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

#### **COMMENTARY NUMBER 961**

June 2018 Retail Sales, Production, New Orders, Housing Starts and Home Sales, Freight Index
July 26, 2018

\_\_\_\_

July 27th GDP Benchmark Revisions Offer a Likely Hit to Historical Growth, Could Shift Relative Second-Quarter versus First-Quarter Patterns, Offering a Surprise to Booming Second-Quarter Expectations

June 2018 Housing Starts, Building Permits and New- and Existing-Home Sales All Dropped Sharply Month-to-Month, With Downtrending Six-Month Moving Averages

Shy of Recovering Pre-Recession Peaks, June Activity Was Down for Housing Starts by 48.4% (-48.4%), Single-Unit Starts by 52.9% (-52.9%), Multiple-Unit Starts by 30.0% (-30.0%), Building Permits by 43.7% (-43.7%), Existing-Home Sales by 26.0% (-26.0%) and New-Home Sales by 54.6% (-54.6%)

June Manufacturing Jumped, Reversing Some of May's Supply-Disrupted Slump, Still Holding Shy by 5.6% (-5.6%) of Recovering Its Pre-Recession High, Setting a Record 42-Consecutive Quarters (126 Months) of Economic Non-Expansion

Monthly Real Retail Sales Jumped in June, Boosted by Inconsistent Seasonal Adjustments

Real Growth in New Orders for Durable Goods Was Tepid in June, with the Aggregate Series Shy of Its Pre-Recession Peak by 9.9% (-9.9%)

June Freight Index Annual Growth Backed Off Recent Surge; Current Activity Still Shy by 5.2% (-5.2%) of a Recovering Pre-Recession High

\_\_\_\_\_

**NOTE TO SUBSCRIBERS:** I apologize for delayed *Commentaries* this week. Tumbling down a concrete walkway over the weekend, I ended up looking and feeling like a boxer who had just lost a lengthy match. Waylaid from regular writing for a couple of days, I am OK and now largely recovered. Some of the delayed writing is caught up here. Today's *Commentary No. 961* concentrates on the June 2018 housing construction and home sales data released in the last week.

*Commentary No. 962*, tomorrow, July 27th, will headline the first estimate of Second-Quarter 2018 GDP along with a summary of the comprehensive annual GDP revisions back to 1929.

Full details on today's June New Orders for Durable Goods, recent Industrial Production, Retail Sales and the Cass Freight Index<sup>TM</sup> reporting will be caught up in *Commentary No. 963* over the weekend. They also are discussed in today's *Opening Comments*.

Extended analysis and coverage of the GDP and comprehensive benchmarking will be published on Tuesday, July 31st, followed by a review of July Employment and Unemployment and the June Trade Deficit and Construction Spending on Friday, August 3rd. Updated *Hyperinflation* and *Consumer Liquidity Watches* will follow shortly thereafter, likely early in the August 6th week.

Links to the most-recent *Watches:* <u>Hyperinflation Watch – No. 2</u> (July 20th) and <u>Consumer Liquidity Watch – No. 3</u> (July 18th). The *Watches* always are available directly at <u>www.shadowstats.com</u>, along with your case-sensitive login and password. Updates are advised by e-mail, unless you request otherwise (send a note to <u>johnwilliams@shadowstats.com</u>).

Planned publication schedules, revisions to same and notes to subscribers are posted regularly in the top left hand-column (under the *Latest Commentaries* heading) of the *ShadowStats* home page.

Today's (July 26th) Opening Comments review recent economic reporting trends and developing economic circumstances, with a brief preview of tomorrow's pending GDP revisions.

The Reporting Detail reviews the June 2018 New Residential Construction (Housing Starts and Building Permits) and Existing- and New-Home Sales.

The next Week, Month and Year Ahead will be incorporated into catch-up Commentary No. 963 over the weekend.

Commentary No. 961 contents, including graphs and tables, are indexed and linked on following page.

