

Consumer Metrics Institute News

October 29, 2015: BEA Reports 3rd Quarter 2015 GDP Growing at 1.49%

(Web page version is [here](#))

In their first estimate of the US GDP for the third quarter of 2015, the [Bureau of Economic Analysis](#) (BEA) reported that the economy was growing at a +1.49% annualized rate, down -2.43% from the second quarter.



This report included significant changes in the details as well as the headline. By far the greatest quarter-over-quarter change was in inventories, which subtracted -1.44% from the headline after being essentially neutral during the prior quarter. As we have mentioned before, the BEA's treatment of inventories can introduce noise and seriously distort the headline number over short terms -- which the BEA admits by also publishing a secondary headline that excludes the impact of inventories. This BEA "bottom line" (their "Real Final Sales of Domestic Product") reported a much more respectable +2.93% growth rate for the third quarter.

Consumer activity once again contributed the bulk of the headline number (providing +2.19% in total), although that contribution was less than during the prior quarter (down -0.24% in aggregate). Fixed commercial investments, governmental spending and exports also weakened materially, while imports subtracted less from the headline than during the prior quarter.

Meanwhile there was better news for household income. Real annualized per capita disposable income was reported to be \$38,086 per annum, up \$251 per year from the prior quarter. The household savings rate was reported to be 4.7% -- up slightly from the prior quarter's 4.6% rate.

For this revision the BEA assumed an annualized deflator of 1.22%. During the same quarter (July 2015 through September 2015) the inflation recorded by the Bureau of Labor Statistics (BLS) in their CPI-U index was negative (dis-inflationary), at -0.37%. Over estimating inflation results in pessimistic growth rates, and if the BEA's "nominal" data was deflated using CPI-U inflation information the headline number would show a much better +3.10% growth rate.

Among the notable items in the report :

-- The headline contribution from consumer expenditures for goods was +0.99% (down -0.21% from the prior quarter).

-- The contribution to the headline from consumer services also weakened slightly to +1.20% (down -0.03% from the second quarter). The combined consumer contribution to the headline number was +2.19%, down -0.24% from 2Q-2015.

-- The headline contribution from commercial private fixed investments essentially halved, dropping to +0.47% -- down -0.36% from prior quarter. Spending on non-residential structures contracted while the growth rate for residential structures weakened.

-- As mentioned above, inventories contracted materially -- subtracting -1.44% from the headline number. As mentioned below, we suggest that this number should be largely ignored.

-- Governmental spending added +0.30% to the headline (down -0.16% from the prior quarter). The remaining growth was almost entirely in state and local spending.

-- The contribution to the headline number from exports (+0.24%) was less than half of the number from the prior quarter (down -0.40% from the +0.64% for 2Q-2015).

-- Imports subtracted less from the headline number (-0.27%) than during the previous quarter

(a change of +0.19%).

-- The "real final sales of domestic product" is now reported to be growing at a +2.93% annualized rate, off only -0.97% from the very respectable +3.90% recorded for last quarter. Once again, this is the BEA's "bottom line" measurement of the economy and it excludes the reported inventory contraction.

-- Also as mentioned above, real per-capita annual disposable income was reported to have grown materially during the quarter and the household savings rate also improved slightly. However, this admittedly good news should be read in the context of a real per-capita annual disposable income that is up only +3.84% in aggregate since the second quarter of 2008 -- a meager annualized +0.52% growth rate over the past 29 quarters.

The Numbers

As a quick reminder, the classic definition of the GDP can be summarized with the following equation :

$$\text{GDP} = \text{private consumption} + \text{gross private investment} + \text{government spending} + (\text{exports} - \text{imports})$$

or, as it is commonly expressed in algebraic shorthand :

$$\text{GDP} = \text{C} + \text{I} + \text{G} + (\text{X}-\text{M})$$

In the new report the values for that equation (total dollars, percentage of the total GDP, and contribution to the final percentage growth number) are as follows :

GDP Components Table

	Total GDP= C + I + G + (X-M)				
Annual \$ (trillions)	\$18.0	= \$12.4	+ \$3.0	+ \$3.2	+ \$-0.5
% of GDP	100.0%	= 68.6%	+ 16.6%	+ 17.8%	+ -2.9%
Contribution to GDP Growth %	1.49%	= 2.19%	+ -0.97%	+ 0.30%	+ -0.03%

The quarter-to-quarter changes in the contributions that various components make to the overall GDP can be best understood from the table below, which breaks out the component contributions in more detail and over time. In the table below we have split the "C" component into goods and services, split the "I" component into fixed investment and inventories, separated exports from imports, added a line for the BEA's "Real Final Sales of Domestic Product" and listed the quarters in columns with the most current to the left :

