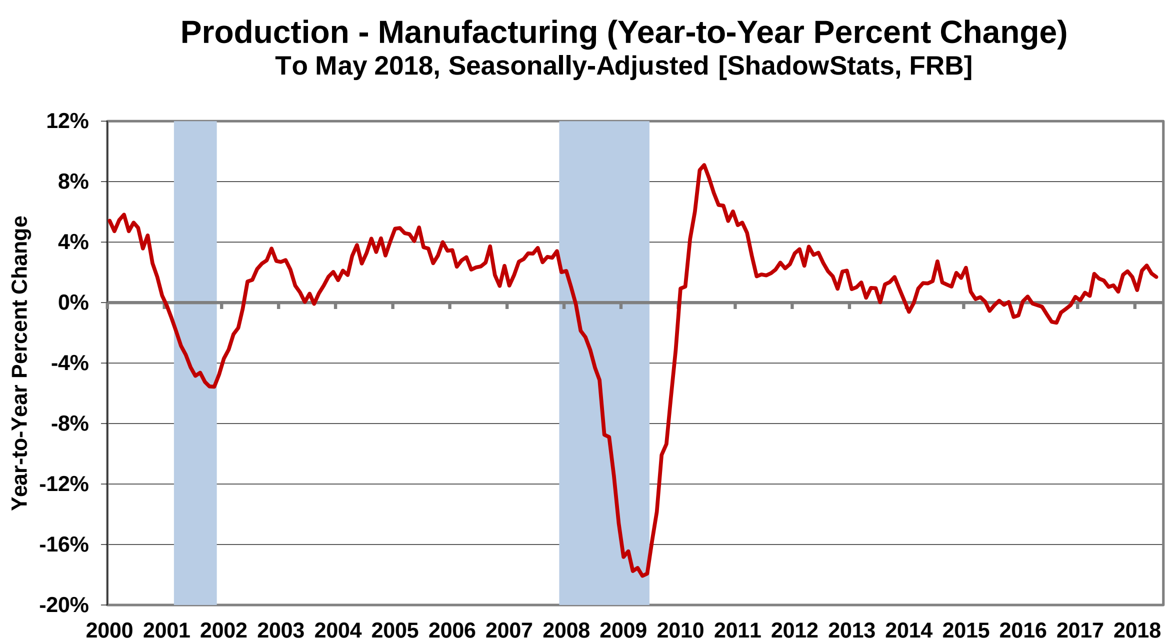
Graph 5: Industrial Production-Manufacturing, 12-Month Moving-Average Level (2000 to May 2018)

(Same as Graph OC-5 in Commentary No. 956)

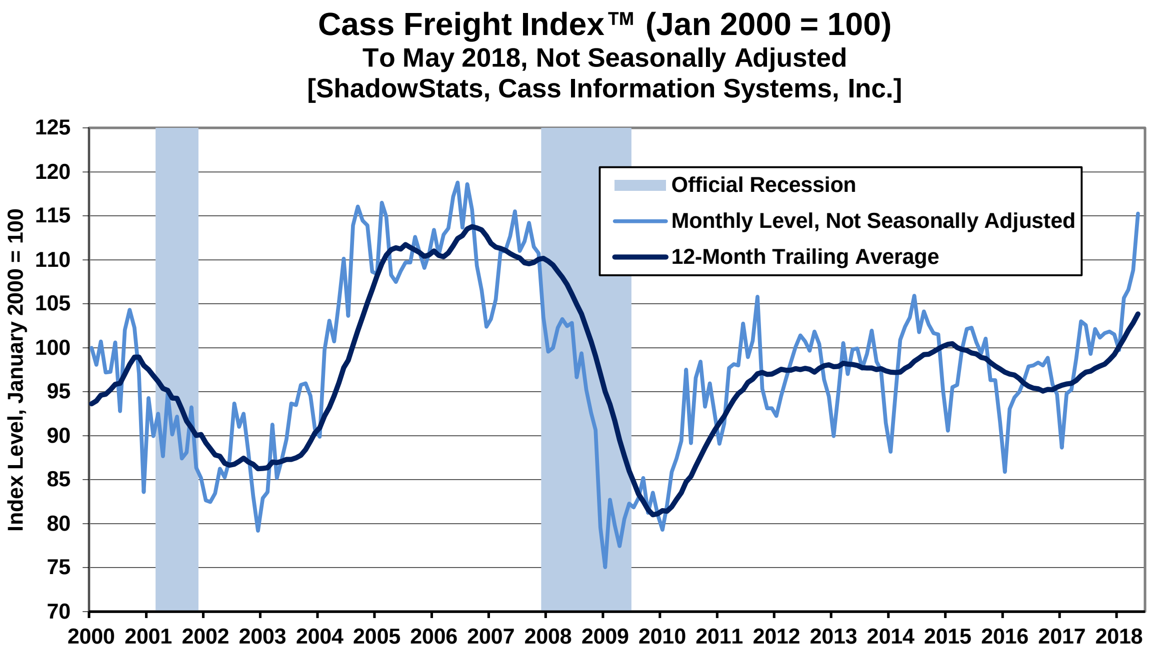


Graph 6: Manufacturing, Year-to-Year Percent Change (2000 to May 2018)

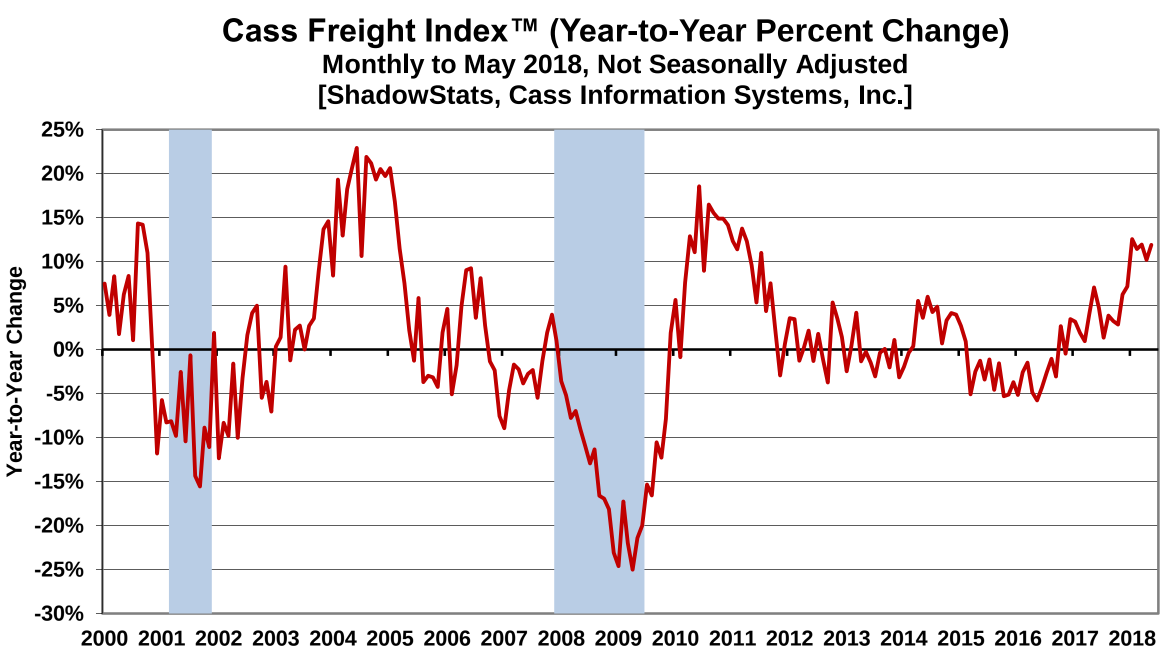
(Same as Graph OC-7 in Commentary No. 956)



Graph 7: CASS Freight Index ™ Moving-Average Level (2000 to May 2018)
(Same as Graph OC-4 in Commentary No. 956)



Graph 8: CASS Freight Index, Monthly Year-to-Year Percent Change (2000 to May 2018)
(Same as Graph OC-6 in Commentary No. 956)



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 May 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 *Commentary No. 956*), and the GDP (see the next section), 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.

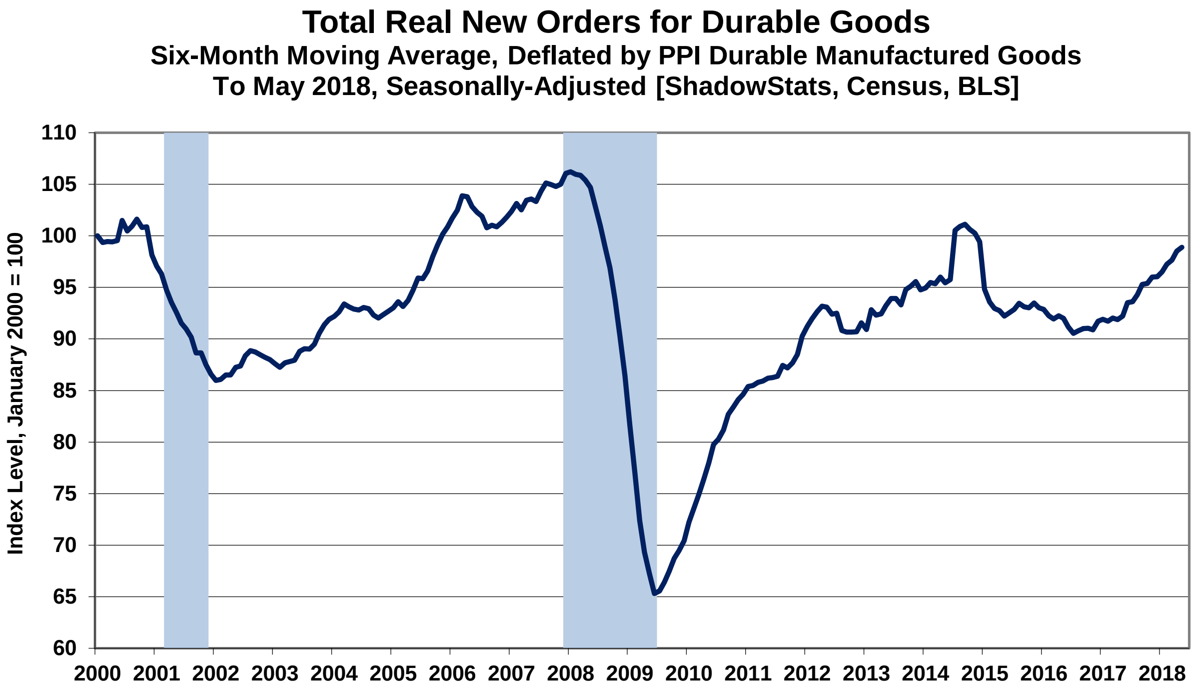
Two sets of graphs follow. The first set (*Graph 9* and *Graph 10*) shows the aggregate series or total durable goods orders; the second set (*Graph 11* and *Graph 12*) shows the ex-commercial aircraft series. The aggregate orders series in *Graphs 9* and *10* includes the monthly commercial aircraft 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 11* and *12* 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 1* and *Graph 2*, 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.

