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

COMMENTARY NUMBER 971

Construction and Housing Markets, Durable Goods Orders, GDP and Underlying Reality

October 3, 2018

Second-Half 2018 Economic Growth Prospects Are on the Wane, With Third-Quarter Real Merchandise Trade Deficit Headed for a Record Shortfall

August Private Labor-Market Surveying Showed Some Pickup

Federal Reserve Tightening Hits the Consumer Hard, Threatening Any Nascent, Broad Economic Upturn

Total August Real Construction Spending, Residential and Nonresidential, Fell for Third Straight Month; Private Spending Down, Government Spending Up

Clobbered by Intensifying Consumer Liquidity Troubles, All Major Residential-Construction and Home-Sales Indicators in August Held in Deepening, Six-Month Moving-Average Downtrends

Residential Sales and Construction Held Shy of Recovering Pre-Recession Peaks: Existing-Home Sales by 26.5% (-26.5%), New-Home Sales by 54.7% (-54.7%), Building Permits by 45.7% (-45.7%) and Housing Starts by 43.6% (-43.6%)

Ex-Defense and Commercial Aircraft, August Real Durable Goods Orders Fell by 0.5% (-0.5%); Automobile Orders and Shipments Declined; Growth Driven by Government Spending, Not by the Consumer

Second-Quarter Real Gross Domestic (GDP) Revised to 4.16% from 4.23%; Purported Equivalent Gross Domestic Income (GDI) Revised to 1.62% from 1.81%

Real GDP Stood 17.4% Above Its 2007 Pre-Recession Peak, Yet It Held Shy by 5.2% (-5.2%) of that Peak, Corrected for Understated GDP Inflation

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PLEASE NOTE: The next regular *Commentary No. 972*, planned for Friday, October 5th will provide a full review of the August 2018 Trade Deficit and Construction Spending, and at least an initial review of September 2018 Employment and Unemployment.

Hyperinflation and Consumer Liquidity Watches. Both of the most-recent *Watches, Hyperinflation Watch – No. 3* of August 12th and *Consumer Liquidity Watch – No. 4* of August 10th will be updated fully in the week ahead.

DAILY UPDATE Coverage. Detail on new headline economic data is posted in the ***Daily Update*** section in the top left-hand column of the *www.ShadowStats.com* home page. When major economic releases are published, brief, summary headline details are posted there usually within an hour or so of the release. Those details remain posted until they are covered separately in a subsequent *Commentary*.

The planned ShadowStats Publication Schedule, Schedule Revisions and Notes to Subscribers also are provided regularly at the end of that column.

Your comments and suggestions always are invited.

Best wishes to all, John Williams (707) 763-5786

Today's (October 3) *Opening Comments* discusses economic trends in the latest headline data, along with an updated review of underlying economic reality, which standardly will accompany regular reviews of the Gross Domestic Product releases. Headline details of the just-released August Construction Spending and pending Trade Deficit and Employment Stress are also reviewed.

The ***Reporting Detail*** provides coverage of August 2018 New Residential Construction Spending, New- and Existing-Home Sales, New Orders for Durable Goods and the third estimate of Second-Quarter 2018 GDP.

The ***Week, Month and Year Ahead*** provides background on recent *Commentaries* and discusses/previews pending economic releases.

Commentary No. 971 contents, including graphs and tables, are indexed and linked on following page.

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OPENING COMMENTS

UNDERLYING ECONOMIC REALITY

Contracting Consumer Sector versus Growing Government Consumption

Tentative and Fragile Early-Economic Recovery Threatened by Fed Tightening

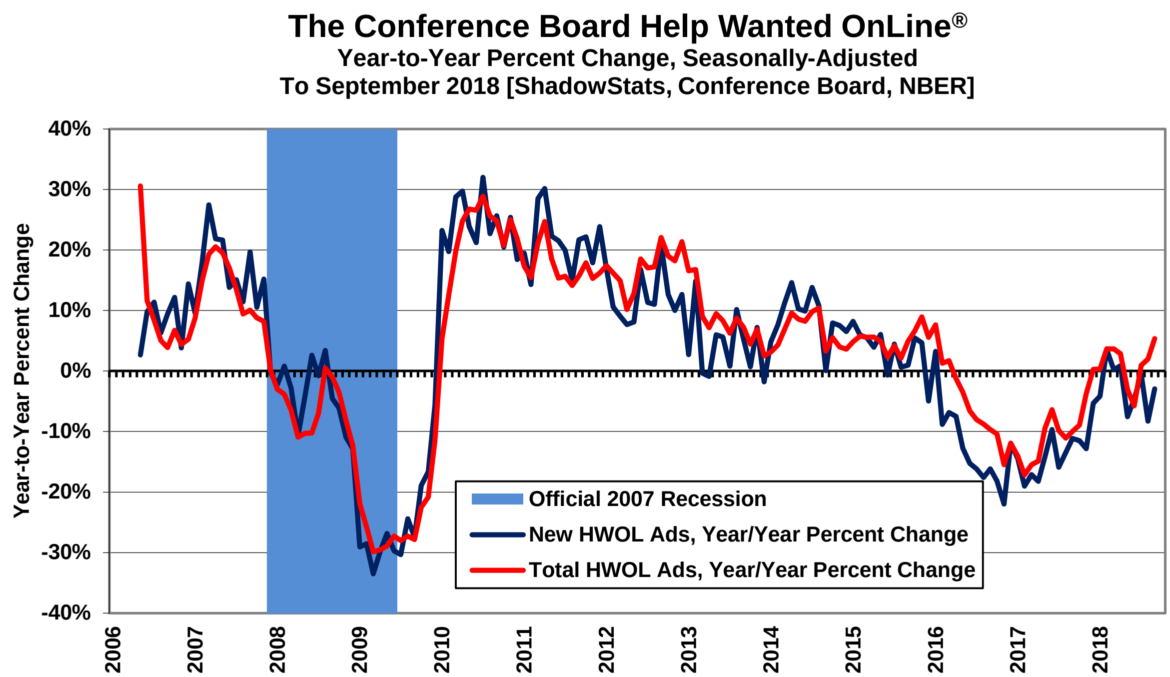
Deteriorating Real Merchandise Trade Deficit Threatens Near-Term Headline GDP

Economic Outlook Dims for the Second-Half 2018, as Federal Reserve Tightening Clamps Down on Systemic and Consumer Liquidity, while the Trade Deficit Balloons Anew. These ***Opening Comments*** offer first a quick review of late-breaking data, and issues looming in the week ahead, then update of the *Underlying Economic Reality* section of *Special Commentary No. 968-Extended*, *Section II*, both as to fully updated headline numbers and related graphs.

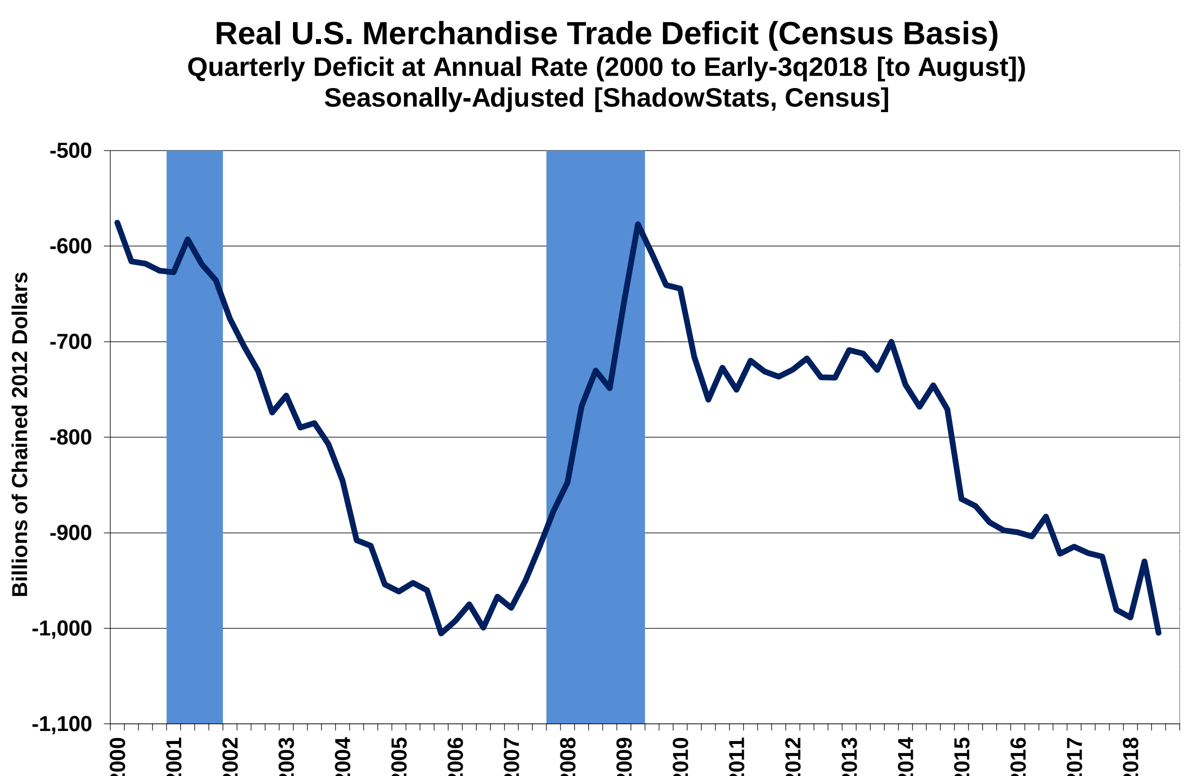
Covered here is today's release of the September 2018 Conference Board Help-Wanted Online Advertising® (HWOL), with mixed implications for the headline September labor numbers. Next is the unfolding circumstance with deteriorating trade deficit details and negative implications for third-quarter GDP, followed by initial details on August real Construction Spending, which suggest some underlying shifts in the nature of current economic activity.

September 2018 Help-Wanted Advertising Gained 3.2%, Driven by an 8.2% Jump in New Ads, Which Also Fell by 2.9% (-2.9%) Year-to-Year, Holding Deep in Non-Expansion Territory. The Conference Board Help-Wanted Online Advertising® (HWOL) for September 2018 was released as we were going to press this morning (October 3rd). Total Ads in September 2018 HWOL gained month-to-month by 3.2%, having gained 1.0% in August. The aggregate increase was almost entirely from New Ads, which gained 8.2% in the month, having declined by 8.2% (-8.2%) in August. Reflected in *Graph OC-1*, year-to-year, aggregate HWOL was up by 5.2% in September 2018, versus 2.0% in August 2018, but the series-driving New Ads component was down year-to-year by 2.9% (-2.9%) in September 2018, having declined at an annual pace of 8.3% (-8.3%) in August 2018. Remaining deep in non-expansion territory, though, the Total Ads and New Ads series were down respectively from historic highs by 17.1% (-17.1%) and by 30.9% (-30.9%). Full details will follow in *Commentary No. 972*. Many thanks to The Conference Board for permission to publish *Graph OC-1* of year-to-year change in its *Help Wanted OnLine®* data.

Graph OC-1: The Conference Board Help Wanted OnLine®, Yr-to-Yr Percent Change to September 2018



Graph OC-2: Real Merchandise Trade Deficit (Early-Trend in Third-Quarter 2018)



Pending August 2018 Trade Deficit Deterioration. Separately, based on the release of the advance-estimate of the August 2018 Trade Deficit on September 27th, there is good reason to expect a sharp deterioration in the headline Trade Deficit (to be published on October 5th). As reflected in *Graph OC-2* and discussed in the *Pending Releases* section of the *Month, Week and Year Ahead* section, the third-quarter 2018 real merchandise trade deficit is on track to rival, if not surpass the worst-ever quarterly real U.S. deficit in fourth-quarter 2005.

If this deterioration unfolds as expected, it will have major negative implications for third-quarter 2018 GDP growth. The headline second-quarter GDP growth of 4.2% would have been 2.9%, net of the second-quarter's spurious trade-deficit improvement. Full detail will follow in pending *Commentary No. 972*, subsequent to the full headline trade deficit reporting on Friday.

Government Spending on Infrastructure and Defense, and a Burgeoning Budget Deficit, Provide an Economic Boost, While Fed Tightening Clamps Down on the Consumer? August 2018 Real Construction Spending declined month-to-month by 0.4% (-0.4%), down for the third-straight month, in a deepening downtrend. Private Residential and Nonresidential Construction Spending revised lower, consistent with the slowing consumer activity seen in Existing- and New-Home Sales, and related New Residential Construction activity. The earlier, related Home Sales and Residential Construction series are reviewed in today's *Reporting Detail*, while full coverage of August Construction Spending will follow in *Commentary No. 972*. Nonetheless, updated Construction Spending graphs of the real aggregate level of activity and year-to-year change are found in the later *Review of Underlying Economic Reality* section (respectively *Graphs OC-21* and *OC-22*).

Where Private Construction Spending continued to tumble, growth was seen, however, in upwardly revised Public Spending (real monthly growth of 1.7%). Considered along with the circumstances accompanying the headline New Orders for Durable Goods section in the *Reporting Detail*, an interesting thread tied to government spending has started to surface. Surging Defense Orders kept Real New Orders for Durable Goods on the plus-side for the month. Surging Public Spending on infrastructure kept the Real Construction Spending from being significantly weaker.

Where increased government spending indeed provides economic stimulus, it also needs to be paid for by something other than the U.S. Treasury selling its Notes and Bonds. If these trends continue, they should help the economy in the short term, but ultimately they also would savage the federal budget deficit, the stability of U.S. fiscal conditions and the ultimate long-range solvency prospects for the U.S. Treasury.

As seen now with both the recent real durable goods orders and real construction spending, growth here has come from increased government spending, not from the liquidity-stressed consumer, who remains under siege from the current and recent Federal Reserve policies.

The ***Reporting Detail*** reviews the latest numbers on August 2018 Residential Construction, Existing- and New-Home Sales and New Orders for Durable Goods, along with the third estimate of, second revision to Second-Quarter 2018. On top of stalling activity seen in August Retail Sales and Industrial Production, along with the discussion of a possible *Tipping Point* in the domestic financial markets discussed in prior *Commentary No. 970*, today's coverage of subsequent releases of other significant economic indicators suggests some exacerbation of the previously discussed troubling economic signals.

Updated Review of Underlying Economic Reality—Early Recovery, But No Economic Expansion. What follows here updates the *Underlying Economic Reality* section of *Special Commentary No. 968-Extended*, *Section II*, reflecting the latest data in comparative graphs Much of the accompanying text is repetitive from the earlier version.

Unlike Booming Headline GDP, Real-World Business Activity Is Off Bottom, But Still Well Shy of Recovery and Economic Expansion. Noted regularly in these monthly GDP *Commentaries*, the headline GDP detail simply remains the most worthless of the popular government economic series, in terms of indicating realistic U.S. business activity. "Headline Real GDP" reflected in *Graphs OC-3* and a truncated version in *OC-7*, and the same series corrected for understated inflation used in deflating the headline GDP, plotted in *Graphs OC-4* and a truncated *OC-9* as "Corrected Real GDP" (see the *Opening Comments* of *Special Commentary No. 968-Extended*) are compared and contrasted here with a number of better-quality private and public economic numbers of broad activity. Those numbers tend to confirm the reporting patterns of "Corrected" *Graph OC-9*. Early recovery seen in the "Corrected" series remains extraordinarily fragile, with the Fed's current tightening of liquidity conditions threatening to pull the rug out from underneath a nascent rebound. Housing activity, for example, already has turned down anew.

Viewed in terms of standard economic definitions, an "economic recovery" begins as the economy moves off bottom, off the trough in activity, until it "recovers" its pre-recession peak activity. Thereafter, economic growth is in "expansion." Headline GDP currently has expanded by 17.4% beyond its pre-recession peak, although no other major economic or employment indicator confirms that.

The ShadowStats "Corrected" Real GDP has been moving off bottom, growing quarter-to-quarter and year-to-year, since second-quarter 2017, yet it remains shy by 5.2% (-5.2%) of recovering its pre-recession peak. It is off bottom, having "recovered" by 1.9%, but still well shy of beginning a period of "expansion."

The Fed Has No Way Out. A basic systemic issue is that the Federal Reserve remains mired in efforts to restore stable- and normal-functioning to the domestic banking, subsequent to the 2008 near-collapse of the banking system. Despite the Fed's continued tightening, which is on the brink of, if not already having pushed the economy back into broad contraction, there are no easy options available to stabilizing the circumstance, shy of an overhaul of the domestic banking system and its oversight by the Federal Reserve. If the domestic system falls back into another 2007/2008 liquidity panic, which is likely, such a crisis very easily could trigger that systemic overhaul.

Freight Activity, Consumer Goods, Manufacturing, Durable Goods Orders, Petroleum Consumption, Construction Spending, Civilian Employment-Population Ratio All Are Shy of Pre-Recession Levels. The headline, inflation-adjusted estimates of U.S. GDP growth and level of activity, consistently have been overstated through the government's use of deliberately understated headline inflation in deflating economic series. At present, that inflation-rate differential for the GDP is running at about two-percentage points on an annual basis, slightly increased post-2018 benchmark revisions. *Graph OC-3* and *Graph OC-7* of the third estimate of second-quarter 2018 Headline Real GDP are adjusted for the headline Implicit Price Deflator (IPD) and are used as the Headline systemic standard measure, where *Graphs OC-4 and OC-9* are the standard measure of the headline Corrected Real GDP.

Consider "Headline GDP" *Graphs OC-3* and *OC-7*, versus *Graphs OC-4* and *OC-9* of the "Corrected GDP." In terms of plotted level, Headline GDP plunges but recovered and expanded, while the

"Corrected" GDP plunged and has yet to recover fully. In terms of year-to-year growth, the Headline Series shows annual growth about 2.0% higher, reflecting the headline inflation differential.

The comparative *Graph OC-11* shows the Cass Freight Index™ measure of North American freight volume through August 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 *Commentary No. 970*). As a broad measure of basic domestic economic activity, the index has much more in common with the "corrected" GDP in *Graph OC-9*, than with the headline GDP of *Graph OC-7*. The 12-month trailing average of the level of activity is plotted, only where a particular series is not seasonally-adjusted, or where a seasonally-adjusted series, such as Consumer Goods should have some meaningful relationship to national freight activity.

Graph OC-13 reflects August 2018 production of Consumer Goods, *Graph OC-15* plots August 2018 Manufacturing and *Graph OC-17* reflects real New Orders for Durable Goods and *Graph OC-19* plots U.S. July Petroleum Consumption.

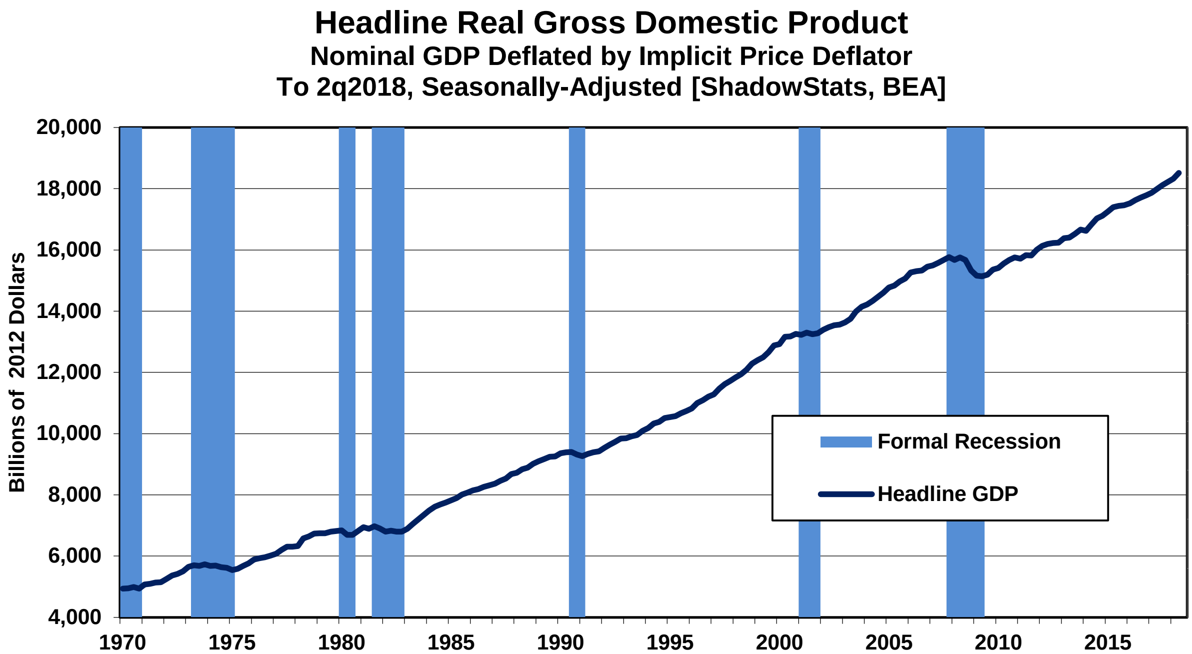
Graph OC-21 of inflation-adjusted total U.S. Construction Spending, which includes everything from roads and office buildings to residential construction, is among the variety of indicators that show patterns of economic collapse into 2009/2011, followed by some minimal (not full) recovery and ongoing stagnation/downturn. Also worthy of consideration are the related construction and home sales plots in *Graph 1* to *18* in the *Reporting Detail*

Graph OC-23 of the employment-to-population ratio also remains a solid indicator of underlying labor conditions and economic activity, in the context of the broad population and long-term discouraged and displaced workers, reflected there through August 2018. The higher the ratio, usually the healthier the labor conditions and the stronger the economy.

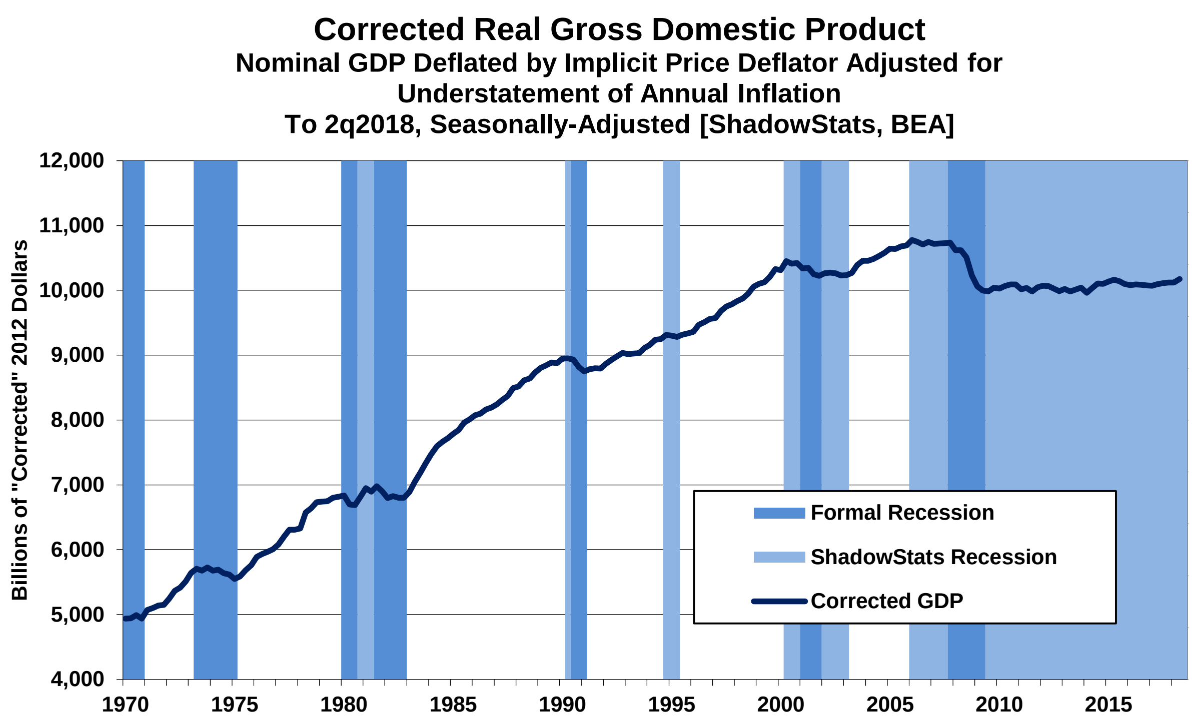
[Graphs OC-3 to OC-23 begin on the next page.]

