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

COMMENTARY NUMBER 893
May 2017 Housing Starts, Consumer Liquidity Update

June 16, 2017

May Housing Starts Plummeted on Top of Downside Revisions,
Confounding Happy, Rebounding Consensus Expectations

Stagnant to Downtrending Activity Remained Shy of Recovering
Pre-Recession Peaks by 52.0% (-52.0%) for Housing Starts and
by 48.4% (-48.4%) for Building Permits

Consumer Liquidity Stresses Continue to Restrain Broad Economic Growth

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PLEASE NOTE: The next regular Commentary, *scheduled for Friday, June 23rd, will review May 2017 New- and Existing-Home Sales in the context of what otherwise will be a* General Commentary, *providing a broad review of economic-, financial- and political-system conditions.*

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

Today's *Commentary* (June 16th). In the context of broadly non-recovering economic activity, reviewed in the ***Opening Comments and Executive Summary*** are summary details of May 2017 New Residential Construction and an update to Consumer Liquidity Conditions (page 8).

The ***Reporting Detail*** (beginning page 14) provides extended analysis and additional graphics of the new monthly Housing Starts and Building Permits detail.

The ***Week, Month and Year Ahead*** (beginning page 22) reviews recent *Commentaries* and previews next week's releases of New- and Existing-Home Starts.

OPENING COMMENTS AND EXECUTIVE SUMMARY

Economy Continues in Deepening Trouble. In the context of rapidly deteriorating, broad economic conditions and related shifting implications for FOMC activity, discussed in yesterday's *Commentary No. 892*, today's (June 16th) headline reporting of May 2017 New Residential Construction, including Housing Starts, only exacerbated the circumstance. While the Housing Starts series regularly is volatile and unstable in its revisions, there was an unfortunate consistency within the headline negative details. Consensus estimates had been for some recovery in the May data, following "unexpected" weakness in April reporting. Not only did activity fall sharply in May, but it also declined relative to the new headline April and March, which were revised meaningfully lower from the prior month's estimates.

Executive Summary: New Residential Construction/Housing Starts—May 2017—Activity Dropped Sharply and "Unexpectedly" in May, on Top of Downside Prior-Period Revisions. May 2017 Housing Starts continued to plunge and to revise lower, despite consensus expectations for a monthly rebound in the headline data for this highly-volatile series.

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 up-trending but non-recovering low-level activity. That flattened out in the last year or two in ongoing, low-level stagnation, and now it has turned lower, again, with the latest detail, as seen in accompanying *Graphs 1* to *12*. Plotted with just the raw, seasonally-adjusted monthly data, the pattern of now-downtrending low-level stagnation, showed headline May 2017 housing starts activity to be down by 52.0% (-52.0%) from its pre-recession high.

May 2017 Monthly Contraction Was Across-the-Board. The always-unstable and highly-volatile aggregate Housing Starts series declined month-to-month in May 2017, in the context of downside revisions to activity in both April and March. The seasonally-adjusted, headline monthly decline in May 2017 housing starts of 5.5% (-5.5%) followed a revised monthly decline of 2.8% (-2.8%) in April, with level-of-activity aggregate detail is plotted in *Graphs 1* to *4* of the *Executive Summary*, and in *Graphs 21*, *23*, *24* and *25* in the *Reporting Detail*. Year-to-year change in the seasonally-adjusted, May 2017 aggregate housing-starts measure was a statistically-insignificant decline of 2.4% (-2.4%), versus a revised annual decline in April 2017 of 0.7% (-0.7%).

Where the unstable housing starts series can show varying patterns, that partially is due to the reporting mix of residential construction products, with the largest physical-count category of one-unit structure starts—generally for individual consumption, resulting in new home sales—versus multi-unit structure starts that reflect the building of condominiums, rental and apartment units, etc. The monthly decline in the aggregate housing starts series for May was across-the-board. Graphs of the different sectors follow in accompanying *Graphs 1* to *8*, with extended detail and graphs in the *Reporting Detail*.

A Note on the Regular Housing Starts Graphs. *[With minor adjustment, this section has been repeated from the* Reporting Detail.*]* Headline reporting of Housing Starts activity is expressed by the Census Bureau as an annualized monthly pace of starts, which was 1,092,000 in May 2017, versus a downwardly-revised 1,156,000 [previously 1,172,000] in April 2017. That annualized-rate scaling is used in the aggregate housing starts and building permits *Graphs 20* to *25* at the end of the *Reporting Detail* section.

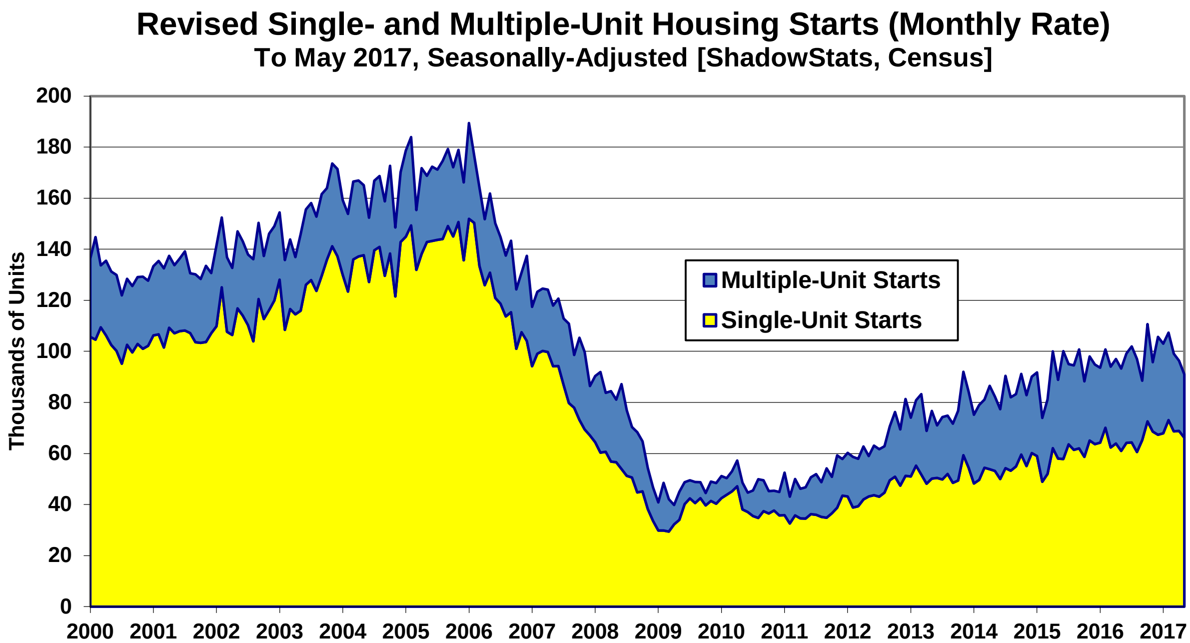
Nonetheless, given the nonsensical monthly volatility in reporting and the exaggerated effect of annualizing the monthly numbers in this unstable series, the magnitude of monthly activity and the changes in same, more realistically are reflected at the non-annualized monthly rate. Consider that the headline, 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 starts rate of 91,000 units in May 2017, instead of the annualized headline level of 1,092,000 units, is used in the scaling of accompanying *Graphs 1* to *8*. 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* versus *Graph 21* [in the *Reporting Detail*].

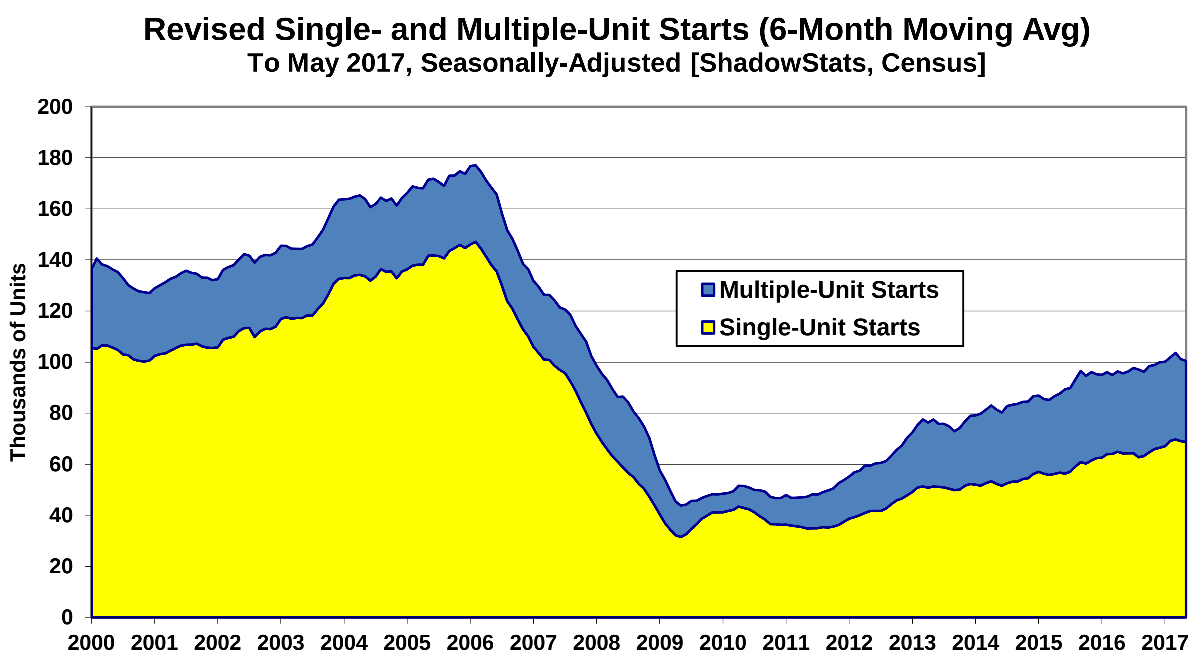
The record monthly low level of activity seen for the present aggregate series was in April 2009, where the annualized monthly pace of housing starts then was down by 79% (-79%) from the January 2006 pre-recession peak for the series. Against that downside-spiked low in April 2009, the May 2017 headline monthly number was up by 128%, but it still was down by 52% (-52%) from the January 2006 pre-recession high. Shown in the historical perspective of the post-World War II era, current aggregate-starts activity is in relative stagnation, still at low levels that otherwise have been seen at or near the historical troughs of other recession activity of the last 70 years, as reflected in *Graphs 24* and *25* in the *Reporting Detail*. In fact, as can be seen there in *Graph 25*, 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.