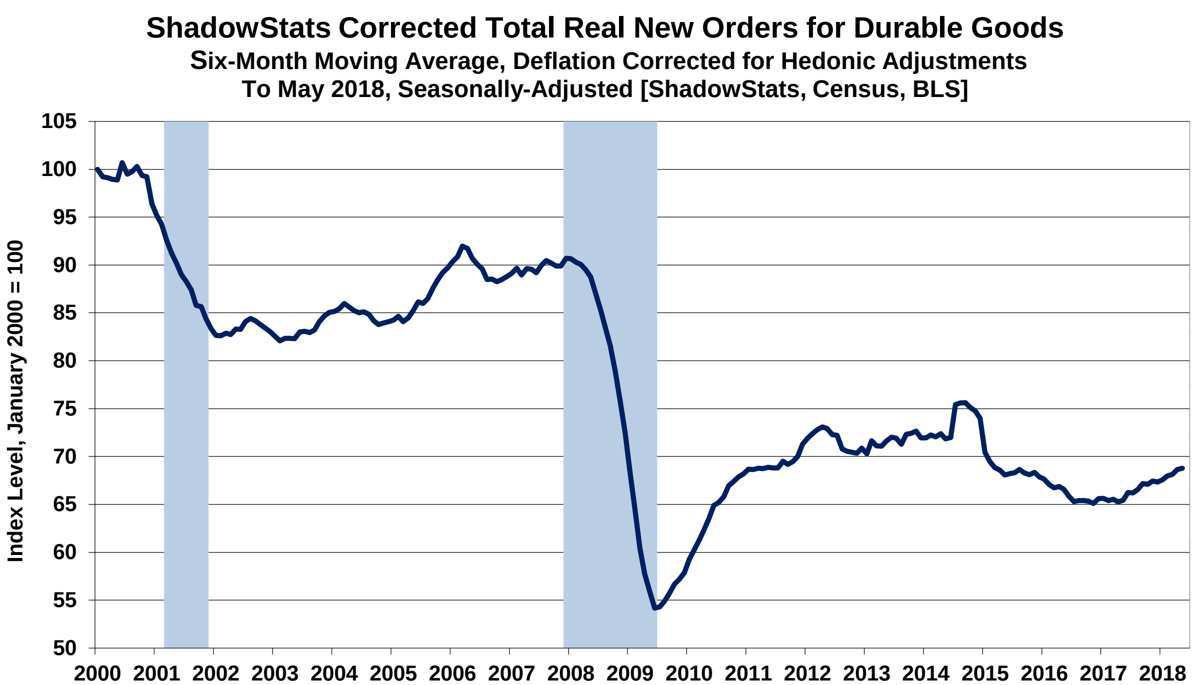
[Graphs 9 to 12 begin on the next page.]

Smoothed Real Series and Real Series Corrected for Inflation-Understatement

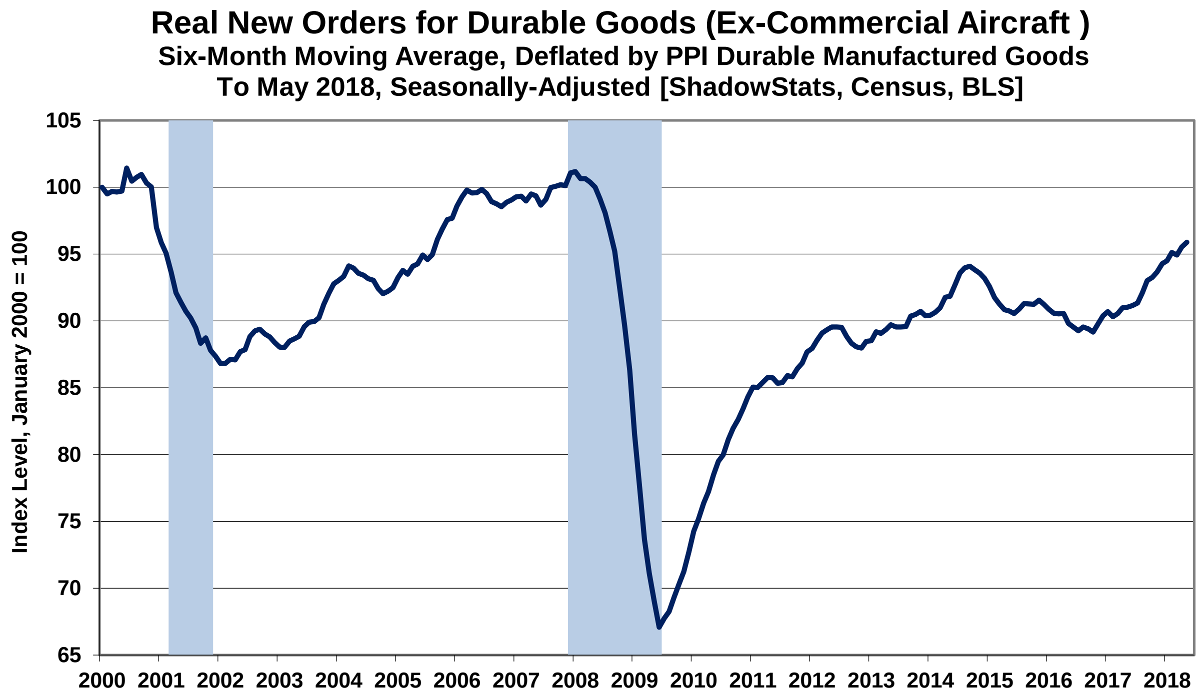
Graph 9: Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



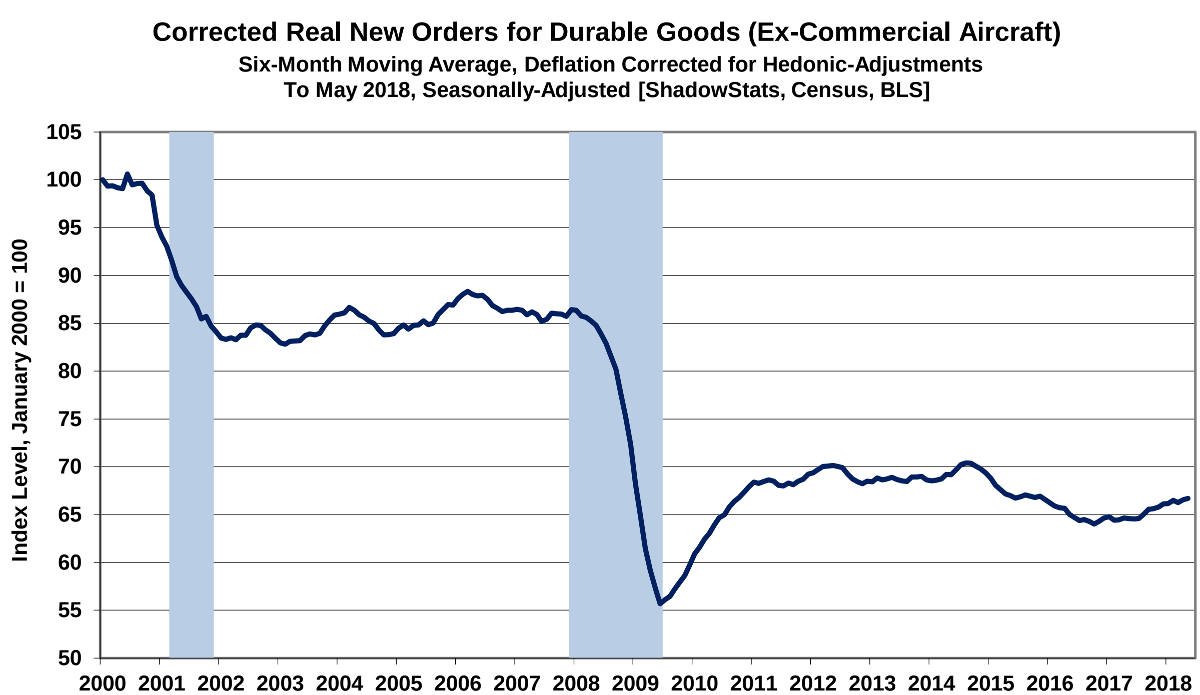
Graph 10: Corrected Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



Graph 11: Index of Durable Goods Orders – Ex-Commercial Aircraft, 6-Month Moving Average



Graph 12: Corrected Index of Durable Goods Orders – Ex-Commercial Aircraft, 6-Month Moving Average



Benchmarked Orders Signaled Weaker Economy in Recent Years, Foreshadowing GDP Overhaul

Last Month's Downside, Benchmark Revisions to New Orders and Manufacturers' Shipments, Confirmed Regular Upside Biases Built into Headline Monthly Reporting. The May 17th annual revisions to Manufacturers' Shipments, and the subsidiary series New Orders for Durable Goods, broadly were to the downside. They also largely were consistent with major downside revisions to the Industrial Production series in its March 23rd benchmarking and in its unusual monthly revisions of May 16th (see *Commentary No. 951*, *Commentary No. 950* and *Commentary No. 942-B*).

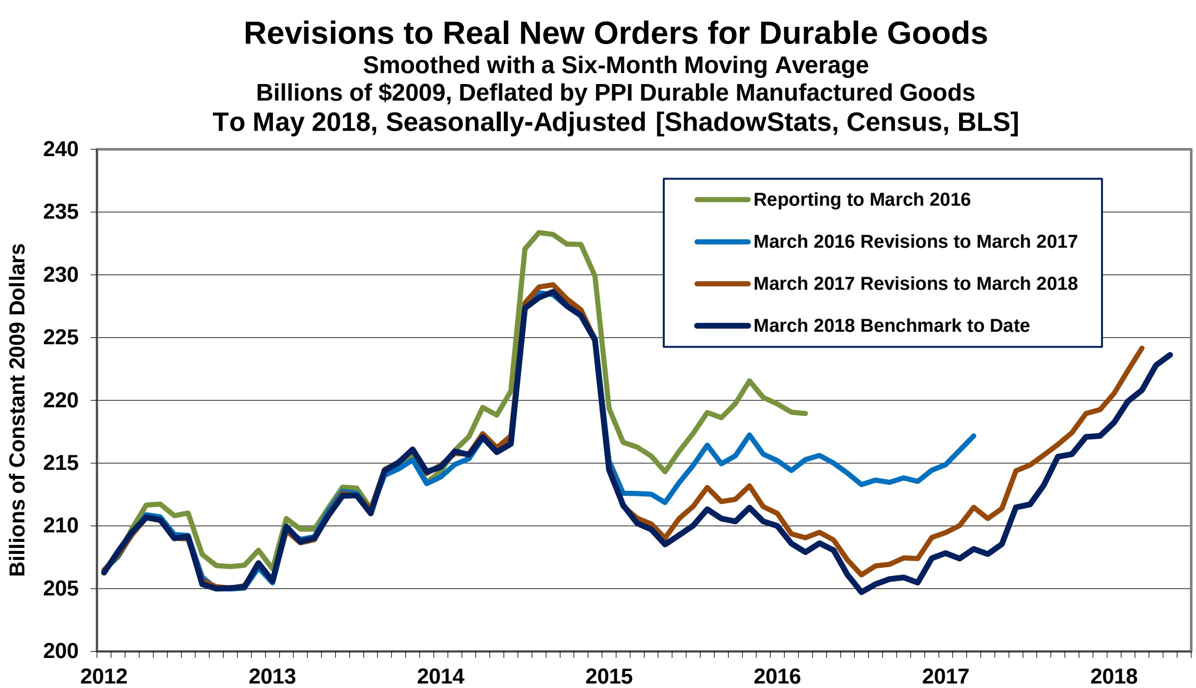
This circumstance has been the common experience in economic reporting of recent years and decades (see *Graphs 13* to *15*). Discussed in *Special Commentary No. 888*, there is a broad upside bias often built into the underlying assumptions that drive the headline reporting of many, widely-followed and politically-sensitive economic series.

The following table from *Commentary No. 950* summarized the net annual growth revisions to Real New Orders for Durable Goods, Ex-Commercial Aircraft in the March 17th benchmarling.