#### **Contents - Commentary No. 961 Major Sections and Graphs**

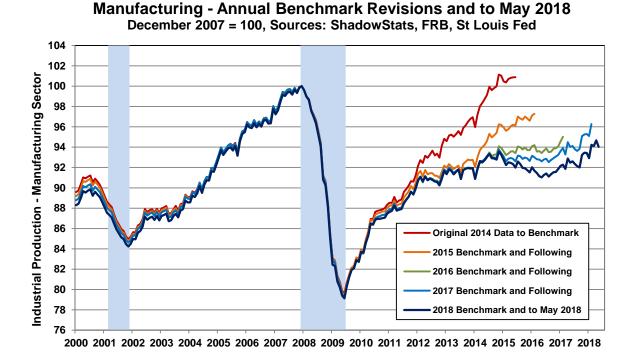
OPENING COMMENTS	4
Potential GDP Shenanigans, as Mixed, Harder Reporting Holds Shy of a Boom	4
Graph OC-1: Manufacturing –Annual Benchmark Revisions and Reporting to May 2018	4
Graph OC-2: Level of Real Retail Sales (2000 to Date)	<i>t</i>
Graph OC-3: Index of Aggregate Industrial Production, Since 2000	7
Graph OC-4: Industrial Production - Manufacturing (75.5% of the IIP in 2017), Since 2000	
Graph OC-5: Real New Orders for Durable Goods, Ex-Commercial Aircraft, Since 2000	8
Graph OC-6: CASS Freight Index TM Moving-Average Level (2000 to June 2018)	8
REPORTING DETAIL	9
New Residential Construction (June 2018)	9
Graph 1: Single- and Multiple-Unit Housing Starts (Monthly Rate of Activity, 2000 to June 2018)	12
Graph 2: Single- and Multiple-Unit Starts (Six-Month Moving Average, Monthly Rate of Activity)	12
Graph 3: Aggregate Housing Starts (Monthly Rate of Activity, 2000 to June 2018)	13
Graph 4: Aggregate Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)	13
Graph 5: Single-Unit Housing Starts (Monthly Rate of Activity, 2000 to June 2018)	14
Graph 6: Single-Unit Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)	14
Graph 7: Multiple-Unit Housing Starts, Two-or-More Units (Monthly Rate of Activity, 2000 to June 2018)	15
Graph 8: Multiple-Unit Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)	15
Graph 9: Building Permits (Annualized Monthly Rate of Activity), 2000 to Date	19
Graph 10: Housing Starts (Annualized Monthly Rate of Activity), 2000 to Date	19
Graph 11: Building Permits (Six-Month Moving Average), 2000 to Date	20
Graph 12: Housing Starts (Six-Month Moving Average), 2000 to Date	20
Graph 13: Housing Starts (Annualized Monthly Rate of Activity), 1946 to Date	2
Graph 14: Housing Starts (Annualized Monthly Rate of Activity, 6-Mo Moving Avg), 1946 to Date	2
Existing- and New-Home Sales (June 2018)	22
Graph 15: Existing-Home Sales (Monthly Rate of Activity)	25
Graph 16: Existing-Home Sales (Six-Month Moving Average)	25
Graph 17: New-Home Sales (Monthly Rate of Activity)	26
Graph 18: New -Home Sales (Six-Month Moving Average)	26

#### **OPENING COMMENTS**

#### Potential GDP Shenanigans, as Mixed, Harder Reporting Holds Shy of a Boom

Comprehensive Benchmark Revisions to Gross Domestic Product Will Restate U.S. Economic History Back to 1929, With Growth in the Last Decade Likely to Take Some Hit. Reviewed in Commentary No. 956 and Commentary No. 957, the Bureau of Economic Analysis (BEA) will publish its Comprehensive Benchmark Revision to the GDP series, tomorrow, July 27th. The BEA will recast its broadest economic measure, the Gross Domestic Product (GDP), and purportedly equivalent Gross Domestic Income (GDI) and the broader Gross National Product (GNP) back to the beginning of the reporting of the series in 1929.

Graph OC-1: Manufacturing -Annual Benchmark Revisions and Reporting to May 2018



Copyright 2018 Shadow Government Statistics, Walter J. Williams, www.shadowstats.com

Aside from restating the inflation-adjusted, constant-dollar basis for the series from 2009 to 2012, a large number of revisions and redefinitions loom, ranging from missed historical postings in earlier, less-comprehensive benchmarkings, to seasonally-adjusting "seasonal adjustments" in a continuing effort to smooth out the uncomfortable reality of regular business cycles, particularly on the downside.

<u>Commentary No. 954</u> reviewed this year's benchmarking of subsidiary series, with the subsequent <u>Commentary No. 958</u> covering Construction Spending, the last of the underlying series to be benchmarked. As an example of underlying changes that should be recast in the GDP data, *Graph OC-1* reflects the latest benchmark revision and ongoing reporting in the Manufacturing sector of Industrial Production into May 2018. The patterns there suggest some potential downside revisions to recent years' headline GDP reporting, and, as discussed in <u>Commentary No. 956</u>, even the possibility of a Great Recession double-dip beginning to appear in the numbers, thanks to some missed benchmarkings shown in *Graph OC-1*.

Consensus Expectations Are for Initial, Real Second-Quarter 2018 GDP Headline Growth of About 4.2%, Versus 2.0% in the First-Quarter, But Watch Out for Benchmarking Gimmicks! Where consensus estimates appear to be running around 4.2% for the initial estimate of real second-quarter GDP, jumping from the last pre-benchmark estimate of 2.0% for first-quarter GDP, the Atlanta Fed just dropped its estimate to 3.8% from 4.5% (July 26th).