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

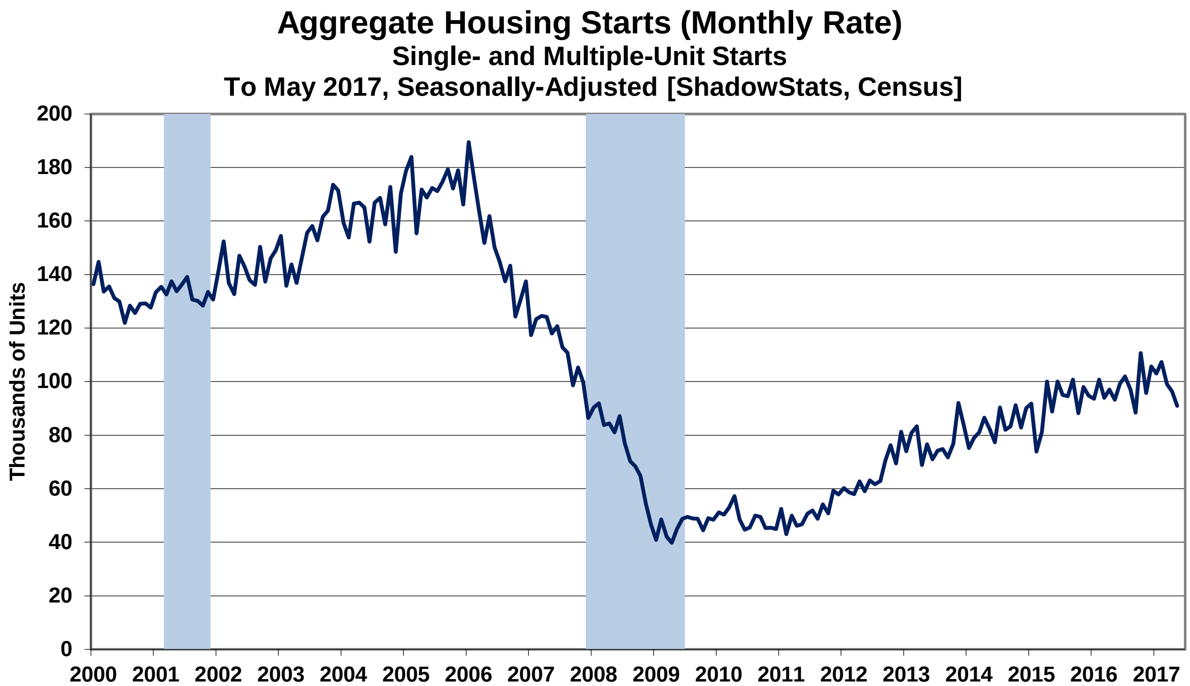
Graph 1: Single- and Multiple-Unit Housing Starts (Monthly Rate of Activity)



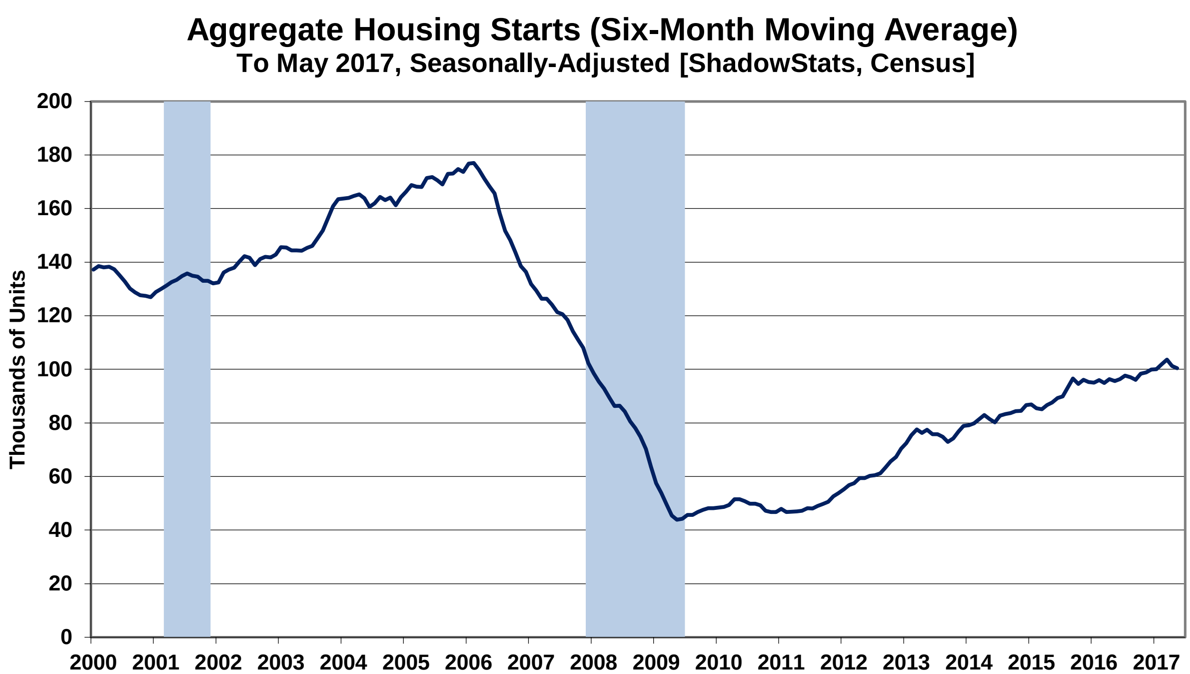
Graph 2: Single- and Multiple-Unit Starts (Six-Month Moving Average, Monthly Rate of Activity)



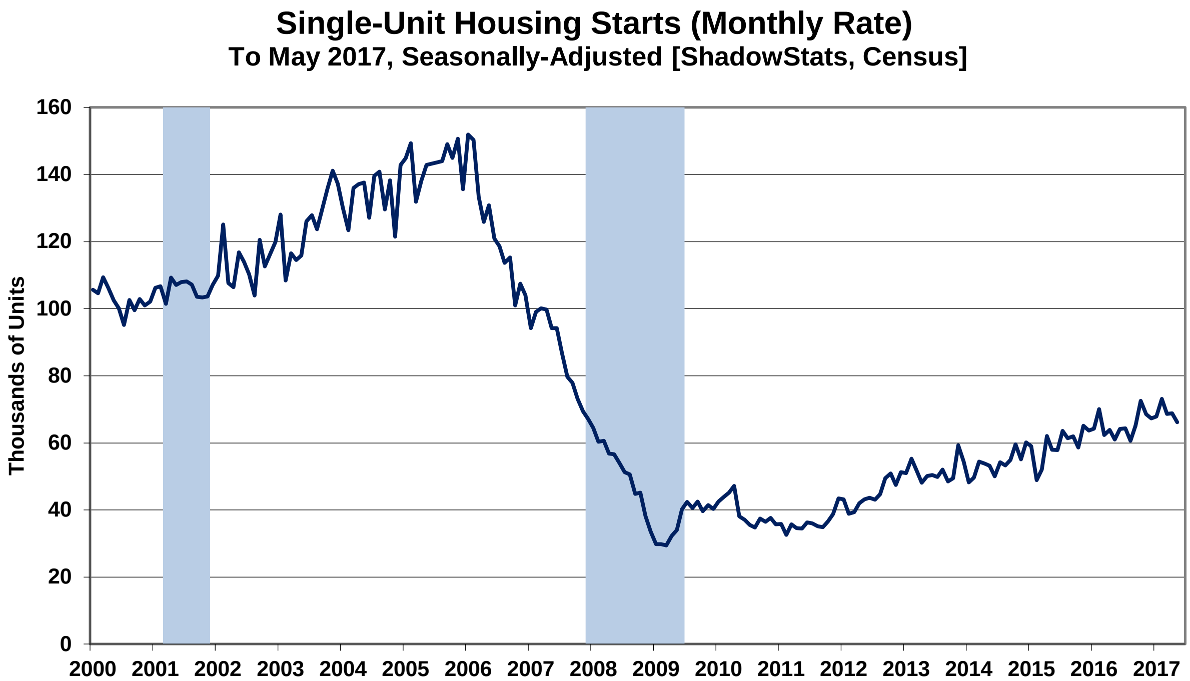
Graph 3: Aggregate Housing Starts (Monthly Rate of Activity)



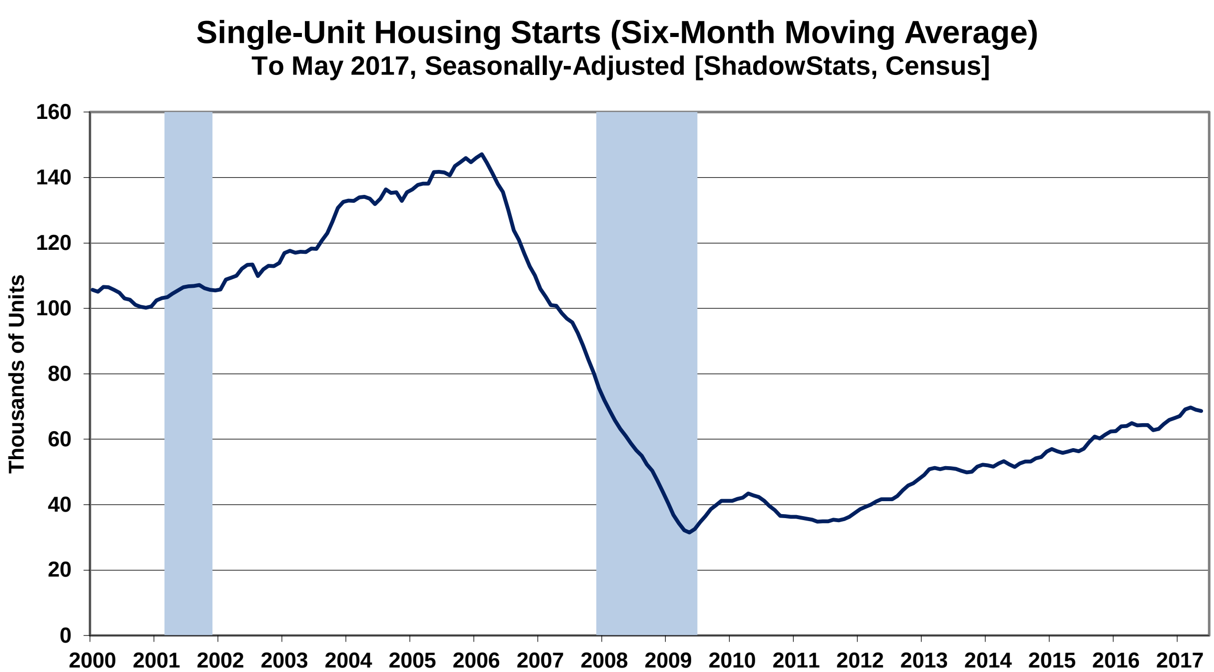
Graph 4: Aggregate Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)