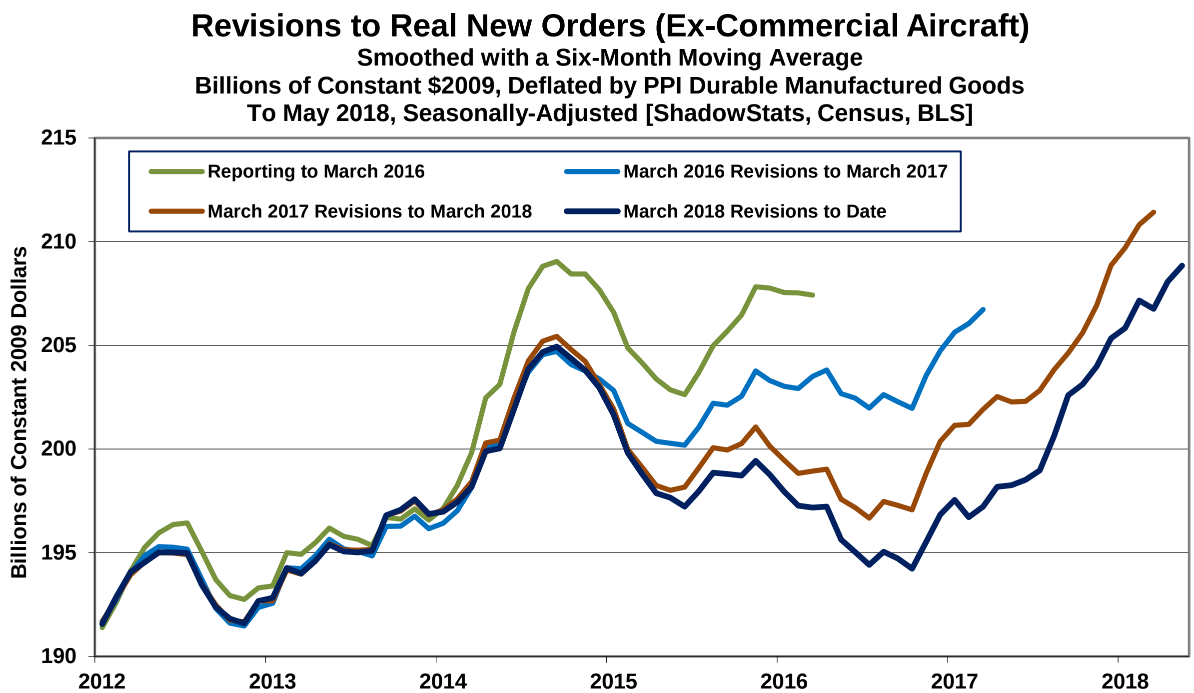
Table 2: Net Benchmark Revisions to New Orders for Durable Goods

May 17, 2018 Annual Benchmark Revisions	Revised Change in			
	Real Level	Year-to-Year Real Growth		
	2017	2015	2016	2017
Manufacturer's Shipments	-2.1%	-0.5%	-1.2%	-0.4%
New Orders for Durable Goods, Ex-Commercial Aircraft	-1.8%	-0.4%	-0.9%	-0.4%

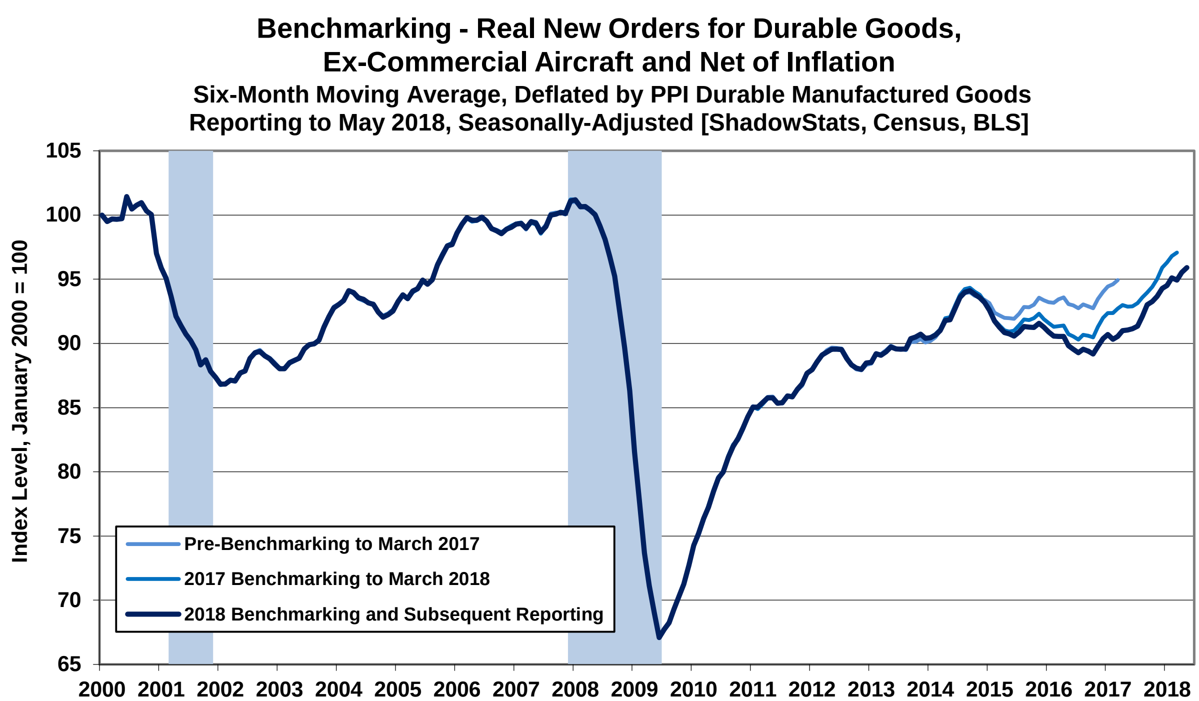
Graph 13: Benchmark Revisions to Real Total New Orders for Durable Goods, Smoothed for 6-Month Moving Avg



Graph 14: Benchmark Revisions to Real Total New Orders for Durable Goods, Ex-Commercial Aircraft



Graph 15: Benchmark Revisions to Real Total New Orders for Durable Goods, Ex-Commercial Aircraft



Caution: Beyond Regular Upside Biases Built Into Headline Reporting, Seasonally-Adjusted Month-to-Month Data Simply Are Not Comparable. The Census Bureau published its 2018 annual benchmark revisions to New Orders for Durable Goods data on May 17th (see the *Press Release*). As an example of the regular, annual downside restatement of recent activity in this series, consider accompanying *Graphs 13* to *15* of both aggregate (*Graph 13*) and ex-commercial aircraft (*Graphs 14* and *15*, with *Graph 15* showing the longer-term historical perspective). The plots reflect the net revisions to the six-month moving averages of real New Orders for Durable Goods for the 2018 benchmarking, as well as for recent years, along with subsequent headline reporting through the May 2018 headline 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 *Commentary No. 951*, *Commentary No. 950* and *Special Commentary No. 888*.

Indeed, current headline durable-goods reporting remains subject to not only the upwardly-biased sampling assumptions seen in the pre-benchmarking reporting, but also to the concurrent-seasonal-adjustment problems commonly seen in with series such as 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 2018 on May 17, 2018 (again see *No. 950*), that consistency ceased with May 25th release of the headline April 2018 detail.

For all monthly reporting from the April 2018 detail until the next annual benchmarking in May 2019, unpublished, monthly historical seasonal-adjustment revisions, calculated along with each new current headline month's detail, and with each month to follow, make the latest detail (May 2018) inconsistent with all the headline historical numbers. (See the related discussion in *Supplemental Labor-Detail Background* on page 29 of *Commentary No. 953-B*).

Gross Domestic Product (GDP), First-Quarter 2018, Third Estimate

Headline Reporting

Gross Domestic Product (GDP). ***[Please note: All numbers here are subject to a comprehensive [Benchmark Revision](#) on July 27th, which will restate and redefine the GDP series back to its 1929 first estimate. See the discussions in the* Underlying Economic Reality *section, and [Commentary No. 954](#)].*** First-Quarter 2018 GDP annualized real growth revised lower to 1.99% +/- 3.5% (95% confidence interval) in its third estimate. This headline second revision was below expectations for "no change" and continued below the forty-year average of 2.7% annualized quarterly real growth for the series. The Bureau of Economic Analysis (BEA) published this "final" revision on Thursday, June 28th.

In the context of continued deepening revisions in the net-exports deficit, the revised real first-quarter GDP growth of 1.99% was down from 2.17% in its second estimate and from 2.32% its initial reporting. That 1.99% first-quarter 2018 growth rate was down from 2.89% in fourth-quarter 2017, 3.16% in third-quarter 2017, 3.06% in second-quarter 2017 and against 1.24% in first-quarter 2017. Again, though, all these numbers will change with the pending benchmark revisions.

Headline year-to-year first-quarter 2018 real GDP growth revised to 2.77% [previously 2.82%, initially 2.86%], above the forty-year annual average GDP growth of 2.7%. Such was against headline annual growth of 2.58% in fourth-quarter 2017, 2.30% in third-quarter 2017, 2.21% in second-quarter 2017 and 2.00% in first-quarter 2017.

Discussed in the *Opening Comments*, a liquidity-strapped U.S. consumer has pulled back in headline basic goods consumption (automobiles, gasoline, clothing) as well as in the buying of new homes. Contractions in those areas rarely are seen outside of formal recessions. In the latest reporting, consumer personal consumption and residential investment accounted directly for 72.9% of the total real GDP.

Detailed and plotted later (see *Graph 22*), the Implicit Price Deflator—GDP inflation—revised higher in first-quarter reporting to 2.20% [previously 1.95%] annualized quarter-to-quarter, versus a parallel quarterly inflation rate of 3.51% in the Consumer Price Index (CPI-U). The higher the rate of inflation, the weaker will be the inflation-adjusted real GDP growth. Deflated by the headline CPI-U, first-quarter Real GDP growth would have been 0.68% instead of 1.99%.

Annualized real growth in the broader Gross National Product (GNP) revised lower to 1.91% from 2.00%, on top of the GDP revision. Real growth in Gross Domestic Income (GDI), the theoretically income-side equivalent to the consumption-side GDP, jumped sharply in revision from 2.80% to 3.57%. That reflected an upwardly revised estimate of corporate profits. Details follow the GDP graphs.

Heavily Followed but of Extremely Poor Quality. 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 (see *Special Commentary No. 885*).

Among a number of other issues, inflation-adjusted real GDP growth is biased heavily to the upside, by the use of understated inflation in deflating the nominal GDP activity (artificially boosting real activity). Introduced during the various Bush and Clinton administrations, a number of changes were made to inflation-estimation methodology so as to reduce the level of reported headline inflation. The lowered inflation reporting boosted headline reporting of economic statistics, particularly the GDP, as touted, for example, in the 1999 *Economic Report of the President* (see the extended discussion in the *Public Commentary on Inflation Measurement*).

This most-popularly-followed economic series, the GDP, usually does not reflect properly or accurately the changes to underlying economic fundamentals and the measures that drive the broad economy, at least as viewed from the standpoint of common experience. Discussed and reflected in the graphs of the *Underlying Economic Reality* section, 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, and still in ongoing stagnation/downturn.

Graphs and Tables. The downside revision to first-quarter GDP reflected shifting growth patterns in a number of component series (see *Table 3*), including the headline Net Export account, effectively the inflation-adjusted trade deficit. The Net Export deficit deepened in revision, finally moving more into line with the headline trade-deficit numbers that had in place for some months (see for example *Commentary No. 947*). Updated for the latest details, the regular GDP and IPD *Graphs 16* to *22* follow the by-sector GDP table and analysis.

Headline Third Estimate of First-Quarter 2018 GDP by Sector. Detailed in *Table 3*, the headline second estimate of First-Quarter 2018 GDP revised to a slower annualized real quarterly growth rate of 1.99% [previously 2.17%, initially 2.32%], down from 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.

Not shown in the table are the year-to-year real growth rates, a revised 2.77% [previously 2.82%, initially 2.86%] in first-quarter 2018 versus 2.58% in fourth-quarter 2017, 2.30% in third-quarter 2017, 2.21% in second-quarter 2017 and 2.00% in first-quarter 2017. The average real annualized and annual GDP growth rate over the last forty years has been 2.7% for both measures.

Table 3 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 0.09% (-0.09%) in the Goods Sector under Personal Consumption Expenditures, and negative growth contribution of 0.04% (-0.04%) from Residential Investment, a subcomponent of Fixed Investment in Gross Private Domestic Investment.

