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

COMMENTARY NUMBER 558 2012 Household Income, August Housing Starts

September 18, 2013

At An 18-Year Low, 2012 Real Median Household Income Was Below Levels Seen in 1968 through 1974

2012 Income Variance Hit Record High, Suggestive of Greater Financial and Economic Crises Ahead

> Systemic Instabilities That Led to 2008 Crisis Still Have to Be Worked Through

Housing Starts Continued in Renewed Downturn or Stagnation

PLEASE NOTE: The next regular Commentary is scheduled for tomorrow, Thursday, September 19th, with an assessment of any changes in FOMC policy, plus an updated summary of the Hyperinflation Outlook (not the revised Hyperinflation Report, which will be published in the near future).

The regular Hyperinflation Watch and Week Ahead sections are not included here, pending updated information in the scheduled September 19th Commentary No. 559. A copy of the existing summary Hyperinflation Outlook is available in the prior Commentary No. 557.

Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

The Census Bureau's *Income, Poverty and Health Insurance Coverage: 2012*, popularly known as the the "Poverty Report," showed no indications of an economic recovery in place or pending. Released September 17th, it also signaled even more-difficult times to come. Suffering from the indicated consumer financial difficulties, August housing starts continued in renewed stagnation or contraction.

Income Conditions Are Not Getting Better; Economic Outlook Remains Bleak. Discussed repeatedly in *ShadowStats Commentaries*, consumers simply cannot make ends meet. As shown in the first graph, inflation-adjusted, or real, median household income, on an annual basis, declined for the fifth-straight year, hitting its lowest level in 18 years, or since 1994. Deflated by the CPI-U, the 2012 median household income reading actually stood below levels reported for the years 1968 through 1974. The Census report confirmed, again, the monthly reporting quality of real median household income data published by Sentier Research (www.SentierResearch.com), whose numbers are plotted in the second graph following.

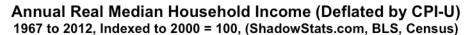
At the same time, despite the ongoing nature of the economic and systemic-solvency crises, and the effects of the 2008 financial panic, income dispersion—the movement of income away from the middle towards both high- and low-level extremes—has held at or hit record highs, instead of moderating, as might be expected during periods of financial distress. Extremes in income dispersion usually foreshadow financial-market and economic calamities. With the current circumstance at a record extreme, and well above levels estimated to have prevailed before the 1929 stock-market crash and the Great Depression, increasingly difficult times are likely for at least the next several years.

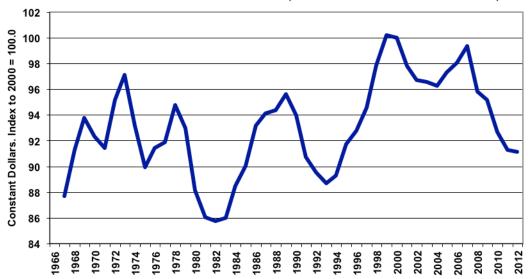
The value of this Census report is in its estimates of household income and income variance, not in the titled poverty or health insurance estimates. Annual poverty reporting *per se* is not too meaningful, where the structure of the reporting is highly subjective. Measuring "poverty" is difficult, at best, when few can agree on a definition. There are many who do not consider themselves to be poor, even though they meet the government's standards, while others think they are poor but are not defined as such. Separately the whole process has been heavily influenced by politics, with even some short-term efforts at impacting the numbers. For example, the survey's inner-city sampling size was reduced (with Congressional oversight) during the Clinton Administration, and then re-expanded at the end of the Clinton era.

The actual survey usually is piggy-backed on the March household unemployment survey of the year following the reported data. Accordingly, the March 2013 survey of 2012 data was used in the report by the Census Bureau, which conducted the household survey on behalf the Bureau of Labor Statistics.