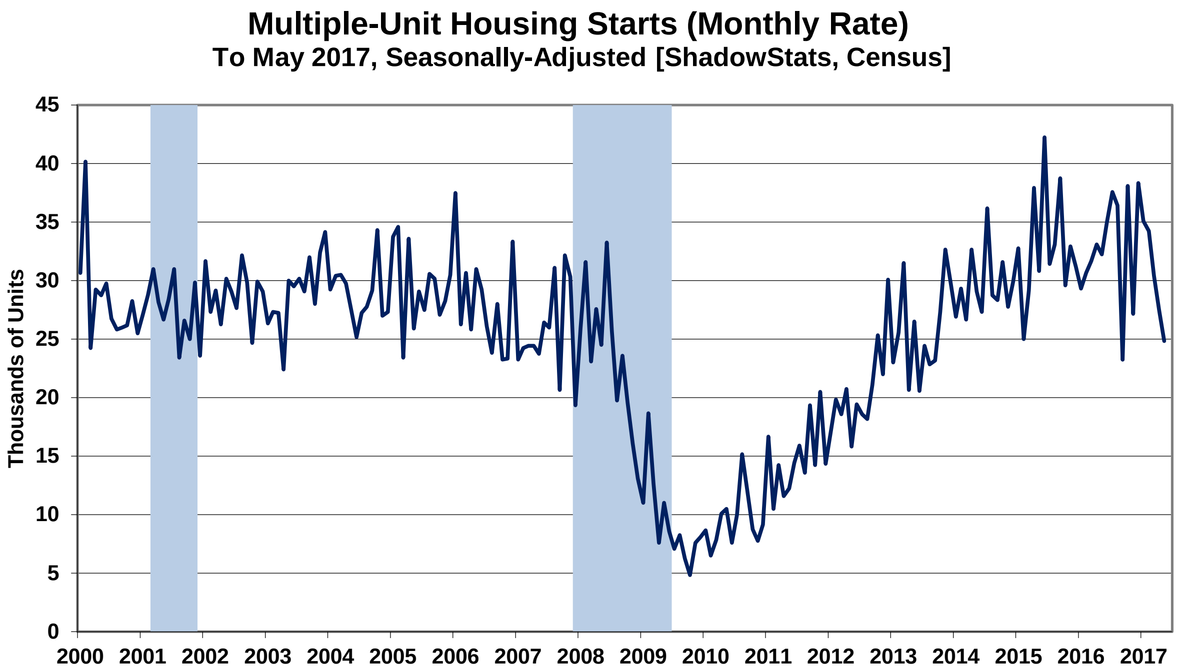
Graph 5: Single-Unit Housing Starts (Monthly Rate of Activity)



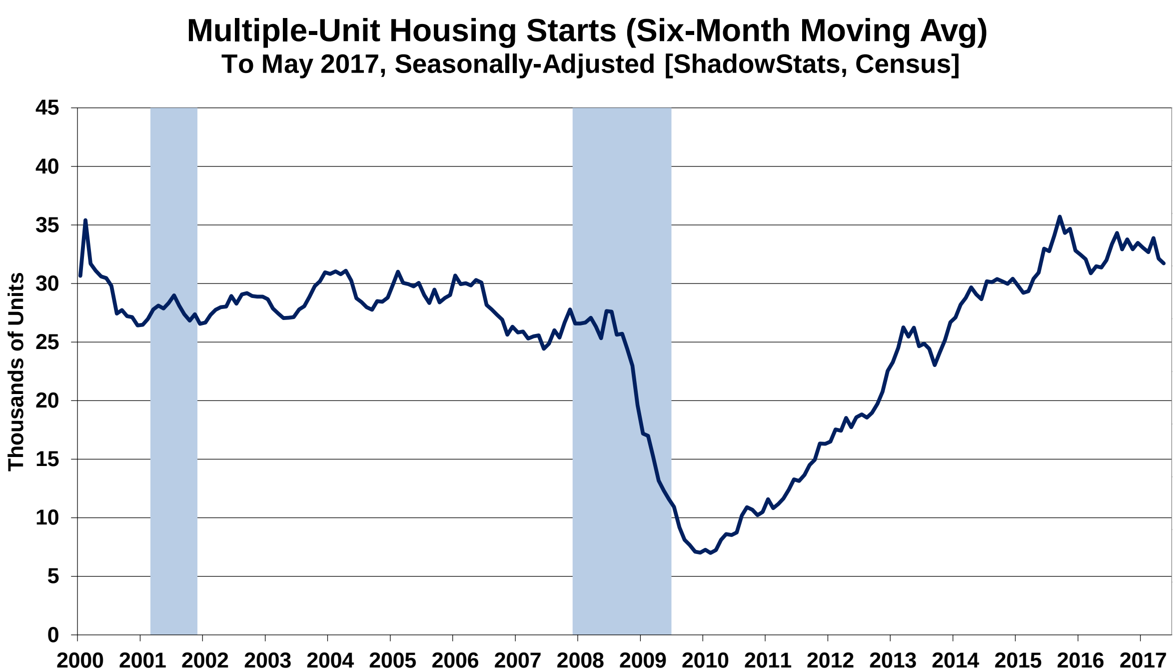
Graph 6: Single-Unit Housing Starts (Six-Month Moving Average, Monthly Rate of Activity)



Graph 7: Multiple-Unit Housing Starts (Monthly Rate of Activity)



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



Updated Consumer Liquidity Conditions—Credit Stresses Continue Amidst Faltering Optimism. The U.S. consumer faces continuing financial stress, which increasingly has been reflected in softening headline economic activity, including real Retail Sales and New Residential Construction activity (see *Commentary No. 891* and *Commentary No. 892* and today's discussion on Housing Starts).

This partial update of Consumer Liquidity Conditions focuses on the recently published first-quarter 2017 flow-of-funds accounting for Consumer Debt (June 8th) and April 2017 Consumer Credit outstanding (June 7th), along with the May 2017 reading of the Conference Board's Consumer-Confidence and the estimates of the full-May and early-June 2017 (this morning, June 16th) of the University of Michigan's Consumer-Sentiment, supplementing the more-comprehensive analyses found in *Special Commentary No. 888* and in the *CONSUMER LIQUIDITY* section of *No. 859 Special Commentary*.

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

These same pocket-book issues contributed to the anti-incumbent electoral pressures in the 2016 presidential race. The post-election environment showed a near-term surge in consumer optimism to levels generally not seen since before the formal onset of the recession in 2002, let alone 2007. Yet, underlying liquidity conditions and economic reality have continued to remain shy of consumer hopes, and, not surprisingly, consumer optimism now is faltering anew.

Including the various consumer income stresses discussed in *No. 888*, the broad underlying consumer liquidity fundamentals simply have not supported, and still do not support a turnaround in general economic activity and broadly are consistent with a "renewed" downturn in non-recovered economic activity. Indeed, never truly recovering post-Panic of 2008, limited growth in household income and credit have eviscerated and continue to impair broad, domestic U.S. business activity, which feeds off the financial health and liquidity of consumers. These underlying liquidity conditions and reality—particularly income and credit—remain well shy of consumer hopes and needs.

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

With the better-quality economic indicators and underlying economic reality never having recovered fully from the collapse into 2009, consumers increasingly should pull back on consumption in the months ahead. Underlying reality is evident in more-meaningful economic indicators—not the GDP—irrespective of the transient, gimmicked boosts to, and current headline slowing in, that most worthless of economic series, as discussed most recently in *Commentary No. 889*.

May/Early-June Consumer Confidence and Sentiment Measures Continue to Falter. This detail incorporates May 2017 reporting for the Conference Board's Consumer-Confidence and the early-June 2017 estimate of the University of Michigan's Consumer-Sentiment. Reflected in *Graphs 13* and *14*, both measures rallied sharply, post-election, reflecting a surge in consumer optimism. Both series now, however, appear to have topped and are beginning to pull back.

The Conference Board's seasonally-adjusted [unadjusted data are not available] Consumer-Confidence Index® (*Graph 13*), and the University of Michigan's not-seasonally-adjusted Consumer-Sentiment Index (*Graph 14*), again, both soared post-election, took breathers in January 2017, boomed into March but declined minimally in April with continued fluttering in May and in early-June for the sentiment measure. Post-election, the three-month moving averages in both series broke above pre-recession highs, with the Consumer-Confidence Index® at levels not seen since before the 2001 recession. That pattern now generally has flattened out or turned down anew.

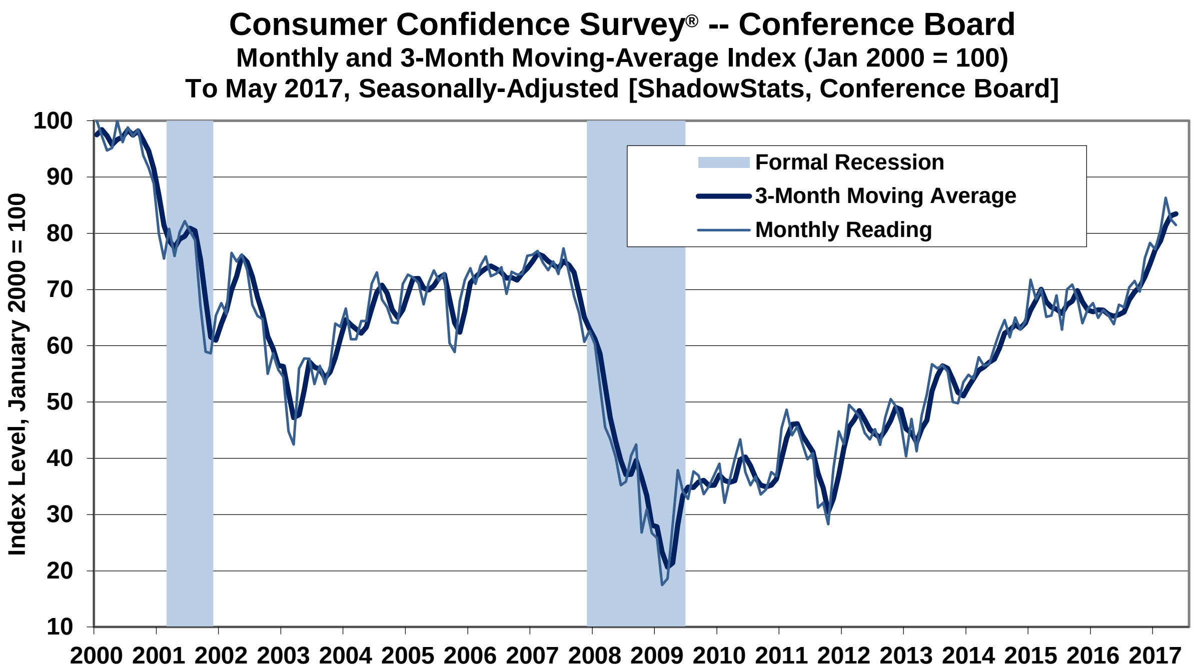
Showing the Consumer Confidence and Consumer Sentiment measures on something of a comparable basis, *Graphs 13* to *15* reflect both measures re-indexed to January 2000 = 100 for the monthly reading. Standardly reported, the Conference Board's Consumer Confidence Index® is set with 1985 = 100, while the University of Michigan's Consumer Sentiment Index is set with January 1966 = 100.

The Confidence and Sentiment series tend to mimic the tone of headline economic reporting in the press (see discussion in *Commentary No. 764*), and often are highly volatile month-to-month, as a result. With what should become increasingly-negative, unstable and uncertain headline financial and economic reporting in the months ahead—beyond the early change-in-government euphoria—successive negative hits to both the confidence and sentiment readings remain increasingly likely in the near future. Some recent movement here may reflect rising levels of political agitation (see *Special Commentary No. 888*).