Table 3: Third Estimate of First-Quarter 2018 GDP, Revised Growth Distribution versus Recent Quarters

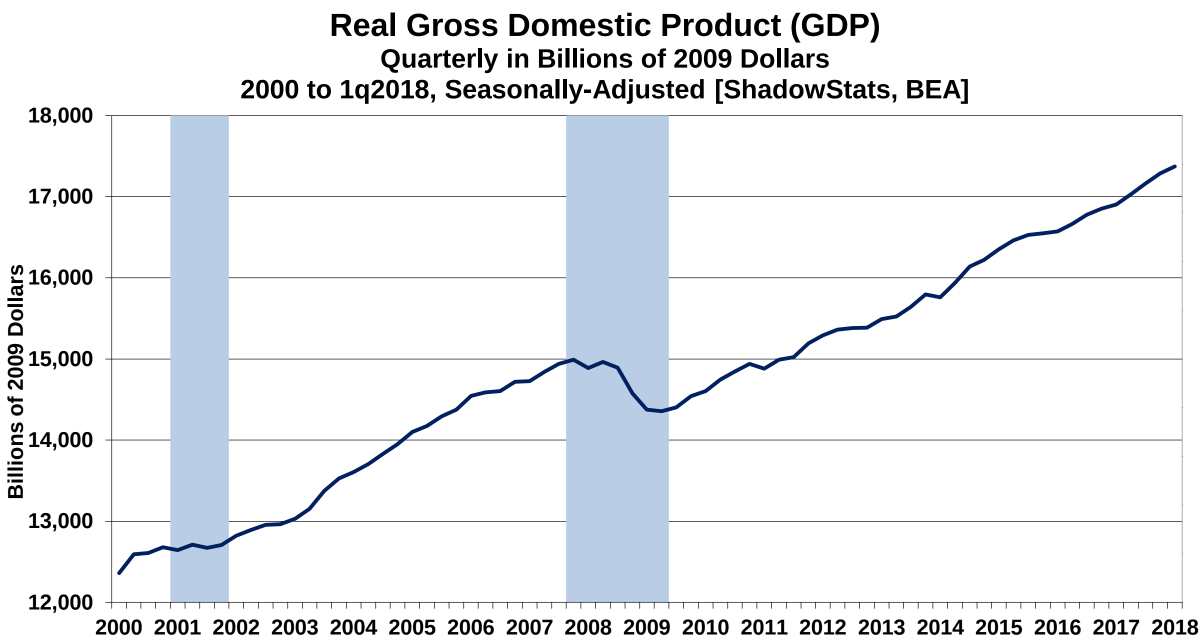
Annualized Quarterly Real Growth in Headline Gross Domestic Product Growth Contribution by Consumption and Product Sector							
	1st-Q 2018 Third Estimate	1st-Q 2018 Second Estimate	1st-Q 2018 First Estimate	4th-Q 2017	3rd-Q 2017	2nd-Q 2017	1st-Q 2017
CONTRIBUTING ECONOMIC SECTOR							
Personal Consumption Expenditures							
- Goods	-0.09%	-0.13%	-0.24%	1.67%	0.97%	1.16%	0.15%
- Services	0.69%	0.84%	0.97%	1.08%	0.52%	1.08%	1.17%
Gross Private Domestic Investment							
- Fixed Investment	1.23%	1.05%	0.76%	1.31%	0.40%	0.53%	1.27%
- Change in Private Inventories	-0.01%	0.13%	0.43%	-0.53%	0.79%	0.12%	-1.46%
Net Exports of Goods and Services	-0.04%	0.08%	0.20%	-1.16%	0.36%	0.21%	0.22%
Government Consumption/Investment	0.22%	0.20%	0.20%	0.51%	0.12%	-0.03%	-0.11%
GDP Annualized Real Growth	1.99%	2.17%	2.32%	2.89%	3.16%	3.06%	1.24%
Final Sales, GDP Less Inventories	2.00%	2.04%	1.89%	3.42%	2.37%	2.94%	2.70%
CONTRIBUTING PRODUCT SECTOR							
Goods	0.73%	0.94%	0.88%	0.78%	2.74%	2.10%	-0.47%
Services	0.82%	0.91%	1.10%	1.18%	0.93%	1.32%	0.91%
Structures	0.44%	0.33%	0.34%	0.93%	-0.51%	-0.36%	0.80%
GDP Annualized Real Growth	1.99%	2.17%	2.32%	2.89%	3.16%	3.06%	1.24%
Sources: Bureau of Economic Analysis (BEA), ShadowStats.							

Real GDP Levels and Annual Growth Rates. *Graphs 16* and *18* plot headline levels of real quarterly GDP activity, respectively showing short-term (since 2000) and long-term (since the historical onset of the quarterly GDP series in 1947) perspectives. *Graph 17* and *19* show the revised year-to-year quarterly detail for the same series. The current-cycle trough in quarterly annual change was in second-quarter 2009 reflecting a year-to-year decline of 4.09% (-4.09%).

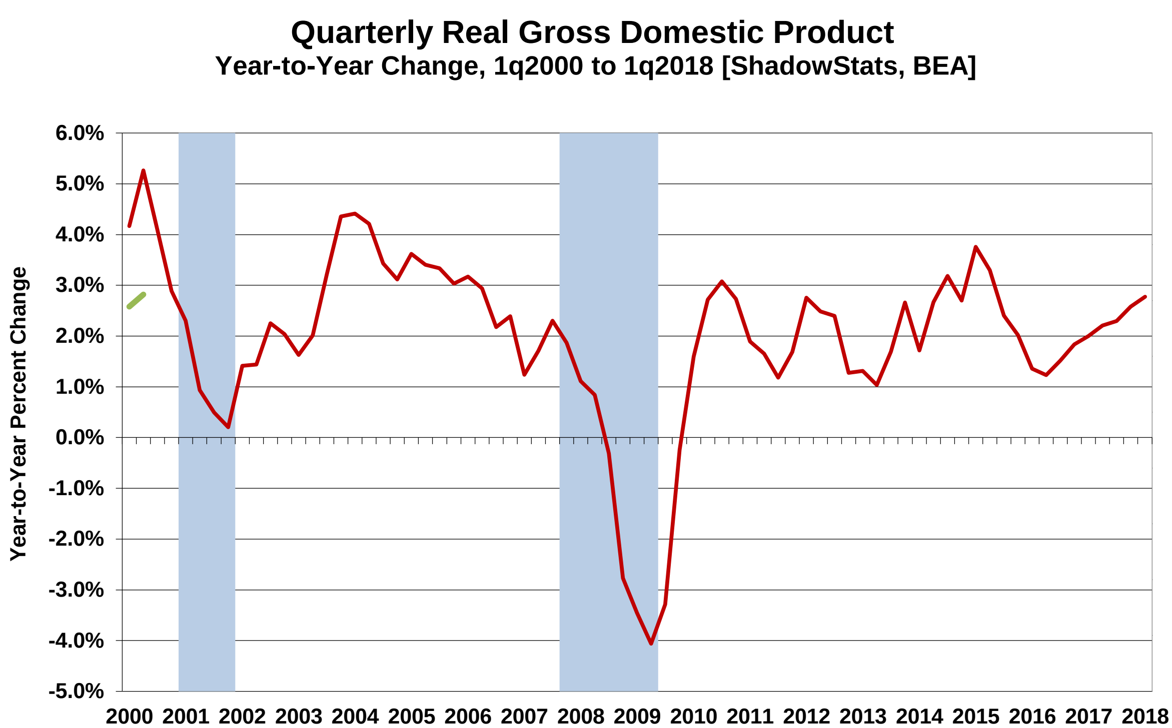
That was the deepest year-to-year contraction for any quarterly GDP in the history of the series, which began with first-quarter 1947 (1948 in terms of available year-to-year detail). Shown in *Graph 21*, the annual decline of 2.78% (-2.78%) in 2009 was the steepest regular annual drop in economic activity 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 20 and *21* show the levels of annual real GDP activity, as well as annual percent change, as estimated beginning in 1929. Reflected in *Graph 20*, 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."

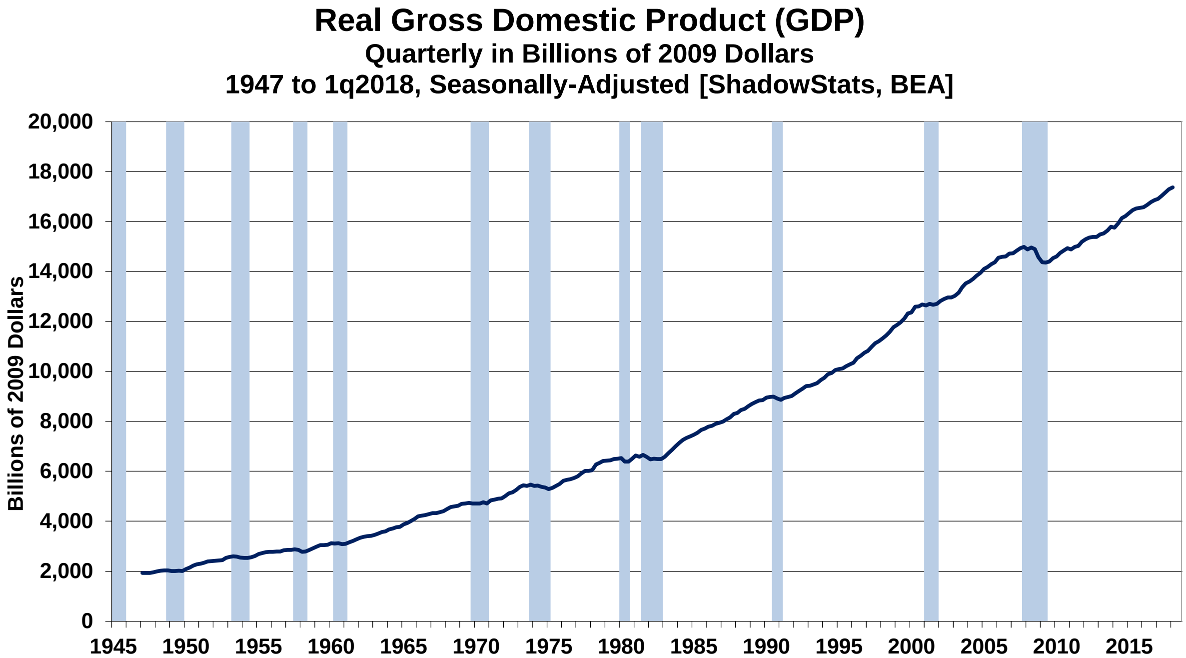
Graph 16: Quarterly GDP in Billions of 2009 Dollars (2000 to 2018), Third-Estimate of First-Quarter 2018



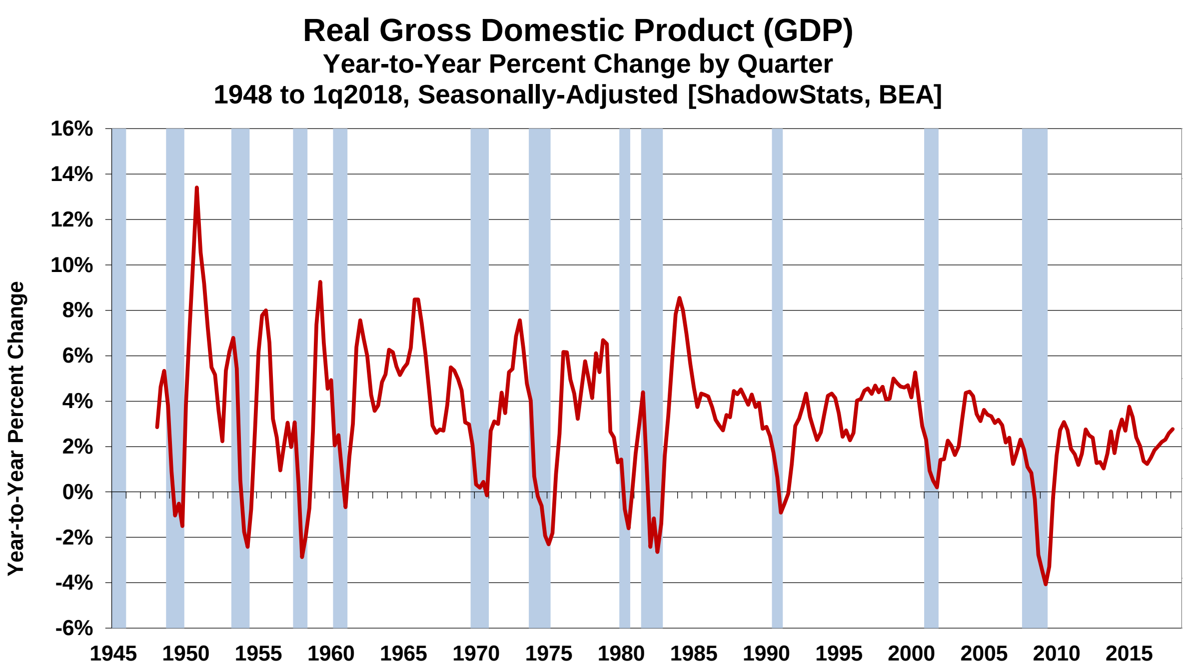
Graph 17: Quarterly GDP Real Year-to-Year Change (2000 to 2018), Third-Estimate of First-Quarter 2018