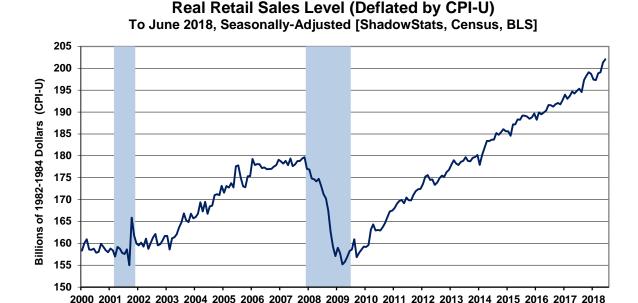
What has not been widely considered is that an early benchmarking goal of the BEA was to revise seasonal adjustments so as to spike first-quarter activity regularly, as opposed to what some claim is a built-in seasonal depressant to first-quarter GDP activity. If that indeed has been incorporated into the benchmarking, then it should shift some growth to first-quarter 2018 activity, subtracting same from the second-quarter 2018. Accordingly, there is risk for a downside surprise to the expected the headline gain of 4.2%.

**Recent Headline Economic Reporting Has Remained Mixed.** Covered in the *Reporting Detail* are the latest numbers for June 2018 Housing Starts and Building Permits (*Graphs 1* to 14), as well as for June Existing- and New-Home Sales (*Graphs 15* to 18). The housing sector took a heavy hit in in June, where each series declined sharply in the month, often on top of downside revisions to the prior month's activity. Getting around the issue of high-volatility in the Census Bureau's Housing Starts and New-Home Sales series, the smoothed six-month trend for each of these series now is in downtrend.

*Coverage in the Weekend Commentary.* The other series discussed here all will be reviewed with normal coverage in *Commentary No. 963*, to be published over the weekend.

On a happier note, *Real Retail Sales* jumped in June 2018 on top of upside revisions, as reflected in *Graph OC-2*. Yet, those numbers were heavily skewed to the upside through the use of inconsistent seasonal-adjustment factors. With consistent factors used year-to-year, the monthly gain in June's nominal sales was a contraction, not a gain.

Graph OC-2: Level of Real Retail Sales (2000 to Date)



June 2018 *Industrial Production* (*Graph OC-3*) gained 0.6% in the month having declined by a downwardly revised 0.5% (-0.5%) [previously 0.1% (-0.1%)] in May. In aggregate, June production was 0.1% ahead of where it was in April.

The biggest monthly boost came from a rebound in *Manufacturing* (*Graph OC-4*), which partially regained the activity it lost in May from a parts-supply disruption. Nonetheless, June Manufacturing did not recover its level of April activity, remained down by 5.6% (-5.6%) from recovering its pre-recession high, having now completed a record 126 months (42 quarters) of economic non-expansion.

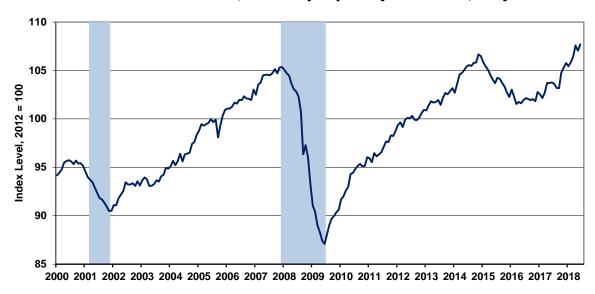
Oil and Gas Production in the Mining Sector added positive growth to the aggregate, while the ever-fluctuating Utilities series was a negative for the month.

In combination with *Manufacturing*, both June 2018 *Real New Orders for Durable Goods* (*Graph OC-5*) and the June *Cass Freight Index* (*Graph OC-6*) remained well shy of recovering pre-recession highs. Those three sectors will be compared and contrasted in this weekend's coverage. Where annual growth in the freight index pulled back sharply, it remained strong. Manufacturing annual growth has been slowing, while real orders, ex-commercial aircraft have remained stable.

