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

COMMENTARY NUMBER 778 November Trade Deficit and Construction Spending

January 6, 2016

Fourth-Quarter Real Trade Deficit Continued on Track for Worst Showing Since Third-Quarter 2007, Indicative of Looming Hit to GDP

Real Construction Spending Now on Track for Fourth-Quarter 2015 Contraction, Consistent with Other Signals for a Drop in Fourth-Quarter GDP

Corrected for "Processing Errors" Headline Construction Spending Was Higher, but With Weaker and Declining Growth Across-the-Board

Reporting Mistakes: A New Era in the Quality of Headline Government Reporting?

Next Month We Get to See the Bureau of Labor Statistics'

Corrections for "Processing Errors" in Income Estimates

PLEASE NOTE: The next regular Commentary, scheduled for Friday, January 8th, will cover December 2015 Employment and Unemployment and the ShadowStats Ongoing Money Supply M3 estimate. A review of economic, political and financial circumstances in 2015 and preview for 2016 are found here: No. 777 Year-End Special Commentary.

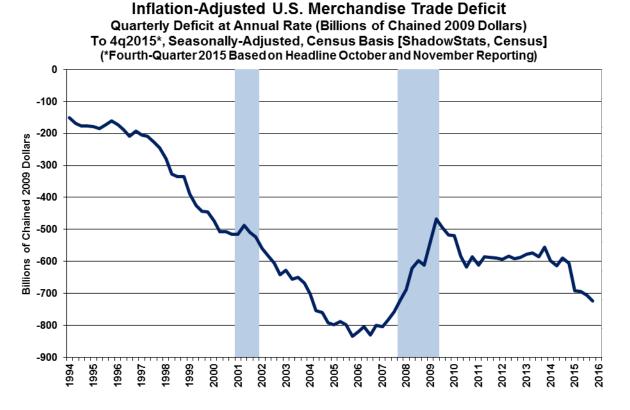
Best wishes to all — John Williams

OPENING COMMENTS AND EXECUTIVE SUMMARY

Prospects Have Intensified for Outright Contraction in Fourth-Quarter 2015 GDP. The first major economic releases of the New Year dealt further blows to prospective, inflation-adjusted real growth in fourth-quarter 2015 U.S. Gross Domestic Product (GDP). Not only did the unfolding fourth-quarter merchandise-trade deficit continue to signal a negative-growth contribution to the pending headline GDP, but also the fourth-quarter construction-spending trend swung from an initial indication of positive growth to a Census-corrected indication now of quarterly contraction.

These data are on top of intensifying quarterly contractions in Industrial Production and Housing Starts, and flat, likely-to-turn negative, quarterly change in Real Retail Sales (see <u>No. 777 Year-End Special</u> <u>Commentary</u>). Not surprisingly, public forecasts of U.S. GDP growth for fourth-quarter 2015 and for all of 2016 have been suffering downside revisions in recent weeks, from non-consensus entities tied to the domestic and global banking systems. So far, those forecasts have held above zero growth for fourth-quarter GDP, although the term "recession" increasingly has surfaced in reference to 2016.

Graph 1: Inflation-Adjusted, Quarterly U.S. Merchandise Trade Deficit



Fourth-Quarter Trade-Deficit Contraction Remained in Play. Adjusted for inflation in a manner consistent with the headline reporting of the GDP, the real merchandise-trade deficit narrowed in November 2015, versus an offsetting widening of the October 2015 shortfall, in revision. As a result, with two of three months now in place, the fourth-quarter 2015 real trade deficit remained on track to

widen versus third-quarter 2015. Not only would that generate an initial, negative quarterly growth contribution to "advance" fourth-quarter 2015 GDP reporting on January 29th, it also would mean that the fourth-quarter 2015 real merchandise trade deficit will be the worst quarterly trade shortfall since third-quarter 2007, as reflected in accompanying *Graph 1*.

Real Construction Spending Now Has Turned Down for Fourth-Quarter 2015. Given the headline November 2015 construction spending detail, and the accompanying historical corrections to the series based on "processing errors" over the last decade (see *Graphs 2* and 3), the trend in reporting for real construction spending in fourth-quarter 2015 has turned negative. Based on detail for just the first two months of the quarter, fourth-quarter 2015 real activity is contracting at an annualized quarterly pace of 1.8% (-1.8%). Based just on the initial, pre-correction headline reporting for October, fourth-quarter activity had been on track for a real annualized quarterly gain of 3.0%.

Still-Weaker Economic Data Likely in the Weeks and Months Ahead. As final monthly data for the fourth-quarter fall into place in the next several weeks, the negative quarterly trends, already at hand, likely will intensify, pushing consensus expectations increasingly towards an outright fourth-quarter GDP contraction and belated recession recognition. Belated recession-recognition remains something of a traditional pattern for consensus forecasts, usually set by Wall Street firms. Few in the consensus acknowledge negative economic forecasts, publicly, until there is little choice but to do so.

Previously discussed, the downturn continues to be seen in nominal and real corporate revenues, in what some are calling a "revenue recession" or "sales recession." Common usage of the term "production recession" continues. If falling corporate revenues, retail sales, industrial production and a renewed downturn in construction activity do not reflect a broad economic contraction in the GDP, it only is because of exploding, non-productive expenditures or invented valuations, related to factors ranging from Obamacare to intellectual property, and due to the use of understated inflation in generating GDP real growth rates. Nonetheless, the intensifying, current economic weakness is enough to show a headline real GDP contraction and declaration of a new, formal recession.

Main Street U.S.A. never experienced the heavily-touted, full economic recovery and boom that followed the headline economic collapse into 2009, yet, once again, it is experiencing contracting, broad economic activity, along with the attendant negative implications for incumbents come the November 2016 national election.