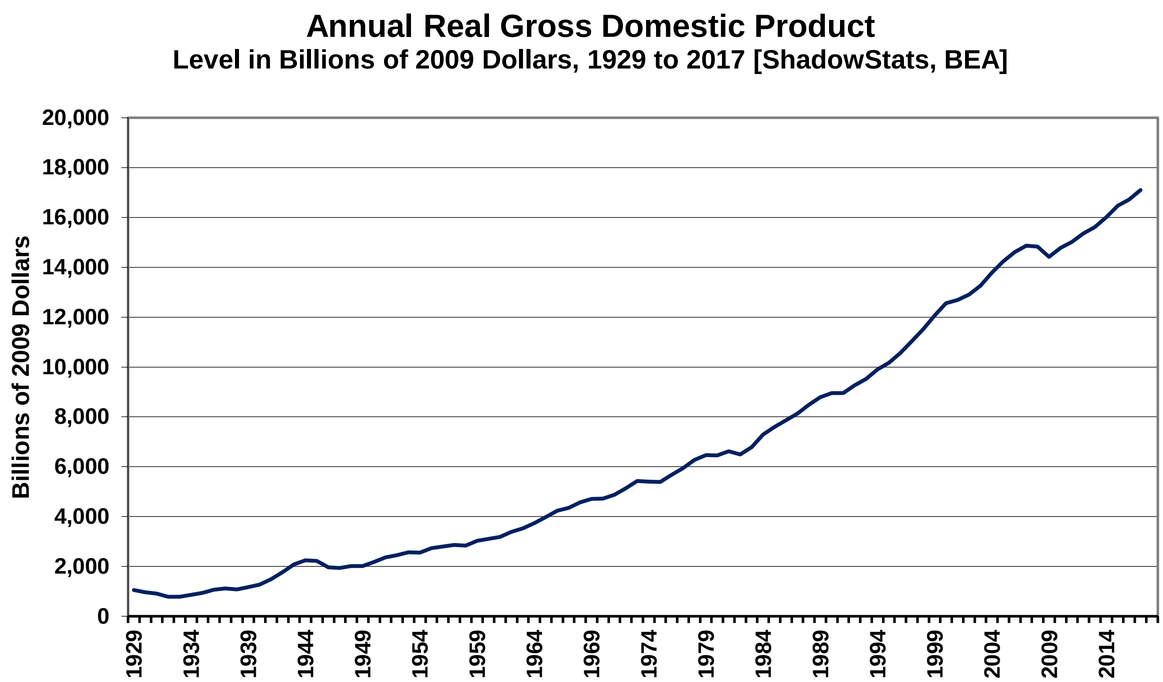
Graph 18: Quarterly GDP in Billions of 2009 Dollars (1947-2018), Third-Estimate of First-Quarter 2018



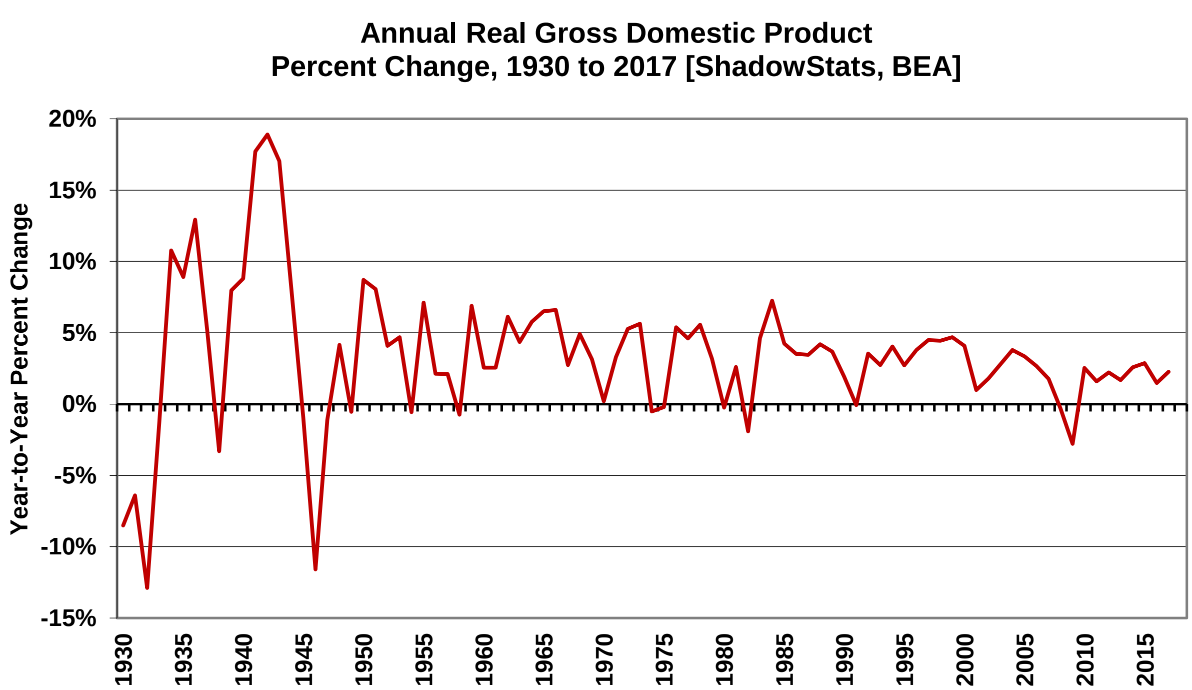
Graph 19: Year-to-Year GDP Real Change (1948-2018), Third-Estimate of First-Quarter 2018



Graph 20: Annual GDP in Billions of 2009 Dollars (1929-2017)



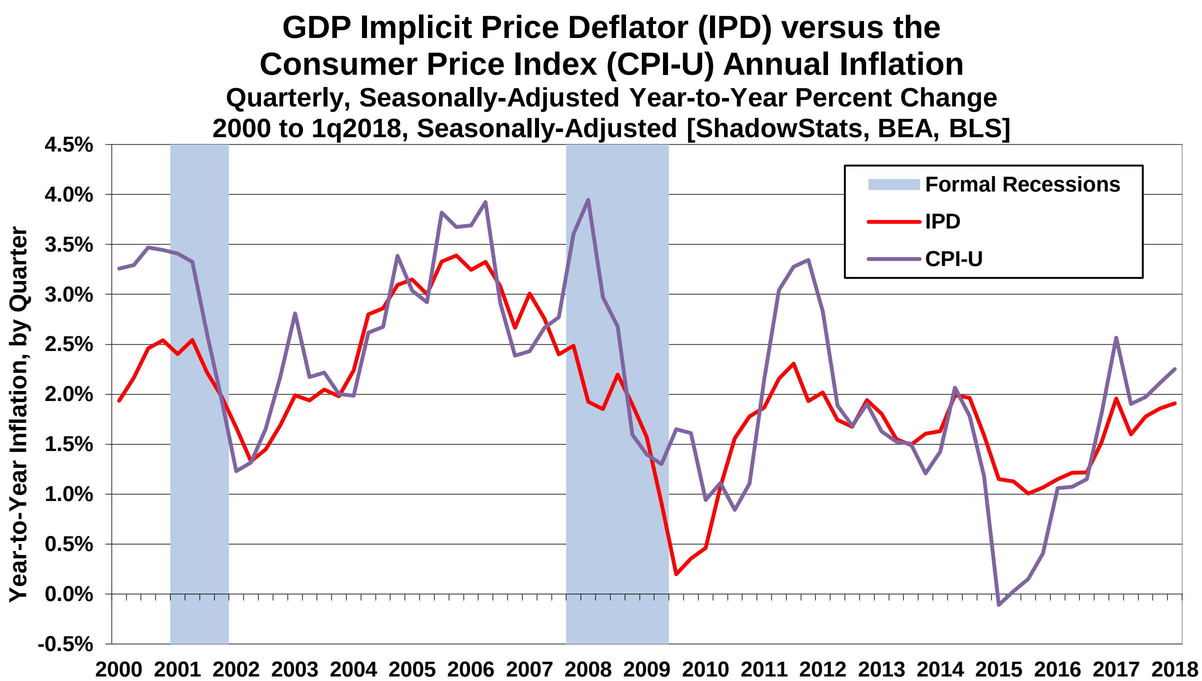
Graph 21: GDP Real Annual Percent Change (1930-2017)



Implicit Price Deflator (IPD). Technically accounting for bulk of the 0.2% (-0.2%) downside revision to the third-estimate of annualized real first-quarter GDP growth, the third estimate of first-quarter 2018 GDP inflation, or the implicit price deflator (IPD) jumped to a revised annualized quarter-to-quarter 2.20% [previously 1.95%, initially 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 third- estimate of first-quarter 2018 IPD inflation revised to 1.91%, up from a previously unrevised 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 22: Yr-to-Yr Inflation, Third-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 2018 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 22*).

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). The second estimates, first revisions to first-quarter 2018 GNP and GDI also were released on June 28th, lagging the parallel GDP reporting by one month, as usual, due to a lack of available, significant underlying detail, a problem that remains common to the headline GDP detail, as well. Where these heavily-massaged and gimmicked, and broadly-meaningless data were updated, again, they all subject to a complete overhaul in a comprehensive benchmark revision back to 1929, to be released on Friday, July 27th.

GNP is 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.

That said, in its second estimate, annualized real First-Quarter 2018 GNP revised lower 1.91%, from an initial estimate of 2.00%, down from an unrevised 2.71% in fourth-quarter 2017, versus 3.65% in third-quarter 2017, 2.77% in second-quarter 2017, 0.94% in first-quarter 2017. Real year-to-year growth revised to 2.76% from an initial estimate of 2.78% for first-quarter 2018 GNP, versus 2.51% in fourth-quarter 2017, 2.48% in third-quarter 2017, 2.22% in second-quarter 2017 and 2.18% in first-quarter 2017.

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 an ever-fluctuating "statistical discrepancy" to the GDI-side of the equation. The second-estimate of real first-quarter GDI growth revised sharply higher, reflecting a sharp upside revision to guesstimated corporate profits in nonfinancial industries.

Annualized real First-Quarter 2018 GDI jumped to 3.57% in revision, up from an initial estimate of 2.80%. That was against an unrevised 1.05% in fourth-quarter 2017, 2.44% in third-quarter 2017, 2.28% in second-quarter 2017 and 2.68% in first-quarter 2017.

Real year-to-year growth in first-quarter 2018 revised higher to 2.33%, versus initial reporting of 2.14%, and against 2.11% in fourth-quarter 2017, 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, third estimate, was an unrevised year-to-year decline of 1.3% (-1.3%), versus an unrevised annual GDP headline gain of 2.8% at the first-decimal point [revised to 2.77% from 2.82% at the second decimal point]. That was against a ShadowStats annual decline of 1.6% (-1.6%) and an annual, real headline GDP gain of 2.6% in fourth-quarter 2017.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the heavily bloated, overstated, third estimate of an annualized, headline quarter-to-quarter gain of 2.0% 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.

Where is the last headline reporting of the current GDP series, before the whole series revised and revamped back to 1929, on July 27th. 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 the following section on *Underlying Economic Reality*. The "corrected" real GDP *Graphs 24* and *26* (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.

["Notes on GDP Nomenclature and Definitions" follows on the next page.]

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.*

Underlying Economic Reality

Real GDP Corrected for the Understatement of Headline Inflation

Underlying Economic Reality: No Full Recovery in Place and No Economic Expansion Since the Collapse of Business Activity in 2009. *[Note: The text here has been revised somewhat from the prior version in* Commentary No. 952*, and all details and graphs here have been updated to reflect the latest developments and the headline reporting of the third estimate of First-Quarter 2018 GDP. For additional background, see* Commentary No. 954 *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 and Commentary No. 876*, all incorporated here by reference.*

Major Series Overhaul to the GDP and Revised Data Back to 1929 Will Hit on July 27th. In the context of a looming "comprehensive" or grand-scale revision to the GDP, and related series back to 1929, all of the numbers in this section will change, and this section will be re-written fully, in the context of the new headline reporting, versus what previously had been reported.

If the revisions are honest and pick up details such as the major downside revisions to Manufacturers' Shipments, Production and the Trade Deficit, GDP growth of recent years will be revised lower. The GDP perhaps might even show a headline double-dip recession in first-quarter 2015, as discussed in prior *Commentary No. 956*.

If the revisions tend to run of the nature of the Clinton and post Clinton era of "Pollyanna Creep," the numbers could be rosier than ever before. Underlying common experience favors the downside. Given the recent shift in the political control of the government's economic reporting Bureaus, current numbers are likely to hold strong, but earlier data from the Bush, Clinton and Obama eras conceivably could face some deflated growth.