#### Graphs OC-3 to OC-6 begin on the next page.]

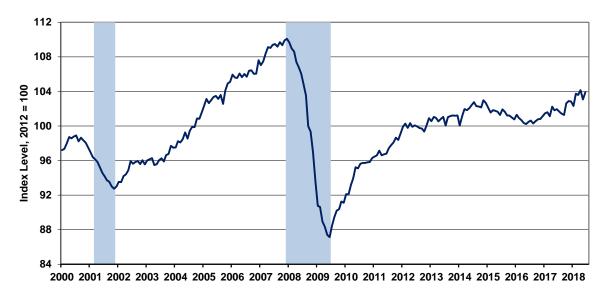
Graph OC-3: Index of Aggregate Industrial Production, Since 2000

### Index of Industrial Production (2012 = 100) Level to June 2018, Seasonally-Adjusted [ShadowStats, FRB]



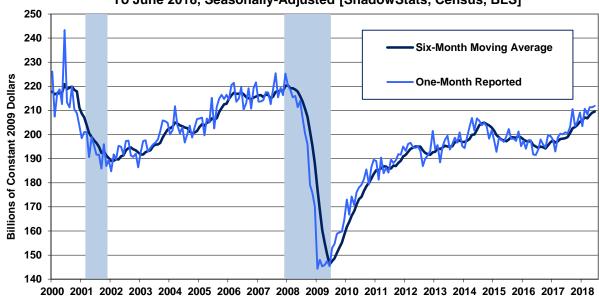
Graph OC-4: Industrial Production - Manufacturing (75.5% of the IIP in 2017), Since 2000

#### Production - Manufacturing (SIC) (2012 = 100) Level to June 2018, Seasonally-Adjusted [ShadowStats, FRB]



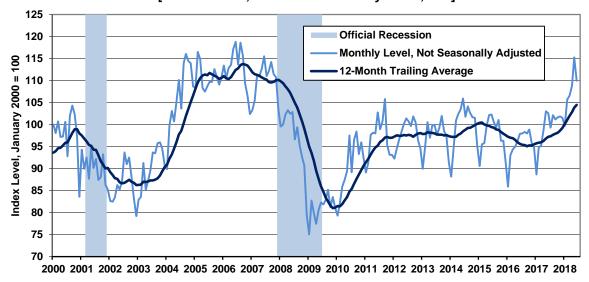
Graph OC-5: Real New Orders for Durable Goods, Ex-Commercial Aircraft, Since 2000

# Real New Orders for Durable Goods (Ex-Commercial Aircraft) Billions of Constant \$2009, Deflated by PPI Durable Manufactured Goods To June 2018, Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph OC-6: CASS Freight Index ™ Moving-Average Level (2000 to June 2018)

# Cass Freight Index<sup>™</sup> (January 2000 = 100) To June 2018, Not Seasonally Adjusted [ShadowStats, Cass Information Systems, Inc.]



#### REPORTING DETAIL

#### **New Residential Construction (June 2018)**

June Building Permits and Housing Starts Fell Meaningfully, Contracted in the Second Quarter, Held Shy of Recovery by 43.7% (-43.7%) and 48.4% (-48.4%), With All Series Now Downtrending. June 2018 was not a good month for New Residential Construction. The ever-unstable Housing Starts series fell by a large but statistically-significant 12.3% (-12.3%) in June 2018, month-to-month, on top of a downside revision to May's activity. The usually more-stable, but not always historically-consistent Building Permits series also declined month-to-month, by a statistically-significant 2.2% (-2.2%), and that was the second consecutive, statistically-significant monthly drop in Permits, which, in theory, lead Housing Starts activity. Both series also contracted quarter-to-quarter in second-quarter 2018, with Housing Starts falling at an annualized pace of 15.7% (-15.7%) and Building Permits falling at an annualized pace of 12.0% (-12.0%).

Consumer Liquidity Problems Continue to Impair Residential Construction Activity. The liquidity bind besetting consumers continues to constrain consumer activity, including in residential real estate. Headline investment in residential real estate showed an unusual, outright quarterly contraction in first quarter 2018 GDP, subject to tomorrow's GDP benchmarking (see Commentary No. 957 and Consumer Liquidity Watch – No. 3). 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 sustain 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.

June 2018 Housing Starts, Headline Detail. The Census Bureau and Department of Housing and Urban Development (HUD) reported June 18th, a statistically-significant, seasonally-adjusted, headline monthly decline in June 2018 Housing Starts of 12.3% (-12.3%) +/- 9.7% (all confidence intervals are expressed at the 95% level). That followed a revised gain of 4.8% [previously 5.0%] in May, a revised decline of 3.8% (-3.8%) [previously 3.1% (-3.1%), initially 3.7% (-3.7%)] in April and an unrevised gain of 2.9% in March. Level-of-activity aggregate detail is plotted in *Graphs 30* to 33, and in *Graphs 40*, 41, 42 and 43.

Year-to-year change in the seasonally-adjusted, June 2018 aggregate Housing Starts measure was a statistically-insignificant decline of 4.2% (-4.2%) +/- 11.9%, versus revised gains 19.2% [previously 20.3%] in May 2018, 9.5% [previously 10.4%, initially 10.5%] in April 2018 and an unrevised gain of 12.6% in March 2018.