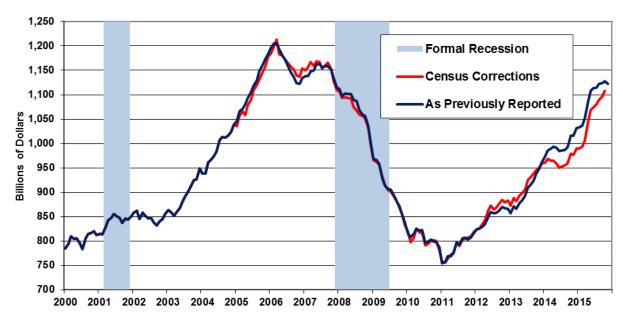
A New Trend in Government Economic Reporting and Revisions? In an extraordinary action for a U.S. government statistical bureau, the Census Bureau (Census) published headline November 2015 construction spending data in the context of "processing error" corrections back to 2005. Such followed the recent Bureau of Labor Statistics (BLS) suspension of full payroll-survey earnings data, due to a "data processing error introduced during the 2009 benchmark [revision]" and pending "corrected" numbers that will be incorporated in the 2015 payroll-employment benchmark of February 6th.

"Corrected" Construction Spending Shifted from Decelerating Growth to Accelerating Decline. The headline construction-spending corrections affected only the private-investment residential series (private-residential improvements) and the all-encompassing total or aggregate series (see *Graphs 1* and 2), with no revisions to either the public-construction or the private-nonresidential-construction spending series.

The revisions went back to January 2015 (a likely arbitrary cut-off). Where recent aggregate spending levels revised higher, monthly, quarterly and annual growth patterns all shifted negatively.

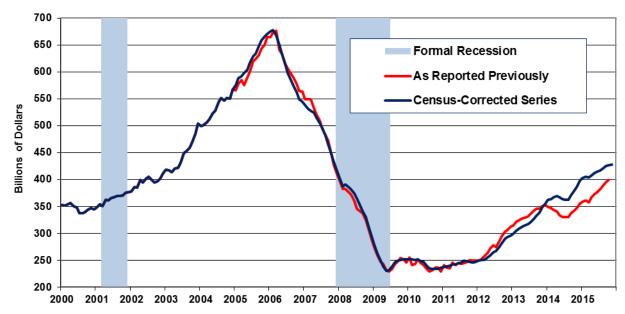
Graph 2: Census-Corrected, Total-Construction Spending

Census-Corrected Total-Construction Spending Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 3: Census-Corrected, Private-Residential-Construction Spending

Census-Corrected Private-Residential Construction Spending Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Today's *Commentary* (**January 6th**). The balance of these *Opening Comments* provides summary coverage of the November Trade Deficit and Construction Spending.

The *Hyperinflation Outlook Summary* was updated in the *Opening Comments* and *Executive Summary* of the December 30th <u>No. 777 Year-End Special Commentary</u>. That summary will be condensed, extracted and included in these regular *Commentaries*.

The Week Ahead previews Friday's (January 8th) reporting of December 2015 labor conditions.

U.S. Trade Deficit—November 2015—Real Fourth-Quarter Merchandise Trade Deficit on Track for Worst Showing in Seven Years. With initial reporting of the inflation-adjusted November 2015 merchandise trade deficit in hand, the suggested real fourth-quarter 2015 trade deficit continued to develop as the worst since third-quarter 2007 (see *Graph 1*). The unfolding details also continued to suggest a negative hit on the "advance" fourth-quarter 2015 GDP growth estimate, as discussed in the opening paragraphs of these *Opening Comments*.

The "unexpected" narrowing in the nominal November 2015 trade deficit to \$42.4 billion was in the context of a revised widening in the October 2015 shortfall to \$44.6 billion from an initial estimate of \$43.9 billion. The "advance" reporting of the November 2015 merchandise trade deficit on December 29th, had indicated a minimal narrowing in the monthly merchandise trade deficit. Once again, though, the "advance" trade series appeared to be of extremely limited scope and usefulness, in terms of a providing meaningful indication of the "final" trade reporting published one week later.

Nominal (Not-Adjusted-for-Inflation) November 2015 Trade Deficit. The nominal, seasonally-adjusted monthly trade deficit in goods and services for November 2015, on a balance-of-payments basis, narrowed by \$2.208 billion in November 2015 to \$42.374 billion, versus a revised \$44.582 billion in October 2015. The November 2015 nominal deficit also widened versus a non-comparable \$40.021 billion trade shortfall in November 2014 (see the *Ongoing Cautions...* section in the *Reporting Detail*).

In terms of month-to-month trade patterns, the headline \$2.208 billion narrowing in the November deficit reflected a decline of \$1.565 billion in monthly exports, more than offset by a \$3.772 billion decline in monthly imports (difference is in rounding). Where the decline in exports was broadly based, the decline in imports primarily was in consumer goods (cell phones), perhaps indicative of slowing U.S. consumer demand. A widening trade deficit in petroleum products continued, however, despite the ongoing decline in the price of imported oil.

For November 2015, the not-seasonally-adjusted average price of imported oil declined to \$39.24 per barrel, versus \$40.12 per barrel in October 2015, and versus \$82.92 per barrel in November 2014. Separately, not-seasonally-adjusted, physical oil-import volume in November averaged 7.035 million barrels per day, up from 6.669 million in October 2015 and up from 6.345 million in November 2014.

Real (Inflation-Adjusted) November 2015 Trade Deficit. Adjusted for seasonal factors, and net of oilprice swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation), the November 2015 merchandise trade deficit (no services) narrowed to \$59.603 billion, versus a largely offsetting,

revised widening in the October deficit to \$61.033 billion. The November 2015 shortfall also widened sharply versus a still-comparable \$48.592 billion real deficit in November 2014.

As currently reported, the annualized quarterly real merchandise trade deficit stood at \$588.6 billion for third-quarter 2014, \$605.5 billion for fourth-quarter 2014, \$692.1 billion for first-quarter 2015, and \$694.5 billion for second-quarter 2015. Widening quarter-to-quarter real trade deficits subtract growth from the quarterly real GDP estimates, while narrowing deficits boost headline GDP. The annualized quarterly real trade shortfall in third-quarter 2015 widened minimally to \$705.8 billion, versus the second-quarter 2015 trade shortfall.

Based just on the headline October and November 2015 detail, the fourth-quarter 2015 deficit currently is on track for an annualized deficit of \$723.8 billion. Not only would that be the worst quarterly deficit since third-quarter 2007, it remains enough worse than third-quarter 2015 reporting to contribute negative growth to the "advance" estimate of fourth-quarter 2015 GDP on January 29th, all as discussed in the opening paragraphs of these *Opening Comments*.