An ongoing, low-level, non-recovered, non-expanding economic stagnation in the real-world economy remains in place despite some corrective regulatory actions, tax reform, movement on the trade front and an unbalanced spending/budget deficit bill. Yet, the better-quality, recent headline reporting and intensifying liquidity issues are suggesting and showing an unfolding new downturn.

Assuming eventual, cooperative, coordinated and meaningful legislative movement in the Congress—despite significant, ongoing political discord—and given basic economic lead times, the first major, positive impact on the economic common experience, from any actions now, would be after the 2018 Congressional election, well into mid-to-late 2019.

Despite some happy recent headline details on the U.3 unemployment rate, the U.S. economy remains mired in non-recovered stagnation, not exploding in an economic boom, as discussed in *Commentary No. 953-B*. Prior headline economic boom stories in the popular press of recent months generally were at least partially as a result of waning hurricane distortions having boosted 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, having shown some downside revisions and relative consumer weakening in first-quarter 2018. Separately, early second-quarter reporting has shown some early weakness in key series such as production and new orders.

Benchmark Revisions and Perpetual GDP Overstatement. All reporting going forward—beginning with the first estimate of Second-Quarter 2018 GDP (July 27th)—will be in the context of the then-coincident, comprehensive benchmark revision to the GDP series back to 1929. Based on recent benchmark revisions to underlying economic series (see *Commentary No. 954*), odds strongly favor downside revisions to GDP activity since at least 2014, most likely since 2010. Although a new recession should be coming into play in the next several quarters, the benchmarking could show that the 2007 recession was a double-dip recession, turning down anew after Industrial Production "recovered" briefly from the 2007 collapse into 2009, in fourth-quarter 2014, only to falter again. Common experience appears to reflect the economy off bottom, but not fully recovered, as seen in *Graphs 23* to *31* with related comments ahead.

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, but, again see also *Commentary No. 956*.

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 27*), industrial production of consumer goods (*Graph 28*), U.S. petroleum consumption (*Graph 29*), total real U.S. construction spending (*Graph 30*) and the employment-population ratio (*Graph 31*). 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 24* and *26*).

Discussed in the current *Consumer Liquidity Watch No. 2*, 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 second estimate of first-quarter 2018 GDP, as well as a sampling of other elements of economic reality.

The first set of graphs (*Graphs 23* and *24*) updates the detail 1970-to-date, expressed in billions of 2009 dollars used with the headline GDP, for the revised 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 24*, 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 25* and *26* show short-term detail, expressed on an index base where first-quarter 2000 = 100.0.

Shown in the first graph of each set (*Graphs 23* and *25*) 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 third estimate of first-quarter 2018 GDP stands 15.88% 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 *Commentary No. 946*. None of the series covered in this section or in *No. 859* has shown yet 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 24* and *26*), shows the third-estimate of first-quarter 2018 GDP activity to be down by 6.33% (-6.33%) from its pre-recession peak of first-quarter 2006. Noted in *General Commentary No. 867*, *Commentary No. 869*, *Commentary No. 926*, *Commentary No. 942-B* and prior *Commentary No. 956*, 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 (currently 125) of economic non-expansion.

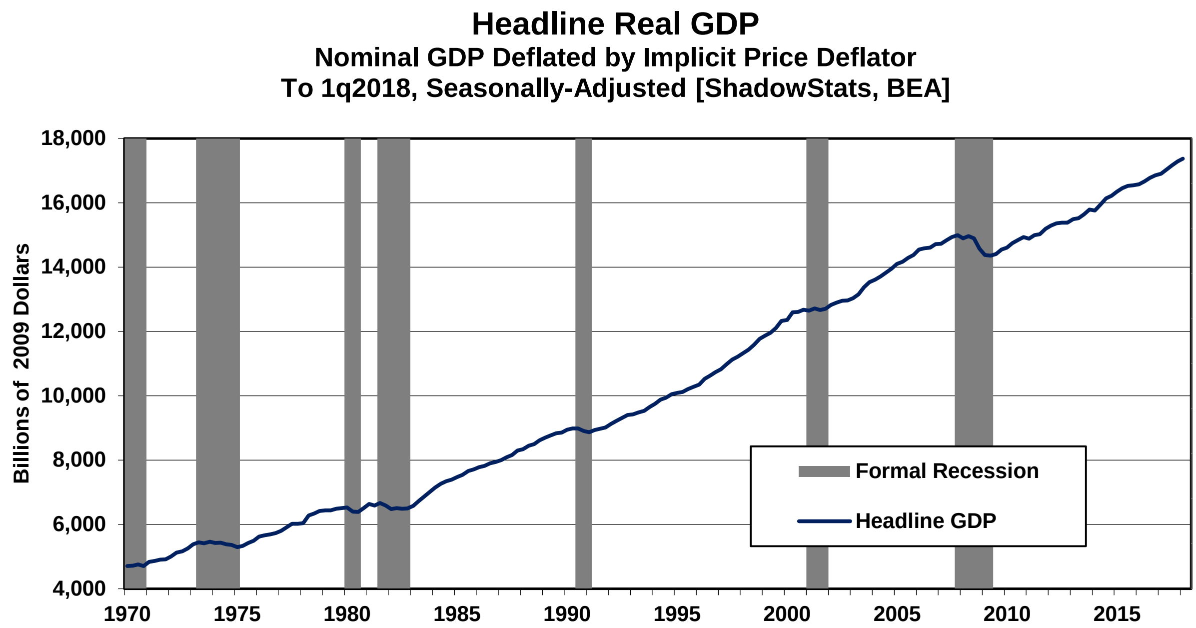
Again, the second graph in each series (*Graphs 24* and *26*) plots the *Corrected Real GDP*, adjusted for the understatement inherent in official inflation estimates (see *Public Commentary on Inflation Measurement*), with the deflation by the implicit price deflator (IPD), adjusted for understatement 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 27* to *31* (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.

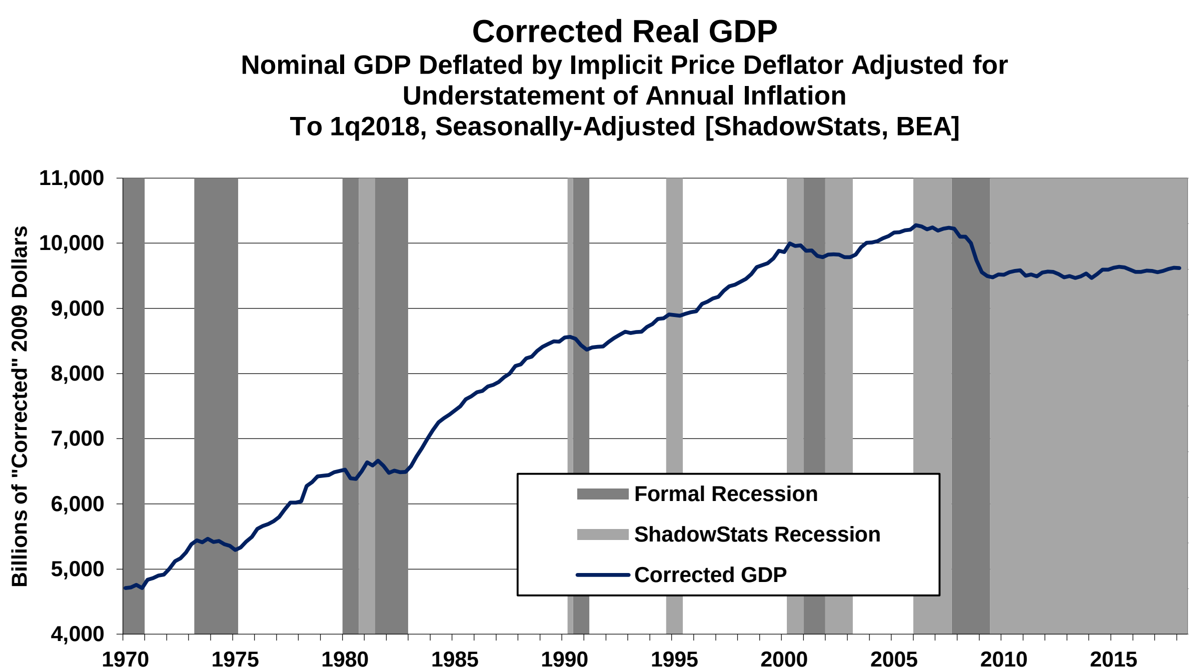
Headline GDP Reporting. Again, the BEA reported its third estimate of First-Quarter 2018 GDP showing a downwardly-revised 1.99%, versus 2.89% in fourth-quarter 2017, 3.16% in third-quarter 2017, 3.06% in second-quarter 2017 and 1.24% in first-quarter 2017. Year-to-year growth was a revised 2.77% in first-quarter 2018, 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 updated details are reflected in *Graphs 23* and *25*, and in the earlier *Graphs 16* to *21*. Again, First-Quarter 2018 GDP currently stands at 15.9% above the pre-2007-recession peak of the series, an incredible (as in not believable) pace of economic expansion. That level of expansion has not been seen otherwise in any other major economic reporting, including employment measures and retail sales, which are among the strongest of the headline series. Again, *Graphs 24* and *26* reflect the ShadowStats alternative estimates of GDP growth, corrected for the understatement of annual inflation used in deflating real GDP growth.

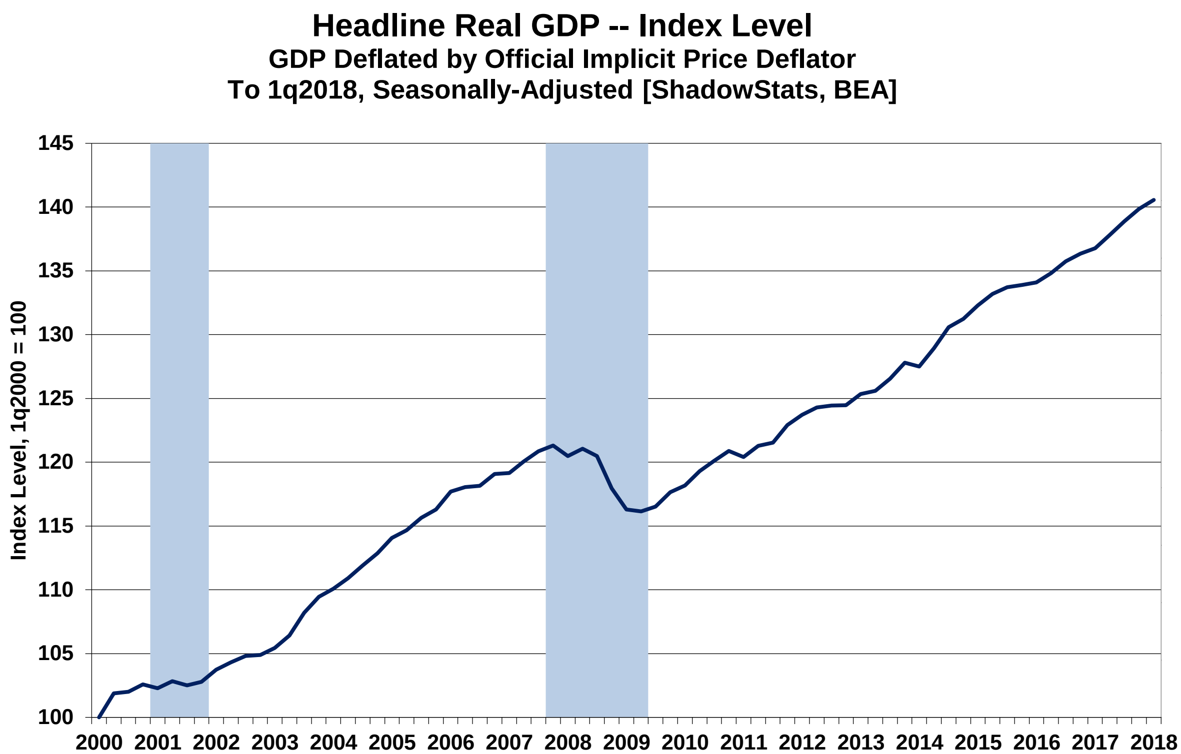
Graph 23: Real GDP (1970 -2018), Third-Estimate of First-Quarter 2018