Sampling Statistics Showed a Significant Decline in Housing Starts in June 2018 Monthly Activity. As rarely has been the circumstance, the headline monthly changes in Housing Starts were statistically-significant in June, although. more commonly, the annual confidence intervals have not been. Those 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 not seen in the current circumstance for monthly Housing Starts.

Such means that the actual monthly change for headline June 2018 Housing Starts, indicated at a decline of 12.3% (-12.3%) +/- 9.7%, was within a range from a contraction of 22.0% (-22.0%) to a decline of 2.6% (-2.6%) with 95% confidence, with the headline decline of 12.3% (-12.3%) the most likely change. The recently revised and benchmarked system had not done much, yet, to narrow those confidence intervals, perhaps something is afoot there.

Housing Starts by Unit Category. The June 2018 headline monthly decline of 12.3% (-12.3%) in total Housing Starts encompassed a monthly decline of 9.1% (-9.1%) in Single-Unit starts and a drop of 20.2% (-20.2%) in the Multiple-Unit "Five Units or More" starts category. There is a missing balance in the "Two to Four Units" category, which declined by 8.3% (-8.3%) in June. 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 declined by 19.8% (-19.8%), as discussed later in the broadest, aggregate "multiple unit" category. Other than for the headline monthly gain in aggregate Housing Starts, none of the other headline monthly changes and none of the headline annual changes was statistically significant. These numbers 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 one-unit structure housing starts—generally for individual consumption, resulting in New-Home Sales—versus multiple-unit structure starts that generally reflect the building of condominiums, rental and apartment units.

Housing starts for single-unit structures in June 2018 declined month-to-month by a statistically-insignificant 9.1% (-9.1%) +/- 10.3%, following revised gains of 5.1% [previously 3.9%] in May, of 0.7% [previously 2.2%, initially 0.1%] in April and an unrevised decline of 2.0% (-2.0%) in March. June 2018 single-unit starts showed a statistically-insignificant annual decline of 0.2% (-0.2%) +/- 11.2%, versus revised annual gains of 19.3% [previously 18.3%] in May 2018, 7.7% [previously 8.0%, initially 7.2%] in April 2018 and an unrevised 7.0% in March 2018 (see  $Graphs \ 1, \ 2, \ 5 \ and \ 6$ ).

Housing starts for apartment buildings, condominiums, etc. (generally 5-units-or-more) declined month-to-month in June 2018, by a statistically-insignificant 20.2% (-20.2%) +/- 22.8%, versus a revised gain of 6.7% [previously 11.3%], a revised decline in April of 17.2% (-17.2%) [previously 15.8% (-15.8%), initially 12.6% (-12.6%)] and an unrevised gain of 15.9% in March. A statistically-insignificant annual

decline of 15.3% (-15.3%) +/- 25.8% in June 2018, followed revised annual gains of 20.2% [previously 27.4% in May 2018, of 21.3% [previously 15.6%, initially 19.0%] in April 2018 and an unrevised 24.6% in March 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-significant June 2018 monthly decline gain of 12.3% (-12.3%) in aggregate starts was composed of a statistically-insignificant decline of 9.1% (-9.1%) in one-unit structures and a statistically-insignificant gain of 19.8% (-19.8%) in the multiple-unit structures category (two-units-ormore, including the five-units-or-more category). In contrast, ex-two-units-or-more, the multiple-unit category declined by 20.2% (-20.2%).

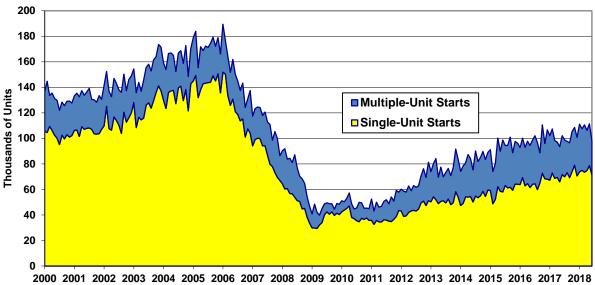
The liquidity bind besetting consumers continues to constrain consumer activity, including in residential real estate. Headline investment in residential real estate showed an unusual, outright quarterly contraction in first quarter 2018 GDP, which is subject to tomorrow's GDP benchmarking (see *Commentary No. 957* and *Consumer Liquidity Watch – No. 3*). 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 sustain 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.