Headline Real GDP and Corrected for the Understatement of Headline Inflation

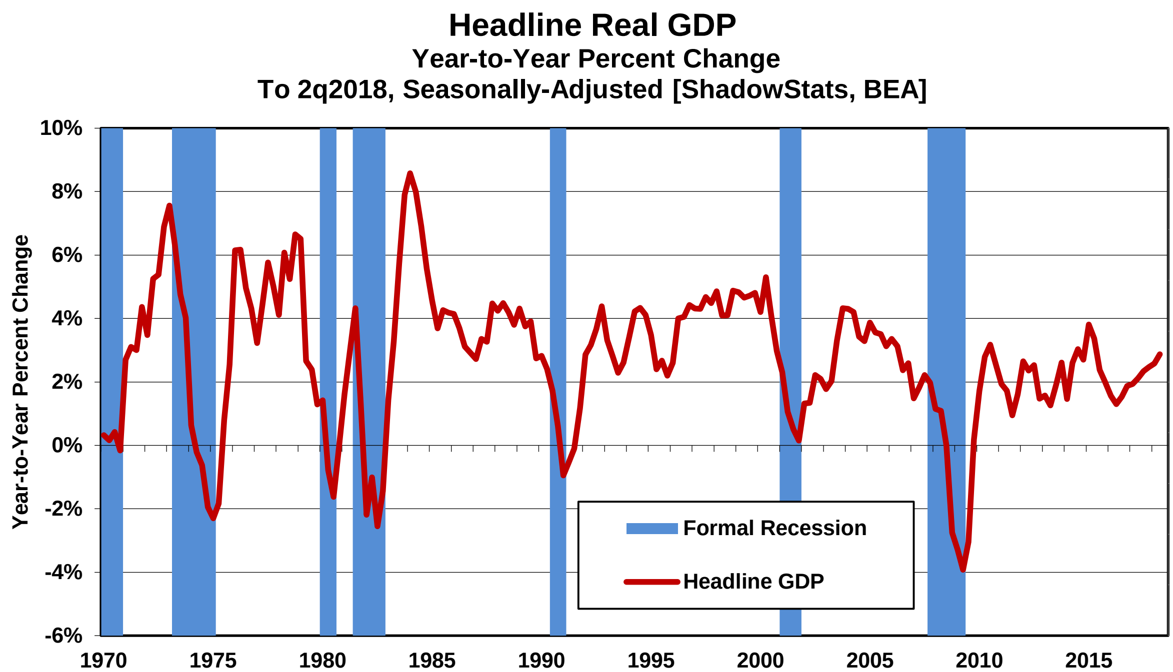
Graph OC-3: Real GDP (1970 -2018), Third-Estimate of Second-Quarter 2018



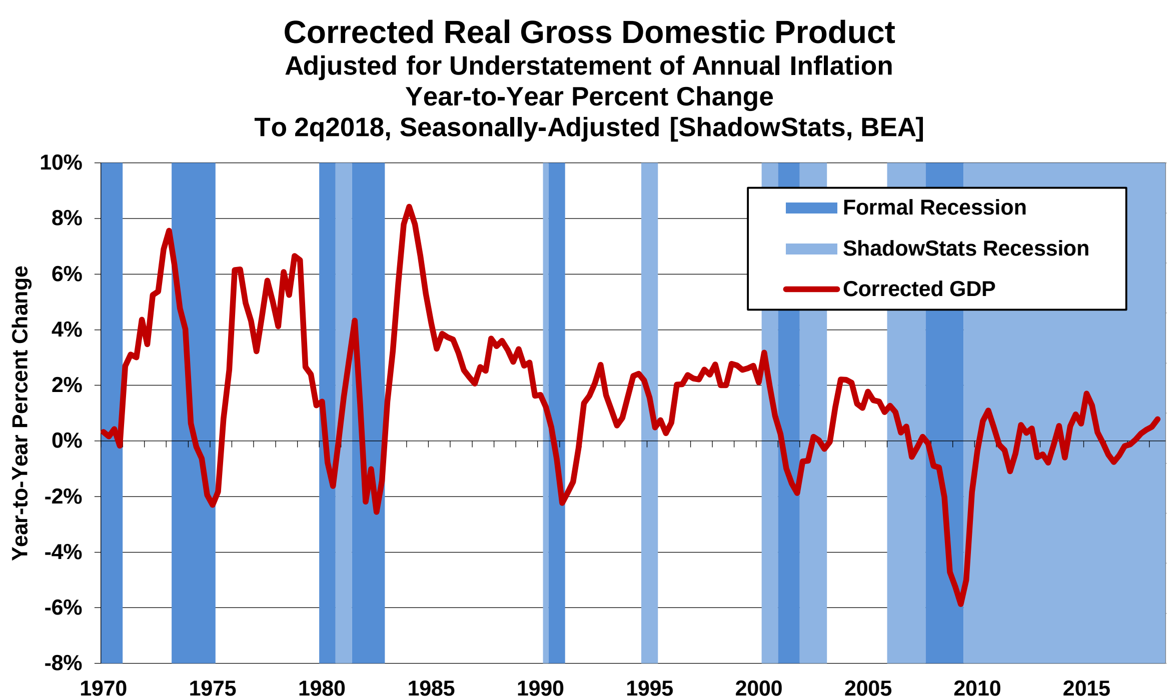
Graph OC-4: "Corrected" Real GDP (1970 -2018), Third-Estimate of Second-Quarter 2018



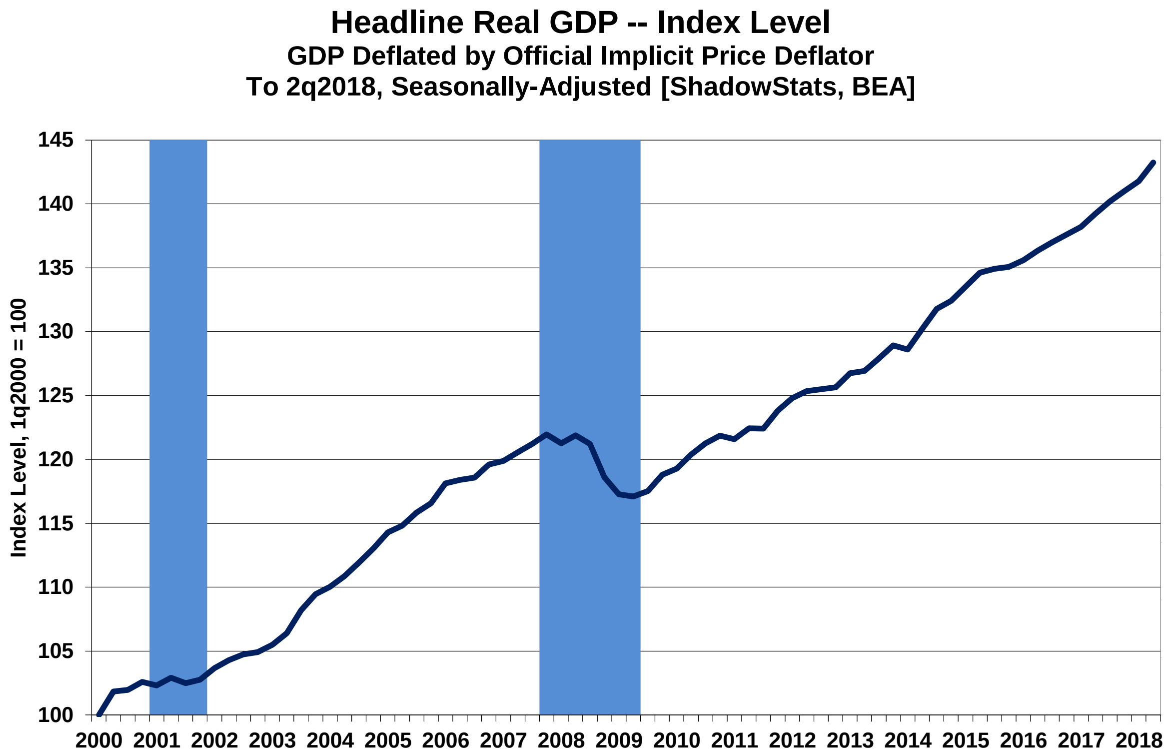
Graph OC-5: Quarterly GDP Real Year-to-Year Change (2000 to 2018), Third-Estimate of Second-Quarter 2018



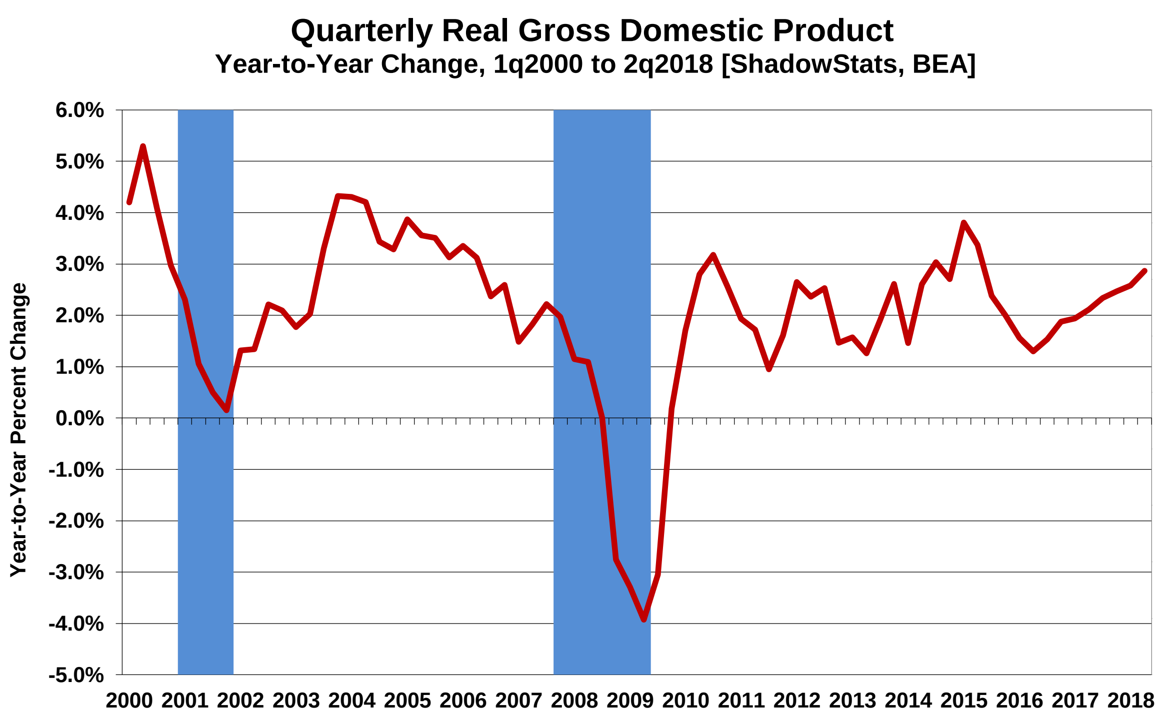
Graph OC-6: Corrected-GDP, Year-to-Year Percent Change (2000 to Third-Estimate of Second-Quarter 2018)



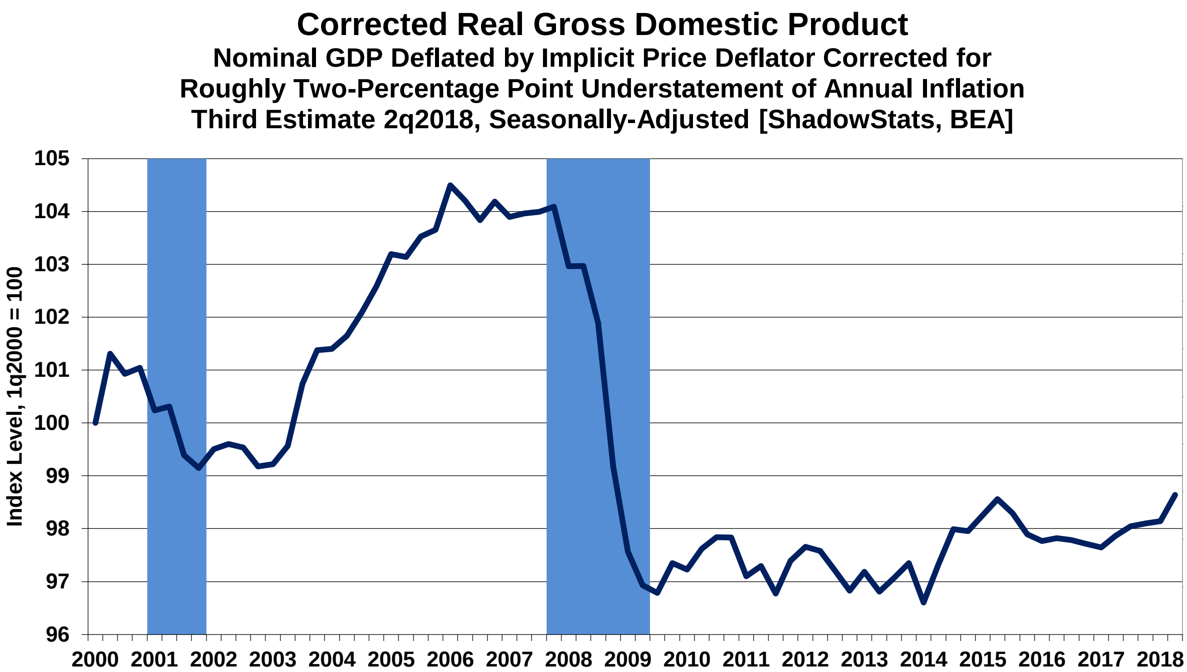
Graph OC-7: Headline Real GDP Index – First-Quarter 2000 through Third-Estimate of Second-Quarter 2018
(Truncated Version of Graph OC-3)



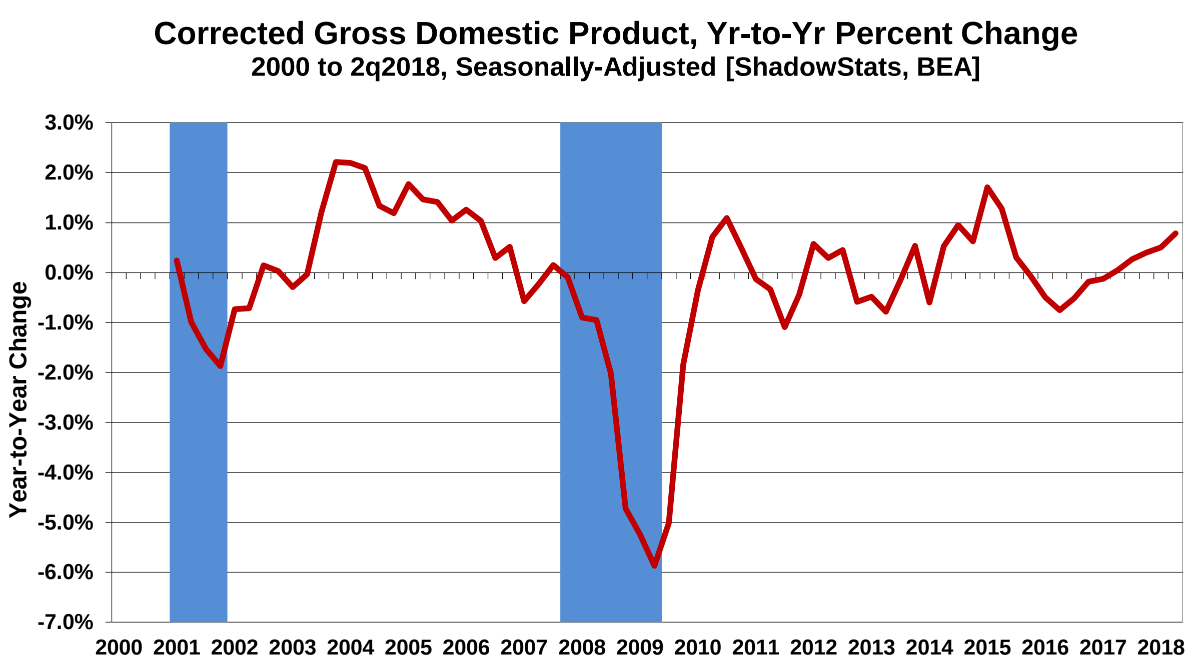
Graph OC-8: Headline GDP Real Year-to-Year Change (First-Quarter 2000 to Second-Quarter 2018)]
(Truncated Version of Graph OC-5, Same as Graph 30 in the Reporting Detail)



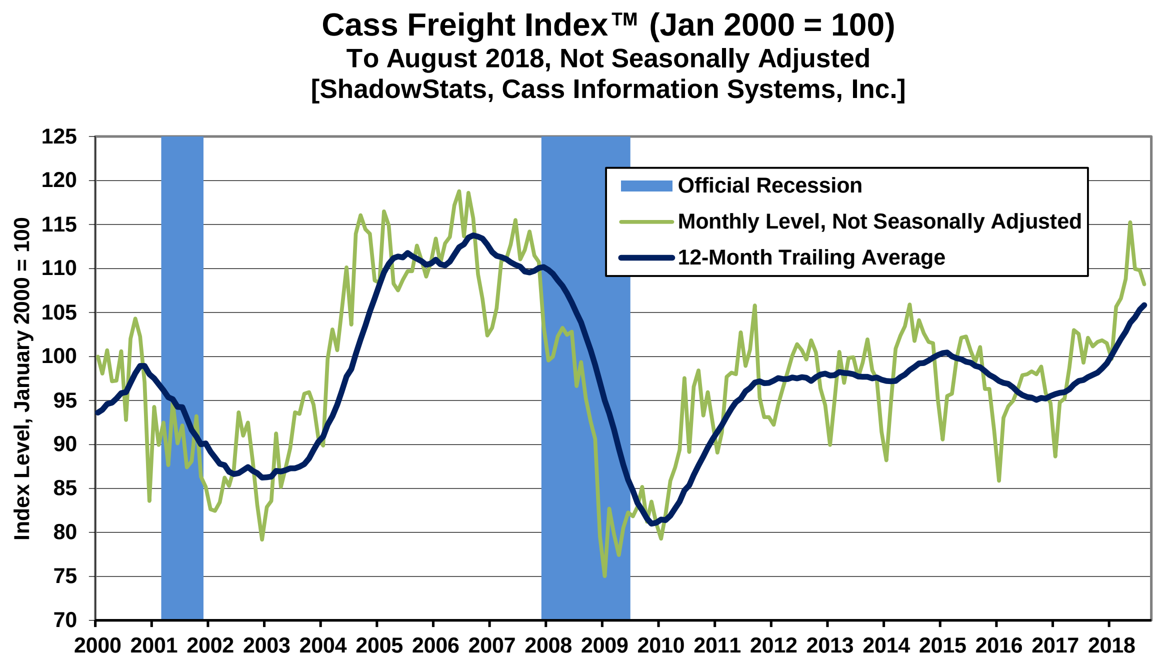
Graph OC-9: "Corrected" Real GDP Index (First-Quarter 2000 to Third-Estimate of Second-Quarter 2018)
(Truncated Version of Graph OC-4)



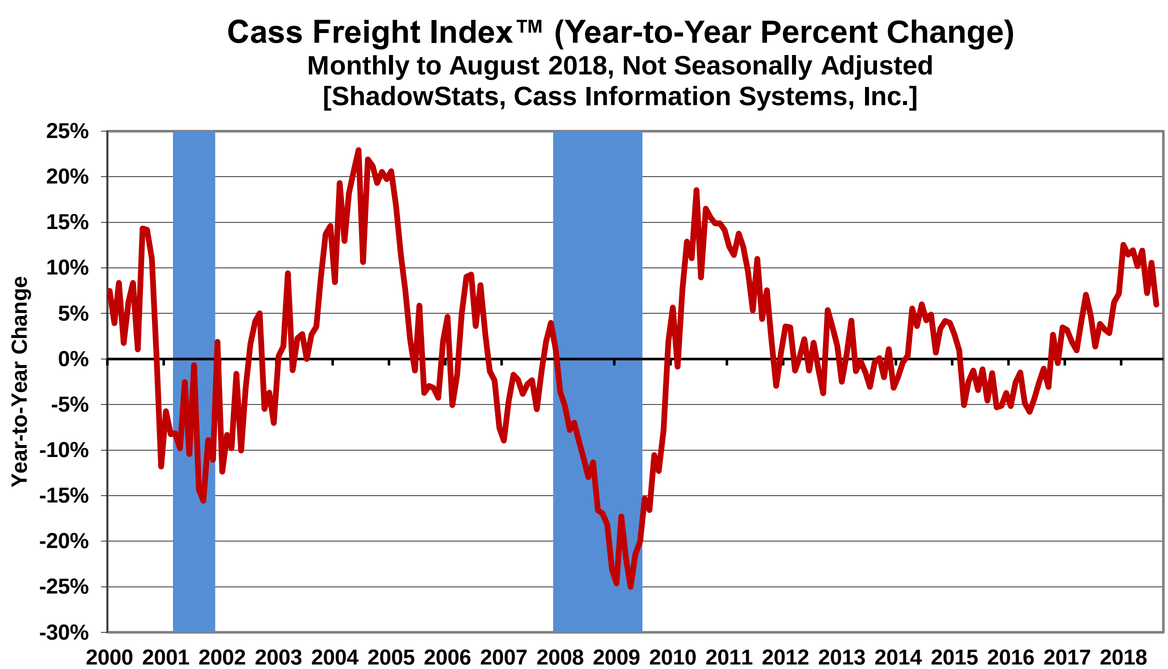
Graph OC-10: Corrected-GDP, Year-to-Year Percent Change (First-Quarter 2000 to Second-Quarter 2018)
(Truncated Version of Graph OC-6)



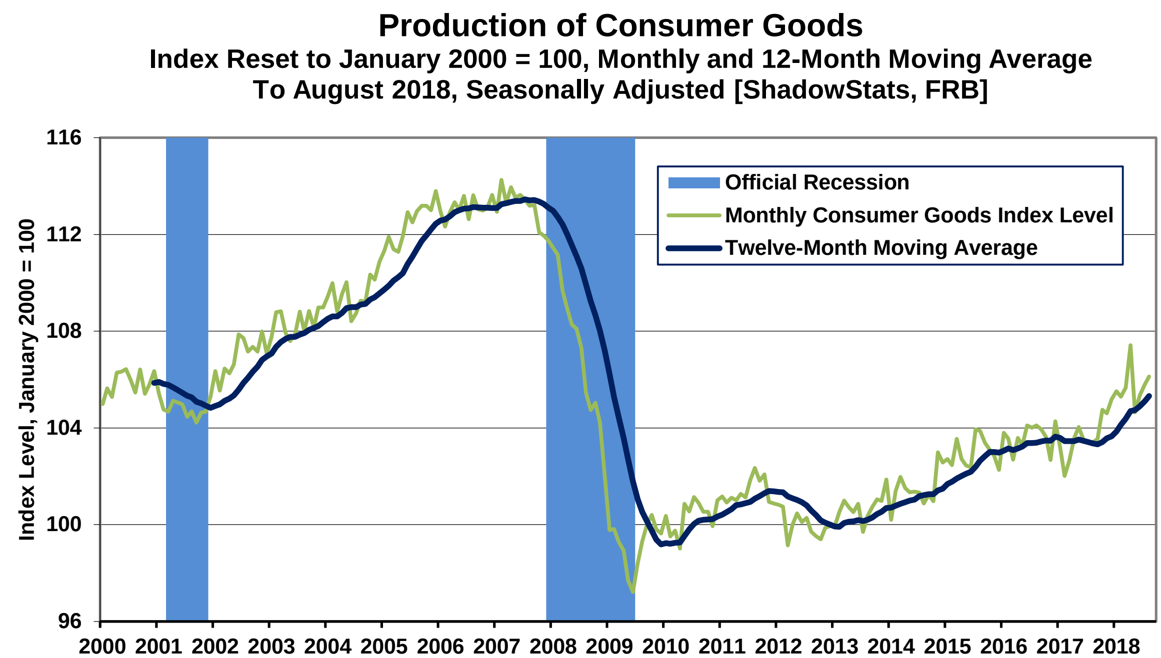
Graph OC-11: CASS Freight Index™ Moving-Average Level (January 2000 to August 2018)
(Same as Graph OC-6 in Commentary No. 970)



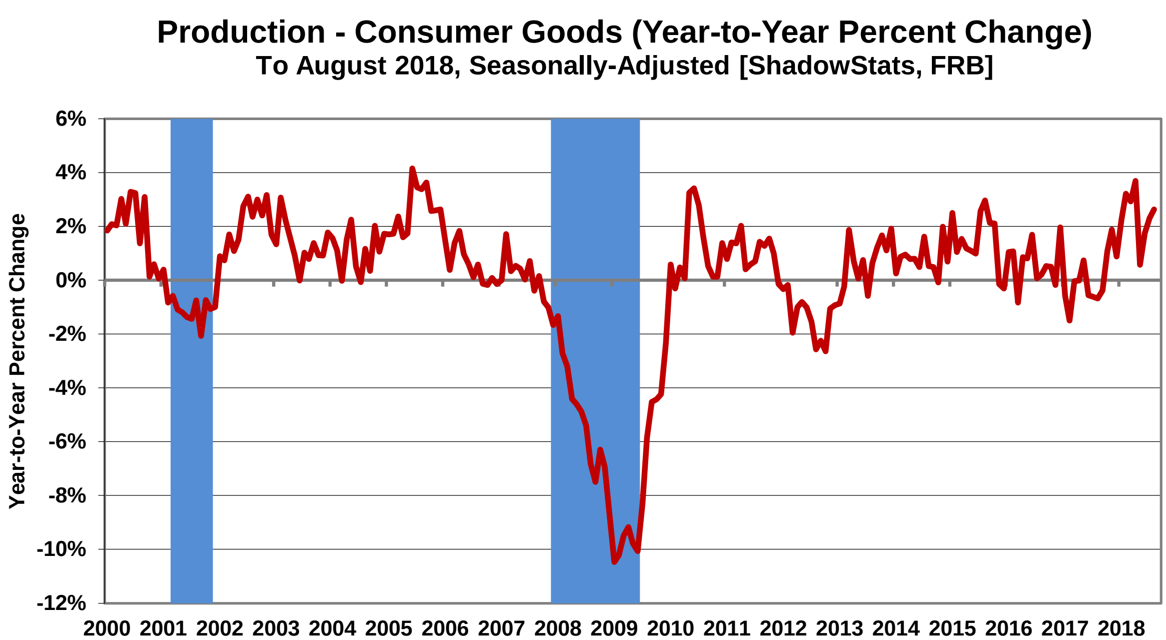
Graph OC-12: CASS Freight Index, Monthly Year-to-Year Percent Change (January 2000 to August 2018)
(Same as Graph OC-8 in Commentary No. 970)



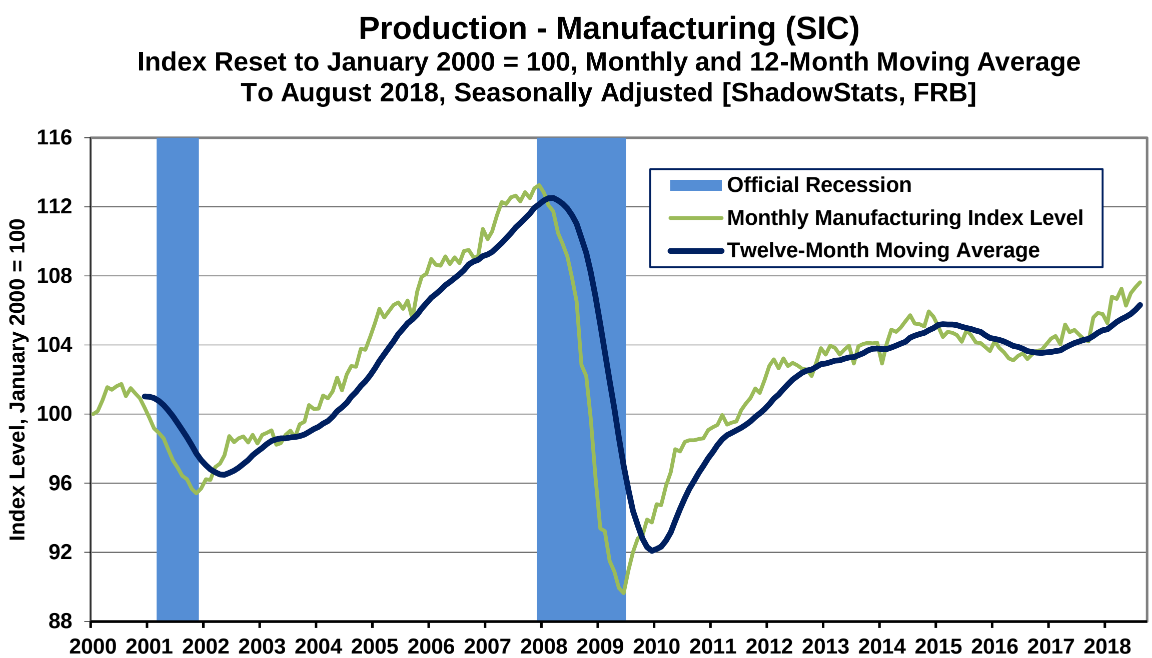
Graph OC-13: U.S. Industrial Production – Consumer Goods (January 2000 to August 2018)



Graph OC-14: Year-to-Year Percent Change, Production of Consumer Goods (January 2000 to August 2018)

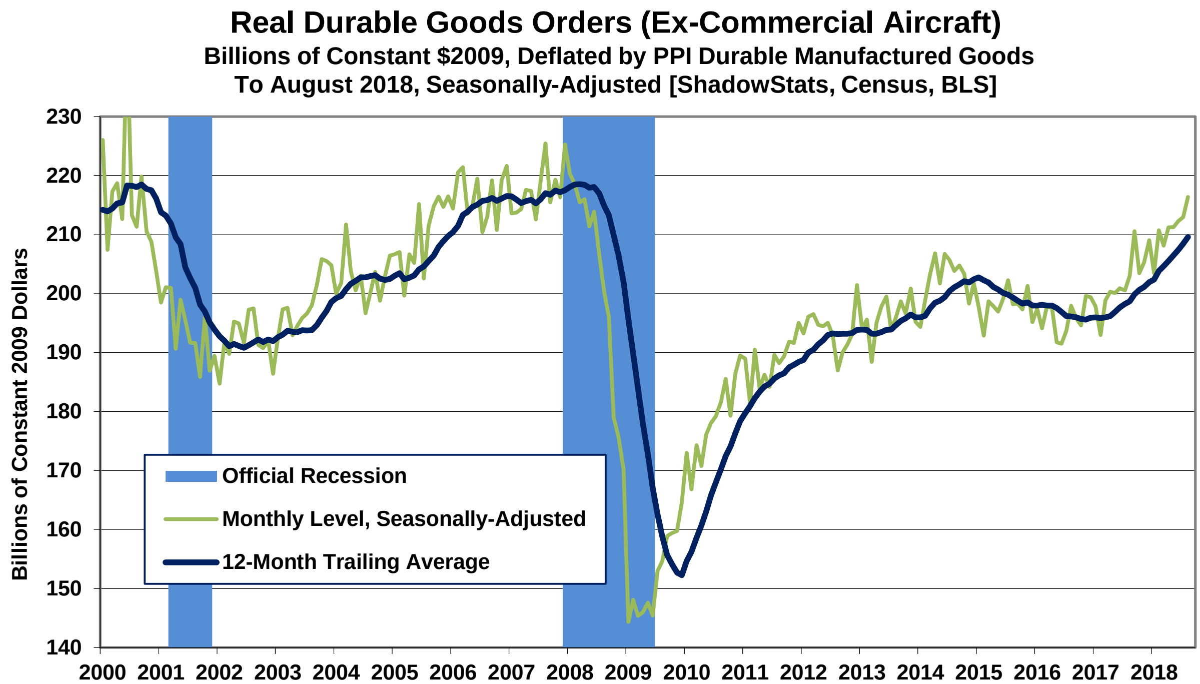


Graph OC-15: Industrial Production-Manufacturing, 12-Month Moving-Average Level (2000 to August 2018)
(Same as Graph OC-7 in Commentary No. 970)