Real Median Household Income Is at Its Lowest Level Since 1994. Real (inflation-adjusted) median household income contracted again in 2012, although the annual change was not statistically significant. Nonetheless, the level was the lowest seen since 1994, and was lower than levels indicated for the 1968 to 1974 period, using the CPI-U as a deflator. As indicated by the Sentier Research numbers, and confirmed broadly by the Census data, consumer income contracted into the formal 2007 recession, with the decline in income accelerating into the period of the purported post-June 2009 economic recovery. With the Sentier numbers now stagnant at a low level of activity, and consumers' inability to expand borrowing in

order to make up for shortfalls in income, the chances of there having been a full economic recovery since 2009 (as reflected in the GDP), or of a recovery pending in the immediate future, remain nil.





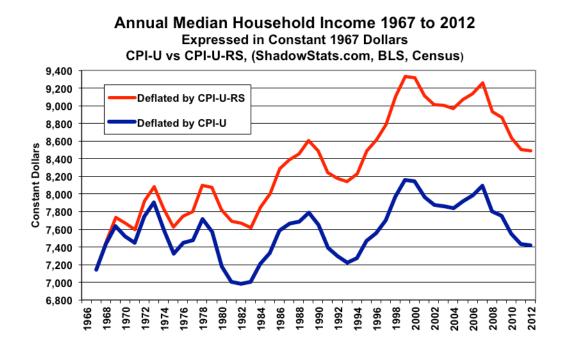
Monthly Real Median Household Income Index Deflated by CPI-U, Seasonally-Adjusted (www.SentierResearch.com)



The first graph, preceding is the Census series of annual real median income, as deflated by the CPI-U and indexed to 2000 = 100. The second graph is based on Sentier's monthly data on real median household income, as deflated by the CPI-U and indexed to January 2000 = 100. Where the index overlapping is not exact, the annual patterns seen in the Census data are broadly consistent with the Sentier data for the period 2000 to 2012. The Sentier numbers continue through July 2013 reporting.

The median household income measure is the middle measure of the survey of household income. It likely is a better reflection than a mean or average household income measure as to how most households are doing, when the income dispersion measures are high. Those measures are at record highs in 2012, as discussed shortly.

Census Plays Games With Inflation. The next graph show median household income deflated using two Bureau of Labor Statistics (BLS) inflation measures, the CPI-U and the CPI-U-RS. With the CPI-U-RS, 2012 median household income has dropped to its lowest levels since 1995 (not 1994) and is above the 1968-to-1974 reporting. The emphasis here is that the graphs use government inflation numbers, not an alternate ShadowStats inflation measure.



The CPI-U is the measure used by the BLS when it deflates its broad income measures, and also it is the inflation measure used in deflating the monthly median household income measures published by Sentier Research. Again, in the case of the median household income series deflated by the CPI-U, the 2012 level of median household income is below the levels seen in the late-1960s and early-1970s.

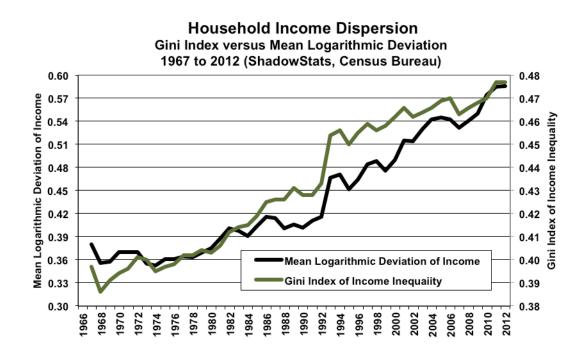
The CPI-U-RS is an "experimental" BLS series used by the Census Bureau in its *Poverty Report* for the historical income estimates (not the poverty-threshold estimates), and it enables Census to report the survey details with artificially-reduced historical inflation levels. The result is a stronger inflation-

adjusted pattern of income levels (the red, narrower line), than what usually would be the official weaker picture (heavy blue line) based on deflation using the traditional CPI-U reporting.