Construction Spending—November 2015—"Processing Error" Revisions Showed Deteriorating Current Construction-Spending Growth Patterns. The headline contraction of 0.4% (-0.4%) in November 2015 nominal construction spending was in the context of major Census Bureau revisions to the series for a "processing error," which impacted both private-residential construction and the total-construction spending detail back to January 2005, a likely an arbitrary cut-off date. The error involved "the tabulation of data on private residential improvement spending."

While the "corrective" revisions upped the dollar level of recent, nominal aggregate spending levels, recent year-to-year annual growth rates revised lower by about 0.4% (-0.4%) from prior estimates, the overall effect was to reduce the pace of recent monthly, quarterly and annual growth rates, both before and after inflation adjustment. *Graphs 2* and *3* in the in the opening paragraphs of these *Opening Comments* show the revised nominal levels of activity, before inflation adjustment.

Allowing for the Census-corrected reporting, quarterly growth slowed sharply for third-quarter 2015 real construction spending (deflated by PPI construction inflation), at a revised annualized quarterly pace of 4.1% [previously 7.4% pre-error], against a revised annualized annual growth rate of 25.0% [pre-error 28.7% pre-error] in second-quarter 2015.

Based solely on the revamped, post-processing-error detail for October and November 2015 reporting, real fourth-quarter 2015 construction spending now is contracting at an annualized pace of 1.8% (-1.8%). Pre-error correction and based solely on headline October 2015 detail, the prior fourth-quarter growth had been estimated at a positive 3.0%.

Graphs 4 to 7 show comparative nominal and real construction activity for the aggregate series as well as for private residential- and nonresidential-construction and public construction spending. Seen after adjustment for inflation, the aggregate series had remained in low-level stagnation into first-quarter 2015. Pre-"correction" it had spiked in recent months, but now it has slowed and flattened out in the last several months of reporting. Post-"correction," the real series in November 2015 still held at 25.6% (-25.6%) below its pre-recession peak of March 2006. Areas of recent relative real strength in all of the major subcomponents have flattened out, or turned down in revision, both before and after construction

inflation. The "corrected" general pattern of real activity remains one of low-level, flat-trending stagnation. Separate graphs of aggregate and real nominal detail are shown in *Graphs 8* and 9of the *Reporting Detail*.

PPI Final Demand Construction Index (FDCI). ShadowStats uses the Final Demand Construction Index (FDCI) component of the Producer Price Index (PPI) for deflating the current aggregate activity in construction-spending, with headline month-to-month broad construction inflation showing a contraction of 0.26% (-0.26%) and year-to-year inflation of 1.97% in November 2015. See details in the *Reporting Detail*. The nominal versus inflation-adjustment effects by construction sector follow in *Graphs 4* to 7.

Headline Reporting for November 2015. The headline, total value of construction put in place in the United States for November 2015 was a correction-based \$1,122.5 billion, on a seasonally-adjusted—but not-inflation-adjusted—annual-rate basis. That was down by a statistically-insignificant 0.4% (-0.4%), versus a "corrected" and otherwise revised \$1,127.0 billion in October 2015. Net of systemic corrections and revisions, the headline November change was a "gain" of 1.4%.

In turn, October spending was up by a "corrected" and otherwise revised 0.3% versus the "corrected" \$1,123.9 billion in September 2015. In turn, corrected September spending was up a revised 0.3% versus a corrected \$1,123.9 billion in August.

Adjusted for FDCI inflation, total real monthly spending in November 2015 was down by 0.1% (-0.1%), following a drop of 0.7% (-0.7%) in October 2015, and a 0.2% gain in September.

On a year-to-year or annual-growth basis, November 2015 nominal construction spending rose by a statistically-significant 10.5% versus a "corrected" year-to-year change in October 2015 of 10.9% and a corrected annual gain of 13.3% in September 2015.

Net of construction costs indicated by the FDCI, the year-to-year gain in total real spending was at 8.3% in November 2015, versus 8.5% in October 2015 and 11.2% in September 2015.

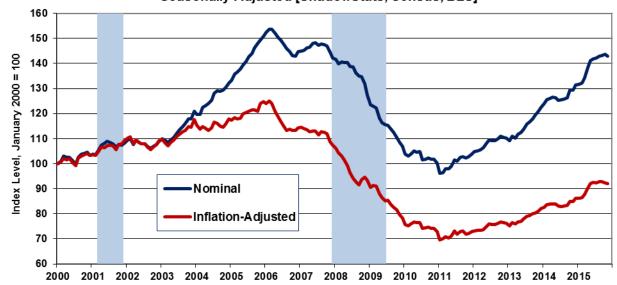
The statistically-insignificant, headline monthly nominal decline of 0.4% (-0.4%) in aggregate November 2015 construction spending, versus a corrected 0.3% gain in October 2015 spending, included a headline monthly contraction of 1.0% (-1.0%) in November public spending, versus a decline of 0.8% (-0.8%) in October. Private spending declined by 0.2% (-0.2%) in November, following an increase of 0.8% in October. Within total private construction spending, however, the residential sector rose by 0.3% in November, versus a corrected 0.3% gain in October, while the nonresidential sector fell by 0.7% (-0.7%) in November, following a 1.1% gain in October.

Construction Graphs. Despite a now-faltering uptrend, the pattern of inflation-adjusted activity here—net of government inflation estimates—does not confirm the economic recovery indicated by the headline GDP series (see Commentary No. 775 and No. 777 Year-End Special Commentary). To the contrary, the latest broad construction reporting, both before (nominal) and, more prominently, after (real) inflation adjustment, generally still shows a pattern of low-level, variably up-trending stagnation, where activity never had recovered pre-recession highs and has flattened-out anew, adjusted for inflation.

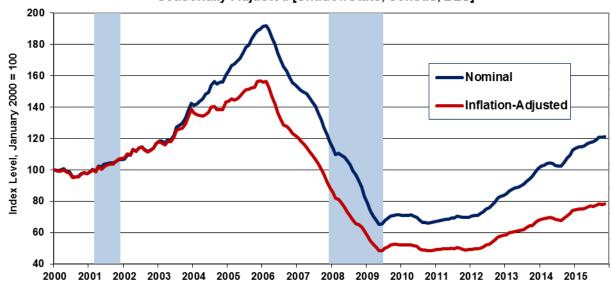
A variety of construction spending and related, comparative graphs (*Graphs 8* to 15) are found in the *Reporting Detail* section. *Graphs 4* to 7, which follow here, show plots of the comparative construction series both before and after adjustment for inflation.