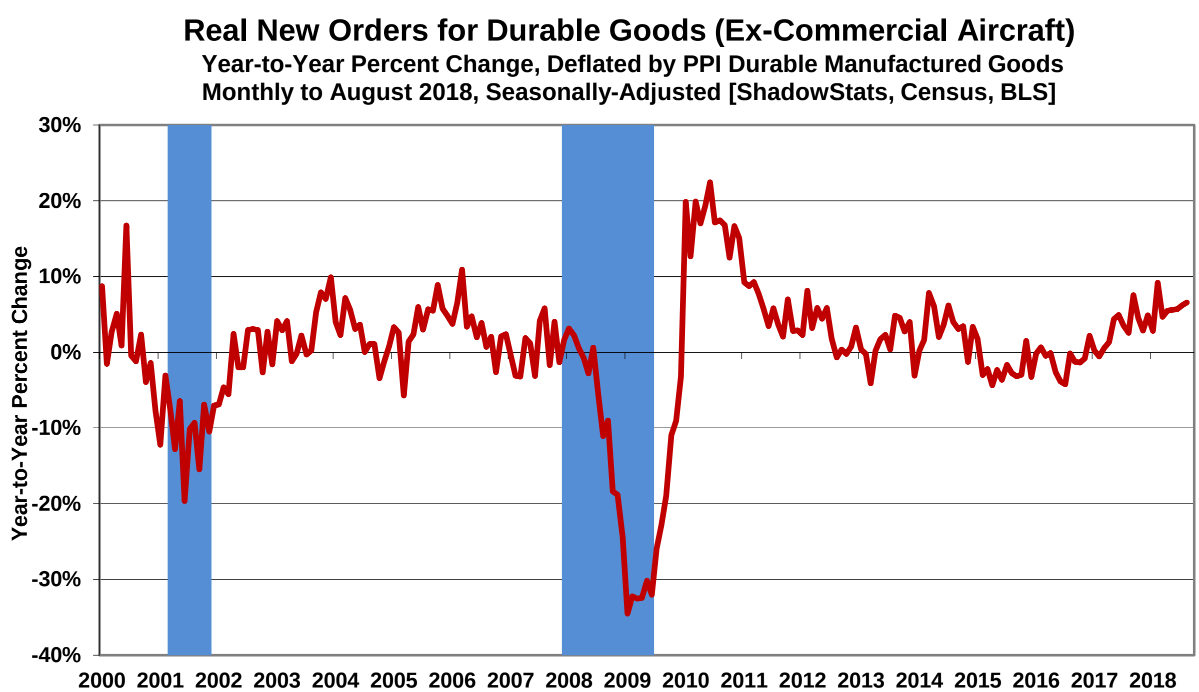


Graph OC-16: Manufacturing, Year-to-Year Percent Change (2000 to August 2018)
(Same as Graph OC-9 in Commentary No. 970)

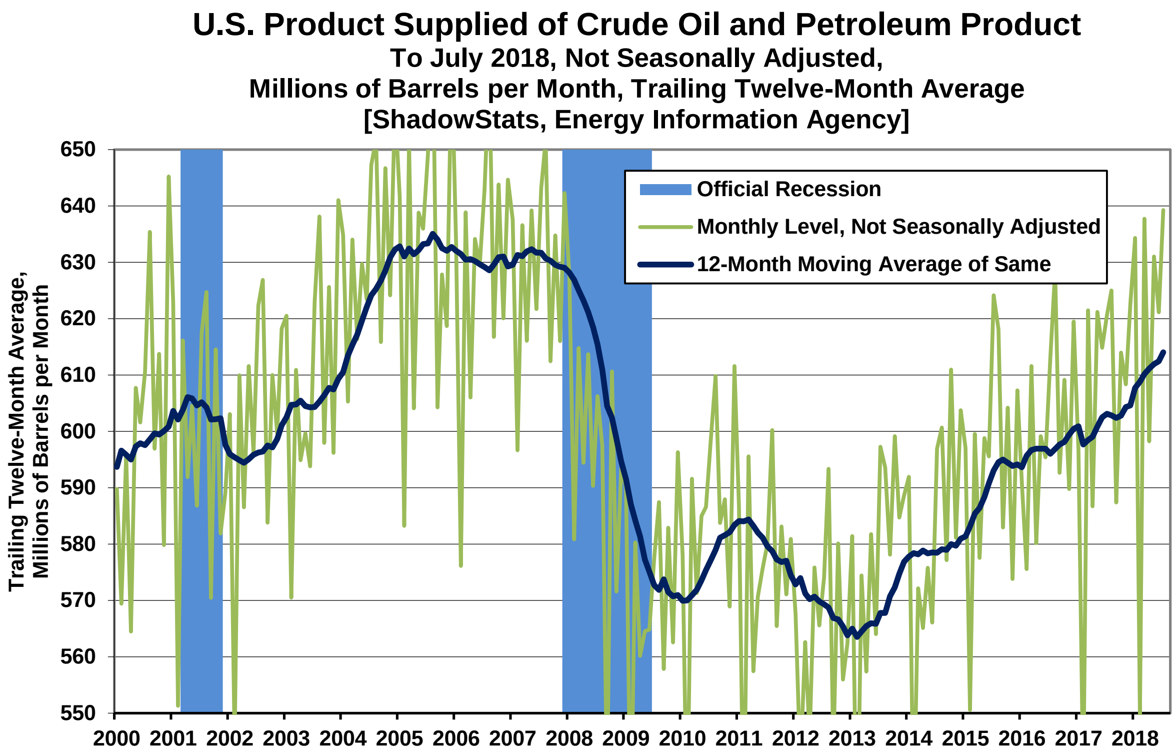
Graph OC-17: New Orders for Durable Goods, 12-Month Moving-Average Level (January 2000 to August 2018)



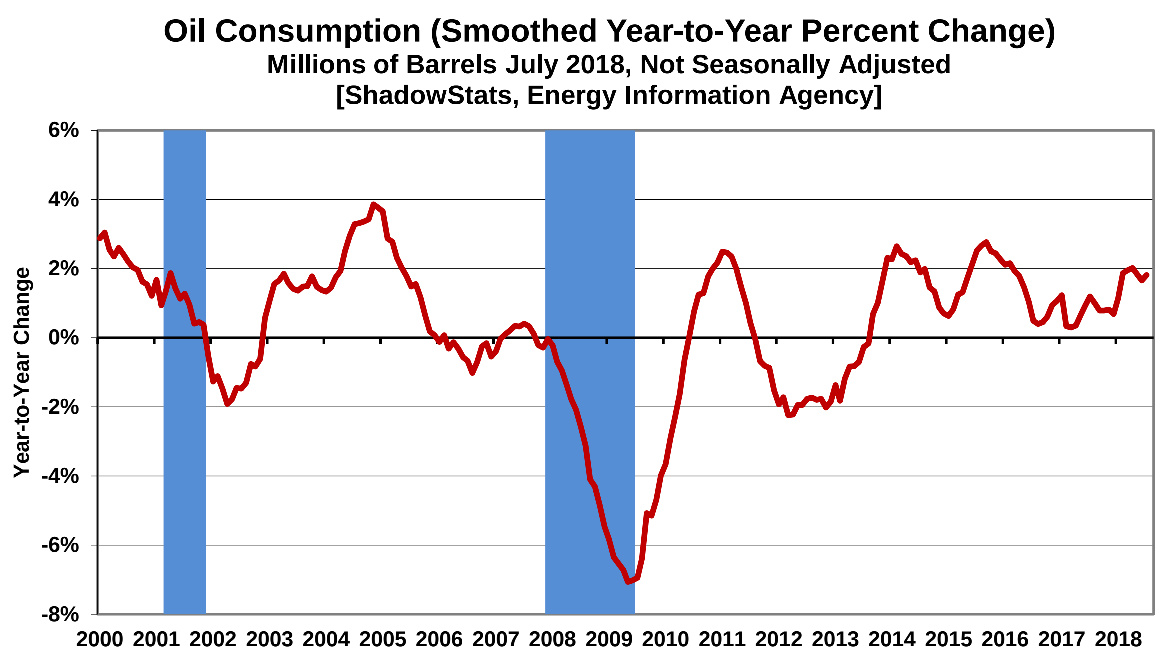
Graph OC-18: New Orders for Durable Goods, Year-to-Year Percent Change (January 2000 to August 2018)
(Same as Graph 21 in the Reporting Detail)



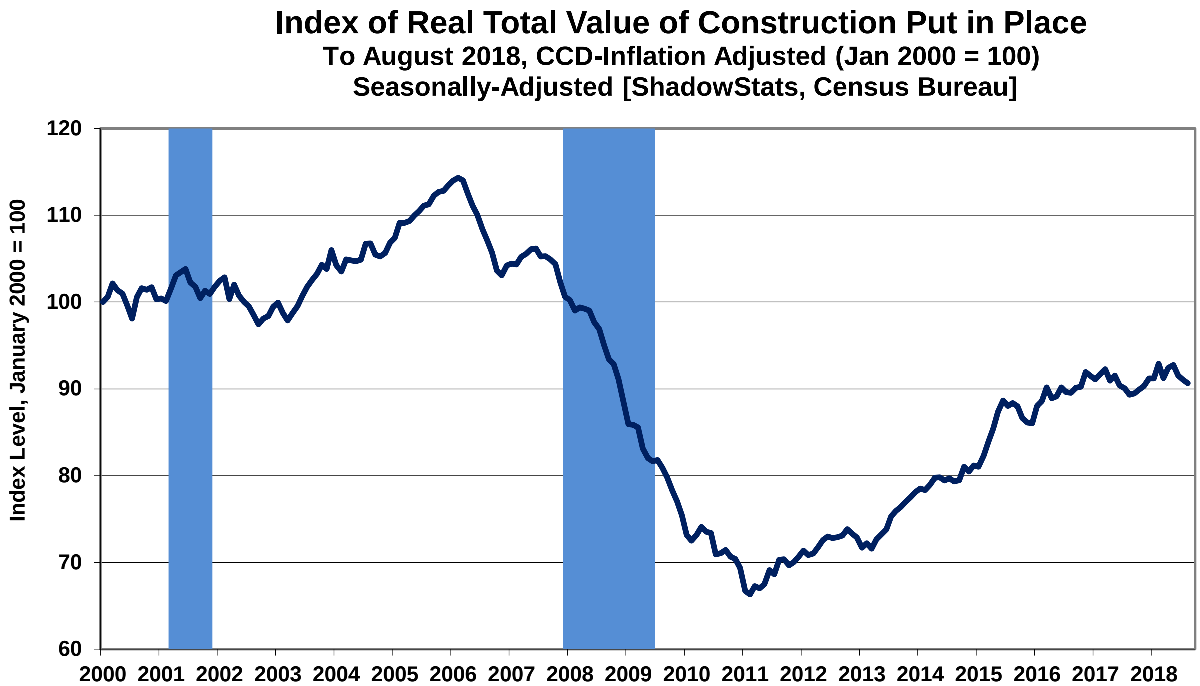
Graph OC-19: U.S. Petroleum Consumption (January 2000 – July 2018)



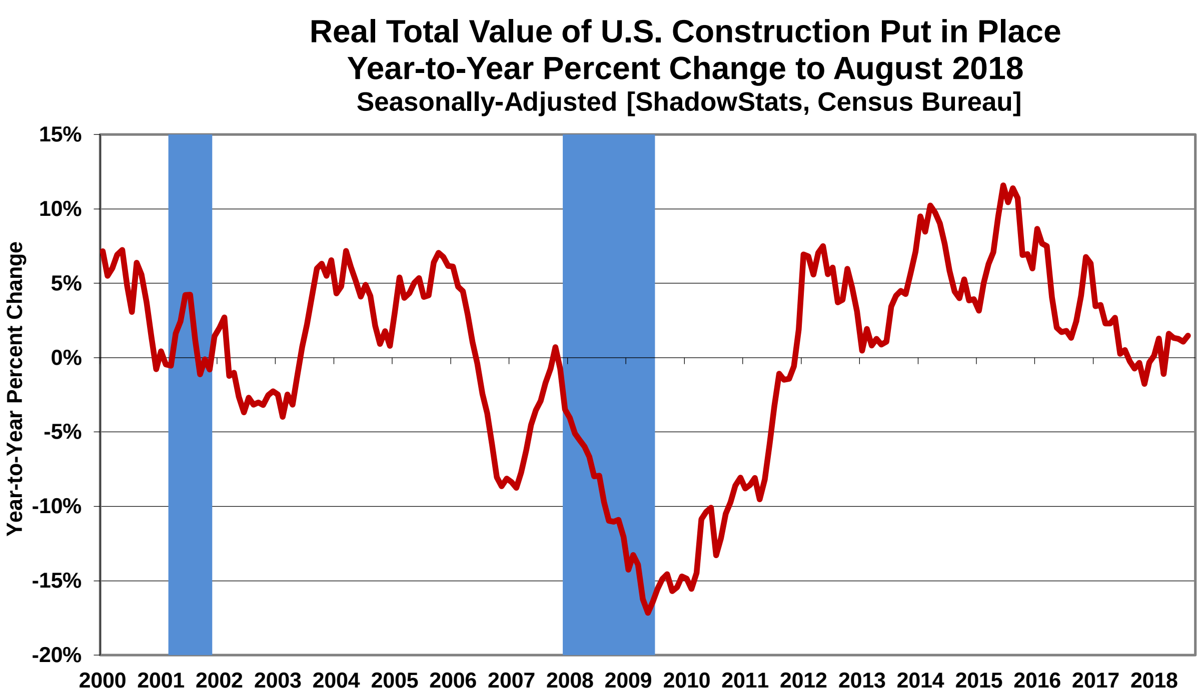
Graph OC-20: Year-to-Year Change, U.S. Petroleum Consumption (January 2000 – July 2018)



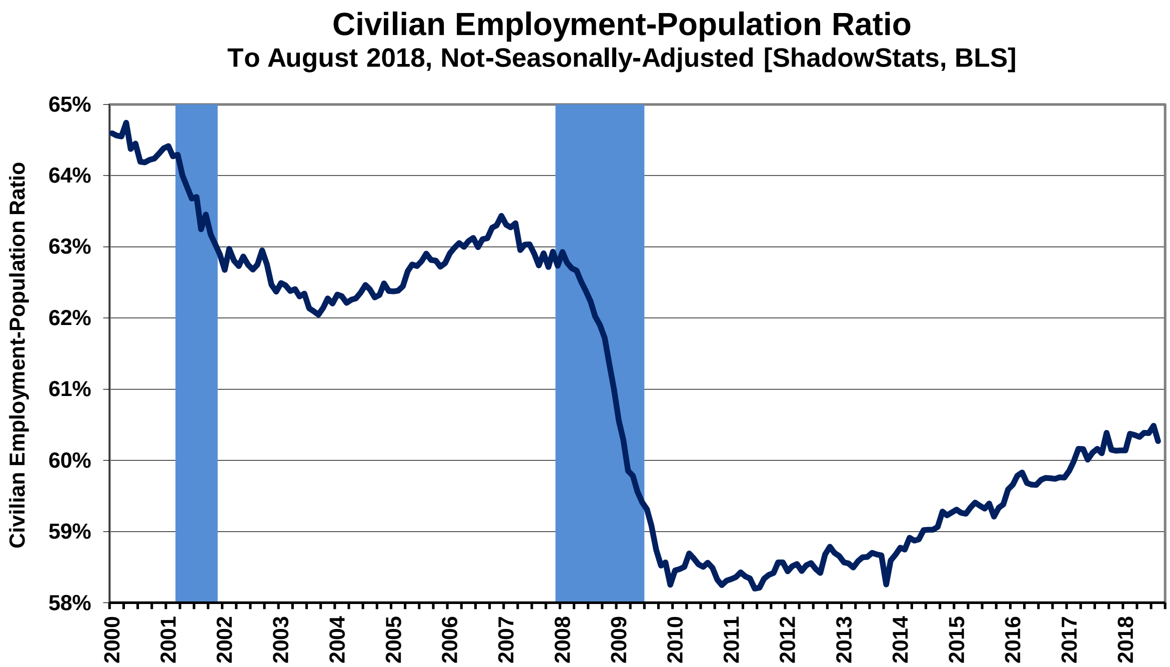
Graph OC-21: Total Real U.S. Construction Spending (January 2000 – August 2018)



Graph OC-22: Yr-to-Yr Percent Change Real Total U.S. Construction Spending (January 2000 – August 2018)



Graph OC-23: Civilian Employment-Population Ratio (January 2000 - August 2018)



[The Reporting Detail begins on the next page]

REPORTING DETAIL

New Residential Construction (August 2018)

Consumer Liquidity Pressures Flowed Through from Weakening Home Sales to New Construction; Significant Drop in Permits Foreshadows Continued Downtrend in Volatile Housing Starts. August 2018 New Residential Construction (Building Permits and Housing Starts) continued to suffer from the consumer liquidity stresses impairing home sales activity, as discussed in the next section. Mounting systemic liquidity stresses were reflected in mixed, but still faltering activity.

For example, on top of downside revisions, August 2018 Building Permits activity, which usually leads Housing Starts activity, dropped by a statistically significant 5.7% (-5.7%) in the month. Still, on top of upside revisions, regularly unstable Housing Starts gained 9.2% in the month, with Single Units up 1.9% and Multiple Units up 27.3%.

As usual, though, for the aggregate Housing Starts and each of its Single-Unit and Multiple-Units component series, the issuing Census Bureau noted for those respective, headline month-to-month percent changes, “The 90 percent confidence interval includes zero, there is insufficient evidence to conclude that the actual change is different from zero.” [Note: ShadowStats standardly uses 95% confidence intervals in its analysis, as discussed later.]

All related series here remained in six-month smoothed downtrends, with headline August Housing Starts down by 43.6% (-43.6%) from recovering is pre-recession peak activity.

The usually more-stable, but not always historically-consistent Building Permits series held well below its recent peak in March 2018, and remained down by 45.7% (-45.7%) from recovering its pre-recession high.

Both series also contracted in second-quarter 2018, with Housing Starts falling at a somewhat narrowed annualized pace of 16.0% (-16.0%) [previously 17.7% (-17.7%)] and Building Permits falling at an unrevised annualized pace of 10.3% (-10.3%). With two months of the third-quarter activity in place, the annualized third-quarter 2018 change for Housing Starts is on early track for a quarterly contraction of 10.0% (-10.0%), while the more-stable, leading Building Permits series is on early-track for an annualized contraction of 15.1% (-15.1%).

***Consumer Liquidity Problems Continue to Impair Residential Construction Activity*.** The liquidity bind besetting consumers, exacerbated by continued rate hikes out of the Federal Reserve, increasingly constrains consumer activity. Headline investment in residential real estate has shown unusual, back-to-back outright quarterly contractions in first- and second-quarter 2018 GDP (see today's review of the third estimate of Second-Quarter 2018 GDP, as well as the discussion in *Consumer Liquidity Watch – No. 4* or the soon to be published *CLW-5*). Without sustainable growth in real income, and without the ability or willingness to take on meaningful new debt in order to make up for an income shortfall, the U.S. consumer remains unable to maintain positive growth in domestic personal consumption, including residential real estate sales and related demand for residential construction. That circumstance—in the last twelve-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

August 2018 Housing Starts, Headline Detail. The Census Bureau and Department of Housing and Urban Development (HUD) reported September 19th, a statistically-insignificant, seasonally-adjusted, headline monthly gain in August 2018 Housing Starts of 9.2% +/-13.3% (all confidence intervals are expressed at the 95% level, unless otherwise indicated). That followed a revised monthly decline of 0.3% (-0.3%) [previously a gain of 0.9%] in July, a revised decline of 11.4% (-11.4%) [previously a decline of 12.9% (-12.9%), initially 12.3% (-12.3%)] in June and an unrevised gain of 4.2% in May. Level-of-activity aggregate detail is plotted in *Graphs 1* to *4*, and in *Graphs 10*, *12*, *13* and *14*.

Year-to-year change in the seasonally-adjusted August 2018 aggregate Housing Starts measure was a statistically-insignificant gain of 9.4% +/- 11.1%, versus a revised decline of 0.9% (-0.9%) [previously 1.4% (-1.4%)] in July 2018, a revised drop of 3.9% (-3.9%) [previously down by 5.5% (-5.5%), initially 4.2% (-4.2%)] in June 2018, and an unrevised gain of 18.4% in May 2018.

***Sampling Statistics Showed No Monthly Changes in August 2018 Housing Starts That Were Significantly Different from Zero*.** As seen most commonly with this series, the headline monthly changes in August Housing Starts were not statistically-significant, as ShadowStats uses the term. Where the 95% confidence interval around the headline change includes zero, the headline change is not statistically-significant at the 95% confidence level (or 90% use by the Census Bureau) in terms of being different from zero.

The indicated confidence intervals account only for sampling error. As defined by the Census Bureau, "If a range does not contain zero, the change is statistically significant. If it does contain zero, the change is not statistically significant; that is, it is uncertain whether there was an increase or a decrease [within the probability estimate of the confidence interval]." The Census Bureau uses a 90% confidence interval by choice (outside the prescribed range on average 1-in-10 months), ShadowStats uses a 95% confidence interval by choice (outside the prescribed range on average 1-in-20 months).

With the indicated confidence interval (ShadowStats always uses a 95% confidence interval, for purposes of consistency, unless otherwise indicated), such allows for the potential of an actual gain or a loss, being weighted in favor of the indicated direction of change, when the confidence includes zero, as seen in the current circumstance for monthly Housing Starts.

That means that the actual monthly change for headline August 2018 Housing Starts was a gain of 9.4% +/-13.3%, within a range from a contraction of 3.9% (-3.9%) to a gain of 22.7% with 95% confidence, with the headline gain of 9.4% the most likely change. The recently revised and benchmarked reporting system for the Housing Starts series has not done much, yet, to narrow those confidence intervals,

Housing Starts by Unit Category. The August 2018 headline monthly gain of 9.2% in total Housing Starts encompassed a monthly gain of 1.9% in Single-Unit starts and a gain of 27.3% in the Multiple-Unit "Five Units or More" starts category. There is a missing balance in the "Two to Four Units" category, which gained by 133.3% in August. Where that latter category is considered too small to be meaningful and is not reported directly, it did affect the aggregates to the extent that total multiple units actually rose by 29.3%, instead of the headline 27.3%, discussed later in the broadest, Aggregate Multiple Units category. None of the headline monthly or annual changes in the various Housing Starts series was statistically significant, except for an annual gain of 37.1% +/- 29.6% in the "Five Units or More" Multiple-Units Housing Starts category. These numbers all are reflected in *Graphs 1* to *8*.

Where the irregular Housing Starts series can show varying patterns, that partially is due to a reporting mix of residential construction products, with the largest physical-count category of Single-Unit Housing Starts—generally for individual consumption, resulting in New-Home Sales—versus Multiple-Units Housing Starts that generally reflect the building of condominiums, rental and apartment units.

Housing Starts for single-unit structures in August 2018 gained month-to-month by a statistically-insignificant 1.9% +/- 11.3%, following a revised gain of 1.8% [previously 0.9%] in July, a revised decline of 9.3% (-9.3%) [previously 9.0% (-9.0%), initially 9.1% (-9.1%)] in June and an unrevised gain of 4.5% in May. August 2018 single-unit starts showed a statistically-insignificant 0.2% (-0.2%) decline, versus a revised annual gain of 2.5% [previously 2.7%] in July 2018, versus a revised annual decline of 1.0% (-1.0%) [previously 0.7% (-0.7%), initially 0.2% (-0.2%] in June 2018, and an unrevised annual gain of 18.6% in May 2018 (see *Graphs 1*, *2*, *5* and *6*).

Housing Starts for apartment buildings, condominiums, etc. (generally 5-units-or-more) gained month-to-month in August 2018 by a statistically-insignificant 27.3% +/- 46.7%, versus revised monthly declines of 2.5% (-2.5%) [previously a gain of 3.1%] in July and 16.6% (-16.6%) [previously 22.4% (-22.4%), initially 20.2% (-20.2%)] in June, and an unrevised gain of 6.2% in May. A statistically-significant annual gain of 37.1% +/- 29.6% in August 2018, followed revised declines of 8.1% (-8.1%) [previously 9.6% (-9.6%)] in July 2018 and 12.0% (-12.0%) [previously 18.1% (-18.1%), initially 15.3% (-15.3%)] in June 2018, following an unrevised annual gain of 19.6% in May 2018.

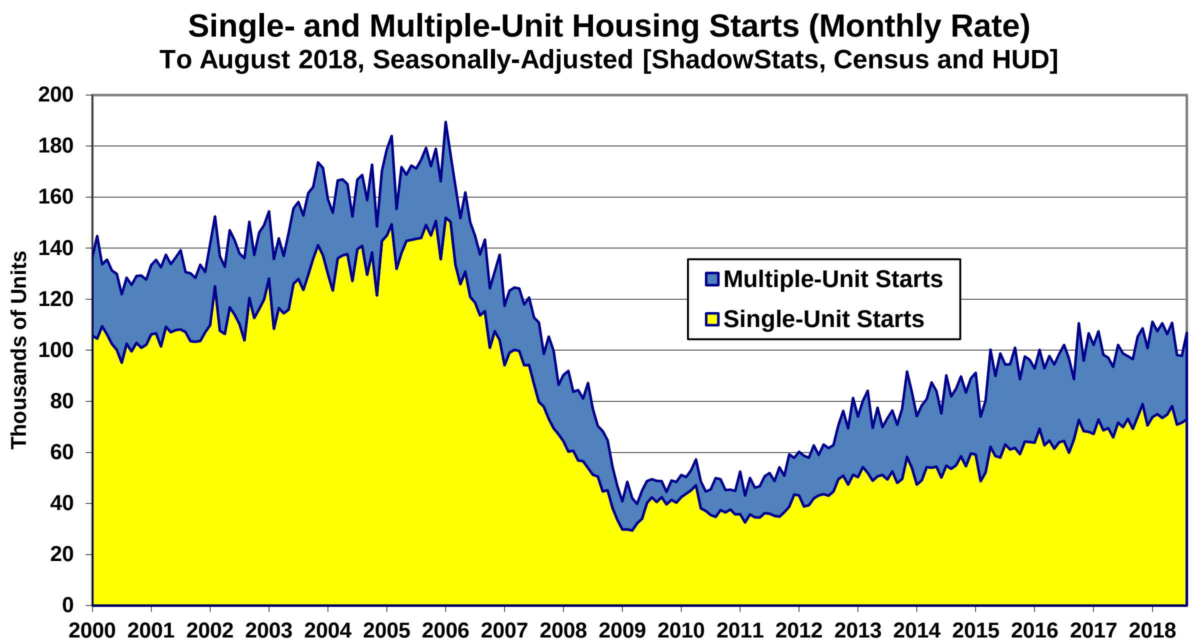
Expanding the multiple-unit housing starts category to include 2-to-4-units plus 5-units-or-more usually reflects the bulk of rental- and apartment-unit activity. The Census Bureau does not publish monthly estimates of the 2-to-4-units category, due to statistical significance problems (a general issue for the aggregate series). Nonetheless, the total multiple-unit category can be estimated by subtracting the single-unit category from the total category (see *Graphs 1*, *2*, *7* and *8*).

Accordingly, the statistically-insignificant August 2018 monthly gain of 9.2% in aggregate starts was composed of a statistically-insignificant gain of 1.9% in one-unit structures and a statistically-insignificant gain of 29.3% in the multiple-unit structures category (two-units-or-more, including the five-units-or-more category).

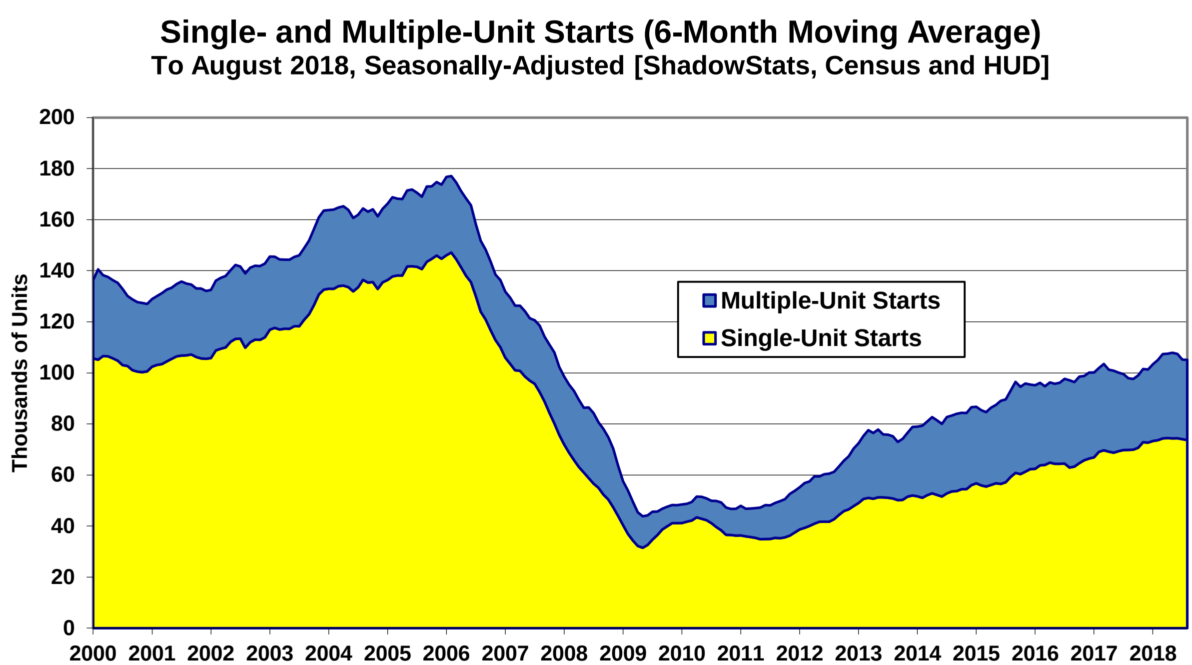
[Graphs 1 to 8 begin on the next page.]