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

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

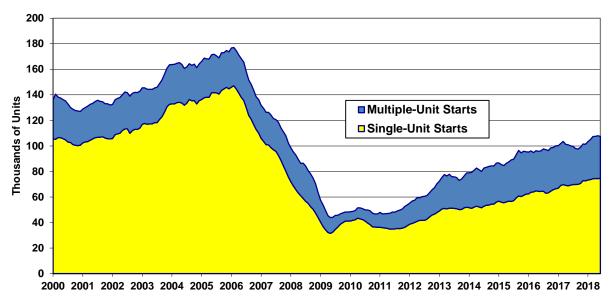
Graph 1: Single- and Multiple-Unit Housing Starts (Monthly Rate of Activity, 2000 to June 2018)

### Single- and Multiple-Unit Housing Starts (Monthly Rate) To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



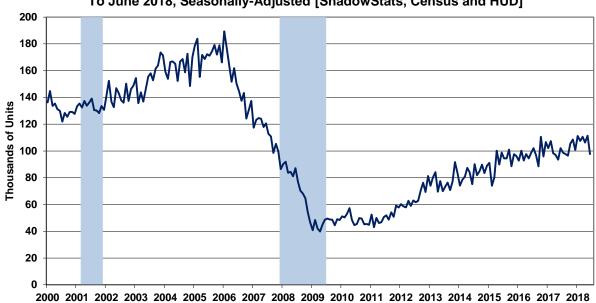
Graph 2: Single- and Multiple-Unit Starts (Six-Month Moving Average, Monthly Rate of Activity)

### Single- and Multiple-Unit Starts (6-Month Moving Average) To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

## Aggregate Housing Starts (Monthly Rate) Single- and Multiple-Unit Starts To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

### Aggregate Housing Starts (Six-Month Moving Average) To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

### Single-Unit Housing Starts (Monthly Rate) To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

### Single-Unit Housing Starts (Six-Month Moving Average) To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

### Multiple-Unit Housing Starts (Monthly Rate) Two-or-More Units

To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]

45

40

35

25

20

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

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

### Multiple-Unit Housing Starts (Six-Month Moving Avg) Total Two-or-More Units

To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]

40

35

20

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

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 1,173,000 in June 2018, down from a revised 1,337,000 [previously 1,350,000] in May 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 97,750 units in June 2018, instead of the annualized headline level of 1,173,000 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 prerecession peak for the series. Against that downside-spiked low in April 2009, the June 2018 headline monthly number was up by 145%, but it still was down by 48% (-48%) from the January 2006 prerecession 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 the *Reporting Detail*. 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, relatively flat, albeit down-trending stagnation, non-recovery and non-expansion.

With the headline June 2018 reporting, the six-month smoothed trends are now relatively flat, but downtrending across-the-board for Housing Starts (both Single- and Multiple-Unit Starts) and Building Permits.

Nonetheless, those still-broadly stagnant New Construction activity series, showed June 2018 Building Permits activity down by 43.7% (-43.7%) from recovering its pre-recession peak (see *Graphs 9* and *10*). Aggregate Housing Starts activity (see *Graphs 3* and *4*) is down similarly by 48.4% (-48.4%), with Single-Unit Starts (*Graphs 5* and *6*) down by 52.9% (-52.9%).

Multiple-Unit Starts (*Graphs* 7 and 8) had fallen back sharply, after first having recovered its 2005 prerecession 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 June 2018 total multiple-unit starts now down 30.0% (-30.0%) from its pre-recession peak on a monthly basis. As see in *Graph* 8, however, on a smoothed six-month moving average basis, multiple-unit starts are operating a level above its pre-recession peak.

In the context of a headline monthly decline in the aggregate June 2018 housing-starts detail (in both single-unit and multiple-unit starts), on top a of downside revisions to May 2018 details, the six-month smoothed, moving averages of these series, as seen in *Graphs 2, 4, 6* and 8, have tended to flatten out, with all now in some downtrend. Again, current levels of headline monthly activity still hold well below pre-recession peaks for the various series.

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 has remained flat in the last several years, in ongoing, low-level stagnation, with nascent downtrends now unfolding (see accompanying *Graphs 9* to *14* of the Building Permits and Housing Starts series). Again, also see *Graphs 1* to 8, covering all of the major Housing Starts series.

Specifically, the more-stable but sometimes inconsistent Building Permits activity also has seen a broad pattern of non-recovery. The headline, monthly decline of 2.2% (-2.2%) +/- 1.4% in June, was the second straight statistically-significant monthly drop. Again, all confidence intervals expressed here are at the 95% level. 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.* 

The size and nature of the permits sampling base is revised frequently, without offsetting adjustments to the historical data, as discussed in <u>Commentary No. 950</u>. 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 current headline monthly decline in Permits has intensified the downtrend in the otherwise the broadly stagnant six-month moving average of this series (see *Graph 11*).

Annualized Second-Quarter 2018 Change in Housing Starts Contracted at an Annualized Pace of 15.7% (-15.7%) Having Boomed by 19.6% in First-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 to 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%, with a year-to-year gain of 0.5%.