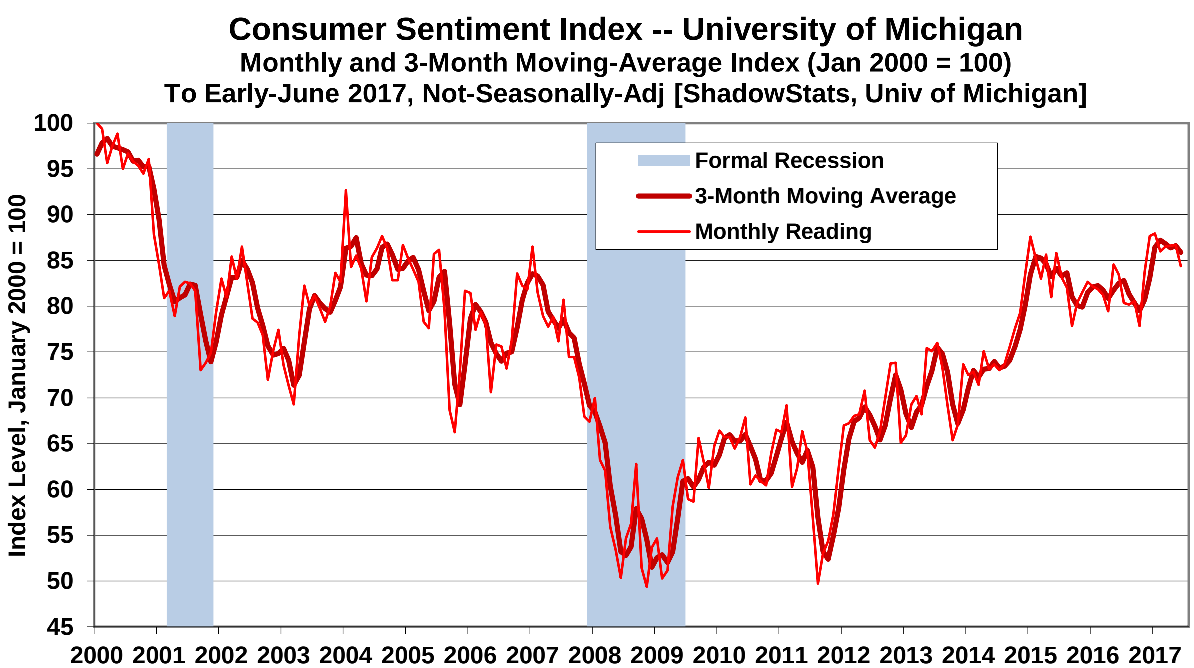
Smoothed for irregular, short-term volatility, the two series still generally had held at levels seen typically in recessions, until the post-2016 election circumstance. Suggested in *Graph 15*—plotted for the last 47 years—the latest readings of Confidence and Sentiment recently have recovered levels seen in periods of normal, positive economic activity of the last four decades, with their six-month moving averages at levels last seen going into the 2001 recession. Broadly, though, the harder, financial consumer measures remain well below, or are inconsistent with, periods of historically-strong economic growth as suggested by headline GDP growth in 2014, for second-and third-quarter 2015 and for third-quarter 2016. Beyond having happy feelings about the future, Consumers still need actual income, cash-in-hand or credit in order to increase their spending.

[Graphs 13 to 15 begin on the next page.]

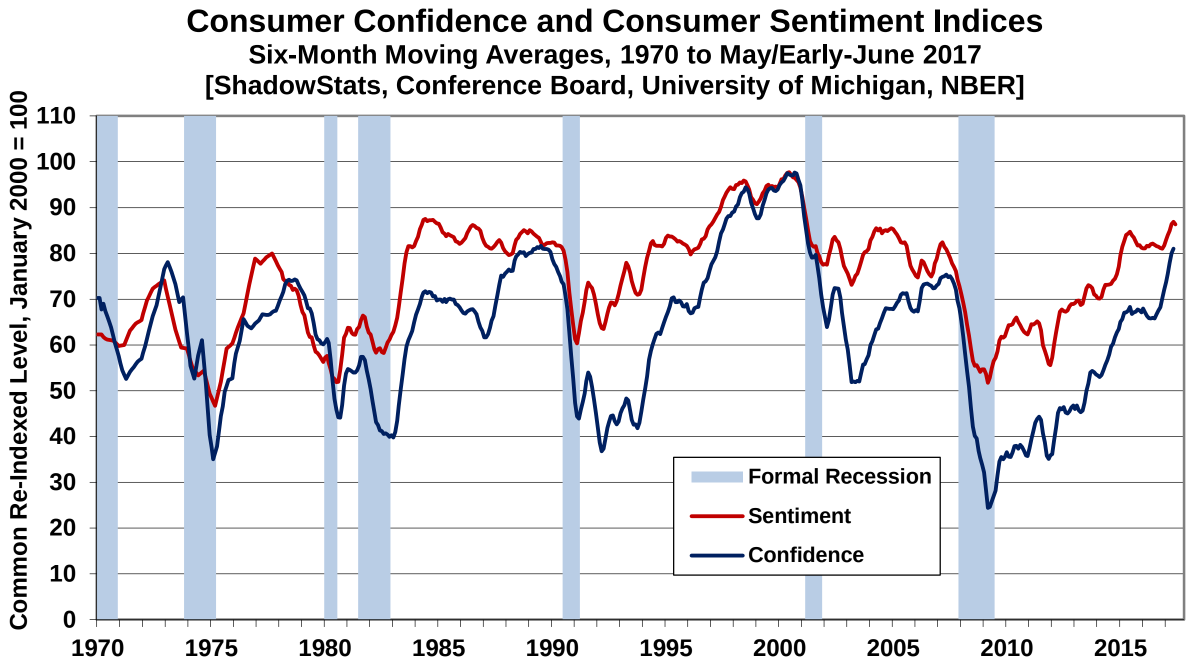
Graph 13: Consumer Confidence (2000 to 2017)



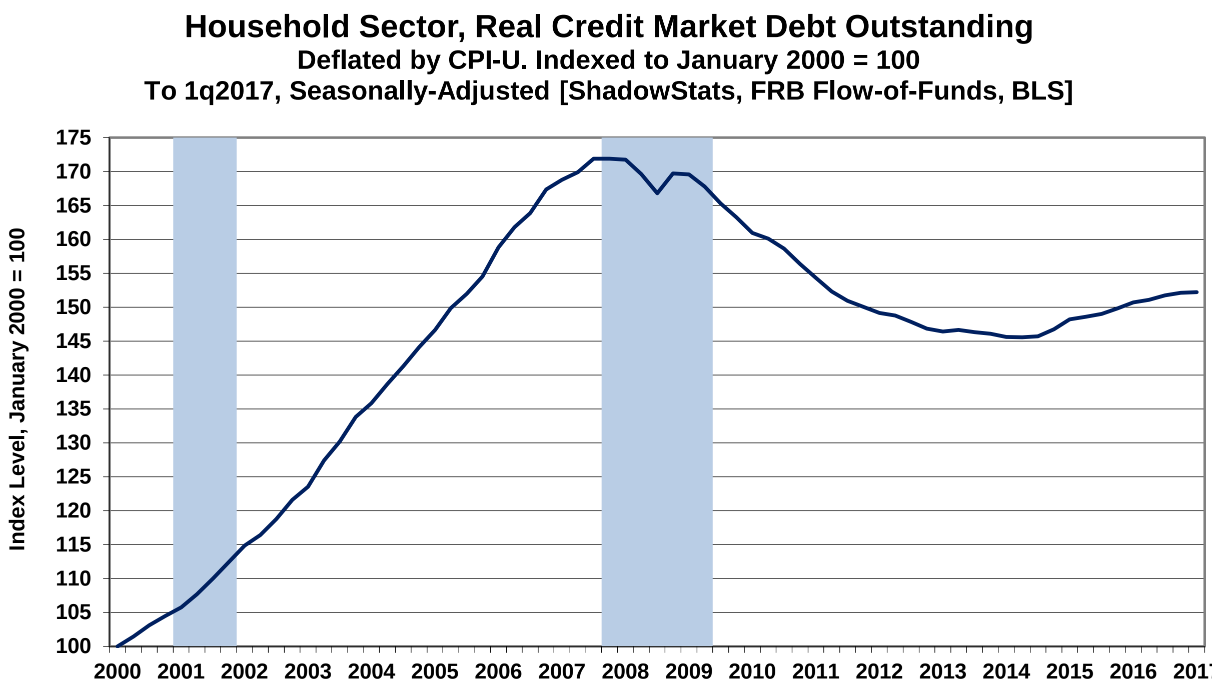
Graph 14: Consumer Sentiment (2000 to 2017)



Graph 15: Comparative Confidence and Sentiment (6-Month Moving Averages, 1970 to 2017)



Graph 16: Household Sector, Real Credit Market Debt Outstanding (2000 through First-Quarter 2017)



Lack of Meaningful Real Consumer Credit Growth Remains an Economic Constraint—Seasonally-Adjusted Monthly Activity Turned Flat-to-Minus. The final four graphs on consumer conditions address consumer borrowing. Where debt expansion can help make up for a shortfall in income growth, adequate expansion of consumer debt, which would help fuel growth in personal consumption, has been lacking.

Consider the preceding *Graph 16* of *Household Sector, Real Credit Market Debt Outstanding*. Household debt declined in the period following the Panic of 2008, and it has not recovered fully, based on the Federal Reserve's updated flow-of-funds accounting through first-quarter 2017. Household Sector, Real Credit Market Debt Outstanding in first-quarter of 2017 still was down by 11.5% (-11.5%) from its pre-recession peak of third-quarter 2007, the same as in fourth-quarter 2016.

The series includes mortgages, automobile and student loans, credit cards, secured and unsecured loans, etc., all deflated by the headline quarterly CPI-U. The level of real debt outstanding has remained stagnant for several years, reflecting, among other issues, lack of normal lending by the banking system into the regular flow of commerce. The slight upturn seen in the series through 2015 and into 2016 was due primarily to gasoline-price-driven, negative CPI inflation, which continued to impact the system through second-quarter 2016. Current activity also has reflected continued relative strength from student loans, as shown in the *Graphs 17* to *19*.

The ShadowStats analysis usually focuses on the particular current weakness in monthly levels of consumer credit, net of what has been rapidly expanding government-sponsored student loans. Where detail on that series is only available not-seasonally-adjusted, the following graphs are so plotted.