Housing Starts Graphs by Sector, Scale in Thousands of Units per Month
(See Note Following on the Housing Starts Graphs)

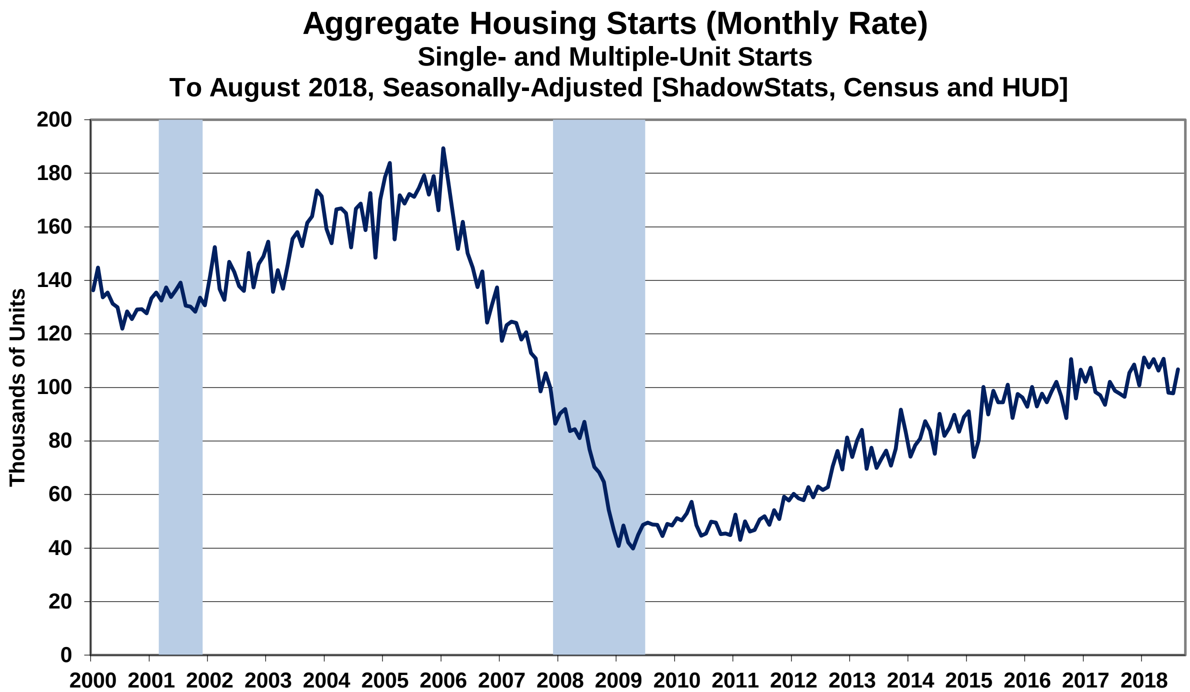
Graph 1: Single- and Multiple-Unit Housing Starts (Monthly Rate of Activity, January 2000 to August 2018)



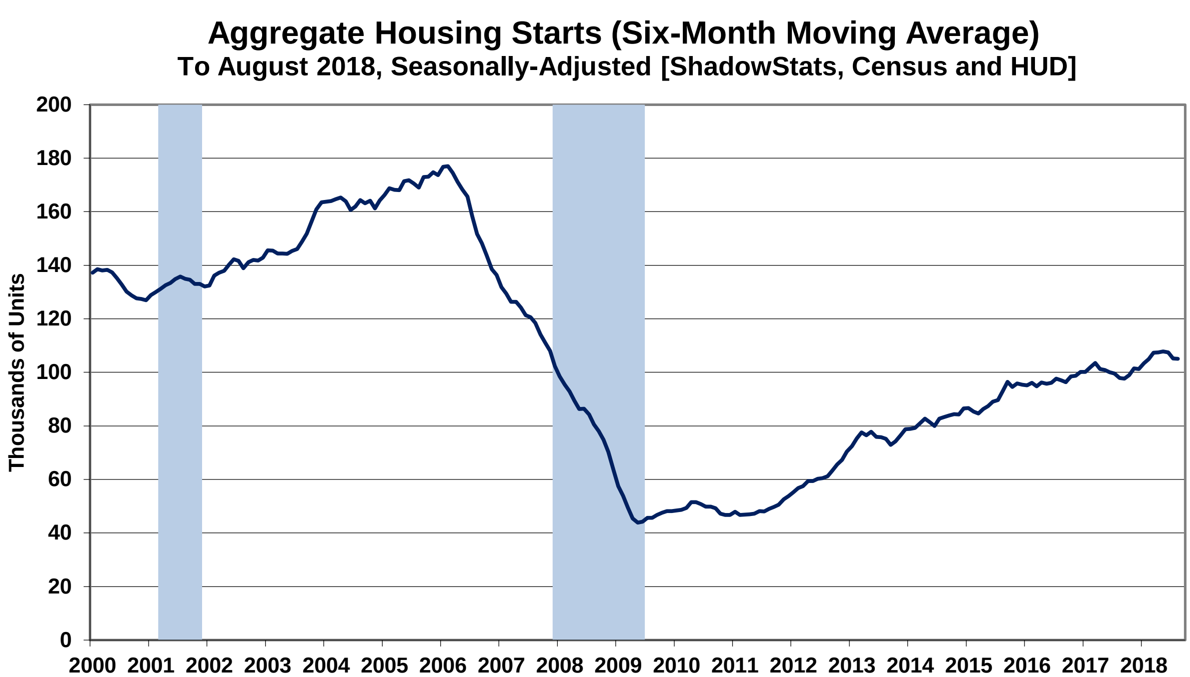
Graph 2: Single- and Multiple-Unit Starts (Six-Month Moving Average, Monthly Rate of Activity)



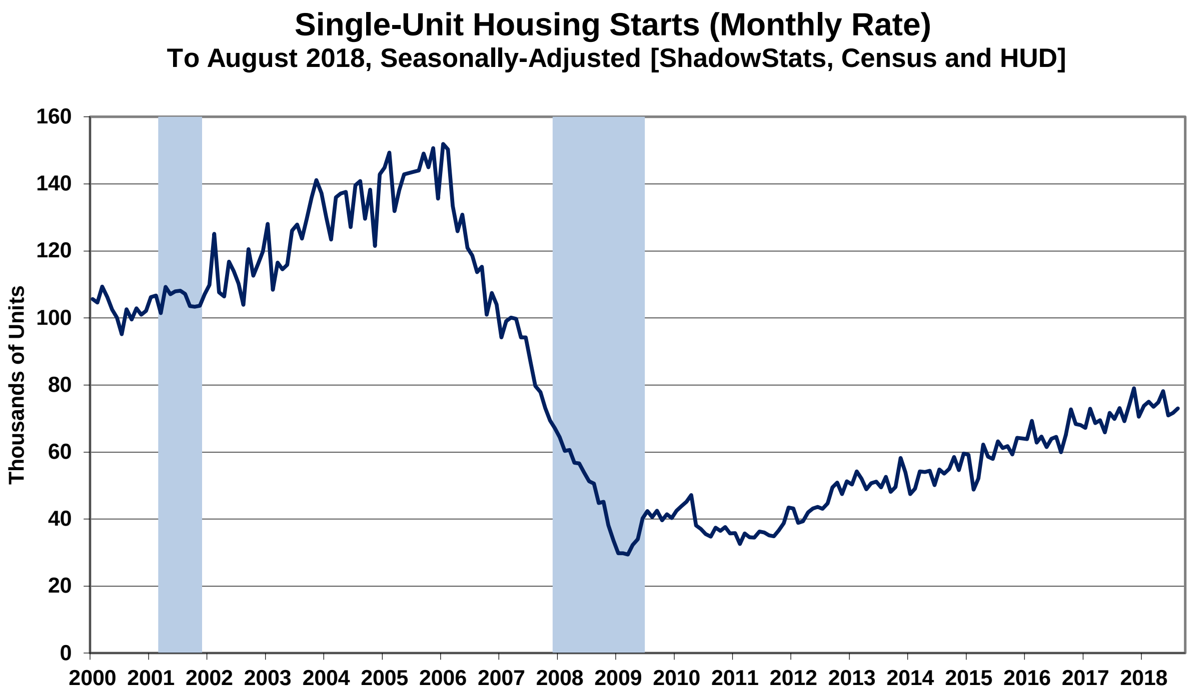
Graph 3: Aggregate Housing Starts (Monthly Rate of Activity, January 2000 to August 2018)



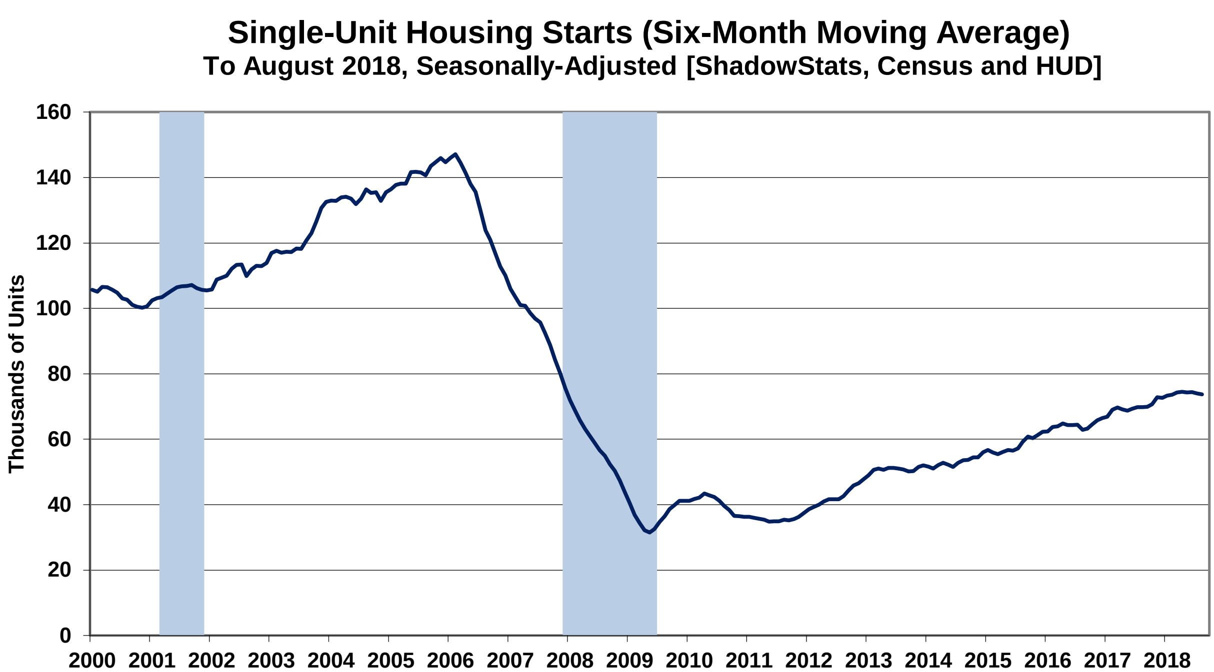
Graph 4: Aggregate Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)



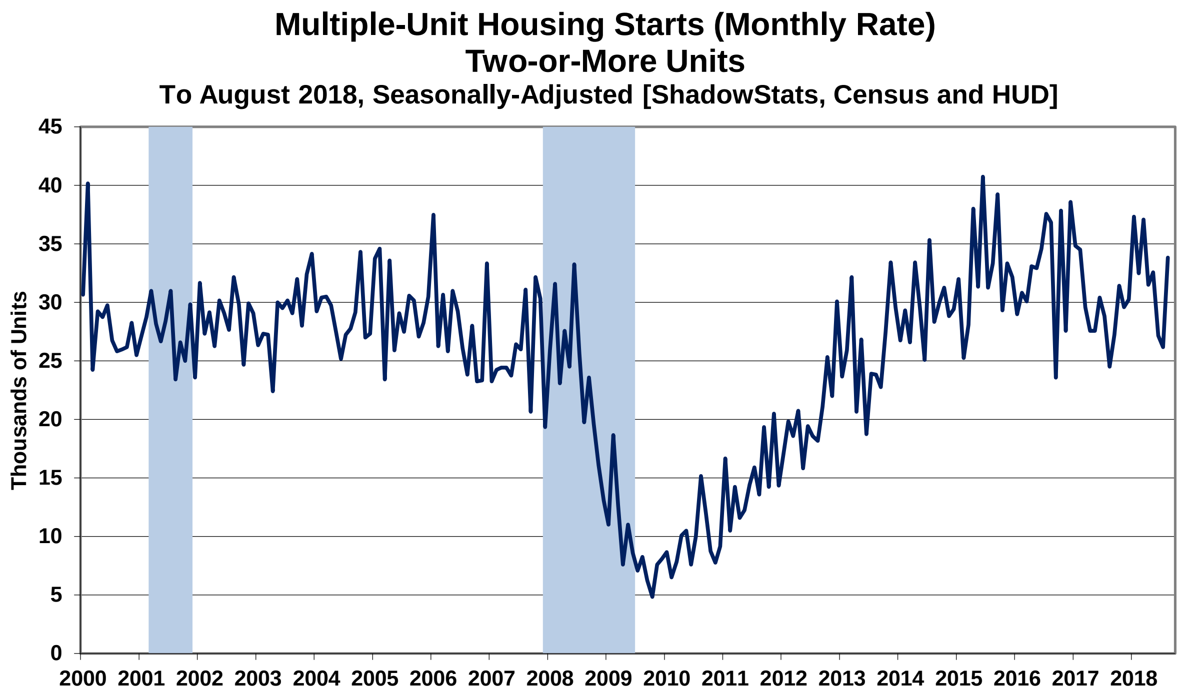
Graph 5: Single-Unit Housing Starts (Monthly Rate of Activity, 2000 to August 2018)



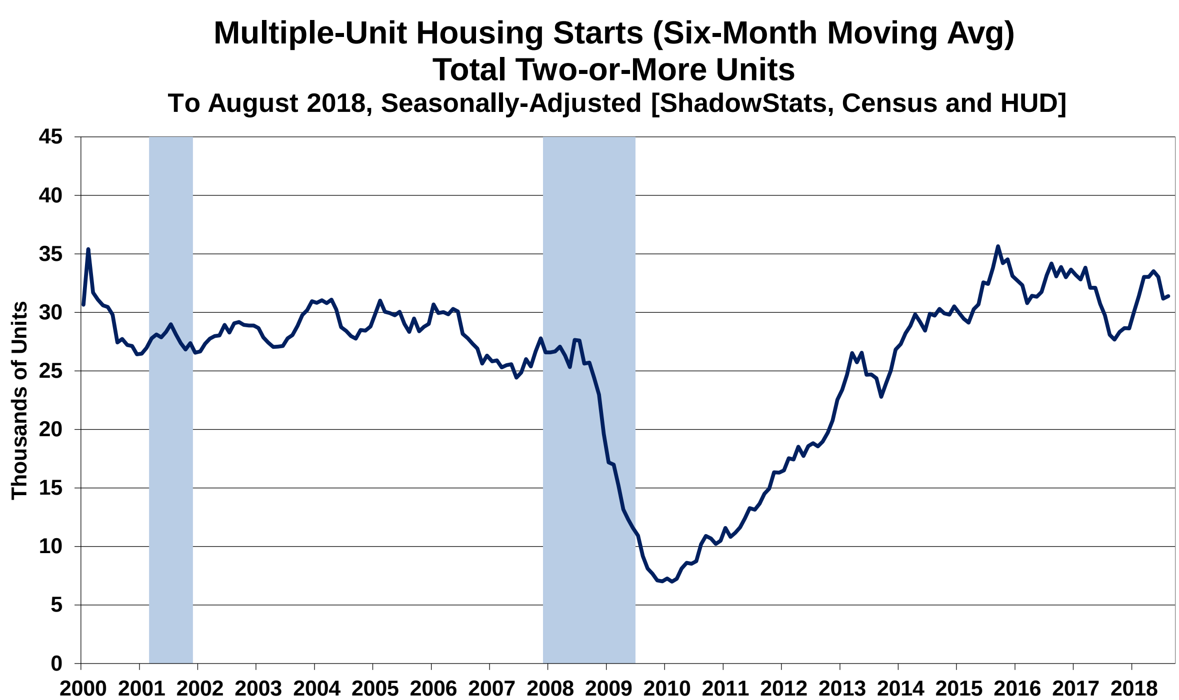
Graph 6: Single-Unit Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)



Graph 7: Multiple-Unit Housing Starts, Two-or-More Units (Monthly Rate of Activity, 2000 to August 2018)



Graph 8: Multiple-Unit Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)



A Note on the Housing Starts Graphs. Headline reporting of Housing Starts activity is expressed by the Census Bureau as an annualized monthly pace of starts, which was 1,282,000 in August 2018, up from a revised 1,174,000 [previously 1,168,000] in July 2018. The scaling used in the aggregate historical Housing Starts and Building Permits *Graphs 9* to *14* (following) reflects those annualized numbers in millions.

Nonetheless, given the frequent nonsensical monthly volatility in reporting, and the exaggerated effect of annualizing the monthly numbers in this unstable series, the magnitude of monthly activity and the changes in same, more realistically are reflected at the non-annualized monthly rate. Consider that the headline, month-to-month gain at an annualized rate of 266,000 in October 2016 was larger than any actual level of (not change in) monthly starts, ever (in units per month, not annualized), for a single month. That is since related starts detail first was published after World War II.

Accordingly, the monthly rate of 106,833 units in August 2018, instead of the annualized headline level of 1,282,000 units, is used in the scaling (monthly units in thousands) of the preceding *Graphs 1* to *8,* which plot the detail by the aggregate and major-sector series, on both a monthly and six-month smoothed basis. With the use of either scale of units, though, appearances of the graphs and the relative monthly, quarterly and annual percentage changes are otherwise identical, as seen in a comparison of *Graph 3* and *Graph 10*.

The record monthly low level of activity seen for the present aggregate series was in April 2009, where the annualized monthly pace of housing starts then was down by 79% (-79%) from the January 2006 pre-recession peak for the series. Against that downside-spiked low in April 2009, the August 2018 headline monthly number was up by 146%, but it still was down by 44% (-44%) from recovering the January 2006 pre-recession high.

Shown in the historical perspective of the post-World War II era, current aggregate-starts activity is in downtrending stagnation, still at low levels that otherwise have been seen at or near the historical troughs of other recession activity of the last 70-plus years, as reflected in *Graphs 13* and *14* at the end of this *New Residential Construction* section. In fact, as can be seen there in *Graph 14*, current housing starts activity not only has failed to recover the current pre-recession (pre-collapse into 2009) peak, but also has yet to recover to the level of any pre-recession peak activity seen in the entire post-World War II era.

Headline Activity Has Not Recovered, Starts and Permits Have Yet to Enter a Period of Economic Expansion. Broadly, the various series (including the often, statistically-significant Building Permits) remain in low-level, down-trending stagnation, non-recovery and non-expansion.

All the headline August 2018 the six-month smoothed trends now are downtrending across-the-board for Housing Starts (both Single- and Multiple-Unit Starts) and Building Permits.

Separately, those downtrending New Construction activity series, showed August 2018 Building Permits activity down by 45.7% (-45.7%) from recovering its pre-recession peak (see *Graphs 9* and *11*). Aggregate Housing Starts activity (see *Graphs 3* and *4*) is down similarly by 43.6% (-43.6%), with Single-Unit Starts (*Graphs 5* and *6*) down by 51.9% (-51.9%).

Multiple-Unit Starts (*Graphs 7* and *8*) had fallen back sharply, after first having recovered its 2005 pre-recession peak in early-2015. A temporary jump in January 2018 monthly activity wiped out virtually all of the most-recent deficit, but activity has fallen off sharply, again, with August 2018 total multiple-unit starts now down 9.8% (-9.8%) from its pre-recession peak on a monthly basis. Seen in *Graph 8*, however, on a smoothed six-month moving average basis, while the multiple-unit starts are operating a level above its pre-recession peak, they also are downtrending.

In the context of continuing broad weakness in the aggregate August 2018 housing-starts detail (in both single-unit and multiple-unit starts), the six-month smoothed, moving averages of these series, as seen in *Graphs 2*, *4*, *6* and *8*, again, have turned from flat to downtrending. Again, current levels of headline monthly activity still hold well below pre-recession peaks for the various series, with the exception of the smoothed multiple-units category.

Indeed, the broad pattern of collapsing residential construction activity from its 2006 pre-recession peak, to a trough in 2009, was followed by a protracted period of generally up-trending but non-recovering, low-level activity. Again, that largely had remained flat in the last several years, in ongoing, low-level stagnation; intensifying downtrends have unfolded (see accompanying *Graphs 9* to *14* of the Building Permits and Housing Starts series). Again, also see *Graphs 1* to *8*, covering the Housing Starts component series.

Specifically, the generally more-stable but sometimes inconsistent Building Permits activity also has seen a broad pattern of non-recovery. The statistically significant headline, monthly decline of 5.7% (-5.7%) +/- 1.9%, and the statistically significant headline year-to-year decline of 5.5% (-5.5%) +/- 1.9% in August 2018, both followed downside revisions to monthly and annual gains in July 2018. August 2018 activity was down by 10.7% (-10.7%) from March's recent post-recession peak, and again still was shy by 45.7% (-45.7%) of recovering its pre-recession high. All confidence intervals expressed here are at the 95% level, unless indicated otherwise. While the ***Building Permits series remains more stable in its reporting month-to-month than the Housing Starts series, the problem with Building Permits remains that the data are not reported on a consistent basis over time, usually with annual breaks around benchmarkings. That said, Permits do tend to lead the Starts, smoothed over time.***

The size and nature of the permits sampling base is revised frequently, without offsetting adjustments to the historical data, as discussed in *Commentary No. 950*. That is why ShadowStats concentrates on the more-consistent Housing Starts series, despite its extreme month-to-month volatility and frequent, massive monthly revisions. The recent headline monthly declines in Permits has intensified the downtrend in the otherwise the broadly stagnant six-month moving average of that series (see *Graph 11*), with some parallel movement seen in *Graph 12* of the six-month smoothed Permits series.

Annualized Second-Quarter 2018 Contraction in Housing Starts Eased to an Annualized Pace of 16.0% (-16.0%), on Early Track for a 10.0% (-10.0%) Decline in Third-Quarter 2018. In this highly volatile and unstable series of recent years, the Housing-Starts count fell at an annualized quarterly pace of 23.2% (-23.2%) in first-quarter 2015, rose at a 92.1% pace in second-quarter 2015, by 1.4% in third-quarter 2015 and contracted at an annualized pace of 9.8% (-9.8%) in fourth-quarter 2015.

First-quarter 2016 activity showed an annualized quarterly gain of 4.9%, while second-quarter 2016 rose by 6.9%. Third-quarter 2016 activity contracted on both an annual and quarterly basis, down year-to-year by 0.8% (-0.8%), the first annual decline since first-quarter 2014, and down at an annualized quarterly pace of 4.4% (-4.4%). Fourth-quarter 2016 housing starts showed annualized quarterly growth of 40.8%, up by 10.9% year-to-year.

First-quarter 2017 annualized quarterly change was a contraction of 6.7% (-6.7%), with year-to-year change slowing to 7.6%. Second-quarter 2017 showed an annualized quarter-to-quarter contraction of 18.2% (-18.2%), with year-to-year change slowing further to 0.7%. Third-quarter 2017 Housing Starts activity reflected an annualized gain of 0.3%, with annual growth of 1.9%. Fourth-quarter 2017 activity surged with an annualized gain of 33.5%, but with a year-to-year gain of just 0.5%.

First quarter 2018, annualized quarterly growth slowed to 19.6%, with annual growth up to 7.2%. Second reporting of second-quarter activity showed a revised annualized quarterly contraction of 16.0% (-16.0%) [previously 17.7% (-17.7%), initially 15.7% (-15.7%)] with revised year-to-growth of 7.7% [previously 7.1%, initially 7.8%]. Based just on the headline monthly detail for July and August 2018, third-quarter activity was on early track for an annualized quarterly contraction of 10.0% (-10.0%), up year-to-year by 4.8%.

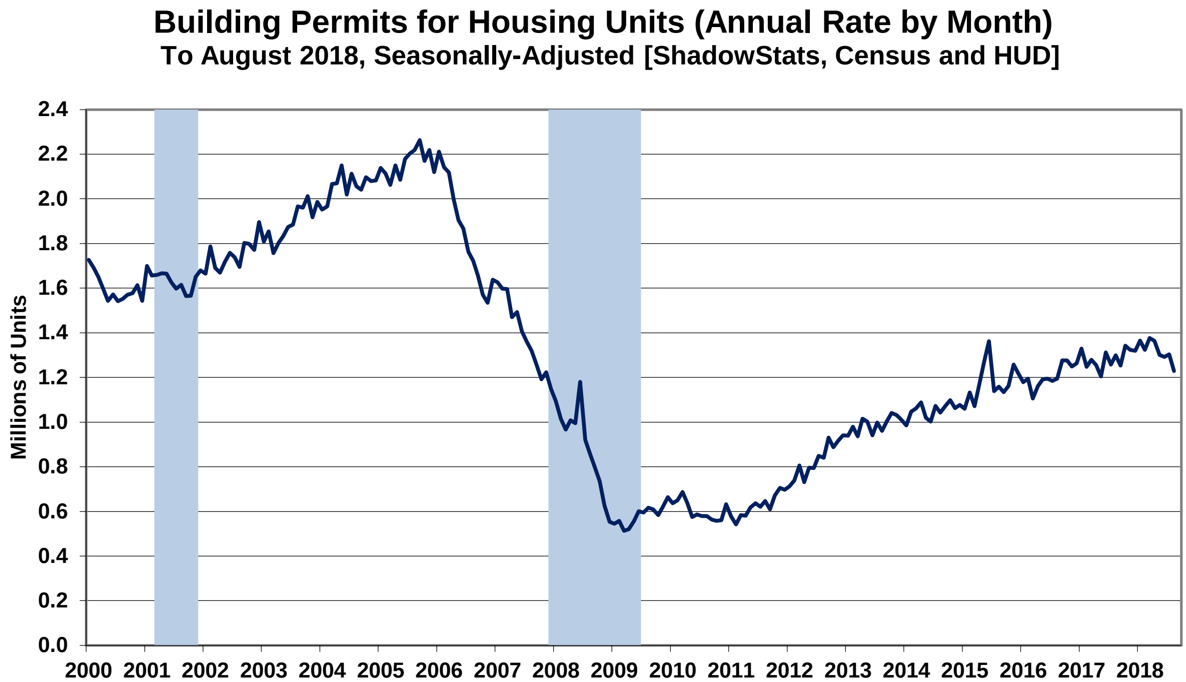
Building Permits. In comparison/contrast, Building Permits (the theoretically-leading series to Housing Starts) showed an annualized quarterly gain of 7.4% in first-quarter 2017 (earlier numbers are not consistent, as discussed in *Commentary No. 950*), with year-to-year change of 10.8%. Second-quarter 2017 showed an annualized contraction of 8.4% (-8.4%), with year-to-year growth of 6.3%. Third-quarter 2017 showed an annualized gain of 4.3%, with a year-to-year gain of 4.3%. Fourth-quarter 2017 showed an annualized gain of 19.5%, with an annual gain of 5.4%.

First-Quarter 2018, annualized quarterly growth was 8.3%, up by 5.4% year-to-year. Third reporting of second-quarter 2018 was an unrevised annualized contraction of 10.3% (-10.3%), up year-to-year by 4.9%. Third-quarter activity is on early-track for an annualized contraction of 15.1% (-15.1%) [previously 2.4% (-2.4%)], with an annual decline of 0.4% (-0.4%) [previously a gain of 3.2%].