Graph 4: Index, Nominal versus Real Value of Total Construction

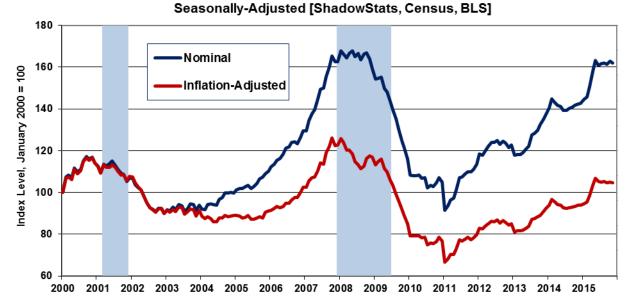
Index of Total Value of Construction Put in Place Nominal versus Inflation-Adjusted (Jan 2000 = 100) To November 2015, Deflated by PPI Construction Indices Seasonally-Adjusted [ShadowStats, Census, BLS]



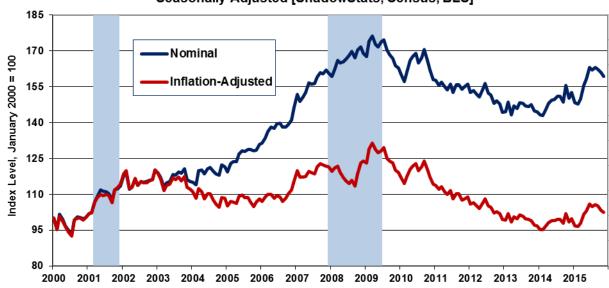
Graph 5: Index, Nominal versus Real Value of Private Residential Construction
Index of Value of Private Residential Construction
Nominal versus Inflation-Adjusted (Jan 2000 = 100)
To November 2015, Deflated by PPI Construction Indices
Seasonally-Adjusted [ShadowStats, Census, BLS]



Graph 6: Index, Nominal versus Real Value of Private Nonresidential Construction
Index of Value of Private Nonresidential Construction
Nominal versus Inflation-Adjusted (Jan 2000 = 100)
To November 2015, Deflated by PPI Construction Indices



Graph 7: Index, Nominal versus Real Value of Public Construction
Index of Value of Public Construction
Nominal versus Inflation-Adjusted (Jan 2000 = 100)
To November 2015, Deflated by PPI Construction Indices
Seasonally-Adjusted [ShadowStats, Census, BLS]



[The Reporting Detail section includes further material on the Trade Deficit, Construction Spending and related graphs.]

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HYPERINFLATION WATCH

HYPERINFLATION OUTLOOK SUMMARY

The *Hyperinflation Outlook Summary* was updated in the *Opening Comments* and *Executive Summary* of the December 30th <u>No. 777 Year-End Special Commentary</u>. That will be condensed further, extracted and included here, shortly, for the regular *Commentaries*.

REPORTING DETAIL

U.S. TRADE BALANCE (November 2015)

Real Fourth-Quarter Merchandise Trade-Deficit Trend Remained on Track for Worst Showing in Seven Years. With initial reporting of the inflation-adjusted November 2015 merchandise trade deficit in hand, the suggested real fourth-quarter 2015 trade deficit continued on track to be the worst since third-quarter 2007 (see *Graph 1*). Implications for a negative hit to the "advance" estimate of fourth-quarter 2015 GDP on January 29, 2016, also continued, as discussed and graphed in the opening paragraphs of the *Opening Comments*.

The "unexpected" narrowing in the nominal November 2015 trade deficit to \$42.4 billion was in the context of a revised widening in the October 2015 shortfall to \$44.6 billion from an initial estimate of \$43.9 billion. The "advance" reporting of the November 2015 merchandise trade deficit on December 29th, indicated a minimal narrowing in the monthly merchandise trade deficit. Once again, the "advance" trade series appeared to be of extremely limited scope and usefulness, in terms of a providing meaningful indication of the "final" trade reporting published one week later.

Nominal (Not-Adjusted-for-Inflation) November 2015 Trade Deficit. The Bureau of Economic Analysis (BEA) and the Census Bureau reported this morning, January 6th, that the nominal, seasonally-adjusted monthly trade deficit in goods and services for November 2015, on a balance-of-payments basis, narrowed by \$2.208 billion in November 2015 to \$42.374 billion, versus a revised \$44.582 [previously \$43.891] billion in October 2015. The November 2015 nominal deficit also widened versus a noncomparable \$40.021 billion trade shortfall in November 2014 (see *Ongoing Cautions...* section).

In terms of month-to-month trade patterns, the headline \$2.208 billion narrowing in the November deficit reflected a decline of \$1.565 billion in monthly exports, more than offset by a \$3.772 billion decline in monthly imports (difference is in rounding). Where the decline in exports was broadly based, the decline in imports primarily was in consumer goods (cell phones), perhaps indicative of slowing U.S. consumer demand. A widening trade deficit in petroleum products continued, however, despite the ongoing decline in the price of imported oil.

<u>Energy-Related Petroleum Products.</u> For November 2015, the not-seasonally-adjusted average price of imported oil declined to \$39.24 per barrel, versus \$40.12 per barrel in October 2015, and versus \$82.92 per barrel in November 2014. Separately, not-seasonally-adjusted, physical oil-import volume in November averaged 7.035 million barrels per day, up from 6.669 million in October 2015 and up from 6.345 million in November 2014.

Ongoing Cautions and Alerts on Data Quality. Potentially heavy distortions in headline data continue from seasonal adjustments. Similar issues affect other economic releases, such as retail sales and payrolls, where the headline number reflects month-to-month change. Discussed frequently (see 2014 Hyperinflation Report—Great Economic Tumble for example), the extraordinary length and depth of the current business downturn and disruptions have disrupted regular seasonality patterns. Accordingly, the markets should not rely too heavily on the accuracy of the monthly headline data.