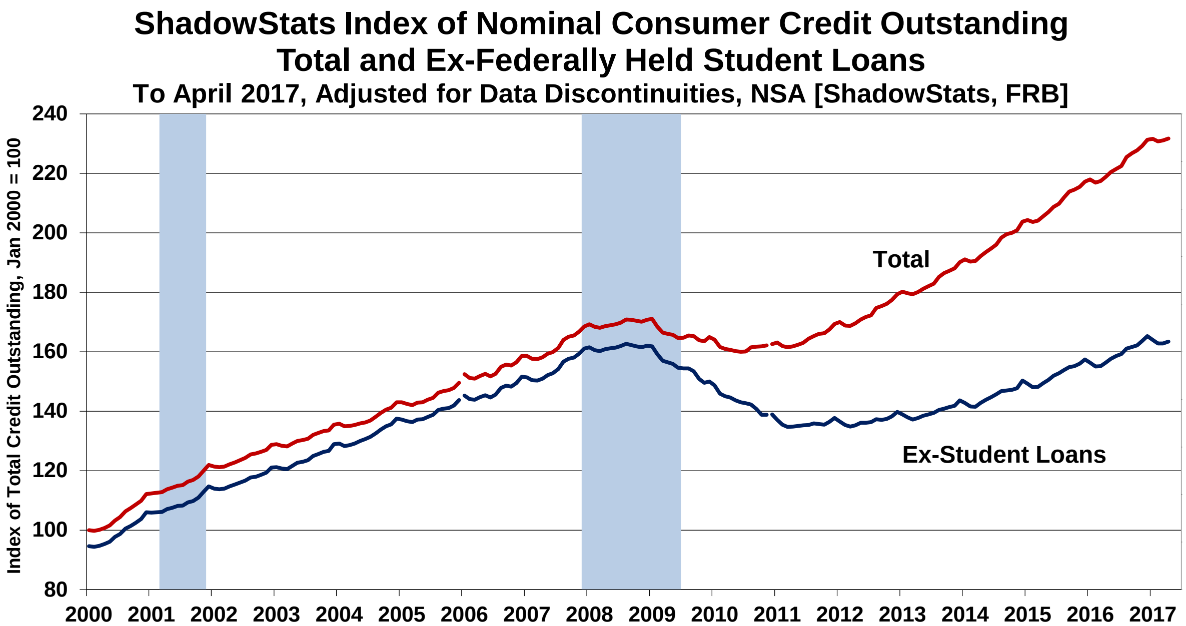
Shown through the latest reporting (April 2017), *Graph 17* of monthly Consumer Credit Outstanding is a subcomponent of *Graph 16* on real Household Sector debt. Where *Graph 17* reflects the nominal reporting, not adjusted for inflation, inflation-adjusted real activity for the monthly Consumer Credit Outstanding is shown both in terms of level (*Graph 18*) and in terms of year-to-year change (*Graph 19*).

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

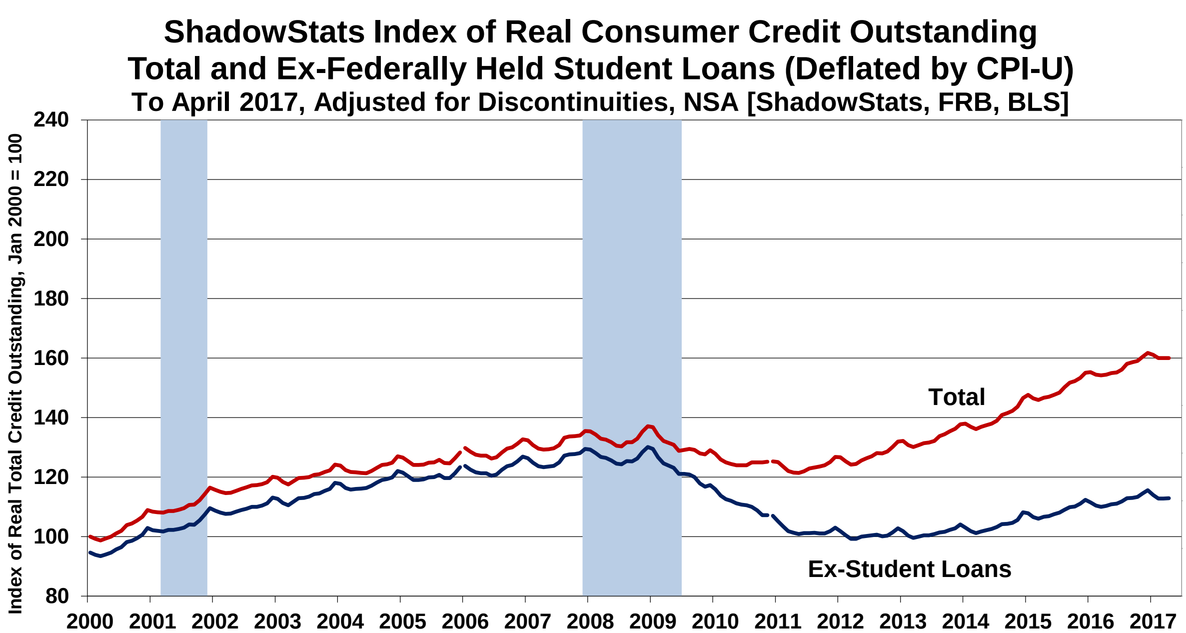
Adjusted for inflation, the lack of recovery in the ex-student loan area is more obvious. Although the recent monthly dips in the not-seasonally-adjusted consumer credit reflect a seasonal pattern, the pace of year-to-year growth continues to slow, suggesting some tightening of credit conditions. Adjusted for discontinuities and inflation, ex-student loans, consumer credit outstanding in April 2017 was down from its December 2007 pre-recession peak by 12.9% (-12.9%). Year-to-year growth in *Graph 19* tends to resolve most of the monthly distortions in the not-seasonally-adjusted data

[Graphs 17 to 19 begin on the next page.]

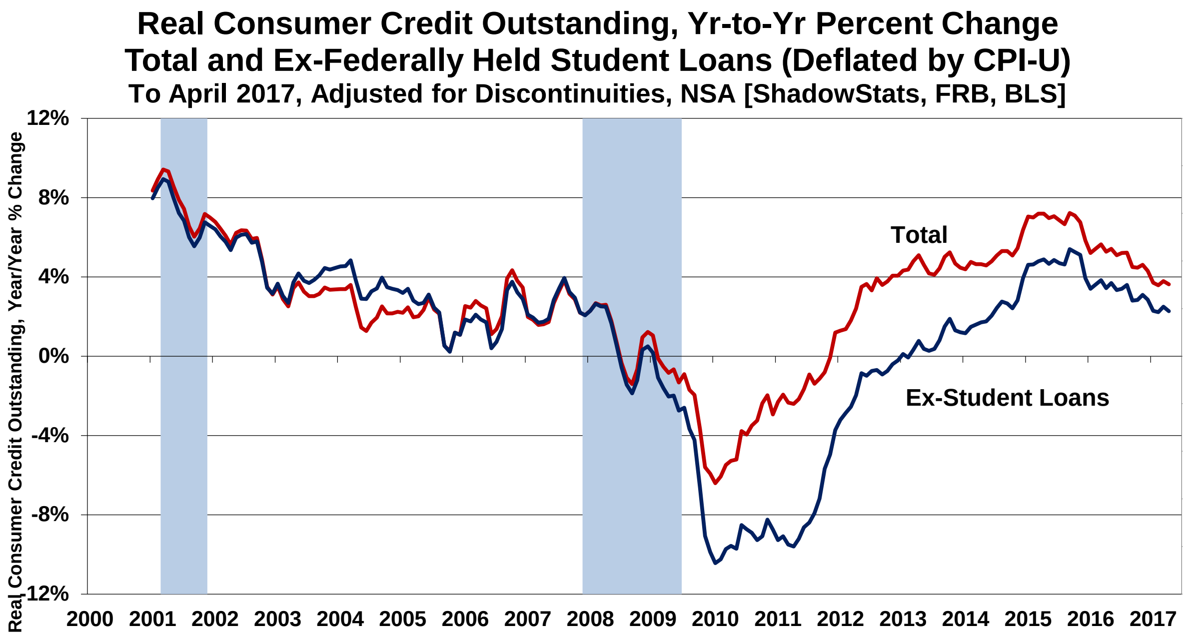
Graph 17: Nominal Consumer Credit Outstanding (2000 to 2017)



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



Graph 19: Year-to-Year Percent Change, Real Consumer Credit Outstanding (2000 to 2017)



[The **Reporting Detail** *contains extended Residential Construction analysis and graphs.]*

REPORTING DETAIL

NEW RESIDENTIAL CONSTRUCTION, HOUSING STARTS (May 2017)

Housing Starts and Building Permits Dropped Sharply and "Unexpectedly" in May, on Top of Downside Prior-Period Revisions. In the context of the prior May 16th annual seasonal-adjustment revisions back to 2015 (see *Commentary No. 887*), and as smoothed and viewed in terms of its six-month moving average, May 2017 Housing Starts activity continued to plunge and to revise lower in today's (June 16th) headline reporting. Such was despite consensus expectations of a large monthly rebound in the headline data for this highly-volatile series.

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 up-trending but non-recovering low-level activity. That flattened out in the last year or two in ongoing, low-level stagnation, and now it has turned lower, again, with the latest detail, as seen in accompanying *Graphs 20* to *25* (also in *Graphs 1* to *12* in the *Executive Summary*).

Plotted with just the raw, seasonally-adjusted monthly data, the pattern of now-downtrending low-level stagnation, showed headline May 2017 building permits activity down by 48.4% (-48.4%) from recovering its pre-recession peak activity, with housing starts activity similarly down by 52.0% (-52.0%). As usual, none of the related headline month-to-month changes was statistically significant. Lack of statistical significance remains a common denominator to nearly all the regular reporting each month of the month-to-month and year-to-year changes. The exception in the current headline May detail was a significant year-to-year decline in the multiple-unit starts.

May 2017 Monthly Contraction Was Across-the-Board. In the context of large downside revisions to March and April activity, aggregate May 2017 housing starts declined by 5.5% (-5.5%) month-to-month. Usually, these monthly numbers are highly unstable and of extremely limited short-term significance, with negligible leading indications of monthly change or relative volatility provided by the related building-permits series. The pattern here, however, has become a trend.

Smoothed with six-month moving averages, both the housing-starts and building-permits series had been in a flat-to-uptrending pattern into last month's benchmarking, but now patterns have shifted to downtrending, low-level stagnation (see *Graph 4* in the *Executive Summary* section, and *Graphs 22* and *23* here).

First- and Second-Quarter 2017 Housing Starts Turn Down in Deepening Quarterly Contractions. In this highly volatile and unstable series of recent years, total housing-starts count fell at an annualized quarter-to-quarter pace of 23.7% (-23.7%) in first-quarter 2015, rose at an annualized 87.7% pace in second-quarter 2015, rose by 1.9% in third-quarter 2015 and then contracted at an annualized pace of 12.0% (-12.0%) in fourth-quarter 2015.

First-quarter 2016 activity showed an annualized quarterly gain of 10.7%, while second-quarter 2016 rose by 1.5%. Third-quarter 2016 activity contracted on both an annual and quarterly basis, down year-to-year by 1.0% (-1.0%), the first annual decline since first-quarter 2014, and down at an annualized quarterly pace of 2.7% (-2.7%). Fourth-quarter 2016 housing starts showed annualized quarterly growth of 39.0%, up by 11.0% year-to-year.

First-quarter 2017 annualized quarterly change just revised to a contraction of 3.4% (-3.4%) [previously down by 1.9% (-1.9%)], with year-to-year change slowing to 7.3% in revision [previously 7.7%]. Based just on the latest April and May 2017 detail, second-quarter 2017 annualized change was on an early track for a contraction of 32.0% (-32.0%), down year-to-year by 2.9% (-2.9%). Based only on the initial April 2017 reporting, the quarter previously had been on track for a contraction of 20.8% (-20.8%), with annual growth slowing to 1.2%.