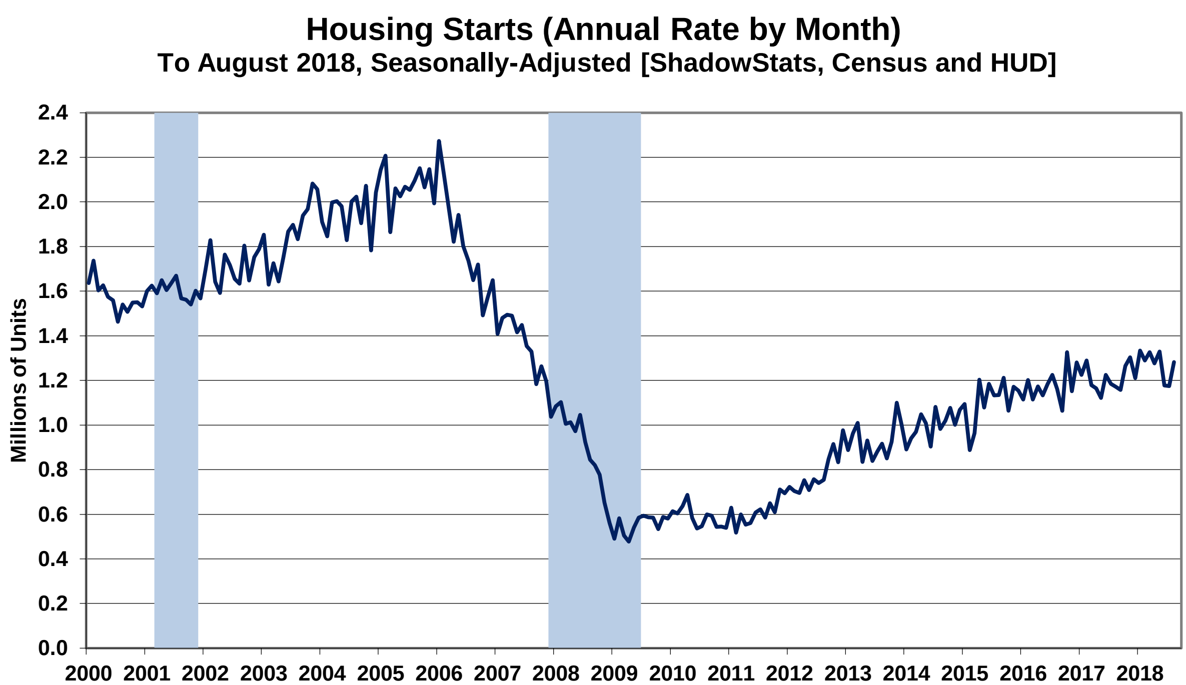
[Graphs 9 to 14 begin on the next page.]

Housing Starts and Building Permits, Historical Plots,
Scale Reflects Annualized Monthly Rate in Millions of Units
(See Preceding Notes on the Housing Starts Graphs)

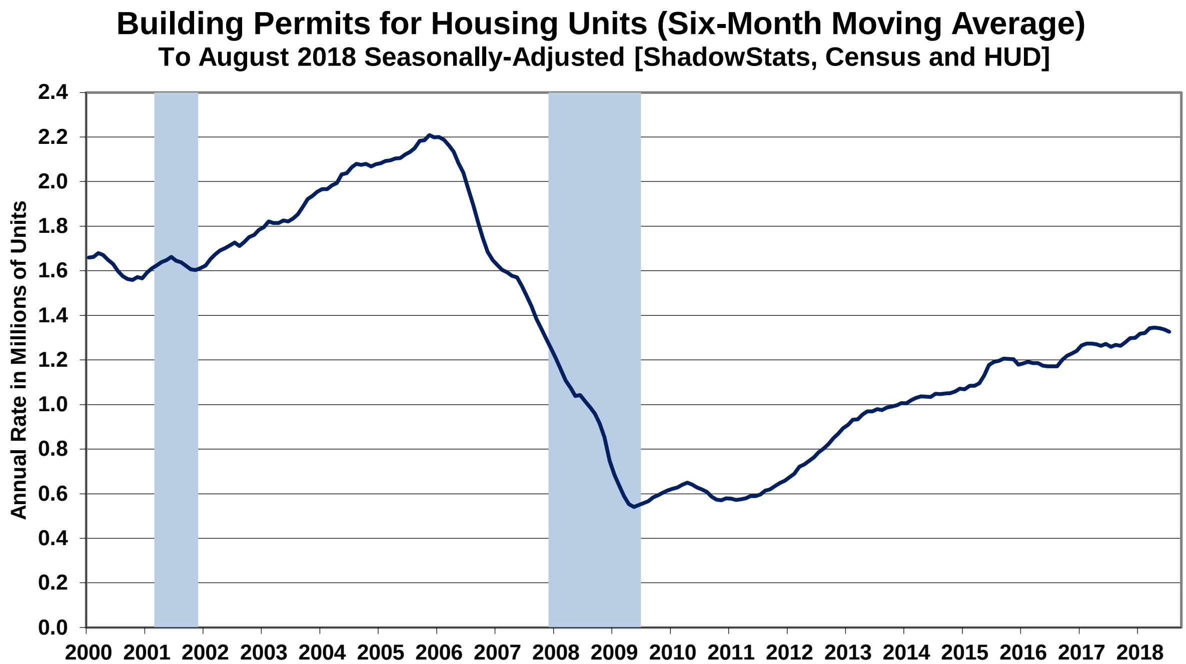
Graph 9: Building Permits (Annualized Monthly Rate of Activity), 2000 to Date



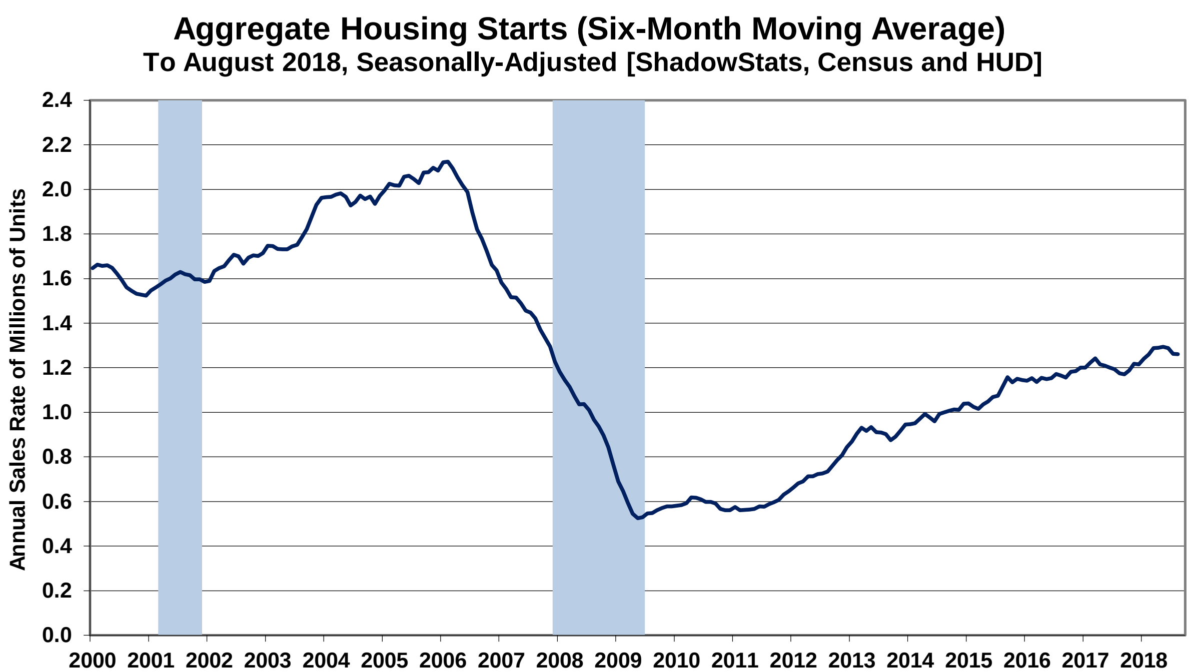
Graph 10: Housing Starts (Annualized Monthly Rate of Activity), 2000 to Date



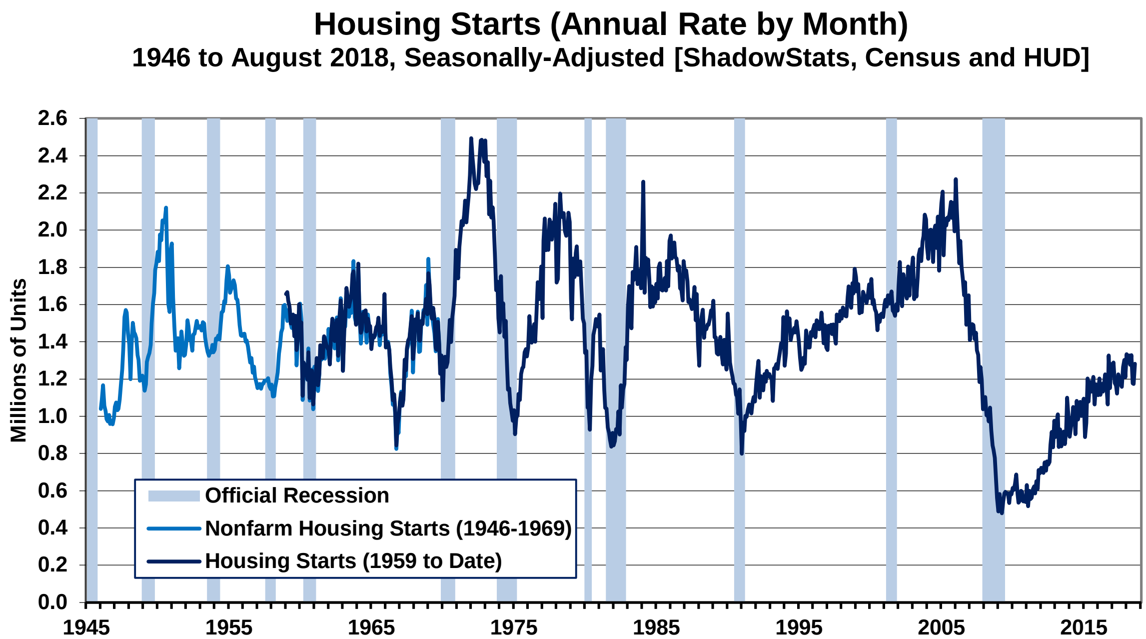
Graph 11: Building Permits (Six-Month Moving Average), 2000 to Date



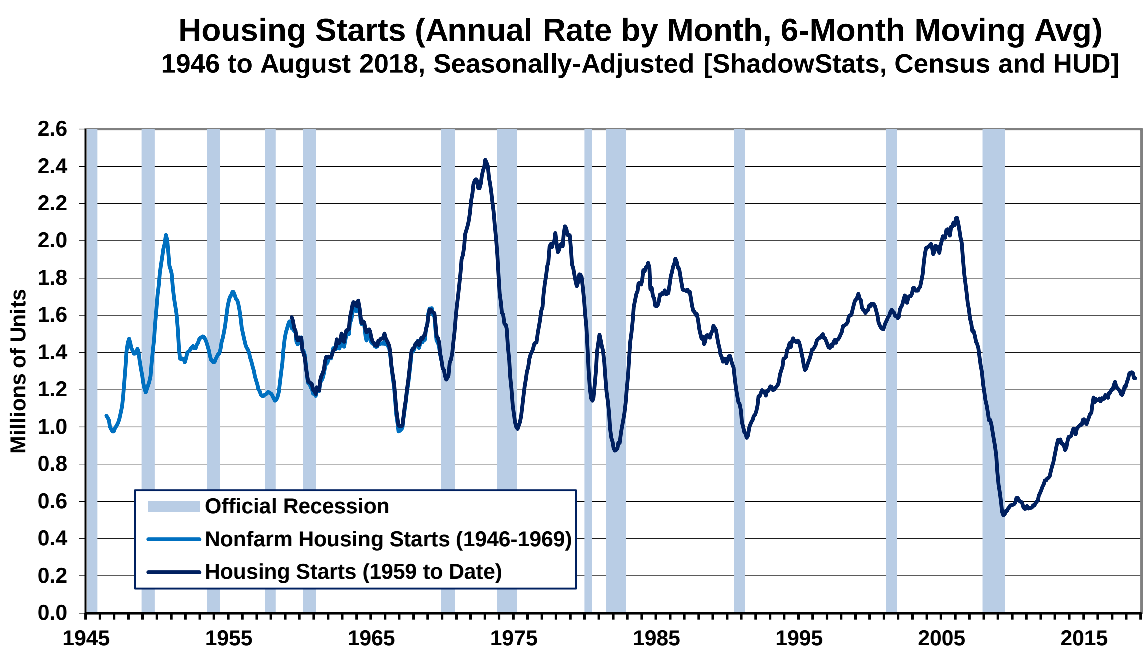
Graph 12: Housing Starts (Six-Month Moving Average), 2000 to Date



Graph 13: Housing Starts (Annualized Monthly Rate of Activity), 1946 to Date



Graph 14: Housing Starts (Annualized Monthly Rate of Activity, 6-Mo Moving Avg), 1946 to Date



Existing- and New-Home Sales (August 2018)

Existing-Home Sales Held at a Two-Year Low, Shy by 26.6% (-26.6%) of Its Pre-Recession Peak; Sales for Year-Ended August 2018 Were Down by 1.2% (-1.2%) from Year-Ended August 2017. Against positive expectations, August 2018 Existing-Home Sales were unchanged month-to-month, having contracted in each of the four prior months, with year-to-year change down for the sixth month. Headline conditions in Residential Construction (see the prior section) and in both Existing- and New-Home Sales broadly have continued to falter in recent months, with six-month smoothed levels of activity in all series continuing in deepening downtrends. Rapidly deteriorating consumer- and systemic-liquidity conditions are taking an increasingly heavy toll on the economy, as the Federal Reserve continues raising interest rates, in its successful efforts to dampen "overheating" domestic business activity. This circumstance is reviewed in *Consumer Liquidity Watch – No. 4* and *Hyperinflation Watch – No. 3* (also to be updated in pending *CLW-5 and HW-4*), as well as in the *Opening Comments* of *Commentary No. 970*.

Existing-Home Sales Continued in Smoothed, Downtrending Stagnation. Released by the National Association of Realtors (NAR) on September 20th, August 2018 Existing-Home Sales (closings of home sales, as opposed to the count of contract signings for New-Home Sales, reported by the Census Bureau) were unchanged at 0.00% month-to-month. That followed month-to-month declines of 0.74% (-0.74%) in July, 0.56% (-0.56%) in June, 0.73% (-0.73%) in May and 2.68% (-2.68%) in April, having gained 1.08% in March and 2.97% in February, having declined month-to-month by 3.24% (-3.24%) in January and 2.80% (-2.80%) in December 2017. Those followed monthly gains of 4.00% in November and 2.42% in October, a decline of 0.92% in September and unchanged in August 2017.

Shown in *Graph 15,* November 2017 Existing-Home Sales was close to the highest level of the post-2006 revamped series (blue line), but shy of its pre-recession peak in the original series (red line). In August reporting, the series held shy by 26.5% (-26.5%) of recovering its pre-recession high. That said, smoothed for six-month moving averages, the Existing-Home Sales series had been in uptrending stagnation into 2017. That recently shifted to fluttering, relatively-flat trend and now clearly in a non-recovering downtrend for the last five months, since April 2018, as reflected in *Graph 16*.

Annual Change. The August 2018 year-to-year change was a contraction of 1.48% (-1.48%) for the second month, the same as in July 2018, following annual declines of 2.18% (-2.18%) in June 2018, 3.39% (-3.39%) in May 2018, 1.62% (-1.62%) in April 2018 and 1.23% (-1.23%) in March 2018. Those followed annual gains of 1.09% in February 2018, an annual plunge in January 2018 of 4.78% (-4.78%), which was the steepest annual decline since August 2014. Such followed annual gains of 0.91% in December 2017, 2.14% in November 2017, annual declines of 0.54% (-0.54%) in October 2017 and 1.83% (-1.83%) in September 2017, versus an annual gain of 1.50% in August 2017.

In terms of the trailing 12-months of sales, for the year-ended August 2018, Existing-Home Sales were down by 1.21% (-1.21%) from the year-ended August 2017. That was the fifth consecutive trailing 12-month period in deepening contraction, against its parallel year-ago pattern.

Quarterly Change. Base solely on the initial July and August 2018 estimates the, early trend for third-quarter 2018 Existing-Homes Sales was for an annualized quarterly contraction of 5.31% (-5.31%), versus annualized contractions of 6.61% (-6.61%) in second-quarter 2018, 6.06% (-6.06%) in first-quarter 2018. Those followed natural-disaster disrupted periods of an annualized quarterly gain of 14.82% in fourth-quarter 2017 and a quarterly contractions 9.94% (-9.94%) in third-quarter 2017, with a pre-hurricanes drop of 3.97% (-3.97%) in second-quarter 2017.

Distressed Sales Held at 3.0% of Total Sales, With June All-Cash Sales Holding at 20%. In the context of mounting consumer liquidity constraints, the NAR estimated the portion of August 2018 sales in "distress" held at 3% (2% in foreclosure, 1% short sales), the same as in July 2018 and down from 4% (3% in foreclosure, 1% short sales) in August 2017. While such remained the lowest level of distress reported since the NAR began surveying such detail in October 2008, consider that October 2008 conditions already were more than three years into the housing-market collapse.

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 held at 20% of transactions in August 2018, versus 20% in July 2018 and 20% in August 2017.

New-Home Sales Gained 3.5% August, but Just 0.3% Net of Revisions in Usual, Irregular Monthly Volatility, Still Shy by 54.7% (-54.7%) of Recovering Its Pre-Recession High. The standard, miserable reporting quality of the New-Home Sales series continued in August 2018. While consensus expectations may have been met, such was in the context of increasingly-common, major downside revisions to previously reported sales of recent months. What was a headline monthly gain of 3.5% for August 2018 sales, was 0.3% net of downside revisions to July and earlier months.

The ongoing plunging trend in New-Home Sales intensified in August, amidst tightening consumer liquidity. Where this extraordinarily volatile series showed a statistically insignificant, headline monthly gain of 3.5%, that was after respective downside revisions of 3.0% (-3.0%) and 3.1% (-3.1%) to July and June activity. Net of revisions, the August monthly gain was 0.3%. Accordingly, the series continued downtrending sharply, smoothed for a six-month moving average (see *Graph 18*).

Reflective of that circumstance, and as noted in the earlier *New Residential Construction* section, headline investment in residential real estate "Gross Private Domestic Investment – Residential" showed unusual, back-to-back quarterly contractions in first- and second-quarter 2018 GDP (see the later section reviewing the third estimate of Second-Quarter 2018 GDP). If this pattern were reflected in the aggregate GDP, the U.S. would be in a formal recession.

New-Home Sales Continued in Smoothed, Downtrending Stagnation. Released September 26th 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), increased month-to-month in August 2018 by a statistically-insignificant 3.5% +/- 16.0% (all confidence intervals are expressed at the 95% level, as detailed in the *New Residential Construction* section). That followed a revised month-to-month decline of 1.6% (-1.6%) [previously 1.7% (-1.7%)] in July, but that deceptively modest revision was against a sharp downside revision to the level of June sales and before. June sales declined month-to-month by 5.4% (-5.4%) [previously 2.4% (-2.4%), initially 5.3% (-5.3%)], against a downwardly revised 3.2% monthly gain [previously 3.3%, 3.9%, initially up by 6.7%] in May and an unrevised monthly decline in April of 5.8% (-5.8%) as reflected currently in *Graph 17*.

Where headline monthly activity for the New-Home Sales remained shy of its pre-recession peak by 54.7% (-54.7%), smoothed with a six-month moving average, this series also continued in low-level, non-recovering stagnation, which has been in downtrend for the last four months (see *Graph 18*).

Annual Change. The year-to-year change in August 2018 New-Home sales was a statistically-insignificant gain of 12.7% +/- 24.2%, versus revised annual gains of 9.4% [previously 12.8%] in July 2018, 0.3% [previously 3.6%, initially 2.4%] in June 2018, 8.1% [previously 8.3%, 10.3%, initially 14.1%] in May 2018 and an unrevised 6.7% in April 2018.

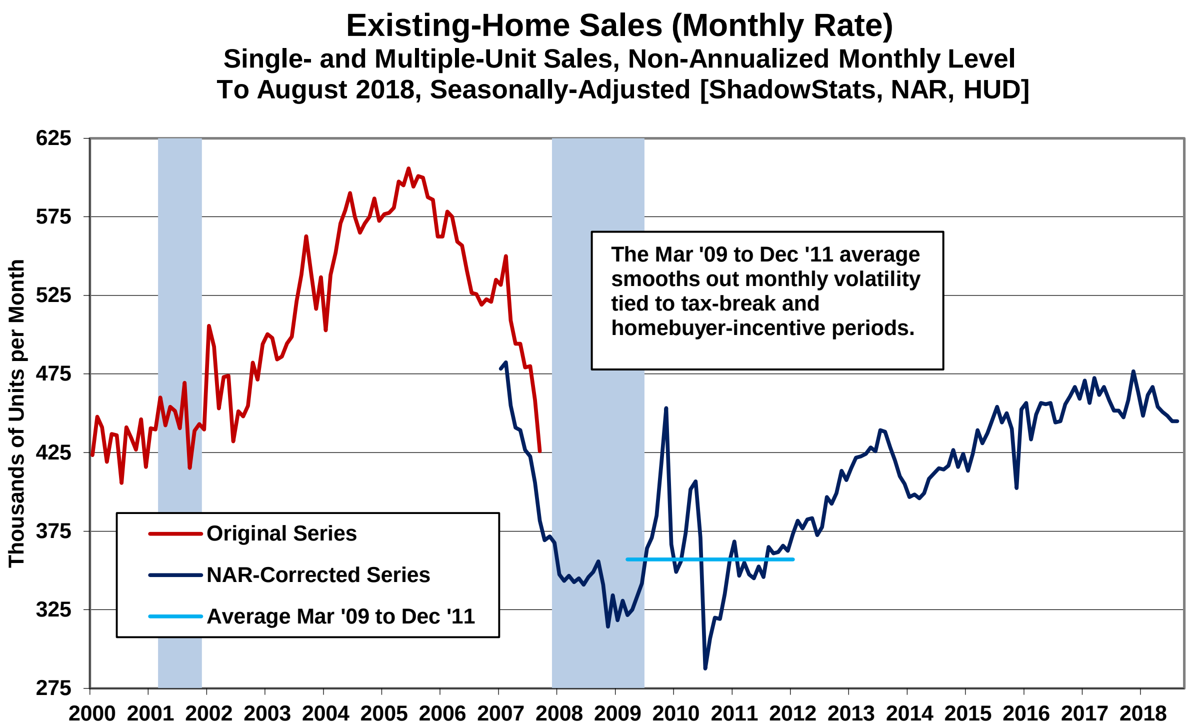
Quarterly Change. Reflecting unstable and broadly meaningless monthly and quarterly swings, Fourth-Quarter 2017 activity surged at an annualized pace of 58.9%, with First-Quarter 2018 showing a gain of 0.4%, with the third estimate of Second-Quarter 2018 showing a revised annualized contraction of 12.4% (-12.4%) [previously 8.4% (-8.4%), initially 6.0% (-6.0%)]. Based just on the initial, unstable detail for July and August 2018, third-quarter 2018 is on early track for an annualized quarterly contraction of 9.8% (-9.8%).

Intensifying Consumer Liquidity Constraints Impair Residential Real Estate Activity, Both Existing- and New-Home Sales. The intensifying liquidity bind besetting consumers continues to constrain residential real estate activity, as discussed in the prior *New Residential Construction Section* and reviewed in *Consumer Liquidity Watch – No. 4* (pending update in *CLW-5*). Without sustainable growth in real income, and without the ability or willingness to take on meaningful new debt (including mortgages) in order to make up for an income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including residential real estate activity and the related pass-through to demand for residential construction. That circumstance—in the last twelve-plus years of economic collapse and stagnation—has prevented a normal recovery in broad U.S. economic activity.

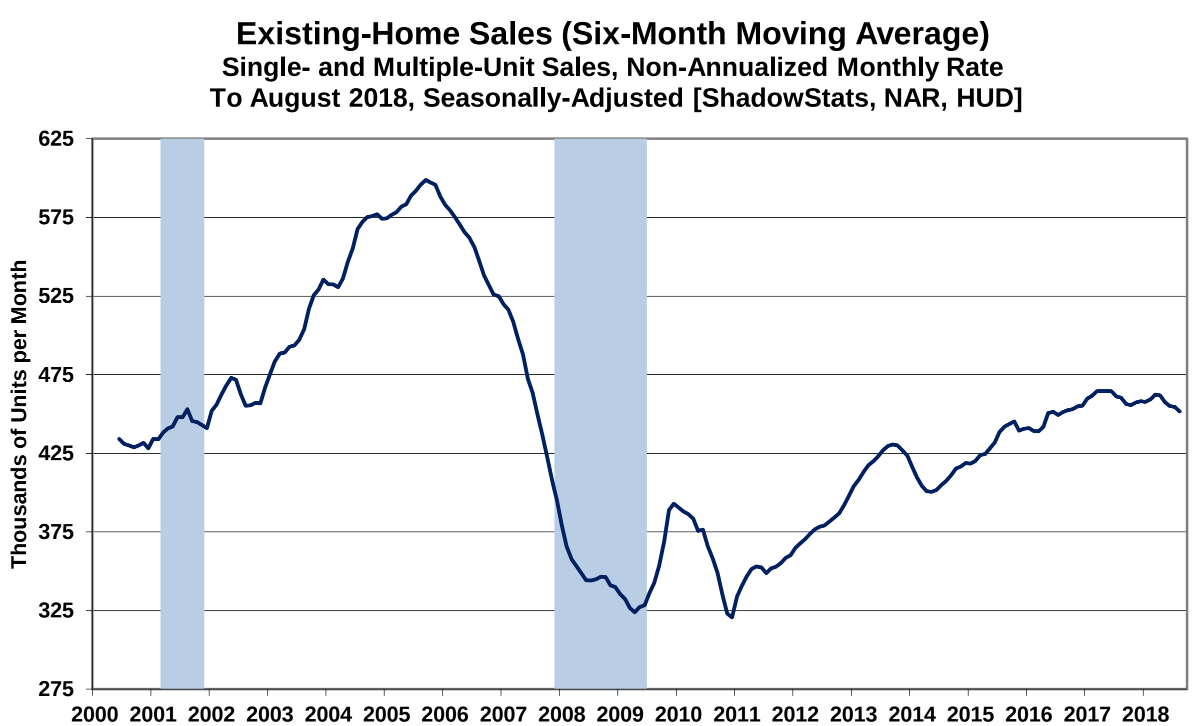
Graphs 15 and *16* plot the Existing-Home Sales series. Comparative plots of the related Housing Starts series (both series cover single and multiple-unit activity) are seen in *Graphs 3* and *4* in the prior *New Residential Construction* section.

Graphs 17 and *18* plot the New-Home Sales series. Comparative plots of the related Single-Unit Housing Starts (both series reflect single-unit activity) are shown in *Graphs 5* and *6*, again in the prior *New Residential Construction* section.