The CPI-U (All Urban Consumers) is the headline consumer inflation number published by the BLS and the one most commonly used in deflating consumer-related dollars. The Census Bureau appears to have used the CPI-U in its annual poverty reports as recently as 2003. No other major government reporting uses CPI-U-RS inflation gimmick, at present.

The CPI-U-RS (Current Methods) is a special version of the CPI-U with its history restated so as to reduce earlier-year inflation by imputing what it would have been, using today's "advanced" CPI reporting methodologies. The CPI-U-RS is the index used by the Census Bureau in deflating income numbers in the *Poverty Report* since 2003. It also is the series reverse-engineered by ShadowStats.com for constructing the SGS Alternate CPI estimates, as discussed in the *Public Comment on Inflation* and in *Hyperinflation 2012*.

Rising and Record Income Dispersion Levels Tends to Foreshadow Economic and Financial-Market Turmoil. Measures of income dispersion, or variance, indicate how income is distributed within a population. A low level of income dispersion indicates that income tends to be concentrated in the middle, while a high level of dispersion indicates heavier income concentrations in the extremes of low and high income, with less in the middle. The higher the variance of income is, as shown in the next graph, the greater is the income dispersion.



Generally, the more moderate the income variance is, the stronger the middle class is, and the healthier the broad economy will be in the longer term. Conversely, the greater the variance in income is, the more

negative are the longer-term economic implications. For example, a person earning \$100,000,000 per year is not going to buy proportionately more automobiles than someone earning \$100,000 per year, so a strong middle class generally is a better circumstance for the auto industry than is extreme income dispersion.

Shown in the following graph are the Gini Index of Income Inequality and the Mean Logarithmic Deviation of Income (MLD), two of the more popular income dispersion series. Some of the finer points and mathematics behind several of the income variance measures are covered in the Census Bureau's article: *The Changing Shape of the Nation's Income Distribution*.

Conditions surrounding extremes in income variance usually help to fuel financial-market bubbles, followed by financial panies and economic depressions. The sequence of those factors tends to redistribute income in a manner that usually lowers income variance, helping economic recovery. Other than for a brief dip following the 1987 stock-market crash, however, U.S. income variance since 1987 has been higher than has been estimated for the economy going into the 1929 stock-market crash and the Great Depression, and its current reading remains nearly double that of any other "advanced" economy. Instead of being tempered by the 2008 financial panic and the ongoing economic and systemic-solvency crises, variance increased to record levels in 2011 and 2012. This suggests that the greatest negative impact of the systemic turmoil, so far, has been on those in the middle-income area. It also is suggestive of even greater financial and economic crises still ahead.

[Some of the text in this section has been repeated from prior analyses of these issues.]

Residential Investment/Housing Starts—August 2013. Remaining well off early-2013 levels, August housing-starts detail showed the usual large monthly revisions (to the downside), along with the regular statistical-insignificance of the month-to-month changes. Allowing for that, recent broad patterns of monthly reporting increasingly suggest that the slight uptrend—seen in the stagnation and bottom-bouncing of the last four years of housing starts—hit a relative near-term peak in first-quarter 2013. Activity turned to contraction in second-quarter 2013 and has stagnated anew in the first two months of the third-quarter.

With aggregate starts data broken into its major subcomponents, activity in single-unit starts generally had been relatively stagnant in the post-housing-crash environment, turning lower recently, while the multiple-unit starts activity has remained highly unstable and irregular, briefly hitting pre-crash levels, but also now pulling back in highly volatile, recent reporting.

The U.S. consumer remains severely constrained in terms of liquidity, as discussed in the previous section on annual household income measures, and as discussed in the *Opening Comments* of the prior *Commentary No. 557*. Without income growth or adequate credit availability, there remains no near-term chance of the consumer supporting a rebound in the housing sector activity or in the broader economy.