Smoothed Numbers. Despite the extreme volatility and instabilities in the housing-starts series, the general pattern of low-level stagnation continued. Again, the six-month moving-average pattern for the aggregate series remained about as flat as one ever sees, albeit now increasingly downtrending in aggregate in low-level stagnation (*Graphs 4* and *23*), with the same pattern of stability also seen broadly in raw monthly data (*Graphs 3* and *21*). That general pattern also can be viewed in terms of the longer-range historical graphs of aggregate activity (*Graphs 24* and *25*) at the end of this section. Parallel graphs of monthly and six-month moving-average Building Permits detail are found in *Graphs 20* and *22*. Given the broad pattern of stagnation in both the aggregate starts and permits series, headline total May 2017 activity, again, remained well below any recovery level, with aggregate Housing Starts down from their January 2006 pre-recession high by 52.0% (-52.0%) and Building Permits down by 48.4% (-48.4%) from their September 2005 pre-recession peaks in activity.

Returning fully to the May 2017 housing starts monthly detail, the dominant (72.7% of total starts) single-unit housing starts sector of that series (*Graphs 5* and *6* in the *Executive Summary*) was down from its January 2006 pre-recession peak by 56.4% (-56.4%).

In contrast the smaller count in the multiple-unit category (two units or more), 26.0% of the total, hit its recent high in June 2015, topping its pre-recession January 2006 peak then by 12.7%. It had dropped back below that 2006 high by 33.8% (-33.8%) as of May 2017.

Reflected in the smoothed graphs in the *Executive Summary*, the various housing-starts series generally are flat-to-downtrending, at a low level of stagnation (*Graph 4* for the aggregate). That reflected a blend of the low-level stagnation in the six-month-smoothed single-unit activity (*Graph 6*), with the more-volatile, smoothed multiple-unit starts (*Graph 8*) that had regained its pre-recession peak, where both series now are showing some recent downtrend.

Consumer Liquidity Problems Continue to Impair Residential Construction Activity. The extreme liquidity bind besetting consumers continues to constrain residential real estate activity, as updated in the *Executive Summary* and as fully reviewed in the *CONSUMER LIQUIDITY* section of [*No. 859 Special Commentary*]. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for an income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including aggregate real estate activity. That circumstance—in the last ten-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity, 73% of which is dependent on personal spending, including residential construction.

May 2017 Housing Starts, Headline Detail. The always-unstable and highly-volatile aggregate Housing Starts series declined month-to-month in May 2017, in the context of downside revisions in both April and March. The Census Bureau reported this morning, June 16th, a statistically-insignificant, seasonally-adjusted, headline monthly decline in May 2017 housing starts of 5.5% (-5.5%) +/- 13.9% (all confidence intervals are expressed at the 95% level). That followed revised monthly declines in April of 2.8% (-2.8%) [previously down by 2.6% (-2.6%)], and of 7.7% (-7.7%) [previously 6.6% (-6.6%)] in March. Level-of-activity aggregate detail is plotted in *Graphs 1* to *4* of the *Executive Summary*, and in *Graphs 21*, *23*, *24* and *25* at the end of this section.

Year-to-year change in the seasonally-adjusted, May 2017 aggregate housing-starts measure was a statistically-insignificant decline of 2.4% (-2.4%) +/- 13.3%, versus a revised annual decline in April 2017 of 0.7% (-0.7%) [previously a gain of 0.7%], and a revised annual gain of 5.4% [previously 6.6%] in March 2017.

The May 2017 headline decline of 5.5% (-5.5%) in total Housing Starts encompassed a headline decline of 3.9% (-3.9%) in the "one unit" category and a drop of 9.8% (-9.8%) in the "five units or more" category. There is a missing balance in the "two to four units" category, which declined month-to-month in May by 7.7% (-7.7%). Where that category is considered too small to be meaningful, it did affect the aggregates minimally, as discussed later in the broader, aggregate "multiple unit" category. Most commonly, not one of the monthly or annual headline changes by category is statistically meaningful, although the headline annual decline in the May 2017 "five units or more" category was marginally significant.

Housing Starts By-Unit Category. *[See* Graphs 1 *to* 8 *in the* Executive Summary.*]* 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 multi-unit structure starts that generally reflect the building of condominiums, rental and apartment units.

Housing starts for single-unit structures in May 2017 declined month-to-month by a statistically-insignificant 3.9% (-3.9%) +/- 12.1%, following a revised monthly gain of 0.2% [previously 0.4%] in April and a revised decline of 6.0% (-6.0%) [previously down by 5.1% (-5.1%)] in March. May 2017 single-unit starts showed a statistically-insignificant annual gain of 8.5% +/- 16.2%, versus revised annual gains of 7.7% [previously 8.9%] in April 2017 and 10.2% [previously 11.2%] in March 2017 (see *Graphs 1, 2, 5 and 6* in the *Executive Summary*).

Housing starts for apartment buildings, condominiums, etc. (generally 5-units-or-more) in April 2017 declined month-to-month by a statistically-insignificant 9.8% (-9.8%) +/- 31.0%, versus revised declines of 11.3% (-11.3%) [previously 9.6% (-9.6%)] in April and 9.4% (-9.4%) [previously 7.4% (-7.4%)] in March. A statistically-significant year-to-year plunge of 25.7% (-25.7%) +/- 23.4% in May 2017 followed revised annual declines of 18.0% (-18.0%) [previously 14.6% (-14.6%)] in April 2017 and 4.1% (-4.1%) [previously down by 1.9% (-1.9%)] in March 2017.

Expanding the multi-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 estimates of the 2-to-4-units category, due to statistical significance problems (a general issue for the aggregate series). Nonetheless, the total multi-unit category can be estimated by subtracting the single-unit category from the total category (see *Graphs 1*, *2*, *7* and *8* in the *Executive Summary*).

Accordingly, the statistically-insignificant May 2017 monthly decline of 5.5% (-5.5%) in aggregate starts was composed of a statistically-insignificant decline of 3.9% (-3.9%) in one-unit structures and a statistically-insignificant decline of 9.7% (-9.7%) in the multiple-unit structures categories (2-units-or-more, including the 5-units-or-more category). In contrast, again, ex-2-units-or-more, the multiple-unit category declined by 9.8% (-9.8%). These series all are graphed in the *Executive Summary*.

A Note on the Regular Housing Starts Graphs. *[With minor adjustment, this section is repeated in the* Executive Summary.*]* Headline reporting of Housing Starts activity is expressed by the Census Bureau as an annualized monthly pace of starts, which was 1,092,000 in May 2017, versus a downwardly-revised 1,156,000 [previously 1,172,000] in April 2017. The scaling used in the accompanying aggregate housing starts and building permits *Graphs 20* to *25* reflects those annualized numbers.

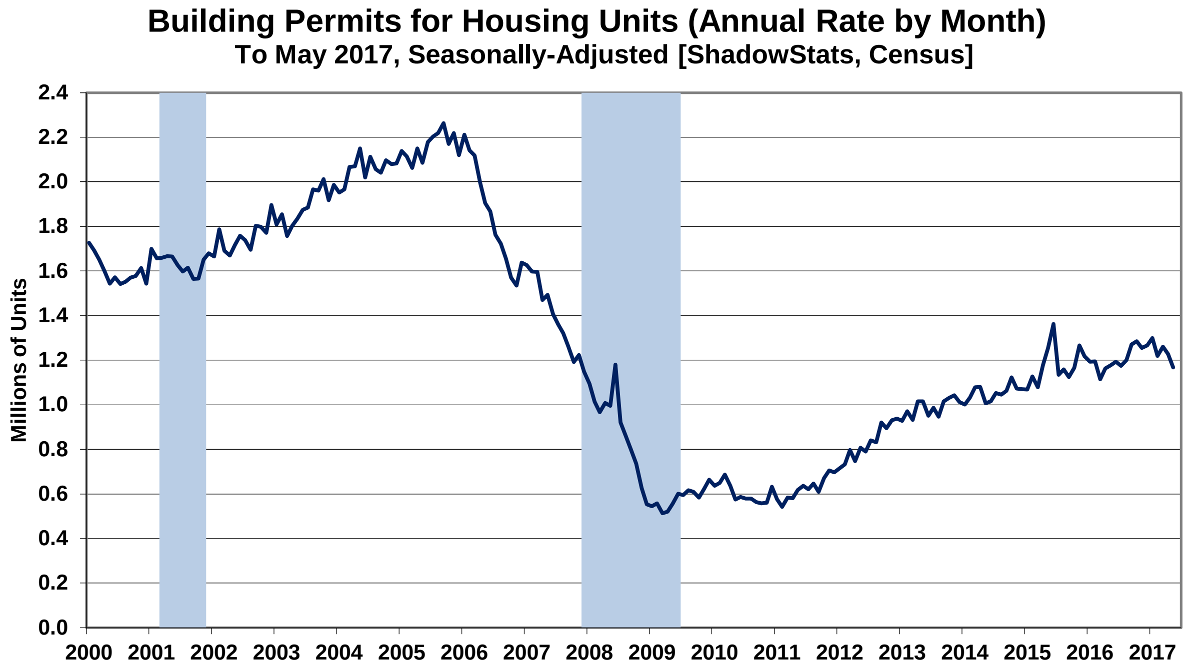
Nonetheless, given the nonsensical monthly volatility in reporting and the exaggerated effect of annualizing the monthly numbers in this unstable series, the magnitude of monthly activity and the changes in same, more realistically are reflected at the non-annualized monthly rate. Consider that the headline, 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 91,000 units in May 2017, instead of the annualized headline level of 1,092,000 units, is used in the scaling of the *Graphs 1* to *8* in the *Executive Summary*. 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 21* versus *Graph 3* in the *Reporting Detail*.