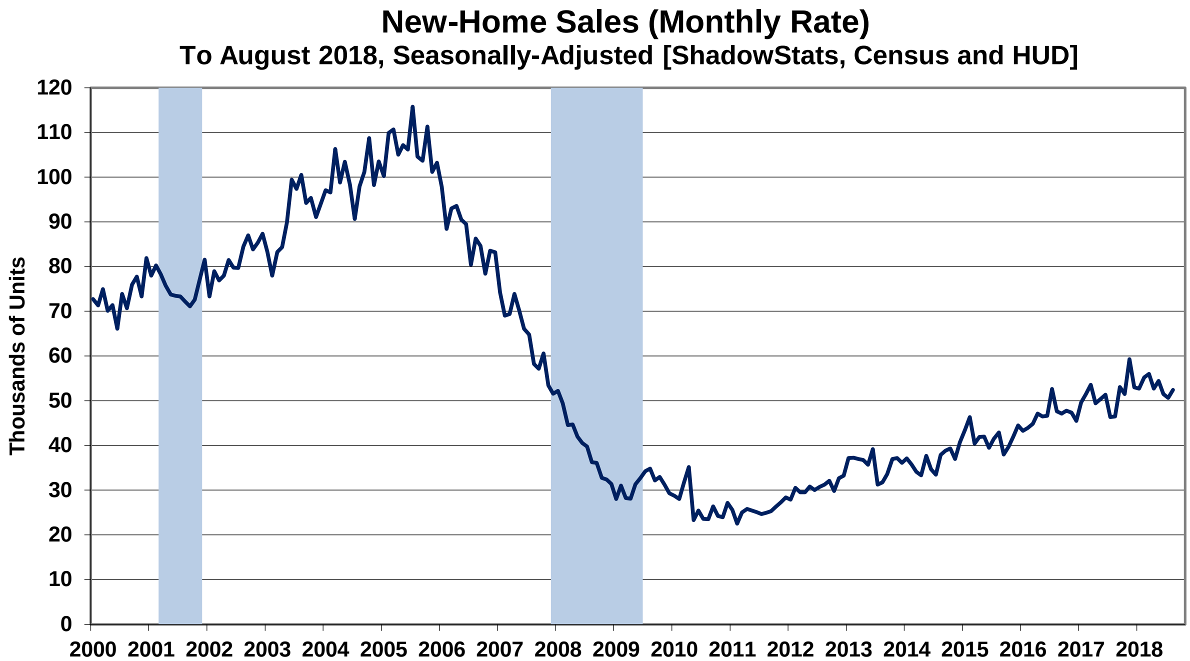
Graph 15: Existing-Home Sales (Monthly Rate of Activity)



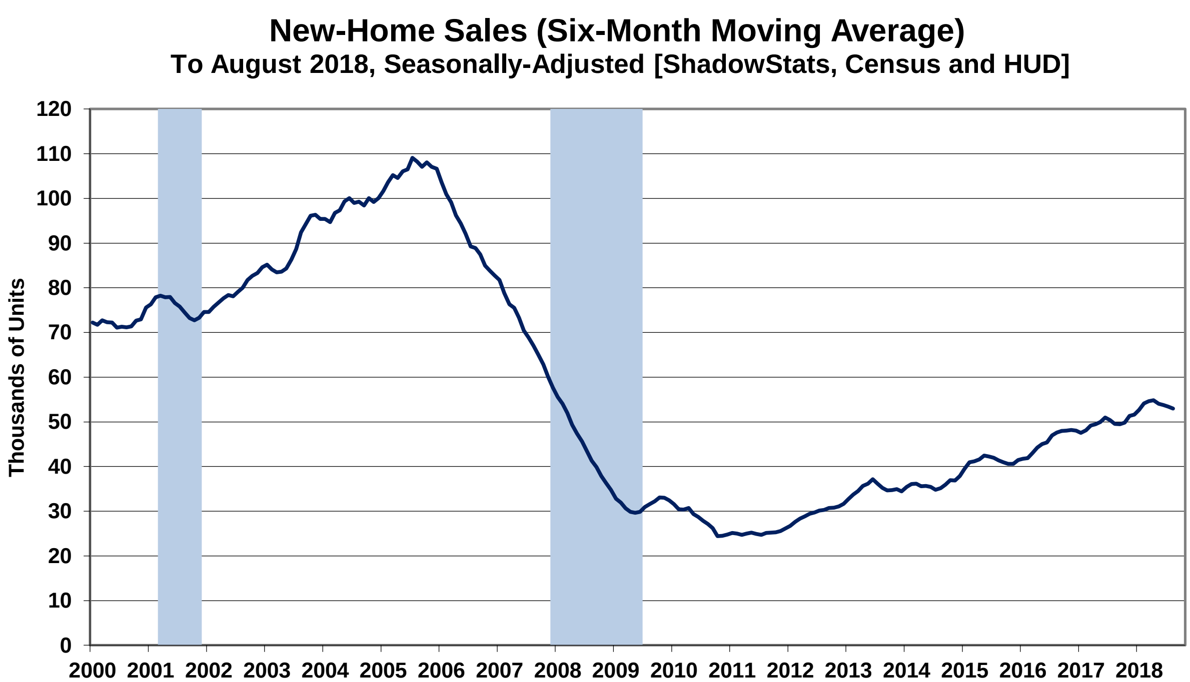
Graph 16: Existing-Home Sales (Six-Month Moving Average)



Graph 17: New-Home Sales (Monthly Rate of Activity)



Graph 18: New -Home Sales (Six-Month Moving Average)



New Orders for Durable Goods (August 2018)

Monthly Real Growth in August New Orders Rose 4.33%, Boosted by Commercial Aircraft and Defense Orders; Ex-Commercial Aircraft and Defense, Orders Declined by 0.49% (-0.49%). Reported by the Census Bureau on September 27th, total nominal New Orders for Durable Goods jumped month-to-month by 4.45% in August 2018, having declined by a revised 1.18% (-1.18%) [previously by 1.69% (-1.69%)] in July 2018, and having gained an upwardly revised 0.85% [previously 0.69%, initially 1.00%] in June 2018. Net of inflation and irregular commercial aircraft and defense orders, real new orders for durable goods declined by 0.49% (-0.49%) in August.

In the context of an August 2018 monthly surge of 69.15% in highly volatile Commercial Aircraft Orders, shifting from a revised decline of 29.09% (-29.09%) [previously a decline of 35.39% (-35.39%)] in July and a revised gain of 1.29%, [previously 1.30%, initially 4.28%] in June, New Orders for Durable Goods Ex-Commercial Aircraft were up by 1.71% in August, versus a revised 0.50% [previously 0.33%] in July, and a revised 0.83% [previously 0.66%, initially 0.80%] in June.

Real Durable Goods Orders—August 2018. ShadowStats uses the Producer Price Index (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 August 2018 PPI series (2009 = 100) showed headline month-to-month inflation of 0.11%, versus 0.17% in July, 0.35% in June, a revised 0.46% [previously 0.52%] in May, a revised 0.35% [previously 0.29%, initially 0.41%] in April, an unrevised 0.41% in March, an 0.35% in February and a 0.41% gain in January. Related year-to-year annual inflation was 3.25% in August 2018, versus 3.20% in July 2018, 2.96% in June 2018, 2.66% in May 2018, a revised 2.19% in April 2018, an unrevised 2.08% in March 2018, 1.84% in February 2018 and 1.79% in January 2018 (see *Commentary No. 970*).

Adjusted for that 0.11% month-to-month inflation reading in August 2018 and the respective inflation rates in earlier months, and as reflected in the accompanying graphs, real aggregate durable goods orders in August 2018 gained 4.33%, having declined month-to-month in July 2018 by 1.35% (-1.35%) and having gained 0.50% in June. August real orders held shy of recovering their pre-recession peak by 7.25% (-7.25%). Ex-commercial aircraft, real month-to-month orders rose by 1.71% in August 2018, versus 0.50% in July and 0.83% in June. Ex-commercial aircraft, August 2018 real orders remained shy of recovering their pre-recession peak by 3.95% (-3.95%).

Real total new orders gained year-to-year by 8.30% in August 2018, versus 6.57% in July 2018 and 0.11% in June 2018. Ex-commercial aircraft, August 2018 real orders rose year-to-year by 6.57%, versus 6.19% in July 2018 and 5.66% in June 2018. *Table 1* summarizes the just presented monthly numbers by category and inflation–adjusted or not-inflation-adjusted status.

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

New Orders for Durable Goods (August 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
Jun 18	251.499	14.257	237.242	225.048	212.291
Jul 18	248.529	10.110	238.419	222.008	212.977
Aug 18	259.592	17.101	242.491	231.624	216.366
	Percent Change			Percent Change	
	Mo/Mo	Mo/Mo	Mo/Mo	Mo/Mo	Mo/Mo
Jun 18	0.85%	1.29%	0.83%	0.50%	0.48%
Jul 18	-1.18%	-29.09%	0.50%	-1.35%	0.32%
Aug 18	4.45%	69.15%	1.71%	4.33%	1.59%
Prior M/M					
Jun 18	0.69%	1.30%	0.66%	0.35%	0.31%
Jul 18	-1.69%	-35.39%	0.33%	-1.86%	0.16%
	Yr/Yr		Yr/Yr	Yr/Yr	Yr/Yr
Jun 18	3.07%		8.79%	0.11%	5.66%
Jul 18	9.98%		9.59%	6.57%	6.19%
Aug 18	11.83%		10.04%	8.30%	6.57%
Prior Y/Y					
Jun 18	2.91%		8.61%	-0.05%	5.49%
Jul 18	9.23%		9.23%	5.85%	5.85%
Sources: Commerce Department, BLS, ShadowStats.com					

Government Defense Spending versus Constrained Consumer Liquidity. The headline detail for the monthly new orders reflected some consumer weakness that ran counter to the aggregate orders boost from increased government spending.

Real August New Orders for Durable Goods, ex- volatile commercial aircraft orders rose by 1.59% in the month, boosted by defense orders, versus a minimally revised 0.32% gain in July and 0.48% in June. Ex-volatile defense orders, Real New Orders in August were down by 0.49% (-0.49%), up by 0.67% in July and down by 4.52% (-4.52%) in June. Increased government spending is an economic stimulus, but if it is fueled by uncovered expansion of deficit spending, as in the current circumstance, it will have longer-term, negative implication for the U.S. government's fiscal stability.

Reflecting mounting consumer liquidity issues, August New Orders for, and Shipments of Domestic Automobiles declined in the month, which moved in tandem with consecutive monthly declines in Motor Vehicle Sales in Retail Sales, as discussed in *Commentary No. 970*.

New Orders, Production and North American Freight Activity and Broad Domestic Economic 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, as well as its relationship with the Cass Freight Index™, a key private-sector indicator of broad activity. Those relationships usually are highlighted in this section. Instead, those and a number of other economic indicators are updated and reviewed against both the headline GDP and the ShadowStats "Corrected" Alternate GDP measure, detailed in today's *Opening Comments*.

Graphs of Inflation-Adjusted and Smoothed Durable Goods Orders and Recent Benchmark Revisions. The headline August 2018 New Orders for Durable Goods of September 27th and accompanying revisions all were in the context of the meaningful, downside annual benchmark revisions (through March 2018) of May 17th, discussed primarily in *Commentary No. 951* and *Commentary No. 950*. Intervening headline monthly details for April to July 2018 were discussed in *Commentary No. 957*, *Commentary No. 961* and *Commentary No. 967* with the most recent details updated in later *Graphs 26* and *30*.

In the context of those benchmark revisions, *Graphs 19* and *20* show the current headline 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 has remained at a low-level of non-recovered, but uptrending stagnation.

The moving-average levels in *Graphs 19* and *20* 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 continued on the upside into 2017 and 2018, although softened by the downside benchmark revisions (again, see *Graphs 26* and *27*). Starting with August and September of 2017, however, broad orders activity was spiked temporarily by natural-disaster recovery, a pattern that now largely has passed.

Three sets of inflation-adjusted graphs (*Graphs 19* to *21*, *Graphs 22* and *23*, and *Graphs 24* and *25*) 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 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 19* and *20*) 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. Along with a period of uptrending stagnation, boosted by disaster recovery, the same pattern of growth and downside benchmark revision largely was repeated through May 2018, as can be seen in *Graphs 26* and *27*.

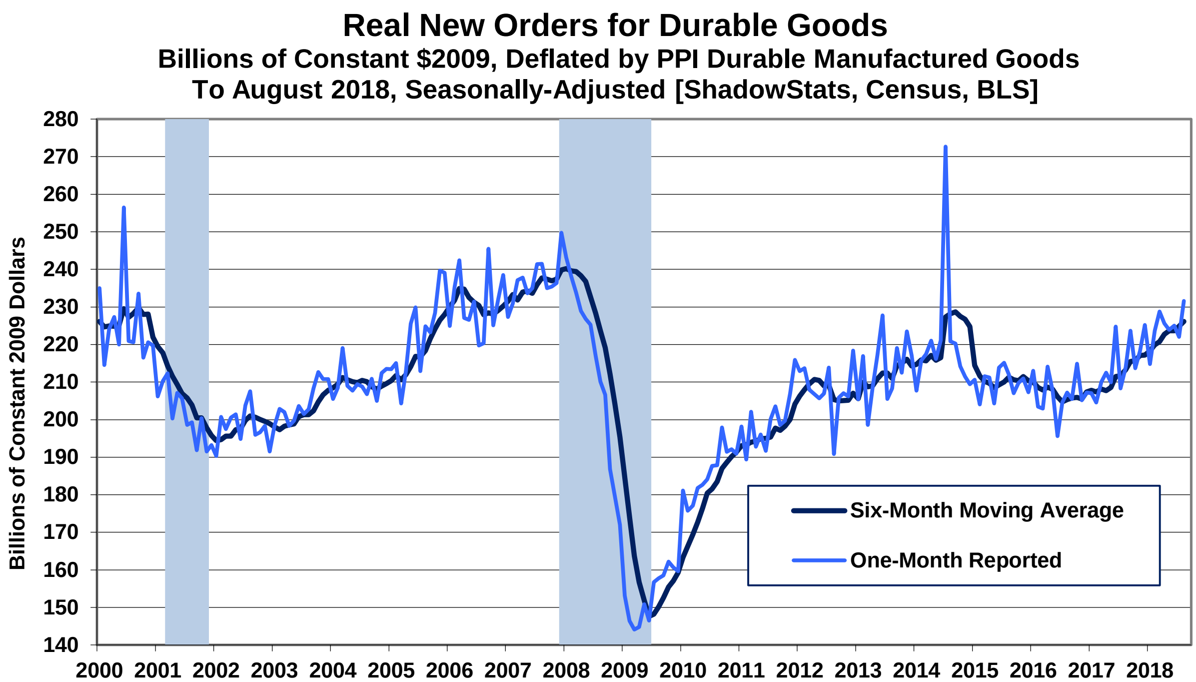
The second set of graphs (*Graphs 22* and *23*) shows the patterns of six-month moving averages of historical, headline real new orders for durable goods (net of official inflation), as well as that pattern "corrected" for understatement of that inflation (and for the corresponding overstatement of official, inflation-adjusted growth). The third set of graphs (*Graphs 24* and *25*) shows largely the same patterns, although they are for the aggregate durable goods orders series, net of commercial aircraft orders.

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 August 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 or non-economic expansion, as is the current circumstance. These series remain in non-recovered, non-expanding, low-level, albeit uptrending stagnation (see the *Opening Comments* of *Commentary No. 966*).

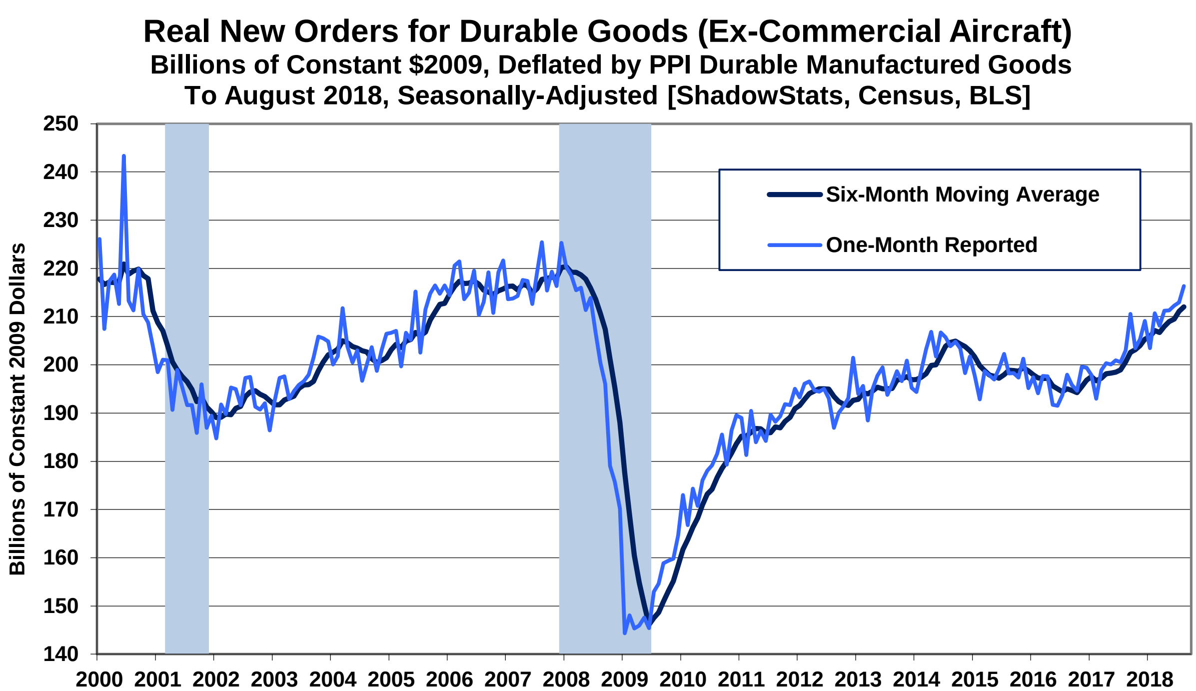
[Graphs 19 to 27 begin on the next page.]

Headline New Orders Detail, Aggregate and Ex-Commercial Aircraft

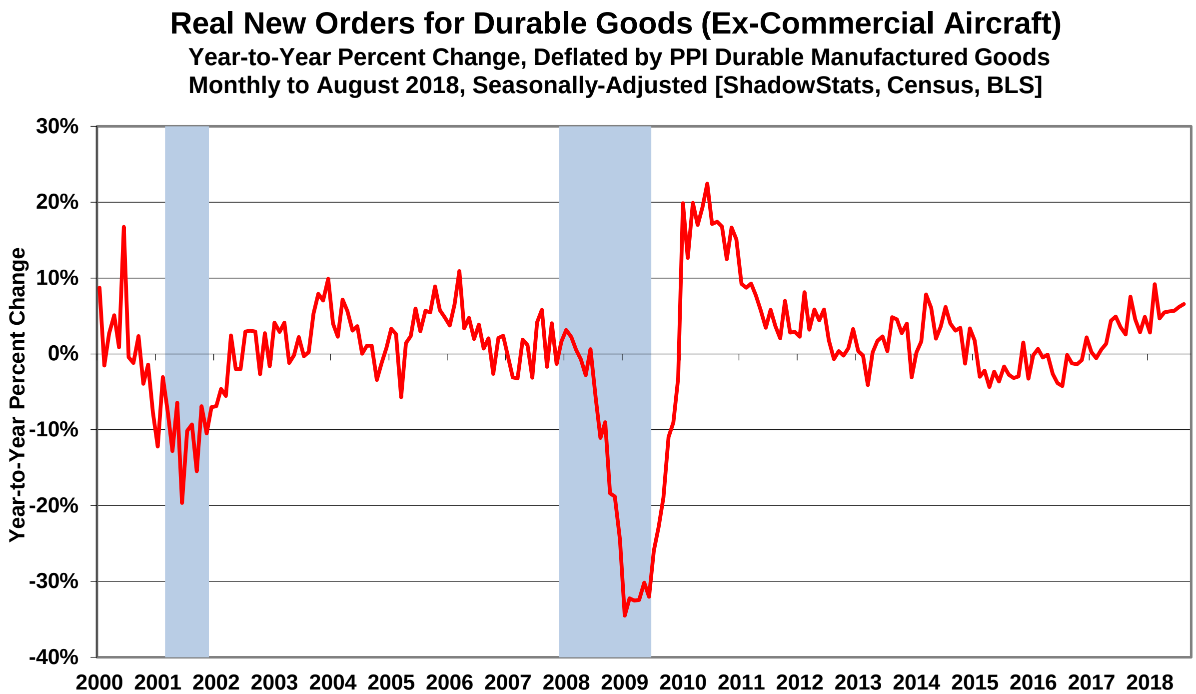
Graph 19: Real Total New Orders for Durable Goods to Date



Graph 20: Real New Orders for Durable Goods – Ex-Commercial-Aircraft Orders to Date



Graph 21: Yr-to-Yr % Change, Real New Orders for Durable Goods – Ex-Commercial Aircraft (2000 to Date)
(Same as Graph OC-18 in the Opening Comments)



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, Retail Sales and the GDP (see *Graphs 14* and *7* in *Commentary No. 970*, and *Graphs OC-4* and *OC-6* in today's *Opening Comments*), 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 22* and *Graph 23*) shows the aggregate series or total durable goods orders; the second set (*Graph 24* and *Graph 25*) shows the ex-commercial aircraft series. The aggregate orders series in *Graphs 22* and *23* 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 24* and *25* are shown net of those volatile commercial aircraft orders.

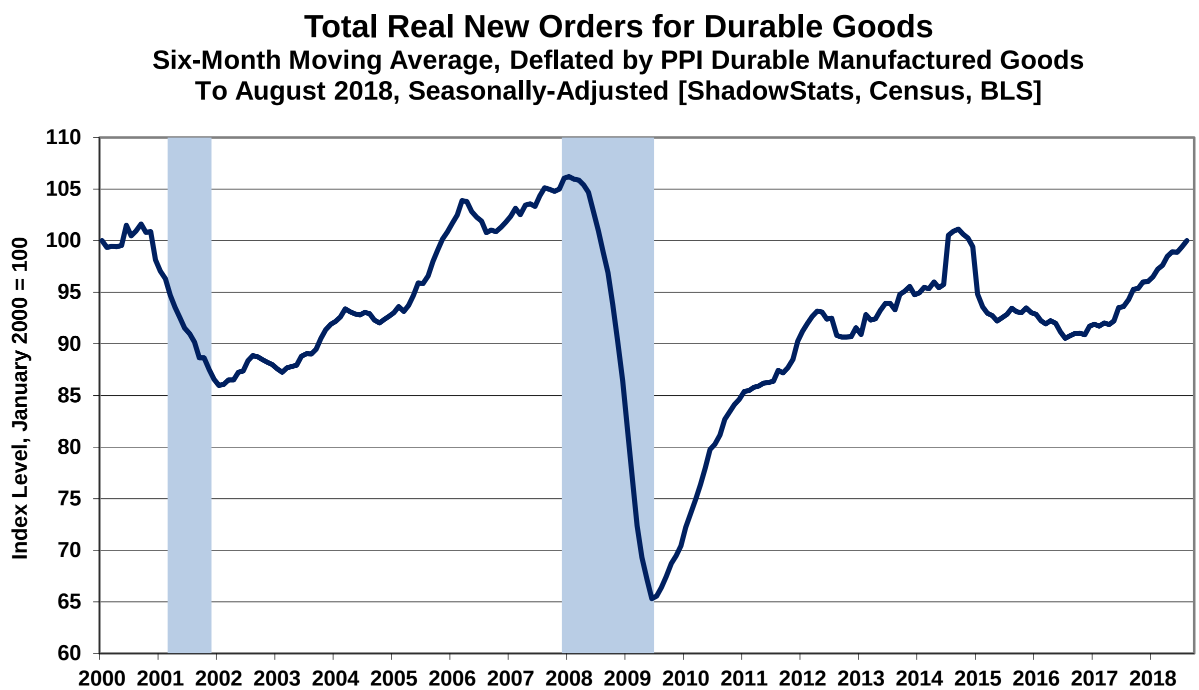
The first graph in each of the two sets shows the official six-month moving average, the same heavy dark-blue line shown in *Graph 19* and *Graph 20*, along with the light-blue thin line of monthly detail. The second graph in each set is the same six-month, moving-average series shown in the first graph, 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.

The 2000 indexing simply provides for some consistency in the series of revamped "corrected" graphics such as Industrial Production, cited earlier. The indexing does not affect the appearance of the graph or reported growth rates (as can be seen with a comparison of the moving average in *Graph 19* to the later *Graph 24*, which has the standard, headline indexing).

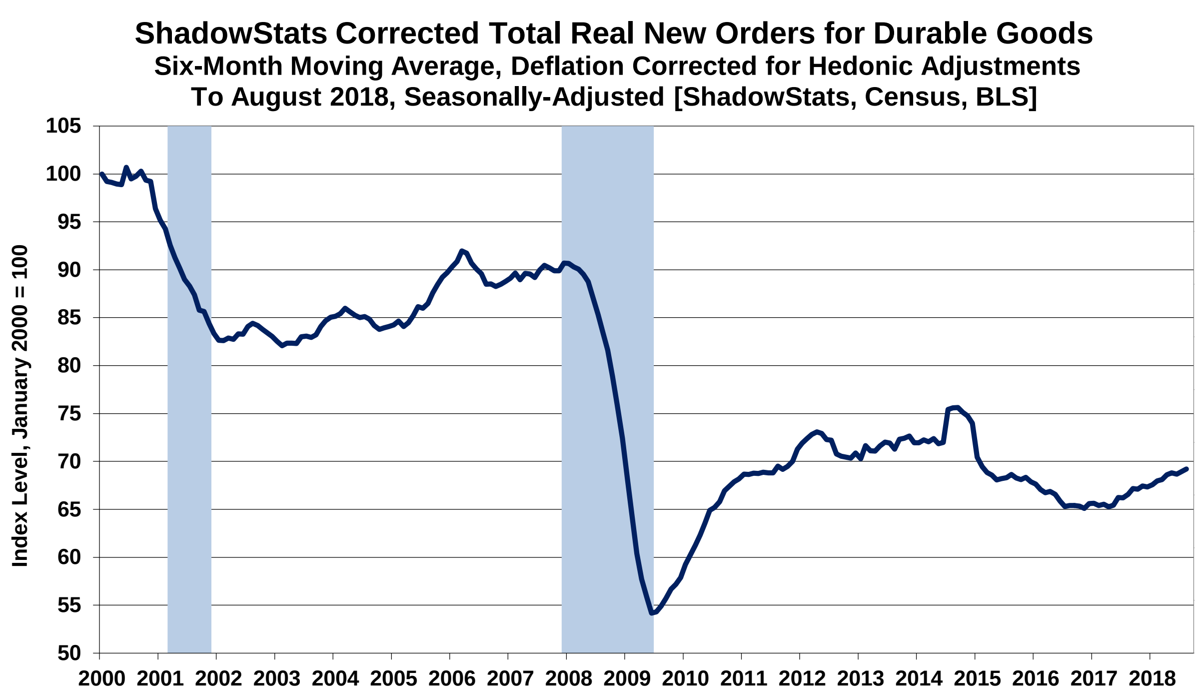
[Graphs 22 to 25 begin on the next page.]