August 2013 Housing Starts Reporting. The headline gain in August 2013 housing starts was statistically-insignificant. The month-to-month gain of 0.9% was a decline of 0.6%, before period-period revisions. July's monthly gain revised to 5.7% (previously 5.9%). Year-to-year growth in the seasonally-

adjusted, aggregate August 2013 housing starts measure was a statistically-significant increase of 19.0%, following a revised gain of 19.2% (previously 20.9%) in July.

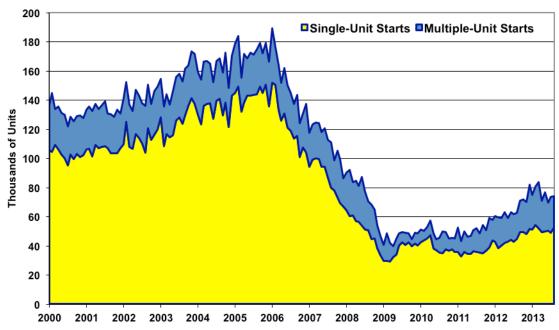
By Unit Category. Housing starts for single-unit structures in August rose by a statistically-insignificant 7.0% for the month, following a revised 3.0% (previously a 2.2%) decline in July. August's annual gain of 16.9% was statistically significant.

Reporting of starts activity for apartment buildings (generally 5 units or more) remained highly unstable, and the monthly decline was not meaningful. Month-to-month, apartment building starts fell in August by a statistically-insignificant 9.4%, following a revised 26.9% (previously 25.5%) gain in July. August's annual gain of 22.9% also was not statistically significant.

Graphs of Housing Starts Activity. The record monthly low seen for the present aggregate series was in April 2009, which was down 79% from the January 2006 peak. Against the downside-spiked low in April 2009, the August 2013 headline number was up by 86%, but it still was down by 61% from the January 2006 series high. That detail is reflected in the graphs of this section, as well as in those of the *Reporting Detail*.

Where the official reporting of housing starts is expressed at an annualized monthly pace of starts, which was 891,000 in August 2013, following 883,000 in July, the graphs on that basis are plotted in the *Reporting Detail*.

Single- and Multiple-Unit Housing Starts (Monthly Rate) 2000 to August 2013, Seasonally-Adjusted (ShadowStats.com, Census)

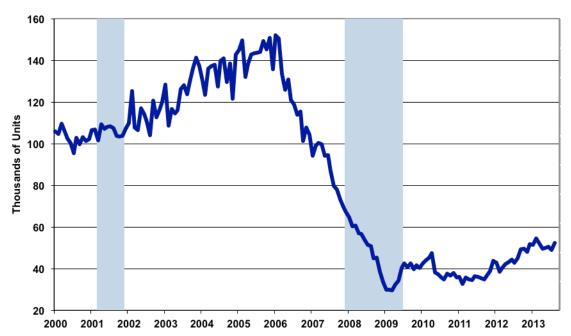


Due to the regular, extreme volatility in the monthly series, however, it is more meaningful to look at the non-annualized monthly number. In terms of estimated, actual seasonally-adjusted monthly activity, housing starts were 74.3 thousand in August, versus 73.6 thousand in July. The graphed and quarterly patterns of growth at an annual or monthly pace are exactly the same; it is just that the monthly levels tend to be a little more representative of actual activity level. Accordingly, the accompanying graphs in this section reflect the seasonally-adjusted monthly rates of activity, not the annualized numbers.

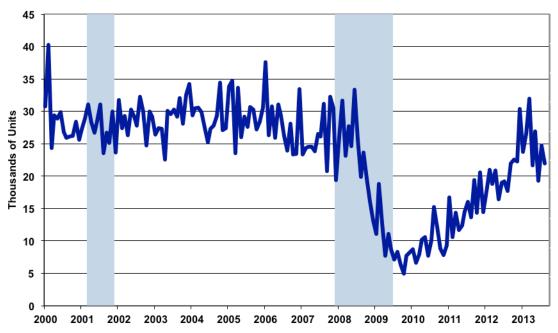
The highly-volatile and irregular housing starts series tends to show mixed patterns, partially because it is reported as a mix of residential construction products, with one-unit housing starts that generally are tied to new home sales, versus multi-unit starts that often reflect rental- and apartment-unit activity. The aggregate, statistically-insignificant August gain of 0.9% was composed of an insignificant 7.0% gain in one-unit housing starts, combined with an insignificant 11.1% monthly decline in starts of multiple-unit (2 or more units) structures (again, starts for 5 units or more were down by 9.4% for the month). The accompanying graphs reflect that detail.