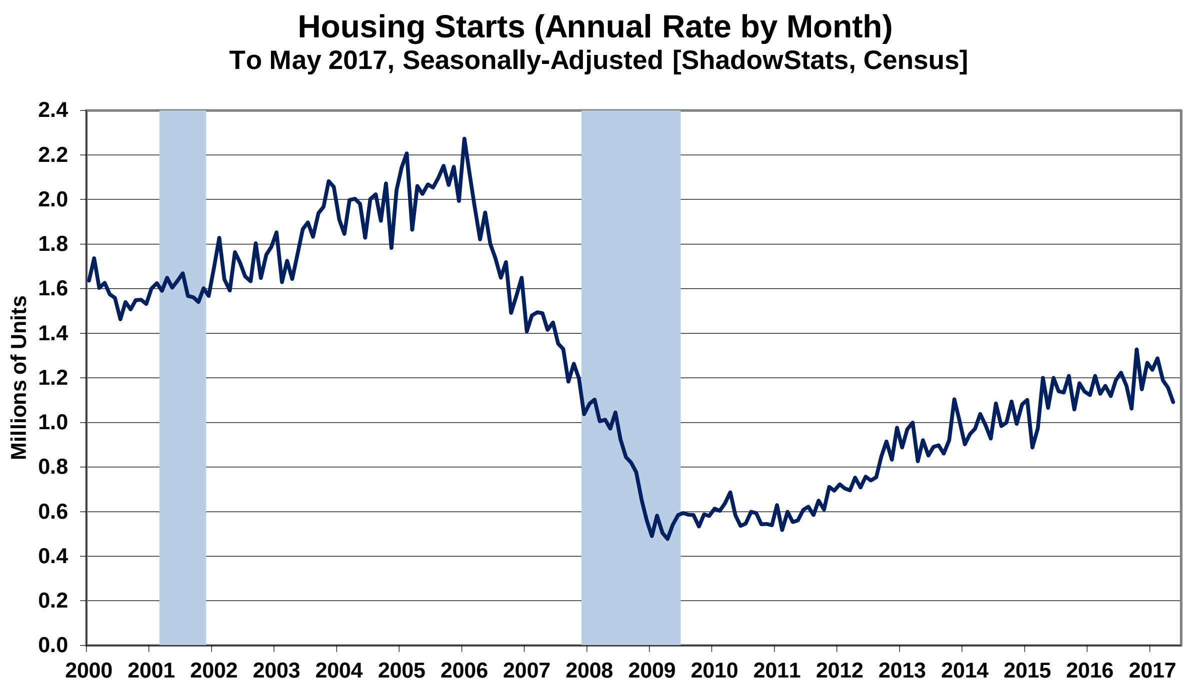
The record monthly low level of activity seen for the present aggregate series was in April 2009, where the annualized monthly pace of housing starts then was down by 79% (-79%) from the January 2006 pre-recession peak for the series. Against that downside-spiked low in April 2009, the May 2017 headline monthly number was up by 128%, but it still was down by 52% (-52%) from the January 2006 pre-recession high. Shown in the historical perspective of the post-World War II era, current aggregate-starts activity is in relative stagnation, still at low levels that otherwise have been seen at or near the historical troughs of other recession activity of the last 70 years, as reflected in *Graphs 24* and *25*. In fact, as can be seen in *Graph 25*, 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.

[Graphs 20 to 25 begin on the next page.]

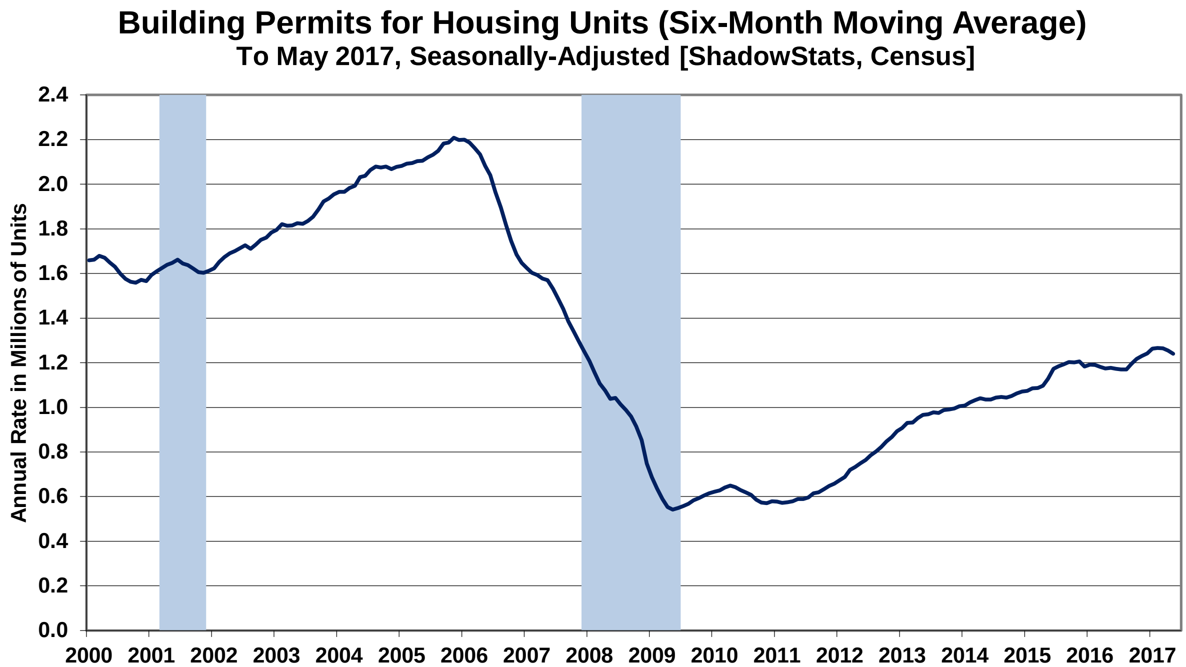
Graph 20: Building Permits (Annualized Monthly Rate of Activity), 2000 to Date



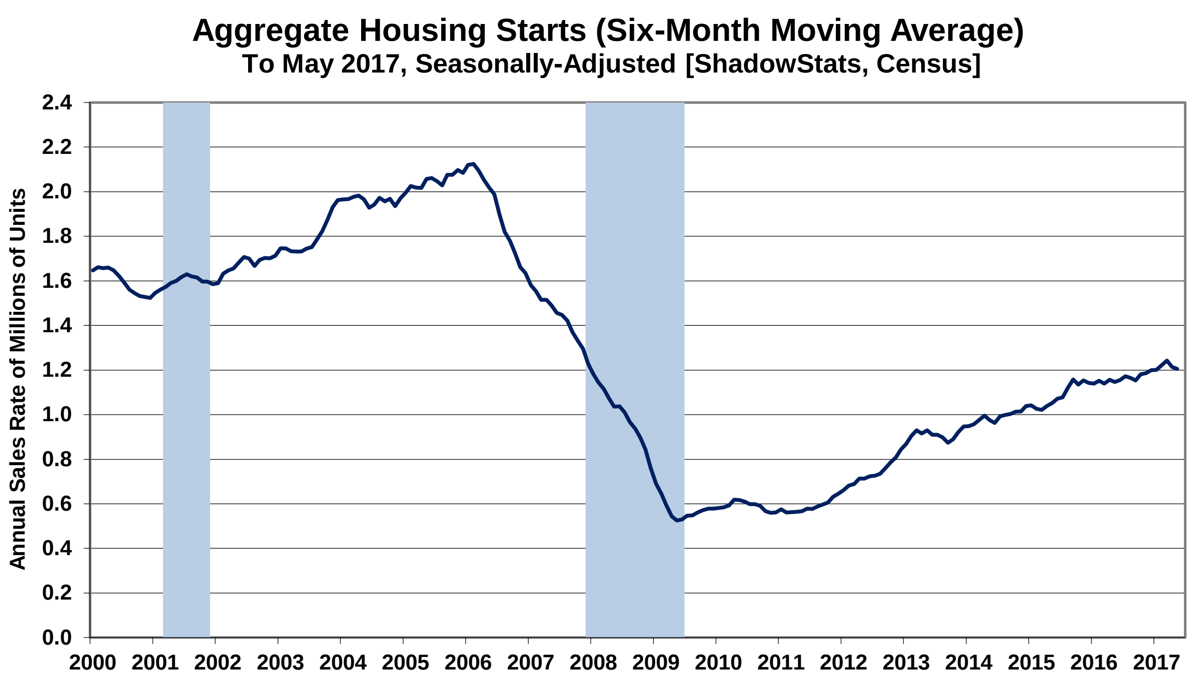
Graph 21: Housing Starts (Annualized Monthly Rate of Activity), 2000 to Date



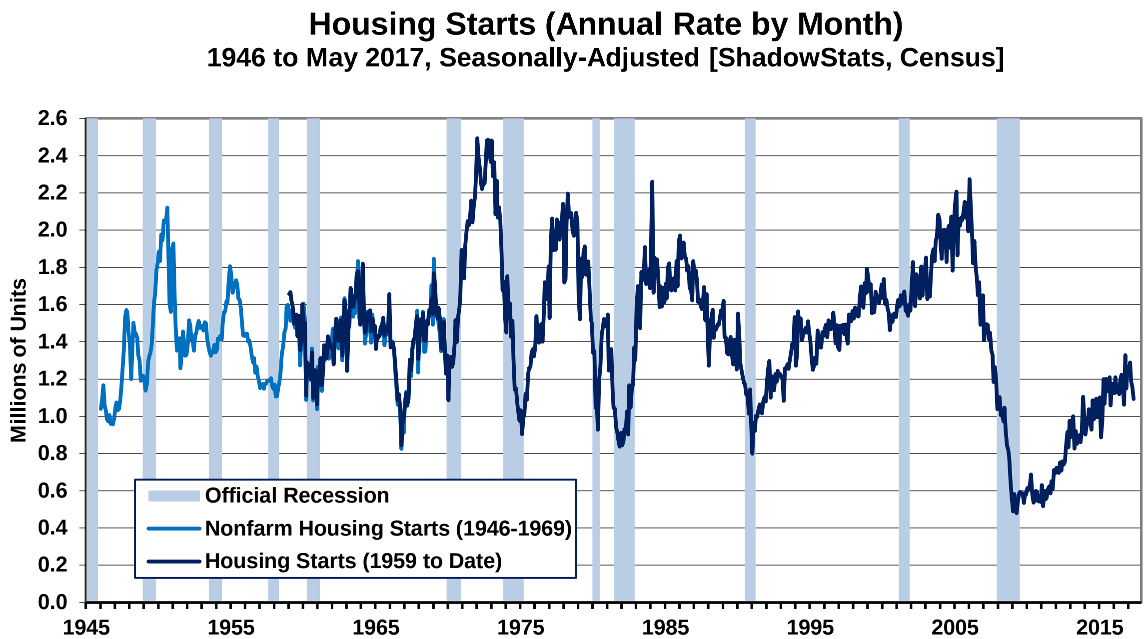
Graph 22: Building Permits (Six-Month Moving Average), 2000 to Date



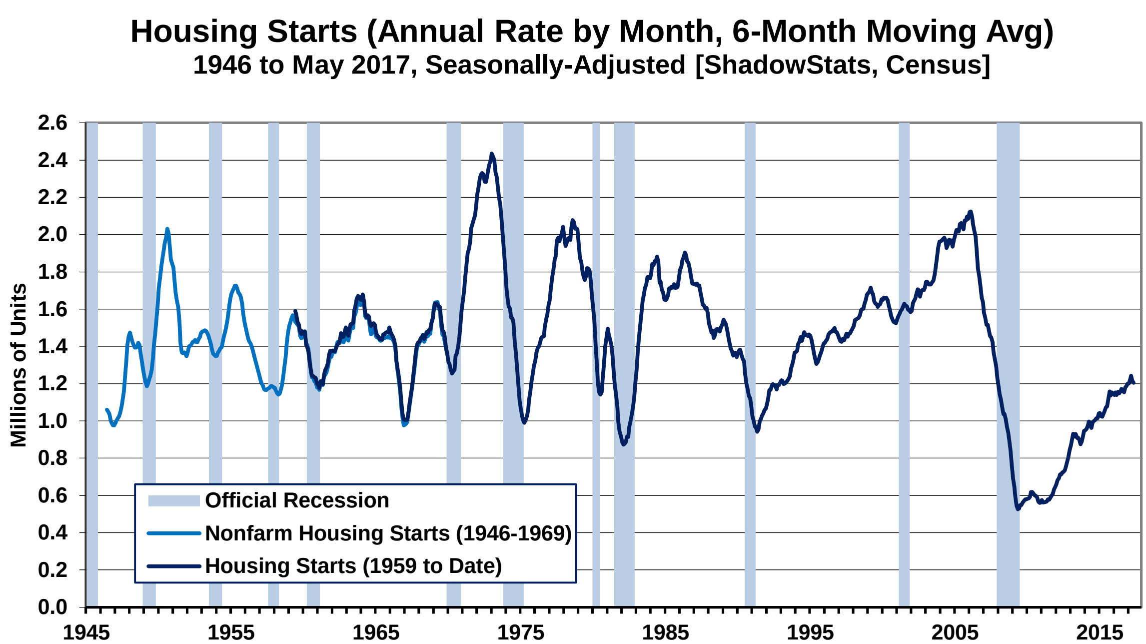
Graph 23: Housing Starts (Six-Month Moving Average), 2000 to Date