Noted in trade-related <u>Commentary No. 748</u>, at least a three-percent understatement of the historical U.S. trade deficit awaits correction in its June 2016 benchmark revision, along with implied, subsequent downside benchmark revisions to historical GDP growth in July 2016. Such formalizes, temporarily, distortions in comparability of near-term (comparable) versus long-term (not comparable) reporting of the goods and services trade detail.

Where imports are counted on the negative side of the trade balance, a change in reporting methodology has shown that imports have been understated regularly, with the effect of underestimating the size of the U.S. trade deficit by at least three-percent. Such has negative implications for historical, broad economic growth and indeed for future GDP benchmark revisions.

Beginning with the headline reporting for July 2015, the Bureau of Economic Analysis (BEA) and the Census Bureau introduced a change in the trade-deficit calculation, now counting low-value imports, which previously neither were reported nor calculated in the monthly balance-of-payments estimates. To allow for near-term reporting consistency in recent headline data, trade detail back to January 2015 also was restated with July 2015 and subsequent reporting to incorporate a "temporary balance of payments adjustment for low-value imports," included in the trade calculations.

Those changes, along with other regular minor revisions to the trade deficit for first-half 2015, had the net effect of widening the six-month trade deficit by 3.3%. The bulk of that was due to the new reporting

approach. Even-greater trade deterioration looms with further, new detail, still to be added. Separately, as a result of the temporary restatement of historical post-December 2014 reporting, current headline balance-of-payment data no longer are consistent with earlier data, such as might be seen with year-ago comparisons.

Noted in the July 2015 trade balance <u>Press Release</u>, "The Census Bureau will revise historical statistics in June 2016 with the annual revision release. To maintain time-series consistency for imports of goods on a balance of payments (BOP) basis, the U.S. Bureau of Economic Analysis has applied temporary BOP adjustments to imports of goods on a Census basis beginning with January 2015 statistics. These adjustments will be removed from imports of goods on a BOP basis in June 2016 when the Census Bureau revises historical statistics."

Real (Inflation-Adjusted) November 2015 Trade Deficit. Adjusted for seasonal factors, and net of oilprice swings and other inflation (2009 chain-weighted dollars, as used in GDP deflation), the November 2015 merchandise trade deficit (no services) narrowed to \$59.603 billion, versus a largely offsetting, revised widening in the October deficit to \$61.033 [previously \$60.327] billion. The November 2015 shortfall also widened sharply versus a still-comparable \$48.592 billion real deficit in November 2014.

As currently reported, the annualized quarterly real merchandise trade deficit stood at \$588.6 billion for third-quarter 2014, \$605.5 billion for fourth-quarter 2014, \$692.1 billion for first-quarter 2015, and \$694.5 billion for second-quarter 2015. Widening quarter-to-quarter real trade deficits subtract growth from the quarterly real GDP estimates, while narrowing deficits boost headline GDP. The annualized quarterly real trade shortfall in third-quarter 2015 widened minimally to \$705.8 billion, versus the second-quarter 2015 trade shortfall.

Based just on the headline October and November 2015 detail, the fourth-quarter 2015 deficit currently is on track for an annualized deficit of \$723.8 billion [virtually unrevised versus the prior fourth-quarter estimate of \$723.9 billion, based just on October reporting]. Not only would that be the worst quarterly deficit since third-quarter 2007, it remains enough worse than third-quarter 2015 reporting to contribute negative growth to the "advance" estimate of fourth-quarter 2015 GDP on January 29th, all as discussed in the opening paragraphs of the *Opening Comments*.

CONSTRUCTION SPENDING (November 2015)

"Processing Error" Revisions Showed Deteriorating Current Construction-Spending Activity. The headline contraction of 0.4% (-0.4%) in November 2015 nominal construction spending was in the context of major Census Bureau revisions to the series for a "processing error," which impacted both private-residential construction and the total-construction spending detail back to January 2005, a likely an arbitrary cut-off date. The error involved "the tabulation of data on private residential improvement spending."

While the "corrective" revisions upped the dollar level of recent, nominal aggregate spending levels, recent year-to-year annual growth rates revised lower by about 0.4% (-0.4%) from prior estimates, the overall effect was to reduce the pace of recent monthly, quarterly and annual growth rates, both before and after inflation adjustment. *Graphs 2* and *3* in the *Opening Comments* show the revised nominal levels of activity, before inflation adjustment.

Allowing for the Census-corrected reporting, quarterly growth slowed sharply for third-quarter 2015 real construction spending (deflated by PPI construction inflation), at a revised annualized quarterly pace of 4.1% [previously 7.4% pre-error], against a revised annualized annual growth rate of 25.0% [pre-error 28.7% pre-error] in second-quarter 2015.

Based solely on the revamped, post-processing-error detail for October and November 2015 reporting, real fourth-quarter 2015 construction spending now is contracting at an annualized pace of 1.8% (-1.8%). Pre-error correction and based solely on headline October 2015 detail, the prior fourth-quarter growth had been estimated at a positive 3.0%.

Graphs 4 to 7 in the Opening Comments section show comparative nominal and real construction activity for the aggregate series as well as for private residential- and nonresidential-construction and public construction spending. Seen after adjustment for inflation, the aggregate series had remained in low-level stagnation into first-quarter 2015. Pre-"correction" it had spiked in recent months, but now it has slowed and flattened out in the last several months of reporting. Post-"correction," the real series in November 2015 still held at 25.6% (-25.6%) below its pre-recession peak of March 2006. Areas of recent relative real strength in all of the major subcomponents have flattened out, or turned down in revision, both before and after construction inflation. The "corrected" general pattern of real activity remains one of low-level, flat-trending stagnation. The aggregate nominal detail is shown in Graph 8 of this Reporting Detail, with the real detail shown in Graph 9.