The next two graphs break-up the component reporting between one-unit and multiple-unit housing starts. The Census Bureau breaks its headline data into three categories beyond "total." Those structure definitions are "1 unit," "2 to 4 units," and "5 units or more." Due to lack of "meeting reliability standards," Census does not publish the actual numbers for the "2 to 4 units," although the numbers can be imputed. Accordingly, ShadowStats breaks the data into two sub-categories: "single-unit" and "multiple-unit" starts, where the multiple-unit category simply is the total unit count, minus the single-unit count.









Activity in single-unit starts generally had remained stagnant in the post-housing-crash environment, and, after a slight uptrend, has moved lower. Multiple-unit starts activity has remained highly unstable and irregular. Though trending higher into first-quarter 2013, activity in this series also appears to have shifted anew, to the downside. With the private-housing market difficulties, former homeowners or those not entering the home-owning market have pushed up demand for rental units. In the context of extreme volatility, multiple-unit starts had moved irregularly higher to pre-crash levels early this year, although, again, they are trending lower in the most-recent reporting.

[For further details on the August housing starts, see the Reporting Detail section.]

REPORTING DETAIL

RESIDENTIAL CONSTRUCTION (August 2013)

August Housing Starts Remained Well Off First-Quarter 2013 Near-Term Peak. August housing-starts detail showed the usual large monthly revisions (to the downside), along with the regular statistical-insignificance of the month-to-month changes. Nonetheless, the broad patterns of monthly reporting increasingly suggest that the slight uptrend seen in the stagnation and bottom-bouncing of the last four years of housing starts hit a relative near-term peak in first-quarter 2013. Activity turned to contraction in second-quarter 2013 and has stagnated anew—slightly above second-quarter levels—in the first two months of the third-quarter.

Revised detail published with August's data show that second-quarter 2013 housing starts declined by 9.3%, a revised annualized pace of 32.2% (previously was 31.1%), versus first-quarter 2013. The average level of the first two months of third-quarter activity was 2.1% higher than the second-quarter activity, a statistically insignificant gain.

This highly volatile and irregular housing starts series tends to show varying patterns, partially because it is reported as a mix of residential construction products, with one-unit housing starts that generally are for individual consumption resulting in new home sales, versus multi-unit starts that generally reflect the building of rental and apartment units.

The 0.9% headline monthly gain in August 2013 housing starts was statistically-insignificant, as were the headline 7.0% gain in one-unit housing starts and the headline 9.4% decline in the five-units-or-more category. Those changes followed equally-insignificant, revised monthly changes of a 5.7% gain (total), 3.0% contraction (one-unit) and a 26.9% increase (five-units-or-more) in July. As explained by the issuing Census Bureau (Department of Commerce) in its monthly press release as to the lack of statistical significance, "The Census Bureau does not have sufficient statistical evidence to conclude that the actual change is different from zero."

As graphed in the *Opening Comments* section, activity in single-unit starts generally had been relatively stagnant in the post-housing-crash environment, turning lower recently, while the multiple-unit starts activity has remained highly unstable and irregular, briefly hitting pre-crash levels, but also pulling back some in the highly volatile, recent reporting.

With the private-housing market difficulties, former homeowners or those not entering the home-owning market have pushed demand higher for rental units. Unfortunately, though, liquidity-impaired consumers can have difficulties with renting as well as with owning their residences (see the discussion on consumer liquidity constraints in the *Opening Comments* of the prior *Commentary No. 557*).