Smoothed Real Series and Real Series Corrected for Inflation-Understatement

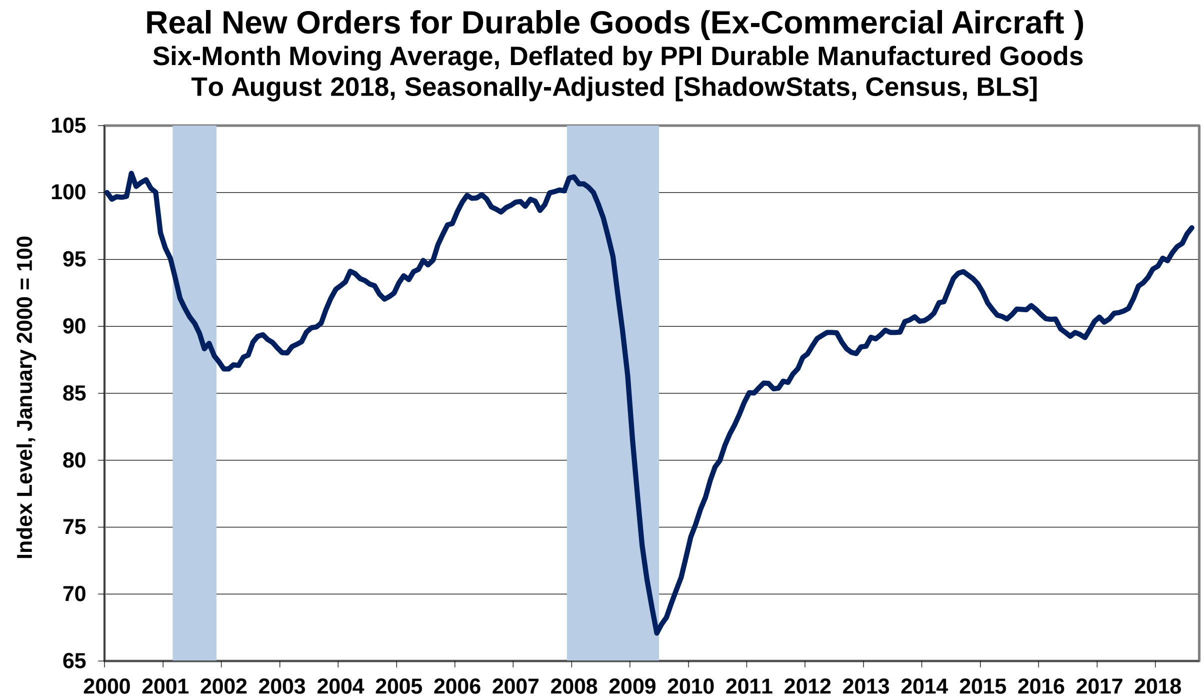
Graph 22: Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



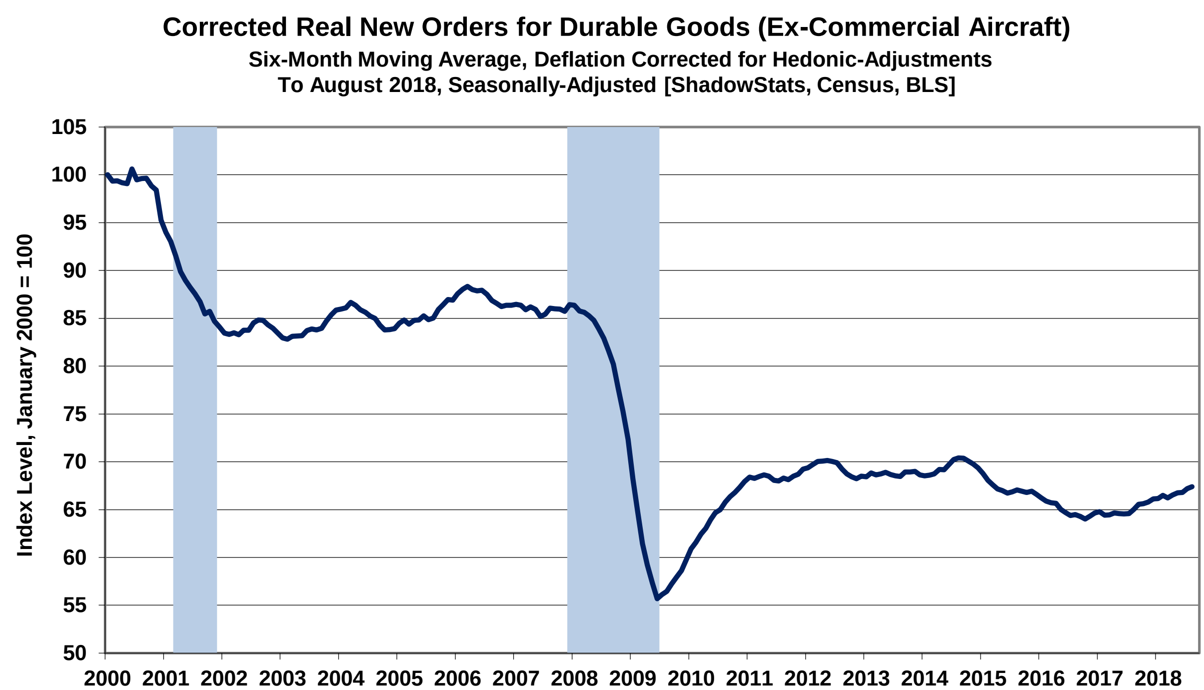
Graph 23: Corrected Index of Real Total New Orders for Durable Goods, 6-Month Moving Average



Graph 24: Index of Durable Goods Orders – Ex-Commercial Aircraft, 6-Month Moving Average



Graph 25: Corrected Index of Durable Goods Orders – Ex-Commercial Aircraft, 6-Month Moving Average



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 Manufacturers' Shipments, and the subsidiary series New Orders for Durable Goods on May 17th, which 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*), and suggestive of some likely parallel hits in the GDP revisions. Yet, there was no clear, parallel impact on the recently-published GDP "comprehensive" benchmark revisions discussed in *GDP Special No. 968*.

This circumstance has been the common experience in economic reporting of recent years and decades. Discussed in *Special Commentary No. 885*, 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.

As an example of the regular, annual downside restatement of recent activity in the New Orders for Durable Goods series, consider accompanying *Graphs 26* and *27* of both aggregate (*Graph 26*) and ex-commercial aircraft (*Graphs 27*) real new orders for durable goods. The plots reflect the net revisions to the six-month moving averages of those two series for the 2018 benchmarking, as well as for the three prior benchmarkings, along with subsequent headline reporting through the August 2018 headline detail.

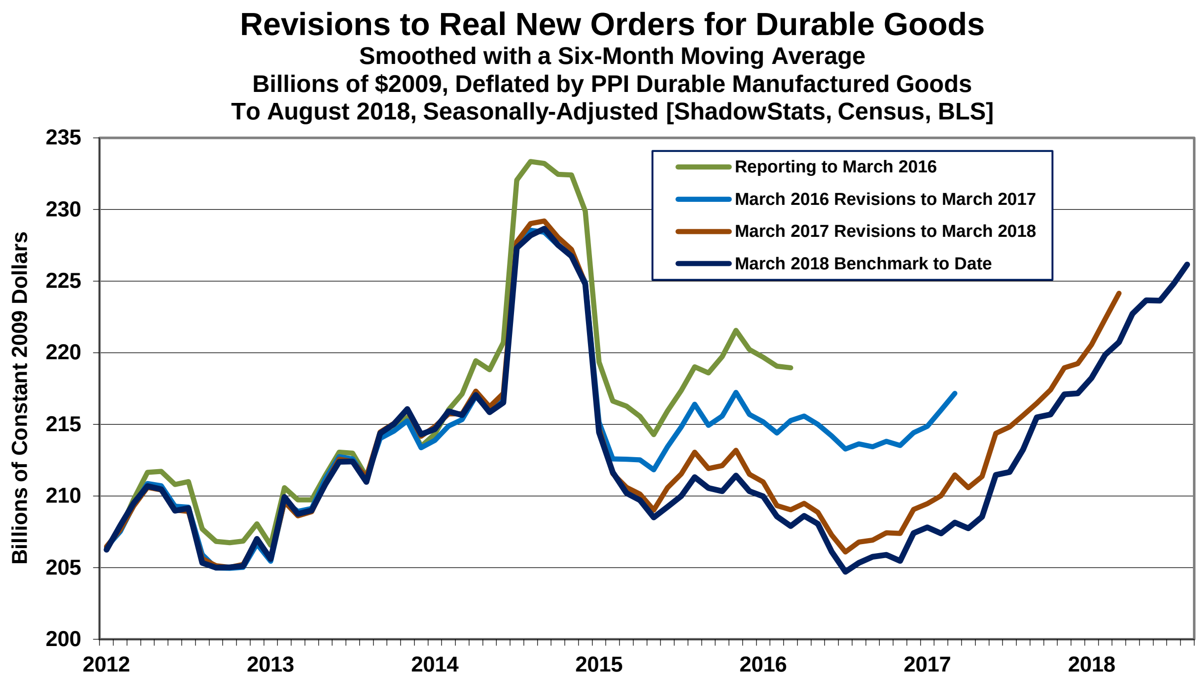
For a substantive review of the last two years of benchmark revisions to New Orders for Durable Goods, and the parent Manufacturers' Shipments series, see *Commentary No. 951*, *Commentary No. 950* and *Special Commentary No. 885*.

Current headline durable-goods reporting remains subject not only to the upwardly-biased sampling assumptions seen in the pre-benchmarking reporting, but also to the concurrent-seasonal-adjustment problems commonly seen with series such as retail sales, and payroll and unemployment reporting. Unusual seasonal-factor volatility raises issues as to the significance of comparing reported seasonally-adjusted changes, be they monthly or quarterly, or on a year-to-year basis. 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 the May 25th release of the headline April 2018 detail.

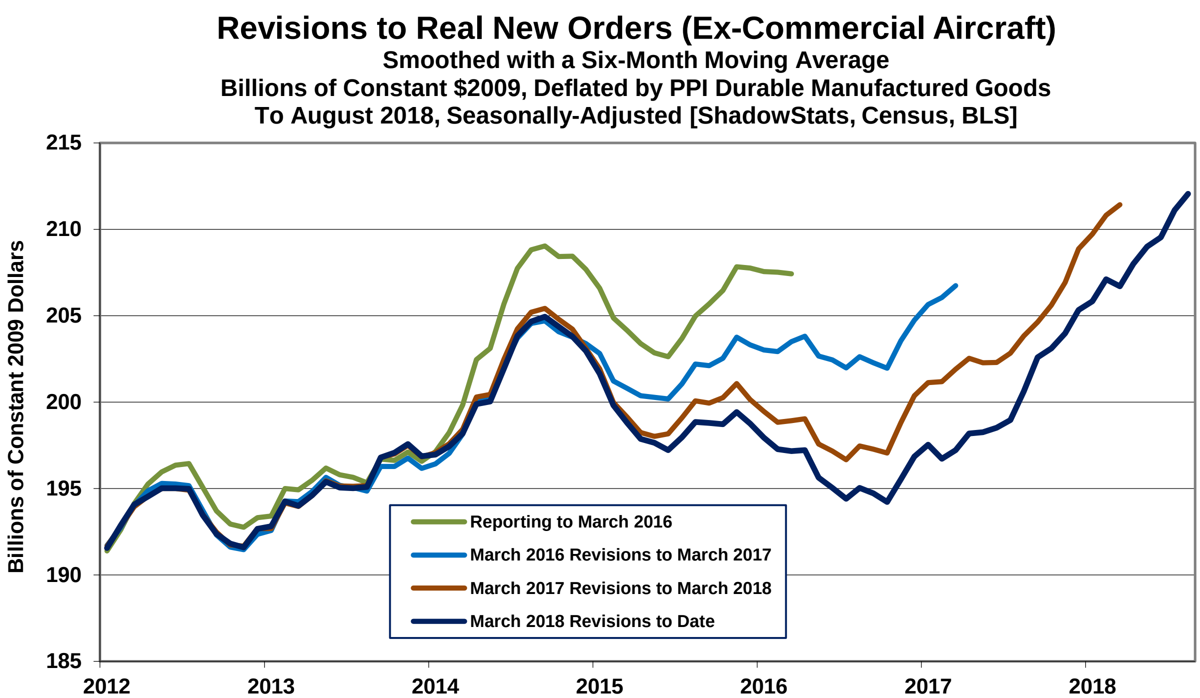
For all monthly reporting from the April 2018 detail until the next annual benchmarking in May 2019, unpublished, monthly historical seasonal-adjustment revisions, calculated along with each new current headline month's detail, and with each month to follow, make the latest detail (August 2018) inconsistent with all the headline historical numbers. (See the related discussion in *Supplemental Labor-Detail Background* in *Commentary No. 969-Extended*).

[Graphs 26 and 27 follow on the next page.]

Graph 26: Benchmark Revisions to Real Total New Orders for Durable Goods, Smoothed for 6-Month Moving Avg



Graph 27: Benchmark Revisions to Real Total New Orders for Durable Goods, Ex-Commercial Aircraft



Gross Domestic Product (Second-Quarter 2018, Third Estimate)

Updated Gross Domestic Income and Gross National Product

Third Estimate of Second-Quarter Gross Domestic Product Revised Minimally Lower, with a Larger Hit to Gross Domestic Income and Smaller Hit to Gross National Product. The third estimate of and second revision to Second-Quarter 2018 Gross Domestic Product (GDP), and the second estimates of and first revisions to Second-Quarter 2018 Gross Domestic Income (GDI) and Gross National Product (GNP) were minimally negative, contrary to positive consensus expectations.

The initial headline estimate of annualized real second-quarter GDP growth was 4.1% [4.06% at the second decimal point], which revised to 4.2% [4.16%] in its second estimate. The consensus outlook had been minimally positive, with expectations for that 4.2% GDP growth to revise higher to 4.3% in its just published third estimate. While the headline detail held at 4.2% in that third estimate, revisions at the second decimal point actually were negative by a rounded 0.1% (-0.1%) in the GDP, and by a rounded 0.2% (-0.2%) for the GDI, which in theory is the income-side equivalent to the GDP's consumption side.

GNP (GDP plus the trade balance in factor income, or interest and dividend payments) once was the benchmark measure of aggregate economic activity. It revised lower at the second decimal point by less than a rounded 0.1%, but headline growth revised lower by 0.1% (-0.1%) thanks to the rounding of the headline two-decimal point aggregate annualized growth-rate level. Summary GDP and component detail, GDI and GNP also are covered in *Table II.* With that as rough background, here is how the final second-quarter National Income revisions went:

- ***GDP.*** Against first-quarter growth of 2.2% [2.22%], second-quarter GDP initially jumped to 4.1% [4.06%]; the second estimate was 4.2% [4.23%]; the third estimate was 4.2% [4.16%], with an annualized real growth decline of 0.07% (-0.07%) (see the Implicit Price Deflator).
- ***GDI.*** Against first-quarter growth of 3.9% [3.90%], second-quarter GDI initially slowed to 1.8% [1.81%]; the second and final estimate slowed further to 1.6% [1.62%].
- ***GNP.*** Against first-quarter growth of 2.2% [2.20%], second-quarter GNP initially was 4.1% [4.07%]; the second and final estimate dropped to 4.0% [4.04%].
- ***Implicit Price Deflator (IPD).*** Second-Quarter 2018 third estimate of GDP inflation, the IPD, rose to an annualized quarterly inflation rate of 3.32%, from 3.25% in its second estimate. That increase of 0.07% in revised quarterly inflation fully accounted for the 0.07% (-0.07%) decline in the annualized Real GDP growth in the same period. There is some benefit to looking at the second-decimal point detail.

Latest GDP Reporting Detail and Extended Coverage. Incorporated here by reference, *Special Commentary No. 968-Extended* (with a shortened link: *GDP Special No. 968*) of September 6th, was structured into four sections:

- The *Opening Comments* in *GDP Special No. 968* reviewed inflation-related and definitional distortions built into headline GDP reporting over the decades. Issues and details there supplement today's *GDP-Related Nomenclature and Definitions* section, specifically tied to the *ShadowStats GDP Corrected for Headline Understatement of Inflation* and the *ShadowStats Alternate GDP Estimate.*
- Part I reviewed the first-revision to second-quarter GDP, where the second revision is covered in today's *Commentary*.
- Part II discussed underlying U.S. economic reality, a section that is updated and expanded upon in today's *Opening Comments*, beginning on page 6.
- Part III provided expanded coverage of the Comprehensive GDP Benchmark Revision back to 1929, which is available for review at any time, again at *GDP Special No. 968*.

[*Portions of this section may be repetitive from coverage of the first-revision to second-quarter 2018 GDP and initial coverage of second-quarter GDI and GNP in Flash Commentary No. 968-Advance* and *GDP Special No. 968*.] Discussed in the opening paragraphs of this section, the second and final revision to Second-Quarter 2018 Gross Domestic Product (GDP) were relatively minimal, published along with the first and final revisions to Second-Quarter 2018 Gross Domestic Income (GDI) and Gross National Product (GNP) by the Bureau of Economic Analysis (BEA) on September 27th. Only the initial estimate of second-quarter 2018 GDP coincided with the July 27th comprehensive annual benchmarking reviewed in *GDP Special No. 968*. The initial estimates of the second-quarter GDI and GNP were published with the first-revision to second-quarter 2018 GDP, and revised along with the GDP in its third-estimate, second revision, as detailed in *Table 2*.

Gross Domestic Product (GDP). Second-quarter 2018 GDP annualized real growth revised lower to 4.15% [previously 4.23%, initially 4.06%] +/- 2.5% (95% confidence interval) in its third and "final" estimate (final except for benchmark revisions in 2019, 2020 etc.). This final revision was slightly below expectations for a minimal upside revision, versus unrevised gains of 2.22% in first-quarter 2018 and 2.29% in fourth-quarter 2017 (see details in *Table 2* and *Graphs 28* and *30*). *Table 2* highlights the third estimate second estimate of second-quarter 2018 GDP, versus its first revision last month and its initial reporting coincident with the July 27th annual benchmarking, which restated the series back to 1929 (all table data reflect the benchmarking). Year-to-year real growth in second-quarter 2018 GDP was a revised 2.89% [previously 2.85%], versus 2.58% in first-quarter 2018 and 2.47% in fourth-quarter 2017 (see *Graphs 29* and *31*).

GDP inflation (the Implicit Price Deflator or IPD) for the second-quarter 2018 was revised negligibly higher to at 3.32% [previously 3.25%, initially 3.22%] quarter-to-quarter, versus 2.02% in first-quarter 2018 and 2.72% in fourth-quarter 2017 (see *Graph 34*). Year-to-year inflation was revised negligibly higher to 2.50% [previously 2.48%, initially 2.47%], versus an unrevised 1.95% in first-quarter 2018 and 1.97% in fourth-quarter 2017 (see *Graph 34*).

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 (denotes an exclusive ShadowStats series):*

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, along with annual Benchmark Revisions usually in the following July, coincident with the "advance" GDP estimate for the second quarter of that year. Every five years or so, those annual revisions are "Comprehensive," restating the series back to its earliest 1929 estimate. The GDP popularly is reported and followed in real terms, net of inflation, reflecting annualized quarter-to-quarter or year-to-year change.*

****GDP Corrected for Headline Understatement of Inflation*** *is a ShadowStats version of real GDP that adjusts headline real GDP activity only for the understated inflation used in deflating the series. Where the inflation used to deflate the various GDP components series tends to be understated in aggregate by roughly two-percentage points per year, the resulting headline real GDP growth is overstated by roughly that amount (see the discussion in Public Commentary on Inflation Measurement* and the *Opening Comments of GDP Special No. 968 Graphs OC-4 and OC-5).*

****ShadowStats Alternate GDP Estimate*** *is a ShadowStats version of real GDP, which adjusts the headline real GDP activity for nominal biases built into the headline GDP reporting from methodological redefinitions that usually are introduced with annual benchmark revisions. Discussed in the Opening Comments, these biases almost always are positive—the ShadowStats "Pollyanna Creep"—and have added 18.1% to the headline level of nominal GDP since 1980 (see Table OC-1 of GDP Special No. 968). Since those numbers are nominal, before inflation-adjustment, the annual bias estimates are separate from the inflation-adjusted distortions of the previous "Corrected" series. Graph OC-7 in No. 968, however, is an inflation-adjusted, year-to-year version of this series, posted regularly on the Alternate Data Tab of www.ShadowStats.com. It will be fully updated and overhauled in the near future.*

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—invariably the case—where 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 of the GDP's monthly political targeting.*

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 headline 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 the growth or level of activity 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 2012 Dollars," a concept introduced with the 2013 and comprehensive revisions, when 2009 was used as the base year for inflation (updated to 2012 dollar in 2018). "Chained" refers to a substitution methodology, where the GDP components with the strongest nominal growth, automatically get a weaker, deflating inflation rate, which artificially boosts the headline real GDP growth.*

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 quarter-to-quarter growth rate annualizes to 1.01 x 1.01 x 1.01 x 1.01 = 1.0406 or 4.1%, instead of 4 x 1.0% = 4.0%.*

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

The GDP (or the broader GNP detail headlined in earlier decades) 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 the discussions in the *Opening Comments* of GDP Special No. 968 and Special Commentary No. 885).

Table 2: Third Estimate of Second-Quarter 2018 GDP, Revised Growth Distribution versus Recent Quarters

Annualized Quarterly Real Growth in Headline Gross Domestic Product (GDP)
Third and Final Estimate 2nd-Quarter 2018 GDP
Growth Contribution by Consumption and Product Sector

GDP COMPONENTS	2nd-Q 2018 Final	2nd-Q 2018 Second Estimate	2nd-Q 2018 First Estimate	1st-Q 2018 Final	4th-Q 2017 Final	3rd-Q 2017 Final	2nd-Q 2017 Final
CONTRIBUTING ECONOMIC SECTOR							
Personal Consumption Expenditures							
- Goods	1.16%	1.12%	1.24%	-0.13%	1.42%	0.86%	1.17%
- Services	1.42%	1.43%	1.46%	0.49%	1.22%	0.65%	0.79%
Gross Private Domestic Investment							
- Fixed Investment	1.10%	1.07%	0.94%	1.34%	1.04%	0.44%	0.72%
- Change in Private Inventories	-1.17%	-0.97%	-1.00%	0.27%	-0.91%	1.04%	0.23%
Net Exports of Goods and Services	1.22%	1.17%	1.06%	-0.02%	-0.89%	0.01%	0.08%
Government Consumption/Investment	0.43%	0.41%	0.37%	0.27%	0.41%	-0.18%	0.01%
GDP ANNUALIZED REAL GROWTH	4.16%	4.23%	4.06%	2.22%	2.29%	2.82%	2.99%
Final Sales, GDP Less Inventories	5.33%	5.20%	5.06%	1.95%	3.20%	1.78%	2.76%
CONTRIBUTING PRODUCT SECTOR							
Goods	1.91%	2.05%	1.81%	1.20%	0.34%	2.40%	2.43%
Services	1.78%	1.78%	1.85%	0.73%	1.32%	0.74%	0.77%
Structures	0.47%	0.39%	0.39%	0.28%	0.64%	-0.32%	-0.21%
GDP Annualized Real Growth	4.16%	4.23%	4.06%	2.22%	2.29%	2.82%	2.99%
SUPPLEMENTAL: GDI AND GNP							
Gross Domestic Income (GDI)	1.62%	1.81%	--	3.90%	1.49%	1.28%	2.78%
Gross National Product (GNP)	4.04%	4.07%	--	2.20%	2.57%	3.57%	2.59%

Sources: Bureau of Economic Analysis (BEA), ShadowStats.

Headline Second Revision to, Third and Final Estimate of Second-Quarter 2018 GDP by Sector. Detailed in *Table 2*, the headline second estimate of Second-Quarter 2018 GDP revised to a somewhat slower, annualized real quarterly growth rate of 4.16% [previously 4.23%, initially 4.06%], up from the recently benchmarked growth rates of 2.22% in first-quarter 2018 [1.99% pre-benchmark], 2.29% [2.89% pre-benchmark] in fourth-quarter 2017, 2.82% [3.16% pre-benchmark] in third-quarter 2017, 2.99% [3.06% pre-benchmark] in second-quarter 2017 and 1.79% [pre-benchmark 1.24%] in first-quarter 2017

Table 1 shows the breakout of GDP growth by quarter, by economic sector and by general product sector. The third estimate of second-quarter GDP at a 4.16% annualized aggregate real quarterly growth rate was depressed by a decline in inventories that subtracted 1.17% (-1.17%) from Final Sales. Indeed the real Final Sales number (GDP growth minus Inventory change) was at an incredibly high (as in not credible) 5.33%. Otherwise, the unusually strong GDP growth was distributed fairly evenly across the major categories.

Not shown in the table are the year-to-year real GDP growth rates, a revised 2.87% [previously 2.89%, initially] in second-quarter 2018, versus unrevised annual growth rates in first-quarter 2018 of 2.58%, fourth-quarter 2017 of 2.47%, in third-quarter 2017 of 2.34%, in second-quarter 2017 of 2.11% and in first-quarter 2017 of 1.93% .

The average real annualized-quarterly and annual GDP growth rates over the last forty years each revised a bit higher in the benchmarking through first-quarter 2018, from 2.71% to 2.73% quarterly, and from 2.70 % to 2.72% annually. Given the headline surge in quarterly second-quarter 2018 GDP, those forty-year averages just shifted to 2.75% quarterly and to 2.71% annually.

Consumer Sector Remained Heavily Stressed. *Table 2* shows the breakout of GDP growth by quarter, by economic sector and by general product sector. As noted in *Commentary No. 957* of July 1st, the pre-benchmarked final estimate of first-quarter 2018 showed consumer weakness "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." While headline contribution to real GDP growth from the consumer goods sector turned positive, to 1.16% in the latest second-quarter detail, it remained down by 0.13% (-0.13%) in the benchmarked first-quarter 2018 detail.

Residential Investment (not detailed in *Table 2* but a component of "Fixed Investment" there), however, remained a negative contributor to real second-quarter 2018 GDP growth of 0.05% (-0.05%) [previously 0.06% (-0.06%), initially 0.04% (-0.04%)], having been a benchmark-revised, negative-growth contributor to first-quarter 2018 of 0.14% (-0.14%). The weakness in the housing market remains an intensifying, near-term issue as discussed in the earlier sections on *New Residential Construction*, and *Existing and New-Home Sales* and the accompanying *Graphs 1* to *18* there and *Graphs OC-21 and OC-22* in today's *Opening Comments* section, updating *Underlying Economic Reality*.

Real GDP Levels and Annual Growth Rates. *Graphs 28* and *30* 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 29* and *31* show the revised year-to-year quarterly detail for the same series. The current-cycle trough in quarterly annual change was second-quarter 2009, reflecting a year-to-year decline of 3.92% (-3.92%).

That was the deepest year-to-year contraction for any quarterly GDP in the history of the quarterly series, which began with first-quarter 1947 (1948 in terms of available year-to-year detail). Shown in *Graph 33*, the annual decline of 2.54% (-2.54%) 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 revised decline of 11.61% (-11.61%), minimally narrower than the 1932 annual economic crash of 12.88% (-12.88%).

Graphs 32 and *33* show the levels of annual real GDP activity, as well as annual percent change, as estimated beginning in 1929. Reflected in *Graph 32*, the annual-average real GDP growth in 2017 was 2.22%, versus 1.57% in 2016, 2.88% in 2015 and 2.45% in 2014. The annual growth rate of 1.55% in 2011 was the slowest pace of annual growth in the post-2009 "recovery," although effectively the same level of growth as seen in 2016.

Gross National Product (GNP) and Gross Domestic Income (GDI). The second estimates of second-quarter 2018 GNP and GDI also were released on September 27th, lagging the parallel GDP reporting and related benchmark revisions 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.

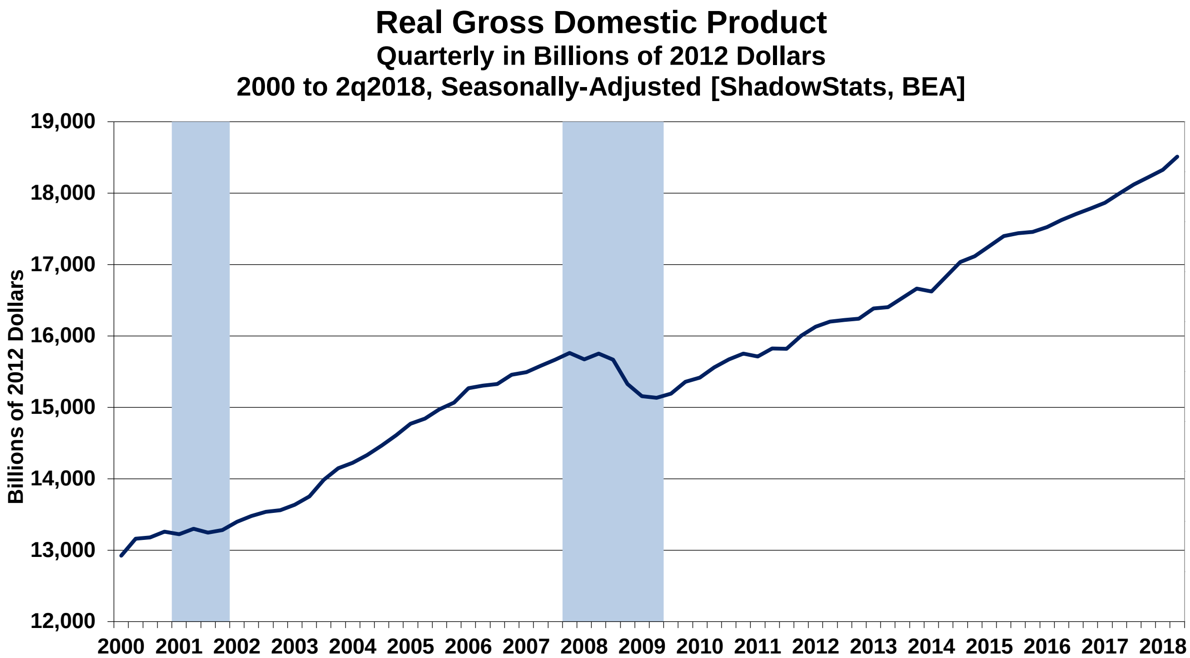
GNP is the broadest National Income measure, reflecting GDP plus the net international trade-flows of factor income, specifically interest and dividend payments. As a reporting gimmick aimed at boosting the headline reporting of economic growth for net-debtor nations such as the United States, international reporting standards were shifted some decades back to reporting headline GDP instead of what had become a relatively weaker GNP. With no unusually large swings in headline factor income, however, second-quarter 2018 GNP reporting moved largely along with the GDP. The initial estimate of second-quarter 2018 GNP showed a revised annualized quarterly real growth of 4.04% [previously 4.07%], versus 2.20% in first-quarter 2018 and 2.57% in fourth-quarter 2017. Year-to-year growth revised to 3.09% [previously 3.10%] in second-quarter 2018, versus 2.73% in first-quarter 2018 and 2.56% in fourth-quarter 2017.

GDI is the theoretical income-side equivalent to the consumption-side GDP estimate, yet the two measures rarely come close to showing similar quarterly growth patterns, with some relatively wild quarterly swings in the current numbers. Accordingly, on just a bookkeeping basis, 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. Yet, the headline GDI growth patterns reflect only the headline GDI estimate, not any "discrepancy" accounting.