Graph 24: Housing Starts (Annualized Monthly Rate of Activity), 1946 to Date



Graph 25: Housing Starts (Annualized Monthly Rate of Activity, 6-Month Moving Avg), 1946 to Date



WEEK, MONTH AND YEAR AHEAD

Rapidly Softening Economic Reporting Should Compromise Fed Policies, Pummel the U.S. Dollar and Boost the Price of Gold. *[Please Note: The discussions of shifting FOMC policy in the* Opening Comments *and* Hyperinflation Watch *of prior* Commentary No. 892 *speak for themselves, and otherwise will be absorbed into the* Week, Month and Year Ahead *text of next week's* General Commentary No. 894. *The broad outlook has not changed; it just has begun to move forward. Accordingly, other than for the* Pending Economic Releases *section and this paragraph, text here has not been changed meaningfully from* No. 892.

Recent benchmark revisions to the Trade Deficit (see *Commentary No. 890*), Industrial Production (*Commentary No. 877*), Manufacturers' Shipments (*Special Commentary No. 888*), Housing Starts (*Commentary No. 887*) and Retail Sales (*Commentary No. 882*) broadly have confirmed that recent historical activity has been overstated and/or that it is turning down anew, despite near-term improvement in some headline details, such as the May unemployment rate and April industrial production. Reporting patterns likely will continue to weaken in the next month or so, which should trigger anew financial-market concerns as to the direction of pending Fed policy actions. Adding uncertainty are risks of political surprise, as discussed in *Special Commentary No. 888*. Otherwise, the broad outlook has not shifted.

In the context of the *Opening Special Comments* of *Special Commentary No. 885*, and as discussed in the *Opening Comments* of *Commentary No. 883*, the still-unfolding downshift in economic expectations increasingly should move market expectations for Federal Reserve policy away from rate hikes and the normalization of the Fed's balance sheet, towards renewed quantitative easing. The problem for the U.S. central bank remains that faltering domestic economic activity stresses banking-system solvency. Aside from formal obligations of the Fed to maintain healthy domestic economic and inflation conditions, the central bank's primary function, in practice, always has been to keep the banking system afloat. The near-absolute failure of that function in 2008 remains the primary ongoing and unresolved problem for the Fed, and it is one of the ongoing primary issues preventing the return of U.S. economic activity to normal functioning.

The outlook for future FOMC activity was updated in the *Hyperinflation Watch* of *Commentary No. 886*, and remains otherwise as reviewed in the *Opening Comments* and *Hyperinflation Watch* of *Commentary No. 880*, and as previously reviewed in *Commentary No. 873*. The circumstances and outlook remain as broadly outlined in *No. 859 Special Commentary*.

As reflected in common experience, actual U.S. economic activity generally continues in stagnation or downturn, never having recovered fully its level of pre-economic-collapse (its pre-2007-recession peak). While the latest headline GDP shows economic expansion of 12.5% since that series purportedly recovered its 2007-pre-recession high in 2011, no other "recovered" economic series has come close to showing that expansion either in terms of magnitude or in the purported brevity of the depression. Most of the better-quality series have remained in continuing, not-recovered status, in a period of protracted downturn that now rivals that of the Great Depression (see *Commentary No. 887* and *Commentary No. 869*). With intensifying signals, near-term economic woes, the FOMC soon should come under pressure to shift policies, once again, reverting to some form of quantitative easing, in an effort to address related, intensifying solvency risks in the domestic banking system.

Discussed in *No. 859 Special Commentary*, the Trump Administration continues to face extraordinarily difficult times, but has a chance to turn the tide on factors savaging the U.S. economy and on highly negative prospects for long-range U.S. Treasury solvency and stability and strength in the U.S. dollar. Any forthcoming economic stimulus faces a nine-month to one-year lead-time, once in play, before it meaningfully affects the broad economy. Delays from political discord continue to push targeted programs back in time. Needed at the same time are a credible plan for bringing the U.S. long-term budget deficit (sovereign solvency issues) under control, and action to bring the Federal Reserve under control and/or to reorganize the banking system. These actions broadly are necessary to restore domestic-economic and financial-system tranquility (see *No. 859*), but they will not happen without the cooperation of Congress.

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

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

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

Broad economic and systemic conditions are reviewed regularly, with the following *Commentaries* of particular note: *Special Commentary No. 885*, *Commentary No. 869*, *No. 777 Year-End Special Commentary* (December 2015*)*, *No. 742 Special Commentary: A World Increasingly Out of Balance* (August 2015) and *No. 692 Special Commentary: 2015 - A World Out of Balance* (February 2015). Those publications updated the long-standing hyperinflation and economic outlooks published in *2014 Hyperinflation Report—The End Game Begins* – *First Installment Revised* (April 2014) and *2014 Hyperinflation Report—Great Economic Tumble* – *Second Installment* (April 2014). The two *Hyperinflation* installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic reality are the *Public Commentary on Inflation Measurement* and the *Public Commentary on Unemployment Measurement*.

Recent Commentaries (Covering Headline Details and/or Special Features). *[Pease Note: Complete ShadowStats archives, from 2004 forward, are found at www.ShadowStats.com (left-hand column of home page).]*

Commentary No. 892 (June 15, 2017) reviewed May 2017 Industrial Production and assessed current and likely pending shifts in FOMC policy in the context of rapidly-deteriorating, headline economic data.

Commentary No. 891 (June 14, 2017) covered the May 2017 CPI and PPI, along with real and nominal retail sales, along with a quick comment on the FOMC rate hike.

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.

Commentary No. 889 (May 26, 2017) reviewed the second-estimate, first-revision to first-quarter 2017 GDP, and the April 2017 estimates of New Orders for Durable Goods and New- and Existing Home Sales.

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.

Commentary No. 886 (May 16, 2017) reviewed the headline details of the April 2017 CPI and PPI detail, along with headline reporting of nominal and real Retail Sales, real Average Weekly Earnings and regular monthly review of U.S. dollar conditions and prospects.

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. 884 (May 4, 2017) reviewed the March 2017 details for the U.S. Trade Deficit and Construction Spending and the Conference Boards' reporting of April 2017 Help Wanted OnLine.

Commentary No. 883 (April 29, 2017) covered the headline detail for the "advance" or first-estimate of first-quarter GDP, along with an update to *Consumer Liquidity Conditions*.

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 for New- and Existing-Home Sales.

Commentary No. 881 (April 19, 2017) reviewed the prior March 2017 Industrial Production, Housing Starts and the Cass Freight Index™, along with an economic update in advance of the initial first-quarter 2017 GDP estimate.

Commentary No. 880 (April 15, 2017) detailed the prior March 2017 headline reporting the of both Real and Nominal Retail Sales, Real Earnings, the CPI, the PPI and updated Consumer Liquidity, where mounting stresses on consumer income and credit are signaling major economic issues ahead.

Commentary No. 879 (April 7, 2017) covered March 2007 Employment and Unemployment, Help-Wanted Advertising and an update on monetary policy and Money Supply M3 (the ShadowStats Ongoing Measure).

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™.

Commentary No. 873 (March 16, 2017) discussed prospects for future tightening and/or a return to quantitative easing by the FOMC, along with the prior review of the February 2017 Residential Construction reporting.

Commentary No. 872 (March 15, 2017) offered some initial comment on the FOMC rate hike, in conjunction with the review of last month's February 2017 Retail Sales (real and nominal), Real Earnings and the CPI and PPI.

Commentary No. 871 covered (March 10, 2017) reporting of February Labor Conditions, updated Consumer Liquidity and the ShadowStats Ongoing M3 Measure for February 2017, and a revised FOMC outlook.

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. The GAAP-detail will be reviewed in a *Special Commentary*.

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

Note on Reporting-Quality Issues and Systemic-Reporting Biases. With some historical detail updated recently *Special Commentary No. 885*: *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*, significant reporting-quality problems remain with most major economic series. Beyond the pre-announced gimmicked changes to reporting methodologies of the last several decades, which have tended to understate inflation and to overstate economic activity—as generally viewed in the common experience of Main Street, U.S.A.—ongoing headline reporting issues are tied largely to systemic distortions of monthly seasonal adjustments.

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

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

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

PENDING ECONOMIC RELEASES: Existing- and New-Home Sales (May 2017). Reporting of May 2017 Existing-Home Sales is due for release on Wednesday, June 21st, from the National Association of Realtors (NAR), followed by reporting of May 2017 New-Home Sales on Friday, June 23rd, from the Census Bureau. Both New- and Existing-Home Sales will be covered in the *General Commentary No. 894* of June 23rd.

The extreme liquidity bind besetting consumers continues to constrain residential real estate activity, as updated in *Consumer Liquidity Conditions* in today's *Executive Summary*, *Special Commentary No. 888* and as reviewed in the *CONSUMER LIQUIDITY* section of *No. 859 Special Commentary*. Without sustainable growth in real income, and without the ability and/or willingness to take on meaningful new debt in order to make up for income shortfall, the U.S. consumer remains unable to sustain positive growth in domestic personal consumption, including real estate activity and related demand for residential construction, as seen in today's construction details. That circumstance—in the last ten-plus years of economic collapse and stagnation—has continued to prevent a normal recovery in broad U.S. economic activity.

Where the private housing sector never recovered from the business collapse of 2006 into 2009, there remains no chance of a near-term, sustainable turnaround in home-sales activity, without a fundamental upturn in consumer and banking-liquidity conditions. That does not appear to be in the offing.

Smoothed for regular extreme and nonsensical monthly gyrations, a pattern of low-level stagnation in New-Home Sales also should remain in play for that series. While the pattern of low-level stagnation in new sales has continued to fluctuate in recent months, it recently has begun to show somewhat of weakening trend, which likely will intensify. Monthly changes in activity here rarely are statistically-significant, amidst otherwise unstable headline reporting and revisions.

Headline Existing-Home Sales should continue their current general pattern of low-level stagnation. Although there is an uptrend in the smoothed, six-month moving averages, such should begin to flatten out again.