First quarter 2018, annualized quarterly growth slowed to 19.6%, with annual growth up to 7.2%. Initial reporting of second-quarter 2018 activity showed an annualized quarterly contraction of 15.7% (-15.7%), with year-to-growth of 7.8%.

**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 annual gain of 5.4%.

First-Quarter 2018, annualized quarterly growth was an unrevised 8.3%, up by 5.4% year-to-year. Initial reporting of second-quarter 2018 was an annualized contraction of 12.0% (-12.0%), up year-to-year by 4.4%.

[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

### Building Permits for Housing Units (Annual Rate by Month) To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

### Housing Starts (Annual Rate by Month) To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

### Building Permits for Housing Units (Six-Month Moving Average) To June 2018 Seasonally-Adjusted [ShadowStats, Census and HUD]



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

### Aggregate Housing Starts (Six-Month Moving Average) To June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

### Housing Starts (Annual Rate by Month) 1946 to June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



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

Housing Starts (Annual Rate by Month, 6-Month Moving Avg) 1946 to June 2018, Seasonally-Adjusted [ShadowStats, Census and HUD]



#### **Existing- and New-Home Sales (June 2018)**

June 2018 Existing-Home Sales Fell by 0.6% (-0.6%), versus Deepened, Negative May Sales, Down Year-to-Year by 2.2% (-2.2%), Shy by 26.0% (-26.0%) of Recovering Its Pre-Recession Peak. Monthly Existing-Home Sales declined by 0.6% (-0.6%) in June 2018, following a revised decline of 0.7% (-0.7%) [previously 0.4% (-0.4%)] in May 2018, and an unrevised decline of 2.7% (-2.7%) in April and unrevised gains of 1.1% March and 3.0% in February. Still, those gains never offset the recent sales decline of 3.2% (-3.2%) in January 2018 and 2.8% (-2.8%) in December 2017.

Annual change contracted in June 2018 by 2.2% (-2.2%), versus a revised contraction of 3.4% (-3.4%) [previously 3.0% (-3.0%)], versus unrevised annual declines of 1.6% (-1.6%) in April 2018, of 1.2% (-1.2%) in March 2018, a gain of 1.1% in February 2018, a year-to-year decline of by 4.8% (-4.8%) in January 2018 and an annual gain of 0.9% in December 2017. The January 2018 annual drop was the steepest since August 2014.

Nonetheless, as shown in accompanying *Graph 15*, November 2017 Existing-Home Sales was close to the highest level of the post-2006 revamped series (blue line), but still well below the pre-recession peak in the original series (red line). That said, smoothed for six-month moving averages, the Existing-Home Sales series had been in uptrending stagnation into 2017, which recently shifted to fluttering, relatively-flat and now clearly in down-trending stagnation, reflected in *Graph 16*.

Existing-Home Sales Continued in Smoothed, Downtrending Stagnation. Released by the National Association of Realtors (NAR) on July 23rd, Existing-Home Sales (closings of home sales, as opposed to the count of contract signings for New-Home Sales, reported by the Census Bureau) declined month-tomonth by 0.56% (-0.56%) in June 2018, versus a downwardly revised 0.73% (-0.73%) [previously 0.37% (-0.37%)] in May, an unrevised decline of 2.68% (-2.68%) in April, having gained 1.08% in March, 2.97% in February, having declined month-to-month by 3.24% (-3.24%) in January and down by 2.80% (-2.80%) in December 2017, following monthly gains of 4.00% in November and 2.42% in October.

June 2018 year-to-year change was a contraction of 2.18% (-2.18%) versus a revised decline in May 2018 of 3.39% (-3.39%) [previously 3.04% (-3.04%)] and unrevised annual contractions of 1.62% (-1.62%) in April 2018, 1.23% (-1.23%) in March 2018, an annual gain of 1.09% in February 2018, an annual plunge in January 2018 of 4.78% (-4.78%), and annual gains of 0.91% in December 2017, 2.14% in November 2017 and an annual decline of 0.54% (-0.54%) in October 2017.

Second-quarter 2018 Existing Homes Sales contracted at an annualized pace of 6.61% (-6.61%), versus a contraction of 6.06% (-6.06%) in first-quarter 2018, an annualized quarterly gain of 14.82% in fourth-quarter 2017 and consecutive quarterly contractions of 9.94% (-9.94%) and 3.97% (-3.97%) respectively in third-quarter 2017 and second-quarter 2017.

Distressed Sales Held at 3.0% of Total Sales, With June All-Cash Sales Rising to 22%. In the context of continuing consumer liquidity constraints, the NAR estimated the portion of June 2018 sales in "distress" at 3% (2% in foreclosure, 1% short sales), the same as in May 2018 and down from 4% (3% in foreclosure, 1% short sales) in June 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 rose to 22% of transactions in June 2018, up from 21% May 2018 up from 18% in June 2017.