Graph 24: "Corrected" Real GDP (1970 -2018), Third-Estimate of First-Quarter 2018



Graph 25: Real GDP Index – Headline Real GDP through Third-Estimate of First-Quarter 2018



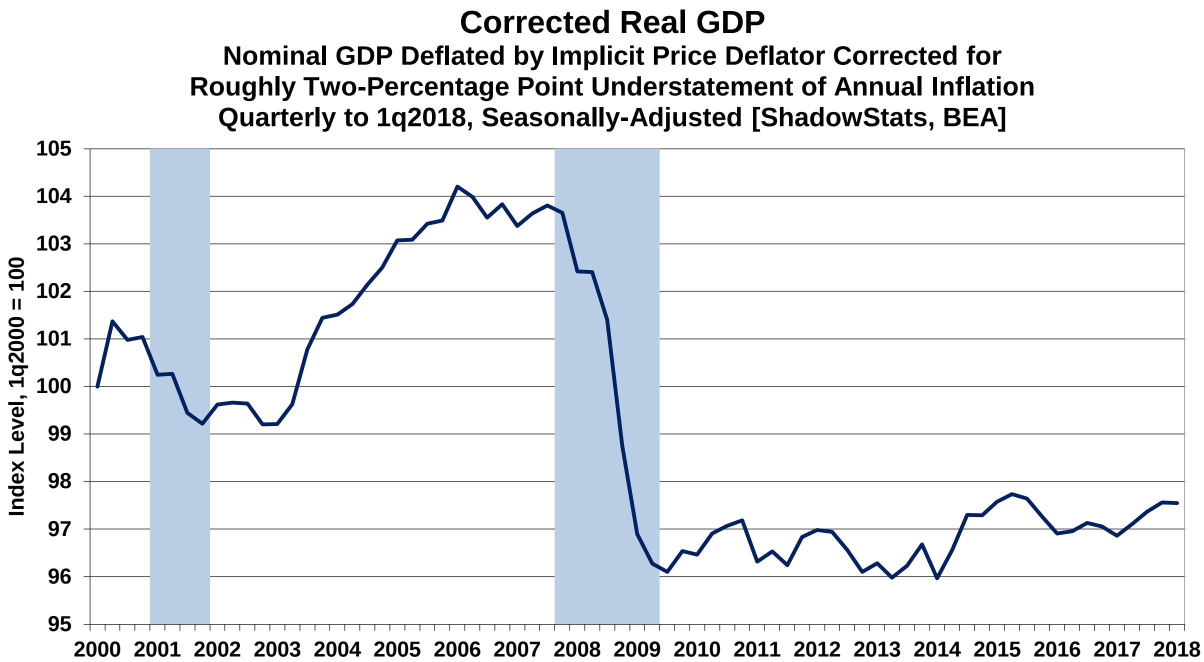
Comparative Indicators. The following *Graph 26* of the "corrected" GDP series is shown along with an example of the regular, comparative economic indicators, which generally confirm the broad story from the "corrected" GDP graph that the economy never recovered from its collapse into 2009 and is either in renewed downturn or continuing low-level stagnation, albeit some of the latter is slightly up-trending.

The comparative *Graph 27* shows the Cass Freight Index™ measure of North American freight volume through May 2018, used with the permission of Cass Information Systems, Inc. This is the same as *Graph 7* used earlier in comparison with current activity of real New Orders for Durable Goods, ex-commercial aircraft. Few measures better reflect the actual flow of goods in commerce than freight activity (see the *Opening Comments* of *Commentary No. 956*). As a broad measure of basic domestic economic activity, the index has much more in common with the "corrected" GDP in *Graph 26*, than with the headline GDP of *Graph 25*.

Graph 28 plots May 2018 Manufacturing of Consumer Goods also from *Commentary No. 956*, in the context of faltering monthly production and manufacturing detail. *Graph 29* of U.S. Petroleum Consumption, and *Graph 30* 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.

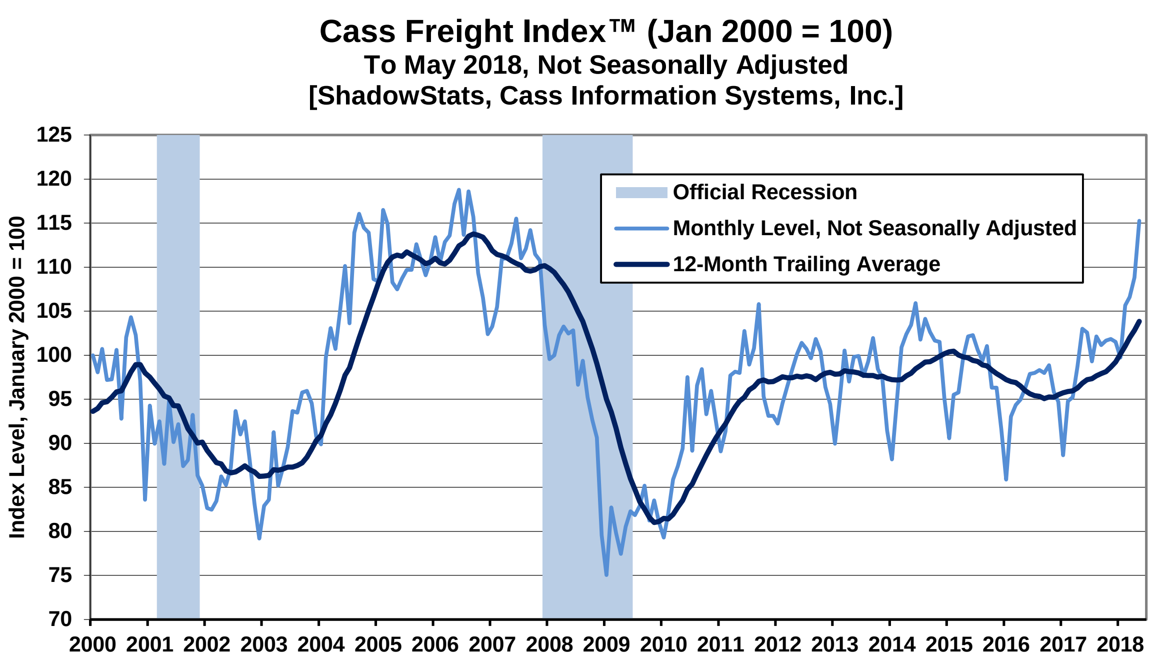
Graph 31 of the employment-to-population ratio also remains a solid indicator of underlying labor conditions in the context of the broad population and long-term discouraged and displaced workers, reflected there through May 2018 and reviewed in the *Opening Comments* of *Commentary No. 953-B*.

Graph 26 "Corrected" Real GDP Index (2000 - 2018), Third-Estimate of First-Quarter 2018

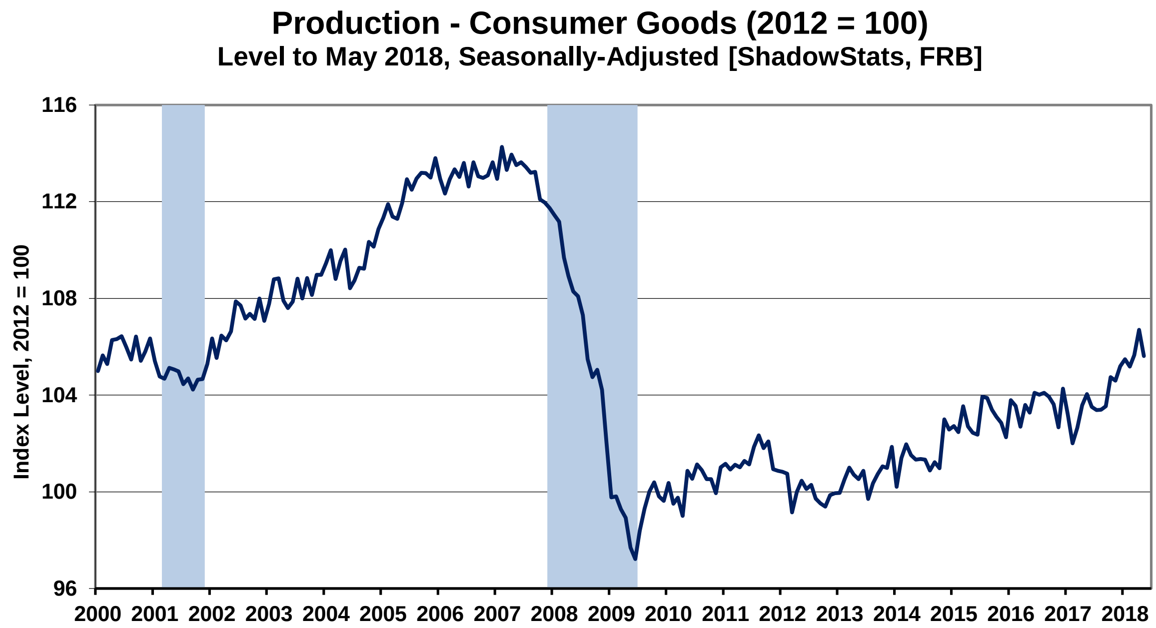


Graph 27: CASS Freight Index Moving-Average Level (2000 to May 2018)

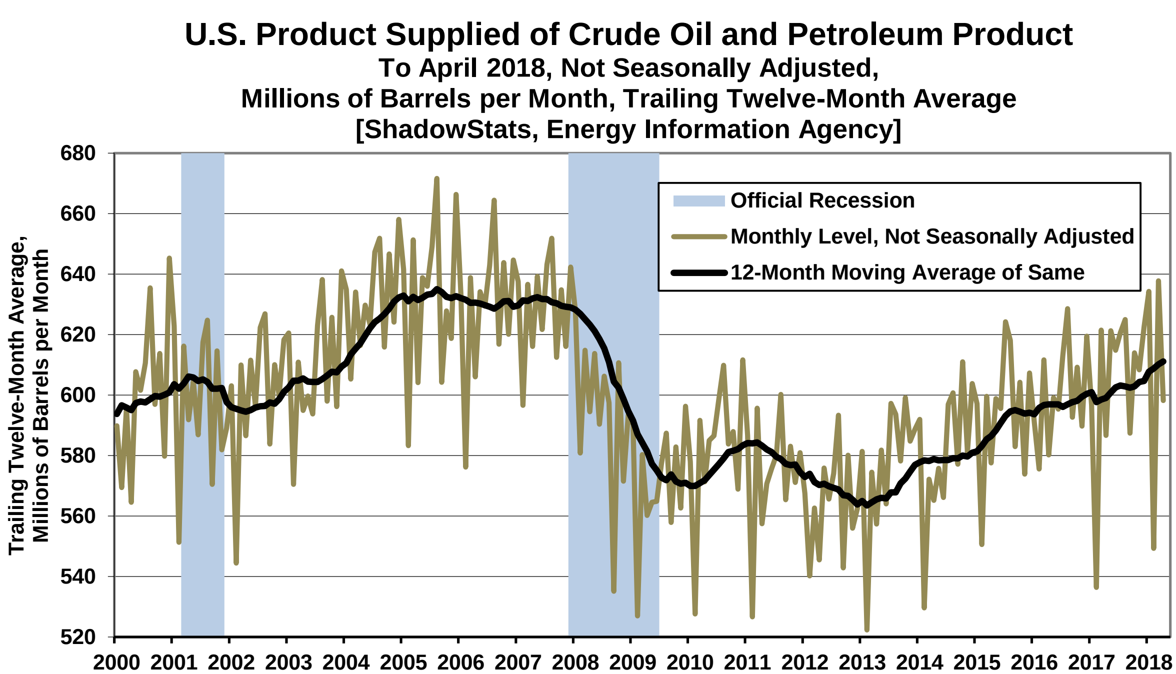
(Same as earlier Graph 7, and Graph OC-4 in Commentary No. 956)