Quarterly Changes in % Contributions to GDP

	3Q- 2015	2Q- 2015	1Q- 2015	4Q- 2014	3Q- 2014	2Q- 2014	1Q- 2014	4Q- 2013	3Q- 2013	2Q- 2013	1Q- 2013	4Q- 2012	3Q- 2012	2Q- 2012	1Q- 2012
Total GDP Growth	1.49%	3.92%	0.64%	2.07%	4.27%	4.56%	0.91%	3.82%	2.98%	1.11%	1.91%	0.10%	0.50%	1.89%	2.67%
Consumer Goods	0.99%	1.20%	0.25%	0.91%	0.91%	1.49%	0.25%	0.70%	0.60%	0.28%	1.39%	0.53%	0.63%	0.26%	1.11%
Consumer Services	1.20%	1.23%	0.94%	1.95%	1.42%	1.11%	0.61%	1.66%	0.57%	0.68%	0.36%	0.25%	0.10%	0.20%	0.52%
Fixed Investment	0.47%	0.83%	0.52%	0.39%	1.23%	0.87%	0.91%	0.79%	0.59%	0.40%	0.77%	1.03%	0.00%	0.98%	2.00%
Inventories	1.44%	0.02%	0.87%	0.03%	0.01%	1.12%	1.29%	0.08%	1.48%	0.38%	0.28%	1.54%	0.18%	0.56%	0.53%
Government	0.30%	0.46%	0.01%	0.26%	0.33%	0.21%	0.00%	0.51%	0.42%	0.38%	0.88%	0.75%	0.22%	0.39%	0.40%
Exports	0.24%	0.64%	0.81%	0.71%	0.24%	1.28%	0.95%	1.42%	0.55%	0.64%	0.12%	0.07%	0.27%	0.61%	0.37%

Imports	0.27%	0.46%	1.12%	1.60%	0.15%	1.52%	0.44%	0.16%	0.39%	0.89%	0.13%	0.65%	0.10%	0.33%	0.40%
Real Final Sales	2.93%	3.90%	0.23%	2.10%	4.28%	3.44%	0.38%	3.90%	1.50%	0.73%	1.63%	1.64%	0.68%	1.33%	3.20%

Summary and Commentary

This report is truly a mixed bag : the weaker headline is in some respects misleading, probably negatively impacted by aberrant inventory numbers and an over estimation of inflation. And yet at face value it shows somewhat weaker consumer activity and sharply lower commercial investments. Plus, exports may have started to fall off the cliff created by a stronger dollar and weakening global economy.

The Good :

-- The inventory line item is problematic even beyond the noise that it introduces to the headline number. In principle, over longer time spans it should be a mostly zero sum series, reverting to a mean that closely mirrors the economy's organic growth (i.e., whatever large numbers it subtracts this quarter are likely to be given back in a future quarters). Over shorter terms it is supposedly an indication of how companies are adjusting inventories to reflect changing customer activity (in this case shrinking inventories in anticipation of weakening sales). However, it can also be held hostage by rapidly changing deflators and exchange rates -- resulting in anomalies and aberrations in the data series that have very little to do with physical inventory levels. We suspect that the latter is at least somewhat in play with this report.

-- If we remove the noise created by the inventory data, we are left with the BEA's own "bottom line" -- the "real final sales of domestic product." That number shows a very respectable +2.93% growth rate, down "only" -0.97% from the astounding +3.90% number reported for the second quarter. Given the suspect nature of the inventory data, this is probably a somewhat closer read on the economy than the headline number.

-- We generally criticize the BEA for using low deflators that create overly optimistic headline numbers. Arguably, report this is the reverse case -- where over reported inflation is creating a pessimistic headline. Using the current dis-inflationary CPI-U data from the BLS as an alternate deflator results in a headline number in excess of 3% -- and the "real final sales" number becomes a "happy days are here again" +4.54%!

The Bad :

-- The economic growth provided by consumer spending and commercial investment is reported to be softening (if we believe the BEA's deflators).

-- Over recent years the BEA has reported economic growth during the winter (fourth and first quarters) that has materially lagged the growth that they have reported during the summer. It seems that their "seasonal adjustments" consistently fail to correct for seasonally bad weather. If that pattern continues, we can expect their data to disappoint over the next two quarters.

The Ugly :

-- Exports. Their contribution to the headline number more than halved quarter-to-quarter. The soaring dollar and plunging global economy have likely caught up with US exporters. In coming quarters we may look favorably back on a time when exports provided any growth at all.

A mixed bag indeed : the headline plunged, but the residual growth is likely under-reported and distorted by aberrant inventory data. Meanwhile, (at face value) the core domestic economy seems to be transitioning to slower growth, with exports leading the way.

That said, we frankly don't know if anyone (including the FOMC) can conclude much about

the true state of the US economy from this report.