June New-Home Sales Declined by an Insignificant 5.3% (-5.3%), in the Usual Nonsense Volatility, Against a Sharp Downside Revision to May, Still Shy by 54.7% (-54.7%) of Recovering Its Pre-Recession High. Miserable reporting quality continued with headline June 2018 New-Home Sales, despite indications from the Census Bureau that May's annual benchmark revisions would improve the stability and significance of the headline reporting detail (see *Commentary No. 951*).

Released July 25th 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), declined month-to-month in June 2018 by a statistically-insignificant 5.3% (-5.3%) +/- 20.0% (again, all confidence intervals are expressed at the 95% level).

That was against a downwardly-revised monthly gain of 3.9% [previously up by 6.7%] in May, versus a deeper monthly decline in April of 4.6% (-4.6%) [previously 3.7% (-3.7%), initially 1.5% (-1.5%)], a revised monthly gain of 1.4% [previously 1.2%, initially 2.0%] in March and an unrevised 4.7% in February (see *Graph 17*).

The year-to-year change in June 2018 sales was a statistically-insignificant gain of 2.4% +/- 28.1%, versus revised annual gains of 10.3% [previously 14.1%] in May 2018, 8.1% [previously 8.9%, initially 11.6%] in April 2018, 4.5% [previously 4.4%, initially 4.5%] in March 2018, and an unrevised 7.3% in February 2018.

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 an gain of 0.4%, with initial second-quarter 2018 showing an annualized contraction of 6.0% (-6.0%).

Smoothed with a six-month moving average, however, this series, continued in low-level, non-recovering stagnation, which has turned to slight downtrend with the latest headline details (see *Graph 18*).

**Intensifying Consumer Liquidity Constraints Impair Residential Real Estate Activity, Both Existing- and New-Home Sales.** The liquidity bind besetting consumers continues to constrain residential real estate activity, as reviewed in *Consumer Liquidity Watch – No. 3*. 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

#### Shadow Government Statistics — Commentary No. 961 July 26, 2018

positive growth in domestic personal consumption, including residential real estate activity and related 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 14* and *16* plot the Existing-Home Sales series. Comparative graphs of the related Housing Starts series (both cover single and multiple-unit activity) are found with *Graphs 3* and *4* on page 13.

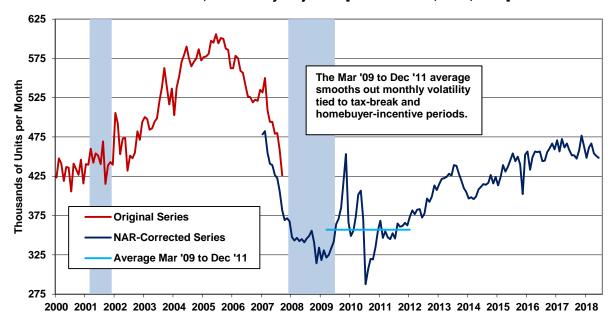
*Graphs 17* and *18* plot the New-Home Sales series. Comparative graphs of the related Single-Unit Housing Starts (both series reflect single-unit activity) are found with *Graphs 5* and 6 on page 14.

[Graphs 15 to 18 begin on the next page.]

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

#### **Existing-Home Sales (Monthly Rate)**

Single- and Multiple-Unit Sales, Non-Annualized Monthly Level To June 2018, Seasonally-Adjusted [ShadowStats, NAR, HUD]



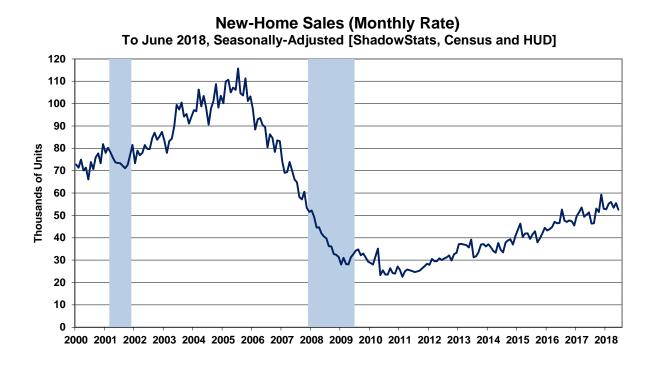
Graph 16: Existing-Home Sales (Six-Month Moving Average)

#### **Existing-Home Sales (Six-Month Moving Average)** Single- and Multiple-Unit Sales, Non-Annualized Monthly Rate

To June 2018, Seasonally-Adjusted [ShadowStats, NAR, HUD]



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



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