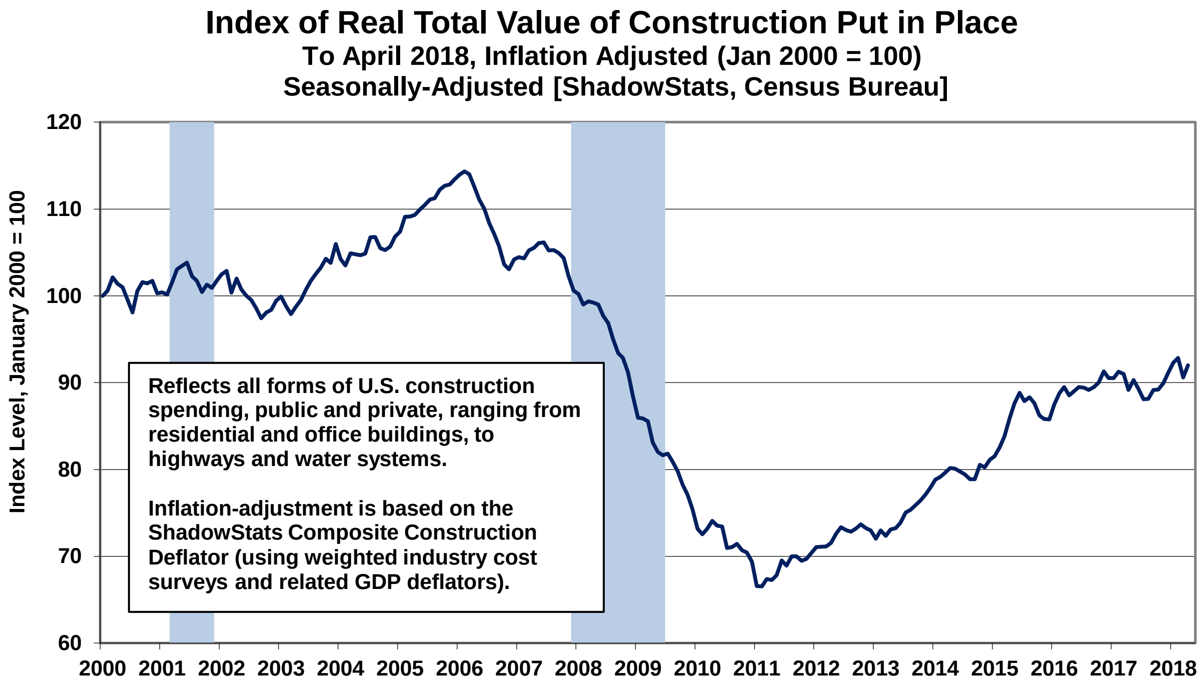
Graph 28: U.S. Industrial Production, Manufacturing – Consumer Goods (2000 to May 2018)
(Same Graph 16 in Commentary No. 956)



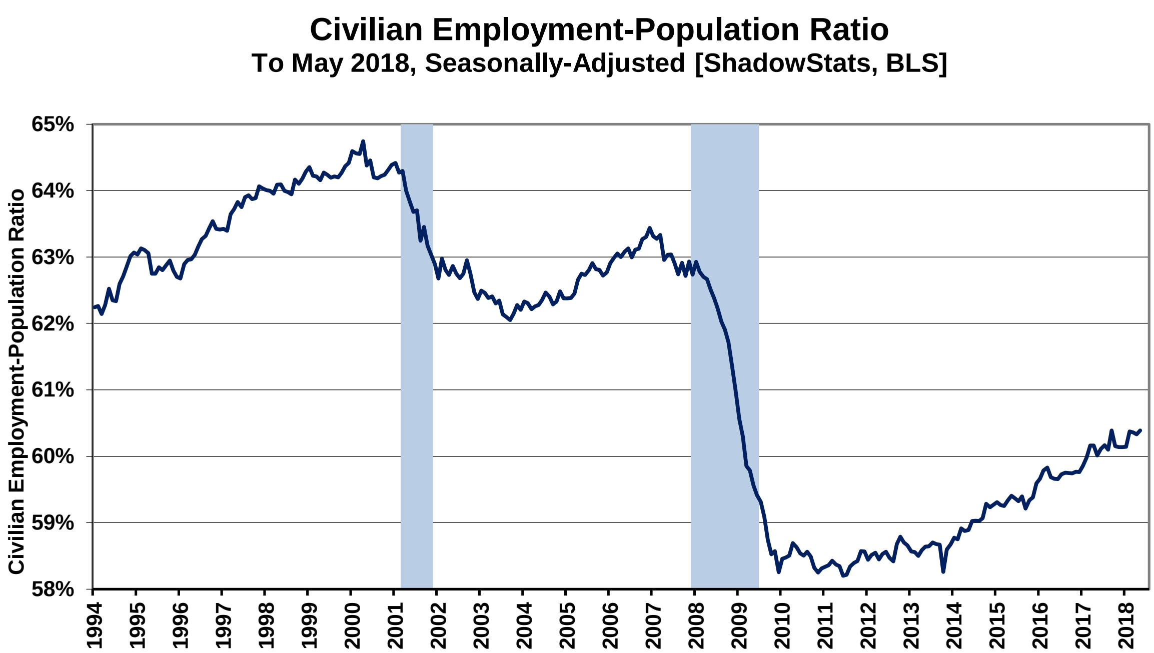
Graph 29: U.S. Petroleum Consumption (2000 – April 2018)



Graph 30 Real Total U.S. Construction Spending (2000 – April 2018)
(See Graph 30 in Commentary No. 953-B)



Graph 31: Civilian Employment-Population Ratio (2000 - May 2018)
(See Graph OC-1 in Commentary No. 953-B)



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

WEEK, MONTH AND YEAR AHEAD

U.S. Dollar and Financial-Market Turmoil Remain Intensified High Risk, Amidst Mounting Fiscal Concerns, Consumer Liquidity Issues and Non-Expanding, Real-World Economic Activity. In the context of some weakening in May New Orders for Durable Goods and Industrial Production, and intensifying negative stresses on basic consumer-liquidity conditions, discussed respectively in the *Opening Comments* and *Consumer Liquidity Watch - No. 2*, revised First-Quarter 2018 GDP continued to reflect quarterly contractions in the consumption of basic goods and in residential investment. The U.S. consumer remains the primary and fundamental driving force behind domestic business activity, and continued likely deterioration of liquidity conditions will be followed by negative headline monthly surprises in the regular economic reporting. Already play are likely net negative revisions to the GDP in its pending, comprehensive annual benchmarking (July 27th). The broad outlook on the economy has not changed. Weaker economic growth and renewed, faltering economic headlines should continue to follow.

The *Opening Comments* and *Hyperinflation Watch* of prior *Commentary No. 955* reviewed the broad outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets. Such updated and expanded upon annual review covered in *Special Commentary No. 935* (see the *Executive Summary*, with *Contents* and links to *Major Sections* and *Graphs* beginning there on page 6). The broad, faltering economic outlook also was reviewed in the *Opening Comments* and *Industrial Production Benchmark Revisions* sections of *Commentary No. 942-B*. The fundamental outlook for U.S. dollar and related market circumstances broadly have not changed from the related vulnerabilities discussed in those earlier missives. The *Hyperinflation Watch* will be updated late-day July 5th as a standalone posting on the ShadowStats Web site, which will be advised by e-mail. This *Week, Month and Year Ahead* will be updated fully, shortly thereafter.

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

Best wishes – John Williams

PENDING ECONOMIC RELEASES

Construction Spending (May 2018). The Commerce Department will release its estimate of May 2018 Construction Spending, in the context of related annual benchmark revisions, tomorrow, Monday, May 1st, with coverage planned for *Commentary No. 958* on Tuesday, July 3rd. Given the extreme regular volatility of this series, almost anything is possible in the near-term, headline monthly detail. Where consensus expectations appear to be for a small monthly gain, such likely would be more than offset by rising headline construction inflation.

The benchmarking will return the monthly detail to monthly and annual comparability, which likely will mean a relative downside revision to annual growth rates, which have been heavily bloated in recent months. Given consistent annual comparisons and strong year-to-year inflation, that should mean some renewed annual contractions in the series, with serious recession signal coming back into play.

Trade Deficit (May 2018). Details for the headline May 2018 Trade Deficit will be released on Friday, July 6th, with coverage at least of the related headlines in *Commentary No. 959-A* of that date, with full coverage like following in *Commentary No. 959-B* over the weekend. Expectations are for some narrowing of the monthly trade shortfall, based on the sharp narrowing in the "Advance" May goods deficit on June 27th. Recent volatility in these numbers, however, leaves the results wide open, albeit odds do favor a narrowing.

Employment and Unemployment (June 2018). The Bureau of Labor Statistics (BLS) will publish headline June labor data on Friday, July 6th, with at least summary coverage of detail in *Commentary No. 959-A* of the date, with extended coverage, in *Commentary No. 959-B* over the weekend. Consensus outlook purportedly is for some narrowing of the payroll gain from June's gain, with headline U.3 unemployment likely to hold at 3.8%, its lowest level since the days of President Nixon.

Some negative shocks here are overdue, however, where a greater-than-expected weakening in payroll growth is a good bet, as would be some back-up in the headline U.3 unemployment rate, particularly considering recent faltering activity of the Conference Board's Help-Wanted Advertising in May 2018.

Both the heavily-stressed Household Survey measures (Employment-Population Ratio and Participation Rate) and Payroll Survey year-to-year gain likely will continue under negative pressure. Annual growth in the May payrolls held at recession-signal levels, a pattern that not only should continue but also intensify.

LINKS TO PRIOR COMMENTARIES, SPECIAL REPORTS AND OTHER WRITINGS

New: The ***Consumer Liquidity Watch*** has become a standalone entity, updated June 29th and posted on the *ShadowStats* Web Site, available there by link at *Consumer Liquidity Watch - No. 2*.

The first standalone ***Hyperinflation Watch*** will follow late-day Thursday, July 5th, covering June 2018 Monetary Conditions.

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

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 missives 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* and now *Consumer Liquidity* and *Hyperinflation Watches* usually are published least weekly, or updated every two weeks for the *Watches*, updating general economic and financial-market circumstances as they develop.

Commentary No. 956 (June 27th) reviewed May 2018 Retail Sales, Industrial Production, New Residential Construction (Housing Starts and Building Permits), New- and Existing-Home Sales, along with detail on the May 2018 Cass Freight Index™ and some potential twists to the pending July 27th Comprehensive Benchmark Revision to the GDP.

Commentary No. 955 (June 18th) analyzed May 2018 inflation as reported with the May 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest

Hyperinflation Watch covering FOMC policy, the U.S. dollar and financial markets. Summary headline details also were provided for May Retail Sales, Industrial Production and the Cass Freight Index™.

Commentary No. 954 (June 8th) reviewed the comprehensive annual benchmark revisions to the Trade Deficit, in the context of recent benchmark revisions to other major economic series and implications for the pending GDP benchmark revisions. Such also covered the headline reporting of the April 2018 headline Trade Deficit detail and an updated Consumer Liquidity Watch.

Commentary No. 953-B (June 5th) analyzed the discrepancies between the record-low headline unemployment rate and near-record-high readings of labor-market stress, in the context of extended coverage the May 2018 Employment and Unemployment and April 2018 Construction Spending, previously headlined in *No. 953-A.*

Commentary No. 953-A (June 1st) provided flash headlines and summary details of the May 2018 Employment and Unemployment and April 2018 Construction Spending, expanded upon in the supplemental coverage of *Commentary No. 953-B.* Current monetary conditions were reviewed, along with the initial estimate of annual growth in the May 2018 ShadowStats Ongoing Estimate of Money Supply M3.

Commentary No. 952 (May 30th) reviewed the second estimate of First-Quarter 2018 GDP, initial estimates of first-quarter GNP and GDI, extended detail on the annual benchmarking of the Retail Sales series, and headline coverage of the May 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 951 (May 25th) reviewed April 2018 New Orders of Durable Goods, in the context of the annual revisions (see prior *No. 950*), New- and Existing-Home Sales and brief coverage of the annual benchmarking of the Retail Sales series.

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

Commentary No. 949 (May 11th) reviewed inflation as reported with the April 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* on the U.S. dollar and financial markets.

Commentary No. 948 (May 9th) explored unusual circumstances with April 2018 Employment and Unemployment numbers, along with the April Conference Board Help Wanted OnLine® Advertising, April Monetary Conditions, the March Trade Deficit and Construction Spending, along with the reintroduction of Sentier Research's monthly Real Median Household Income to March 2018.

Commentary No. 947 (April 27th) detailed the first estimate of First-Quarter 2018 GDP and the related Velocity of Money, March New Orders for Durable Goods, New- and Existing-Home Sales and the "advance" estimate of the March 2018 merchandise goods deficit.

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. 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. 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.

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. 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.

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