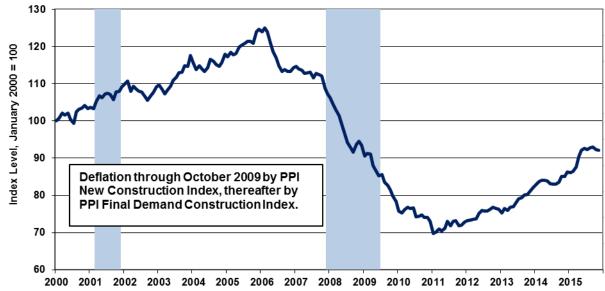
Graph 8: Total Nominal Construction Spending





Graph 9: Index of Total Real Construction Spending

Real Index of Total Value of Construction Put in Place To November 2015, Inflation Adjusted (Jan 2000 = 100) Seasonally-Adjusted [ShadowStats, Census Bureau, BLS]



PPI Final Demand Construction Index (FDCI). ShadowStats uses the Final Demand Construction Index (FDCI) component of the Producer Price Index (PPI) for deflating the current aggregate activity in the construction-spending series. The subsidiary private- and public-construction PPI series are used in deflating the subsidiary series, again, all as shown in *Graphs 4* to 7 in the *Opening Comments*.

The previously-used New Construction Index (NCI) in the PPI was so far shy of reflecting construction costs as to be virtually useless. Although closely designed to match this construction-spending series, the FDCI and subsidiary numbers have two problems. First, the historical data only go back to November 2009. Second, they generally still understate actual construction inflation. Private surveys tend to show higher construction-related inflation than is reported by the government. For example, year-to-year inflation reflected in the privately-published Building Cost Index and Construction Cost Index [Dodge Data and Analytics (McGraw Hill) *Engineering News-Record*] had been running well above the headline pace of annual inflation in the PPI's Final Demand Construction Index, but the annual PPI inflation measure moved to about even with the private-sector measures in October and November 2015.

There is no perfect, publicly-available inflation measure for deflating construction. For the historical series in the accompanying graphs, the numbers are deflated by the NCI through November 2009, and by the FDCI and subsidiaries thereafter.

Seasonally-adjusted November 2015 FDCI month-to-month inflation fell back by 0.26% (-0.26%), having jumped by 0.97% in October. In terms of year-to-year inflation, the November 2015 FDCI was up by 1.97%, versus annual inflation of 2.24% in October 2015.

Where the subsidiary series tend to track the aggregate inflation detail over time, November 2015 headline inflation for publicly-funded construction declined by 0.09% (-0.09%) for the month, having

risen by month-to-month by 0.97% in October, and it rose by 2.06% year-to-year in November 2015, having gained 2.15% year-to-year in October 2015.

Inflation for privately-funded construction fell month-to-month by 0.35% (-0.35%) in November 2015, having risen by 0.98% in October 2015, with year-to-year inflation up by 1.98% in November 2015, versus 2.25% in October 2015.

Headline Reporting for November 2015. The Census Bureau reported January 4th that the headline, total value of construction put in place in the United States for November 2015 was a correction-based \$1,122.5 billion, on a seasonally-adjusted—but not-inflation-adjusted—annual-rate basis. That estimate was down by a statistically-insignificant 0.4% (-0.4%) +/- 1.8% (all confidence intervals are at the 95% level), versus a "corrected" and otherwise revised \$1,127.0 [previously \$1,107.4] billion in October 2015. Net of systemic corrections and revisions, the headline November change was a "gain" of 1.4%.

In turn, October spending was up by a "corrected" and otherwise revised 0.3% [previously up by 1.0%] versus the "corrected" \$1,123.9 [previously \$1,096.6] billion in September 2015. In turn, corrected September spending was up a revised 0.3% [pre-correction up by 0.6%] versus a corrected \$1,123.9 [previously \$1,089.8] billion in August.

Adjusted for FDCI inflation, total real monthly spending in November 2015 was down by 0.1% (-0.1%), following a drop of 0.7% (-0.7%) in October 2015, and a 0.2% gain in September.

On a year-to-year or annual-growth basis, November 2015 nominal construction spending rose by a statistically-significant 10.5% +/- 2.1%, versus a "corrected" year-to-year change in October 2015 of 10.9% [pre-correction up by 13.0%], and a corrected annual gain of 13.3% [previously up by 14.3%] in September 2015.

Net of construction costs indicated by the FDCI, the year-to-year gain in total real spending was at 8.3% in November 2015, versus 8.5% in October 2015 and 11.2% in September 2015.

The statistically-insignificant, headline monthly nominal decline of 0.4% (-0.4%) in aggregate November 2015 construction spending, versus a corrected 0.3% gain in October 2015 spending, included a headline monthly contraction of 1.0% (-1.0%) in November public spending, versus a decline of 0.8% (-0.8%) in October. Private spending declined by 0.2% (-0.2%) in November, following an increase of 0.8% in October. Within total private construction spending, however, the residential sector rose by 0.3% in November, versus a corrected 0.3% gain in October, while the nonresidential sector fell by 0.7% (-0.7%) in November, following a 1.1% gain in October.

Construction and Related Graphs. The earlier Graphs 8 and 9 reflected total construction spending through November 2015, both in the headline nominal dollar terms, and in real terms, after inflation adjustment. The inflation-adjusted graph is on an index basis, with January 2000 = 100.0. Adjusted for the PPI's NCI measure through October 2009 and the PPI's Final Demand Construction Index thereafter, real aggregate construction spending showed the economy slowing in 2006, plunging into 2011, then turning minimally higher in an environment of low-level stagnation, trending lower from late-2013 into mid-2014, some boost into 2015 and, in correction, now in low-level, down-trending stagnation.

The pattern of non-recovered flat, inflation-adjusted activity here—net of government inflation estimates—does not confirm the economic recovery indicated by the headline GDP series (see

<u>Commentary No. 775</u> and <u>No. 777 Year-End Special Commentary</u>). To the contrary, the latest broad construction reporting, both before (nominal) and after (real) inflation adjustment, generally still shows a pattern of low-level activity, where activity never recovered pre-recession highs and has flattened-out anew, adjusted for inflation in 2015, turning lower in fourth-quarter 2015 activity

Graph 10 shows November 2015 construction employment, as discussed and detailed in the coverage of headline November 2015 payroll employment in *Commentary No. 771*. This graph and related detail will be updated in the next *Commentary No. 779*, of Friday, *January 8th*, covering December 2015 payrolls.