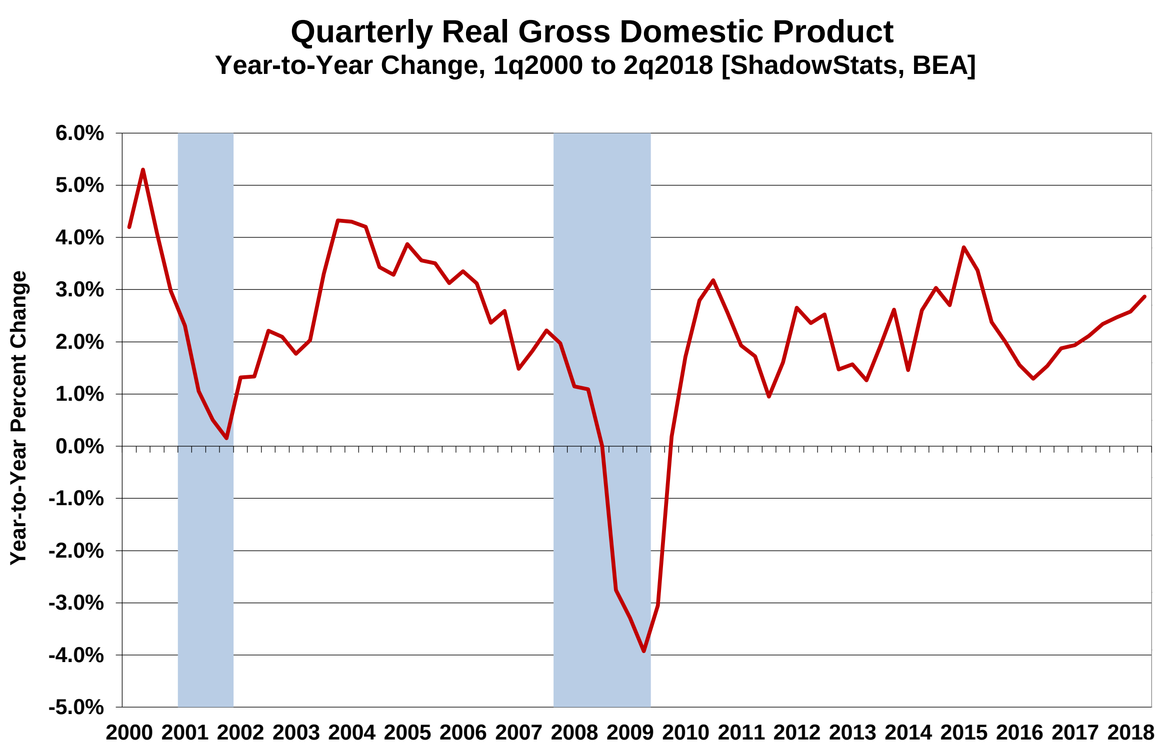
Accordingly, against the headline 4.16% second-quarter GDP growth, up from 2.22% in the first quarter 2018 and versus 2.29% in fourth-quarter 2017, second-quarter GDI grew at a revised annualized pace of 1.62% [previously 1.81%], down from 3.90% in first quarter 2018 and against 1.49% in fourth-quarter 2017 (see *Table 2*). Annual GDI growth rose by a revised 2.07% [previously 2.12%] in second-quarter 2018, versus 2.36% in first-quarter 2018 and 2.25% in fourth-quarter 2017.

[Graphs 28 to 33 begin on the next page.]

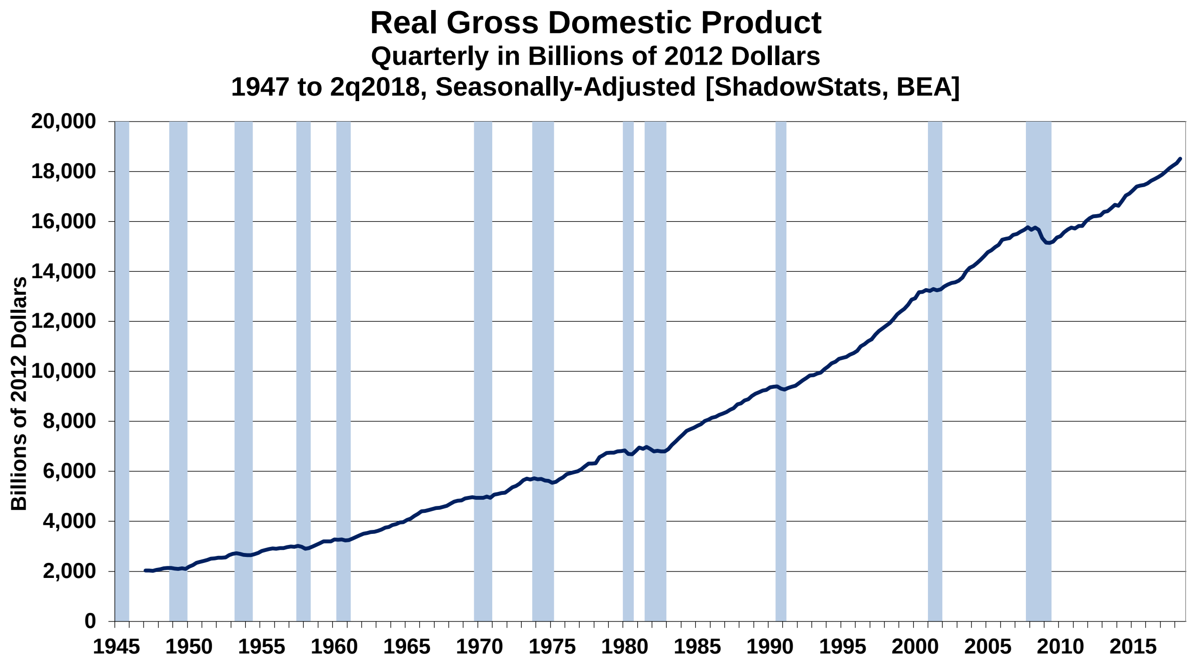
Graph 28: Quarterly GDP in Billions of 2012 Dollars (2000 to 2018), Third-Estimate of Second-Quarter 2018



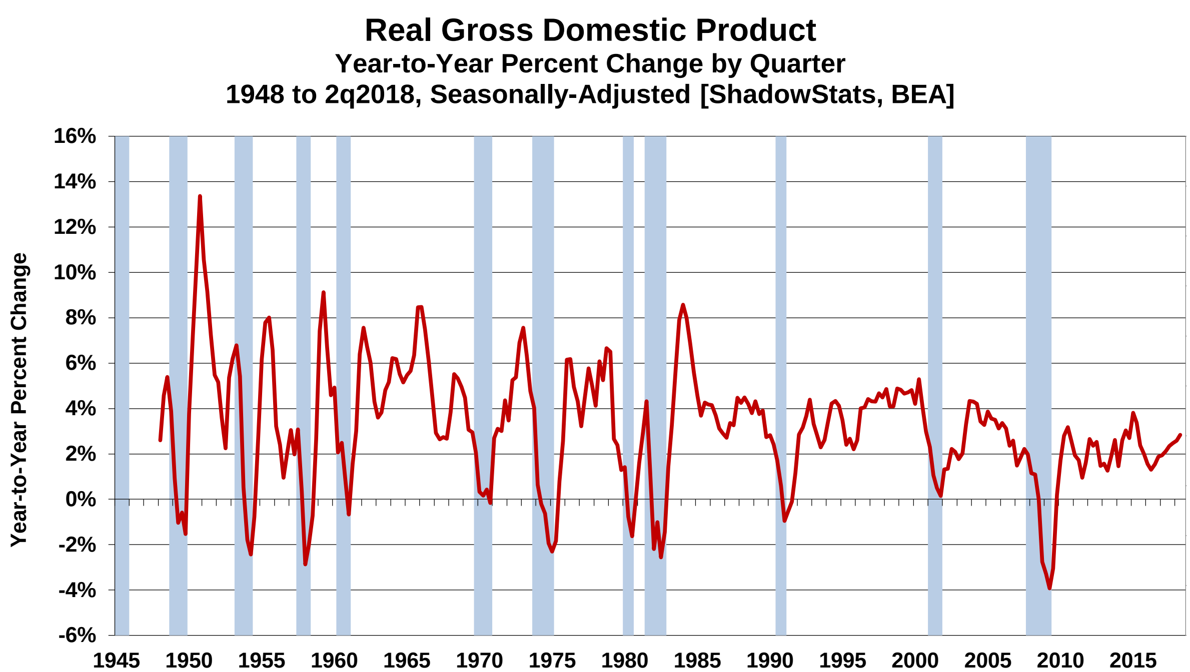
Graph 29: Quarterly GDP Real Year-to-Year Change (2000 to 2018), Third-Estimate of Second-Quarter 2018



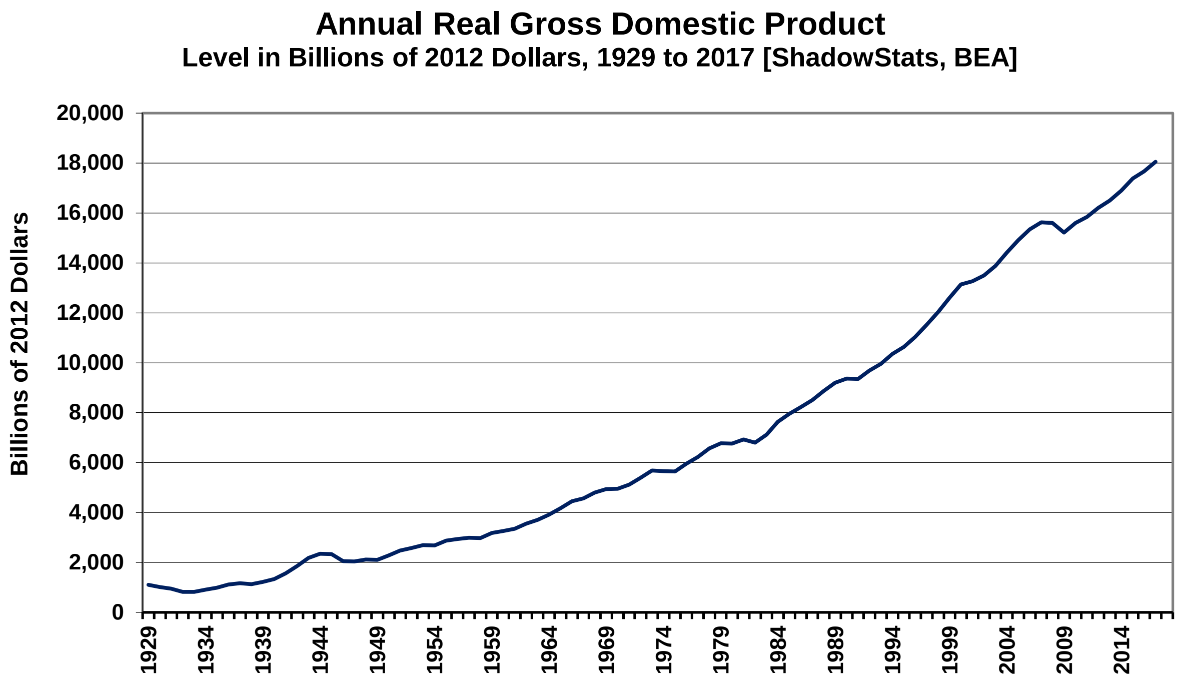
Graph 30: Quarterly GDP in Billions of 2012 Dollars (1947-2018), Third-Estimate of Second-Quarter 2018



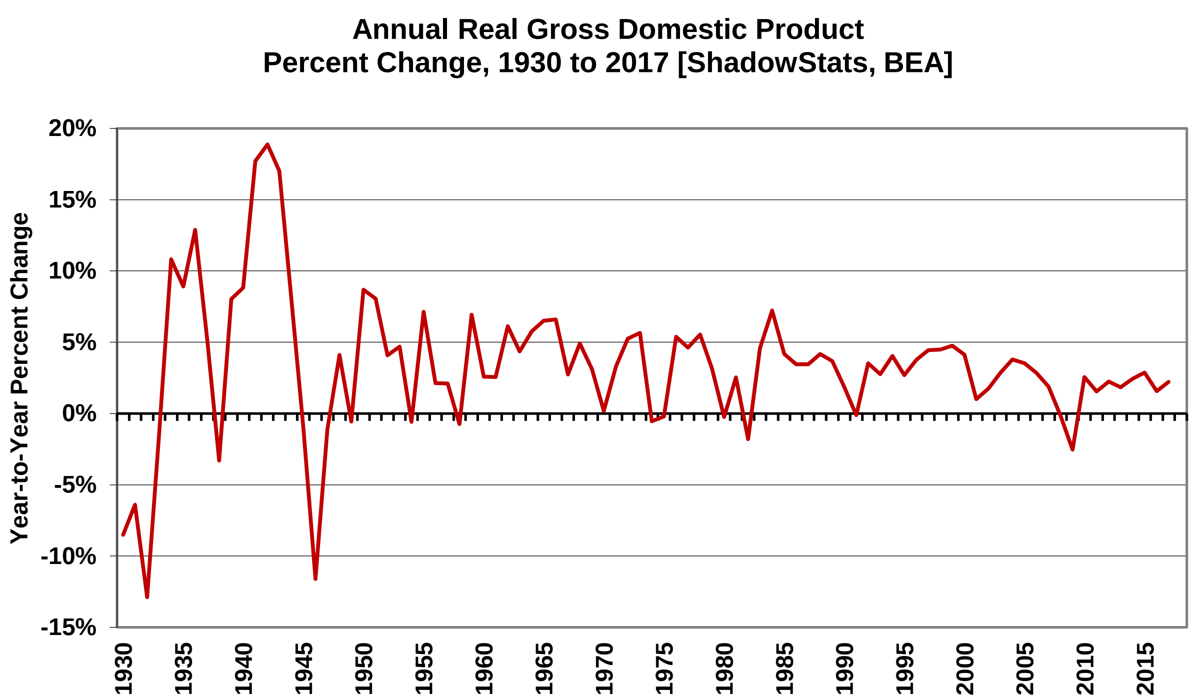
Graph 31: Year-to-Year GDP Real Change (1948-2018), Third-Estimate of Second-Quarter 2018



Graph 32: Annual GDP in Billions of 2012 Dollars (1929-2017)



Graph 33: Real Annual Percent Change (1930-2017)



Implicit Price Deflator (IPD). The IPD is the effective inflation rate used in deflating the before-inflation-adjustment or nominal GDP, to an after-inflation-adjustment, or real GDP basis. As general guidance, the weaker the inflation rate used in deflating an economic series, the stronger will be the resulting inflation-adjusted growth, and vice versa.

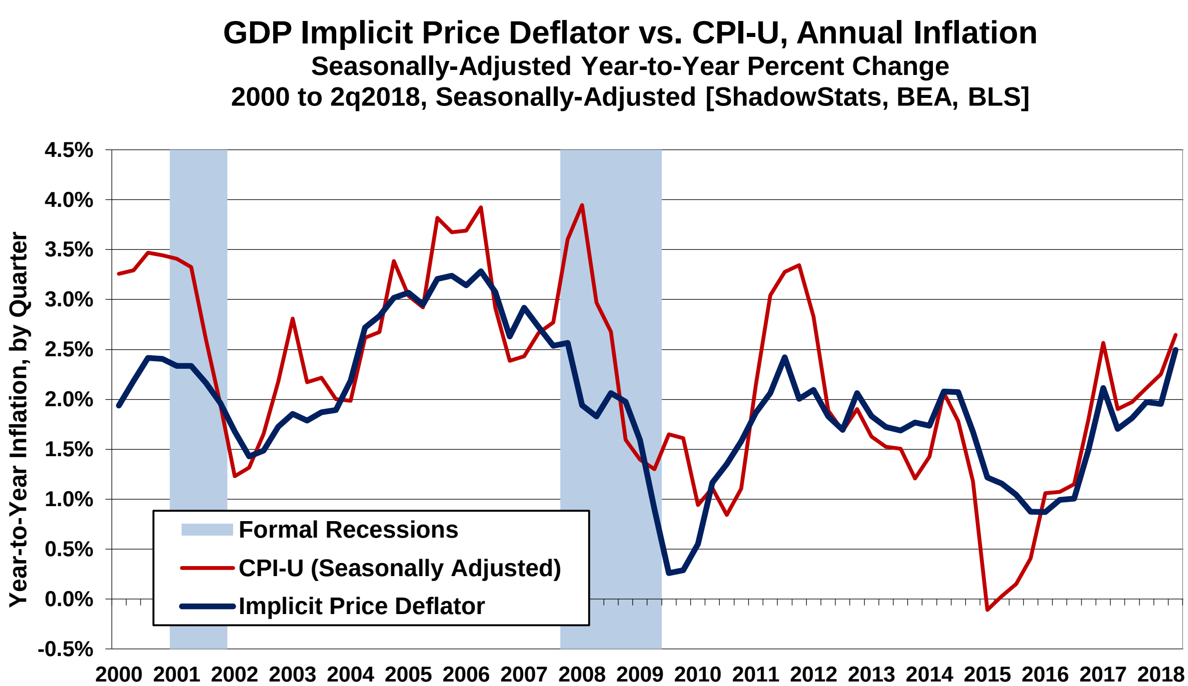
The seasonally-adjusted Implicit Price Deflator showed annualized quarterly inflation for the third estimate of second-quarter 2018 of 3.31%, versus 2.02% in first-quarter 2018, having gained 2.72% in fourth-quarter 2017, 1.94% in third-quarter 2017, 1.14% in second-quarter 2017, and 2.10% in first-quarter 2017.

Year-to-year, the third estimate of second-quarter 2018 IPD was 2.50%, versus 1.95% in first-quarter 2018, 1.97% in fourth-quarter 2017, 1.81% in third-quarter 2017, 1.70% in second-quarter 2017, 2.11% in first-quarter 2017 (see *Graph 34*).

For comparison, seasonally-adjusted, annualized quarterly CPI-U inflation, consistent with the way the seasonally-adjusted, headline real GDP is worked, showed annualized quarterly gains of 1.66% in second-quarter 2018, versus 3.50% in first-quarter 2018, 3.31% in fourth-quarter 2017, 2.13% in third-quarter 2017, 0.10% in second-quarter 2017 and 2.95% in first-quarter 2017.

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 2.65% in second-quarter 2018, versus 2.25% in first-quarter 2018, versus 2.12% in fourth-quarter 2017, 1.97% in third-quarter 2017, 1.90% in second-quarter 2017 and 2.57% in first-quarter 2017 (see *Graph 34*).

Graph 34: Year-to-Year Inflation, Implicit Price Deflator vs. CPI-U, to Second-Quarter 2018, Third Estimate IPD



ShadowStats Alternate GDP. The ShadowStats-Alternate GDP (reviewed broadly reviewed in *Opening Comments* of *GDP Special No. 968*) for the third estimate of second-quarter 2018 GDP, was an unrevised year-to-year decline of 1.3% (-1.3%), versus a revised annual GDP headline gain of 2.9%. That was against a ShadowStats annual decline of 1.5% (-1.5%) and an annual, real headline GDP gain of 2.6% in fourth-quarter 2017. Details are highlighted in the Alternate Data tab on the GDP on the www.ShadowStats.com home page.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the heavily bloated, overstated, second estimate of an annualized, headline quarter-to-quarter gain of 4.2% in second-quarter 2018 likely was much weaker in reality, net of all the happy assumptions and regular reporting gimmicks.

Irrespective of the recent headline benchmark revisions, real-world quarterly contractions still 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.

The alternate GDP estimates are reviewed in the *Opening Comments* and *Section I* of *GDP Special No. 968*. Discussed there is the "Corrected" GDP and the ShadowStats-Alternate GDP, which reflect 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.

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

WEEK, MONTH AND YEAR AHEAD

Risks of U.S. Dollar and Financial-Market Turmoil Remain Intense, Amidst Mounting Fiscal, Liquidity and Political Concerns, Along With Faltering Headline Economic Activity. The headline economic outlook likely will continue to dim rapidly, as seen in the intensifying downturn in the housing and construction markets, and in stalling retail sales and production numbers, despite the headline ShadowStats "Corrected" GDP being off bottom and growing quarter-to-quarter. This circumstance is reviewed and updated in today's *Opening Comments*, in the context of continued weakening in consumer-liquidity trends and the likely tipping point for the markets discussed in *Commentary No. 970* (see also *Commentary No. 969-Extended*, *Special Commentary No. 968-Extended*, *Commentary No. 967* and *Commentary No. 966* and *Commentary No. 959-B*).

Also consider as basic background *Hyperinflation Watch – No. 3* and *Consumer Liquidity Watch – No. 4*. Both *Watches* will be updated in the week ahead, reflecting the latest detail of intensifying consumer- and systemic-liquidity issues, exacerbated by last week's FOMC rate hike designed to "slow" the economy. Postings and links to the two *Watches* will be advised by e-mail, along with links provided on the www.ShadowStats.com home page.

Hyperinflation Watch – No. 3 reviewed the broad outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets (again, see the *Opening Comments* of *Commentary No. 967*). Such expanded upon the annual review in *Special Commentary No. 935*. The broad outlook on the economy has not changed. Weaker economic growth and renewed, faltering economic headlines should continue. The fundamental outlook for U.S. dollar and related market circumstances also broadly have not changed from the related vulnerabilities discussed in earlier missives, subject ultimately to extraordinary financial-market and economic turmoil.

The dollar and financial markets remain at extreme risk of intense, panicked declines, possible at any time. Holdings of 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 are covered on the next page.]

PENDING ECONOMIC RELEASES:

Trade Deficit (August 2018). Details for the headline August 2018 Trade Deficit (goods and services) will be released Friday, October 5th, with coverage then in *Commentary No. 972*. Expectations appropriately are for a sharp deterioration in the August trade shortfall, based on the September 27th "advance" estimate of the August goods deficit widening by five-percent, month-to-month. Discussed in today's *Opening Comments*, and reflected there in *Graph OC-2*, that trend is now solid enough to suggest the third-quarter real merchandise trade deficit is on track to rival, if not to surpass the worst-ever quarterly real U.S. deficit of fourth-quarter 2005.

> **Look for the headline August Trade Deficit to widen meaningfully, as expected, with significant negative implications for third-quarter 2018 GDP growth.**

Employment and Unemployment (September 2018). The Bureau of Labor Statistics (BLS) will publish headline September labor data on Friday, October 5th, with at least summary coverage of the detail in *Commentary No. 972* of that date, with likely supplemental coverage over the weekend.

> **Hurricane Florence disruptions likely reduced payroll counts, but spiked employed counts in the establishment survey (see *Commentary No. 970*), in the same directions as consensus expectations for the headline details, otherwise also opening the headline detail to surprises.**

In the context of likely hurricane disruptions to the headline payroll-employment and household surveying (see the discussion in *Commentary No. 970*), which would tend to boost the Household Survey employed count and reduce the Payroll Employment count, there could be some other surprises.

Consensus expectations appear to be in the same directions as the likely hurricane distortions, with headline September Payroll Employment growth expected to slow from August's headline 201,000 jobs gain, and with the headline U.3 unemployment rate expected to narrow to a near-record -low 3.8% from 3.9% in August.

Beyond hurricane distortion, negative surprises remain a fair bet, where labor conditions continue far shy of the happy news hyped in the popular media. Watch for both of the heavily-stressed Household Survey measures (Employment-Population Ratio and Participation Rate) to continue under negative pressure (see *Graph OC-23* for last month's Employment-Population Ratio).

Year-to-year change in payroll growth and other year-to-year comparisons could be boosted (or otherwise distorted) by year-ago hurricane comparisons. For example, payroll jobs growth likely was more heavily hit in September 2017 than in the current September 2018 circumstance.

On the positive side, the just-released Conference Board's Help-Wanted Advertising® (HWOL) for September 2018 showed some pickup, dominated by New Ads (see *Graph OC-1* and accompanying discussion the *Opening Comments*). Nonetheless, although the aggregate HWOL was up year-to-year, New Ads were down for the year, and both measures remained sharply below recent, historic peaks.

[Links to Prior Commentaries, etc. begin on the next page.]

LINKS TO PRIOR COMMENTARIES, SPECIAL REPORTS AND OTHER WRITINGS

Most Recent Watches:

The ***Consumer Liquidity Watch*** of August 10th: *Consumer Liquidity Watch – No. 4*.

The ***Hyperinflation Watch*** of August 12th: *Hyperinflation Watch – No. 3*.

The latest Watches always are available on www.ShadowStats.com and by link from the current *Commentary*. Updates pending in the next week will be advised by e-mail as they are posted.

Prior Writings Underlying the Regular and *Special 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 Regular Commentaries: *[Listed here are* Commentaries *of the last several months or so, plus recent* Special Commentaries *and a sampling of others covering a variety of non-monthly issues, including annual benchmark revisions, dating back to 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* should be published at least weekly, with *Consumer Liquidity* and *Hyperinflation Watches* updated every several weeks or so, updating general economic, consumer-liquidity and financial-market circumstances as they develop.

Commentary No. 970 (September 26th) discussed a potential, pending Tipping Point in the U.S. financial markets along with a review of August 2018 CPI, PPI, Retail Sales, Industrial Production and the CASS Freight Index™.

Commentary No. 969-Extended (September 16th) Reviewed the reporting of 2017 Real Median Annual Household Income and related measures of Income Dispersion, along with extended coverage of the August 2010 Employment and Unemployment numbers, including an updated Supplemental Labor-Detail Background Supplement.

Flash Commentary No. 969-Advance (September 7th) Covered initial headline employment and unemployment detail for August 2018 (expanded upon in *No 969-B*), July Construction Spending, the July Trade Deficit and a review of August Monetary Conditions.

Special Commentary No. 968-Extended (September 6th) Reviewed underlying economic reality, in the context of statistical deception used in boosting headline GDP activity, and against the background of extended analysis of the 2010 Comprehensive GDP Benchmarking. Separately covered was extended coverage of the second estimate of second-quarter 2018 (see *Flash Commentary No. 968-Advance*).

Flash Commentary No. 968-Advance (August 29th) provided a summary review of the headline first revision, second estimate of Second-Quarter 2018 GDP and initial estimates of GDI and GNP. Also updated early indications from the latest Consumer Liquidity measures.

Commentary No. 967 (August 24th) discuused the annual squirrely season and reviewed July 2018 New Orders for Durable Goods and New- and Existing-Home Sales and the preliminary benchmark revision to 2018 payroll employment.

Commentary No. 966 (August 17th) reviewed July 2018 Retail Sales, Industrial Production, New Residential Construction and the CASS Freight Index™.

Commentary No. 965 (August 12th) covered the July 2018 Consumer and Producer Price Indices (CPI and PPI), and Real Average Weekly Earnings and deteriorating consumer liquidity conditions.

Commentary No. 964-A (August 3rd) preliminary coverage of July 2018 Employment/Unemployment, Conference Board Help Wanted OnLine® Advertising, M3 and the June Trade Deficit and Construction Spending.

Commentary No. 963 (July 31st) reviewed June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index, all in the context of the GDP revisions and unfolding, underlying economic reality.

Commentary No. 962 (July 27th) provided initial coverage of the first or "advance" estimate of Second-Quarter 2018 Gross Domestic Product (GDP) and the Comprehensive Benchmark Revisions to the series back to 1929. A full update and extended coverage are in today's (September 4th) *Special Commentary.*

Commentary No. 961 (July 26th) provided full coverage on New Residential Investment (Housing Starts, Building Permits and New- and Existing-Home Sales. Preliminary coverage was provided on June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index™, all of which were expanded upon in *Commentary No. 963.*

Commentary No. 960 (July 15th) reviewed the June Consumer and Producer Price Indices (CPI and PPI), Real Earnings and related implications for consumer and systemic liquidity

Commentary No. 959-B (July 11th) provided extended detail on June 2018 Employment and Unemployment, the May 2018 Trade Deficit and updated economic outlook, along with expanded discussion on issues affecting the credibility of the headline employment and unemployment data.

Commentary No. 959-A (July 6th) provided flash headlines and summary details of the June 2018 Employment and Unemployment and the May 2018 Trade Deficit, expanded upon in *Commentary No. 959-B* and headline coverage of June 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 958 (July 3rd) covered May 2018 Construction Spending and the accompanying annual benchmarking to that series.

Commentary No. 957 (July 1st) covered May 2018 New Orders for Durable Goods and the third estimate of First-Quarter 2018 Gross Domestic Product (GDP) and the coincident second estimates of Gross National Product (GNP) and Gross Domestic Income (GDI).

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 Industrial Production benchmarking 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.