August 2013 Housing Starts Reporting. The Census Bureau reported today, September 18th, a statistically-insignificant, month-to-month headline gain in seasonally-adjusted August 2013 housing

starts of 0.9% (a decline of 0.6% before period-period revisions) +/- 15.2% (all confidence intervals are at the 95% level). July housing starts revised to a gain of 5.7% (previously 5.9%).

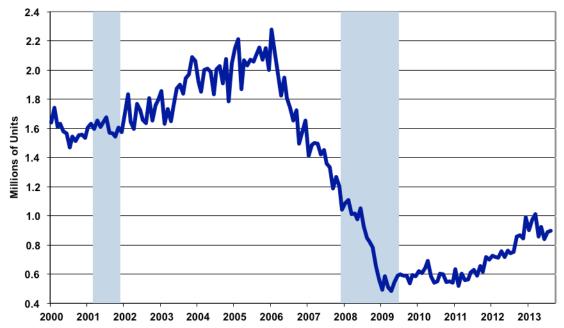
Year-to-year growth in the seasonally-adjusted, aggregate August 2013 housing starts measure was a statistically-significant increase of 19.0% +/- 13.0%, following a revised gain of 19.2% (previously 20.9%) in July.

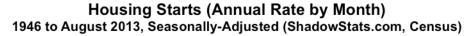
By Unit Category. Housing starts for single-unit structures in August rose by a statistically-insignificant 7.0% +/- 16.3% for the month, following a revised 3.0% (previously a 2.2%) decline in July (see graphs in the *Opening Comments* section). August's annual gain of 16.9% +/- 11.8% was statistically significant.

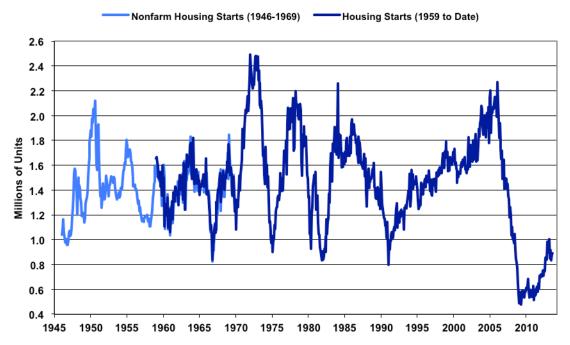
Reporting of starts activity for apartment buildings (generally 5 units or more) remained highly unstable, and the monthly decline was not meaningful. Month-to-month, apartment building starts fell in August by a statistically-insignificant 9.4% +/- 31.8%, following a revised 26.9% (previously 25.5%) gain in July (see graphs in the *Opening Comments* section). August's annual gain of 22.9% +/- 36.3% also was not statistically significant.

Graphs of Aggregate Housing Starts Activity. The record monthly low seen for the present series was in April 2009, which was down 79% from the January 2006 peak. Versus the downside-spiked low in April 2009, the August 2013 headline number was up by 86%, but it still was 61% below the January 2006 series high. These details are reflected in the accompanying graphs.









The official reporting of housing starts is expressed at an annualized monthly pace of starts, which was 891,000 in August 2013, following a revised 883,000 (previously 896,000) in July. Due to the regular, extreme volatility in the monthly series, however, it is more meaningful to look at the actual, non-annualized monthly number. In terms of actual, seasonally-adjusted monthly activity, housing starts were 74.3 thousand in August, versus 73.6 thousand in July. The graphed and quarterly patterns of growth at annual or monthly pace are exactly the same; it is just that the monthly levels tend to be a little more realistic as to the level of activity. Accordingly, the graphs in the *Opening Comments* section reflect the seasonally-adjusted monthly rates, not the annualized numbers. The two accompanying graphs here are the regular plots of aggregate housing starts, in official, annualized millions of units per month.

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