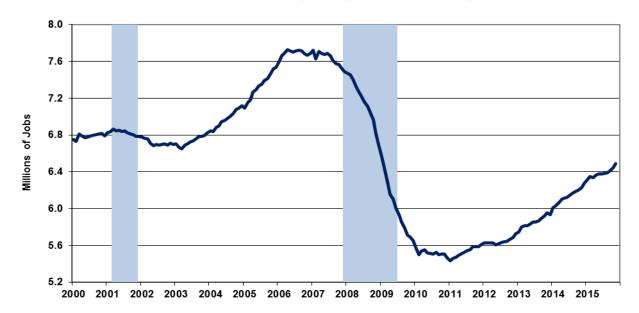
In theory, payroll levels should move more closely with the inflation-adjusted aggregate series, where the nominal series reflects the impact of costs and pricing, as well as a measure of the level of physical activity. Growth in construction payrolls has shown some recent strength at the same time that broad construction activity—measured in terms of units or in real, inflation-adjusted dollars—has begun to slow or turn down anew.

Graph 11 shows total nominal construction spending, broken out by the contributions from total-public (blue), private-nonresidential (yellow) and private-residential (red) spending.

Graph 10: Construction Payroll Employment to Date

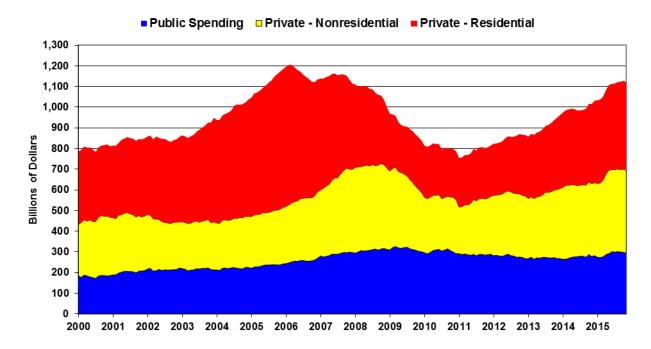
Construction Payroll Employment to November 2015

Seasonally-Adjusted [ShadowStats, BLS]



Graph 11: Aggregate Nominal Construction Spending by Major Category to Date

Construction Spending, Monthly to November 2015 Seasonally-Adjusted Annual Rate [ShadowStats, Census]



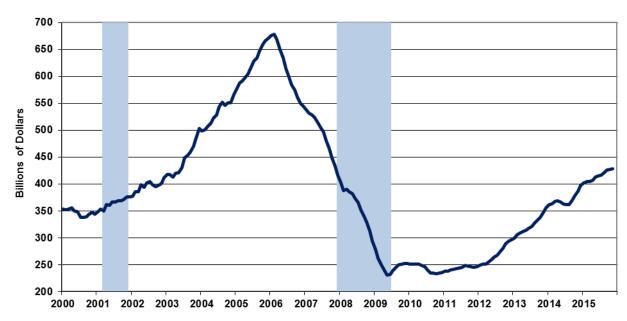
The next two graphs (*Graph 12* and *13*) cover private residential construction along with housing starts (combined single- and multiple-unit starts) for November 2015 (see <u>Commentary No. 774</u>). Keep in mind that the construction spending series is in nominal terms, while housing starts reflect unit volume, which should be parallel with the inflation-adjusted series shown in *Graph 5* of the *Opening Comments* section and presumably with the headline construction-payroll data in *Graph 8*.

Again, see *Graphs 2* and *3* and the related discussion in the *Opening Comments* as to the series corrections for processing errors.

Graph 12: Nominal Private Residential Construction Spending to Date

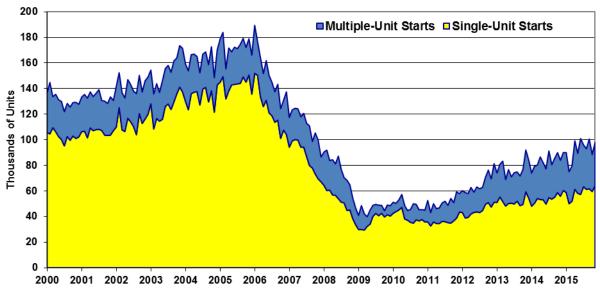
Private Residential Construction to November 2015

Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 13: Single- and Multiple-Unit Housing Starts to Date

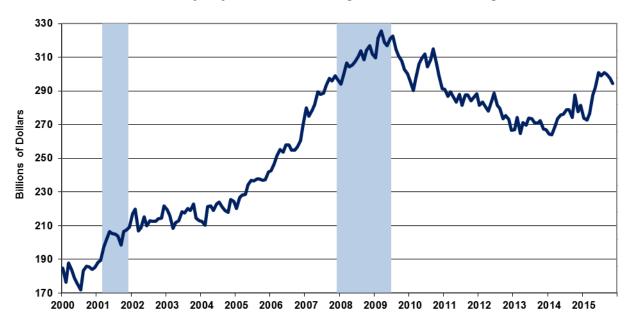
Single- and Multiple-Unit Housing Starts (Monthly Rate) To November 2015, Seasonally-Adjusted [ShadowStats, Census]



Graph 14: Nominal Private Nonresidential Construction Spending to Date
Private Nonresidential Construction to November 2015
Seasonally-Adjusted Annual Rate [ShadowStats, Census]



Graph 15: Nominal Public Construction Spending to Date
Public Construction to November 2015
Seasonally-Adjusted Annual Rate [ShadowStats, Census]



The final set of two graphs (*Graphs 14* and *15*) shows the patterns of the monthly level of activity in private nonresidential-construction spending and in public-construction spending in

private-nonresidential construction has turned flat, remaining off its historic peak, although it recently had been closing in on the pre-recession high, rallying sharply. Public construction spending, which is 98% nonresidential, had continued in a broad downtrend, with intermittent bouts of fluttering stagnation and then some upturn in growth in the last year, turning down anew, most recently. Both series appear stalled shy of their pre-recession peaks, particularly as viewed net of inflation, as shown in *Graphs 6* and 7.

WEEK AHEAD

Economic Reporting Should Trend Much Weaker than Expected, Well into 2016; Inflation Should Rise Anew—Along with Oil Prices—in Response to a Weakening Dollar. Still in a fluctuating, general trend to the downside, amidst increasingly-negative reporting in headline detail, market expectations for business activity nonetheless gyrate with the latest economic hype in the popular media. That effect holds the consensus outlook at overly-optimistic, but softening levels, with current expectations still exceeding underlying economic reality. Along with the broad trend in weakening expectations, movement towards looming recession recognition continues at an accelerating pace, as discussed in the *Opening Comments*, and in the December 30th *No. 777 Year-End Special Commentary*.

Headline reporting of the regular monthly economic numbers increasingly should weaken in the weeks and months ahead, along with much worse-than-expected reporting for at least the next several quarters of GDP (and GDI and GNP), for fourth-quarter 2015 and well into 2016. That includes intensifying signals of a headline fourth-quarter 2015 GDP contraction, due for release on January 29, 2016, as well as downside revisions to recent GDP history in the 2016 annual benchmark revision due on July 29, 2016.

CPI-U consumer inflation—intermittently driven lower this year by collapsing prices for gasoline and other oil-price related commodities—likely has seen its near-term, year-to-year low. Annual CPI-U turned minimally positive in June 2015, for the first time in six months, notched somewhat higher in July and August, with a minimal fallback in September, tied to renewed weakness in gasoline prices. With positive seasonal adjustments countering some of the monthly weakness in gasoline prices, combined with particularly weak headline inflation one year ago, headline November 2015 CPI-U annual inflation was boosted to 0.5%, with further upside movement to headline annual inflation likely in December reporting. Separately, fundamental reporting issues withe CPI are discussed here: Public Commentary on Inflation Measurement.

Significant inflation pressures should mount anew, at such time as oil prices rebound. Again, that process should accelerate, along with a pending sharp downturn in the exchange-rate value of the U.S. dollar. Those areas, the general economic outlook and longer range reporting trends were reviewed broadly, most

recently, in <u>No. 777 Year-End Special Commentary</u> in complement to <u>No. 742 Special Commentary</u>: <u>A World Increasingly Out of Balance</u>, <u>No. 692 Special Commentary</u>: <u>2015 - A World Out of Balance</u> and the <u>2014 Hyperinflation Reports: The End Game Begins</u> and <u>Great Economic Tumble</u>.

Note on Reporting-Quality Issues and Systemic-Reporting Biases. 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 actual inflation and to overstate actual economic activity, 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 eight-to-ten 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, when concurrent seasonal adjustments are used (as with retail sales, durable goods orders, employment and unemployment data, discussed and explored in the labor-numbers related Commentary No. 695).

Separately, discussed in the *Opening Comments*, a heretofore unheard of spate of "processing errors" has surfaced, currently involving surveys of earnings and construction spending. This is suggestive of deteriorating internal oversight and control of the U.S. government's headline economic reporting. At the same time, it indicates an openness of the involved statistical agencies as to reporting-quality issues.

Combined with recent allegations of Census Bureau falsification of data in its monthly Current Population Survey (the source for the Bureau of Labor Statistics' 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*).

PENDING RELEASES:

Employment and Unemployment (December 2015). The Bureau of Labor Statistics (BLS) will publish its December 2015 labor data on Friday, January 8th. Both employment and the broader unemployment numbers remain open for negative, headline surprises, given the ongoing, general weakening tone in a number of business indicators. Some surprises also likely loom in the annual revisions to the headline U.3 unemployment rate.

Established monthly distortions to payroll employment (excessive upside biases, and publishing irregularities with the concurrent-seasonal-factor process) continue, as do the regular monthly distortions to headline unemployment, including definitional issues with "discouraged workers." Publishing irregularities whereby seasonally-adjusted unemployment and Household Survey data are not comparable month-to-month, disappear in the month of December, tied to annual revisions, but they return in their entirety with the January numbers reported in February.

Annual Revisions to the Headline Unemployment and Household Survey Data. For the only time since December 2014, headline unemployment numbers and related series will be published on a consistent and comparable basis in the December 2015 detail. Regularly discussed in the monthly unemployment Commentaries, the BLS uses concurrent-seasonal-factor adjustments. That process results in monthly revisions, every month, to the history of the involved series, as new seasonal factors are generated each

month for the new headline data. The problem is that although the BLS has in hand the revised data each month, it does not publish them. Regularly, the BLS publishes only the current month's headline data using the new seasonals, leaving all prior, seasonally-adjusted headline detail unrevised and on a non-comparable basis.

While the once-per-year consistency and related historical revisions will be interesting, all historical comparability disappears with the January 2016 reporting, which reverts back to the non-comparability of the monthly data, as well as introduces new population parameters, which intensify comparability issues.

Underlying Fundamentals Remain Negative. Underlying economic fundamentals continue to suggest slowing or negative month-to-month growth in headline payrolls, as well as deterioration in the broader unemployment rates such as U.6 and the ShadowStats-Alternate Unemployment Measure, while the headline U.3 unemployment rate likely will hold at 5.0% in the December reporting.

As seen with the reduction in the narrow, headline U.3 unemployment rate in recent months and years, any further narrowing of the headline December unemployment rate likely would encompass more unemployed being redefined off the headline unemployment rolls and out of the headline labor force, rather than the number of declining unemployed actually gaining new employment.

Implied Monthly Trend for December Payroll Employment. Published previously by ShadowStats-affiliate www.ExpliStats.com, in its analysis of the biases built into the BLS's concurrent-seasonal-factor modeling of the November 2015 payroll-employment reporting, the December 2015 built-in-bias trend is for a headline monthly employment gain of 216,000 (see Commentary No. 771), versus the stronger-than-expected headline jobs gain of 211,000 in November. Where consensus forecasts usually settle-in near the trend level, they seem to be narrowly below trend, heading into the headline report. Still, today's unexpectedly-strong ADP report likely will boost consensus expectations a bit further.

To the extent that underlying fundamentals continue to shine through all the regular monthly volatility and distortions, headline activity should continue to favor much weaker-than-expected payroll gains, with a potential downside "surprise" to the December payroll growth.

Also, keep in mind that the advance estimate of the 2015 benchmarking for payroll employment indicated a downside revision of 208,000 (-208,000) jobs to the base-March 2015 payroll employment levels (see *Commentary No. 753* of September 17th), scheduled to be released next month, on February 5th, along with corrections to the "data processing error introduced during the 2009 benchmark [revision]."