

Consumer Metrics Institute News

October 29, 2010: Inside the Third Quarter GDP Release

The Bureau of Economic Analysis' ("BEA") "Advance Estimate" of the Third Quarter 2010 Gross Domestic Product ("GDP") had a headline annualized growth rate of 2.0% for the U.S. economy. 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:

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

For the third quarter of 2010 the values for that equation -- showing each term's total dollars (rounded to the nearest \$.1 trillion), each term's percentage of the total GDP, and each term's contribution to the final percentage growth number -- it might look something like this:

GDP Components Table

	Total GDP	=	C	+	I	+	G	+	(X-M)
Annual \$ (trillions)	\$14.7	=	\$10.4	+	\$1.9	+	\$3.0	+	\$-0.6
% of GDP	100.0%	=	70.7%	+	12.9%	+	20.4%	+	-4.0%
Contribution to GDP Growth %	2.0%	=	1.8%	+	1.5%	+	.7%	+	-2.0%

Perhaps a more interesting view is how the numbers in the bottom line of the above table (contributions to the total headline annualized growth percentage) have been changing over the past seven quarters.

That line breaks out the total annualized growth percentage for the GDP into its component parts. In the table below we have further split the "C" component into goods and services, split the "I" component into fixed investment and inventories, separated exports from imports, and listed the quarters in columns with the most current to the left:

Quarterly Changes in % Contributions to GDP

	3Q-2010	2Q-2010	1Q-2010	4Q-2009	3Q-2009	2Q-2009	1Q-2009
Total GDP Growth	2.00%	1.70%	3.70%	5.00%	1.60%	-0.70%	-4.90%
Consumer Goods	0.64%	0.79%	1.29%	0.42%	1.62%	-0.32%	0.41%
Consumer Services	1.15%	0.75%	0.03%	0.27%	-0.21%	-0.79%	-0.75%
Fixed Investment	0.10%	2.06%	0.39%	-0.12%	0.12%	-1.26%	-5.71%
Inventories	1.44%	0.82%	2.64%	2.83%	1.10%	-1.03%	-1.09%
Government	0.68%	0.80%	-0.32%	-0.28%	0.33%	1.24%	-0.61%
Exports	0.61%	1.08%	1.30%	2.56%	1.30%	-0.08%	-3.61%
Imports	-2.61%	-4.58%	-1.61%	-0.66%	-2.67%	1.55%	6.48%

Several items in the above table tell us a lot about the "Great Recession" and our still unfolding "recovery":

-- One of the real eye-openers in the above table is how much the export-import portion of the equation ("X-M") has impacted the headline growth number over the past seven quarters. For the newly reported quarter the net contribution from foreign trade was -2.0%, as contrasted with a -3.5% number for the prior quarter -- resulting in an improvement of 1.5% in the foreign trade contribution relative to the prior quarter. However, the contribution to the headline 2.0% number from exports softened for the third consecutive quarter despite a weakening dollar, and most of the quarter-over-quarter improvement was from a reduction in the growth rate of imports.

-- Meanwhile the total contributions from the "I" components (commercial investment) actually decreased from 2.9% to 1.5%, a swing of -1.4%. The "fixed investment" component alone changed by nearly -2%, with residential construction contributing -1.35% of

that decline. Inventory building, however, picked up again -- contributing a positive 1.44% to the headline 2.0% GDP number.

-- On the consumer side the contribution to the headline 2.0% growth provided by consumer goods weakened for the second straight quarter, while on the same basis consumer services grew for the second quarter in a row. In fact, over the past five quarters the aggregate consumer numbers have been relatively stable even as the growth split between goods and services has changed significantly, with consumer services now contributing more to GDP growth than consumer goods.

-- Governmental spending (which is now over 20% of the total GDP) grew enough to contribute nearly .7% of the 2.0% total GDP annualized growth. This number reflects all levels of government, and it has probably fluctuated more over the seven quarters shown than policy makers might have planned.

As we look at the numbers we are concerned about several things:

-- Over time inventory building should be a nearly zero-sum game. Inventory building has now provided a significantly positive bias to the annualized GDP growth number for five consecutive quarters. At some point in time factories will have built inventories about as far as is possible for this cycle, and inventory levels should begin to revert to norm. At that time the positive contributions that inventory has made to the headline number might well reverse, much as they did in 2008 and early 2009.

-- The growth in commercial "fixed" investment ground to a halt. Nearly all of the growth in the commercial investments was from the inventory building noted above.

-- The growth mix between consumer goods and consumer services has swung towards services. The consumer services sector of the economy is over twice the size of the consumer goods sector, and it was much harder hit during the "Great Recession." The improved growth rate for this sector is encouraging, but whether it ultimately bodes well for employment remains to be seen.

-- Given the political climate moving forward it is hard to envision growth in the governmental sector at the pace experienced during the past two quarters. Looking at the numbers again, over the past two quarters one could attribute the entire growth of the economy to governmental spending and inventory building. Neither of those are sustainable sources of growth.

-- Export growth has waned, even in the face of a weakening dollar. In a mixed message, the negative contribution of imports also diminished as imports continued to grow -- but at a lower rate.

-- Over recent quarters the BEA has revised the headline number down substantially between the "advance estimate" and the (more or less) final "third estimate." The first quarter's headline was revised down from 3.2% growth to 2.7% growth (before being magically revised up to 3.7% growth a month later, among a host of revisions to data dated as far back as 2007). The second quarter's headline was revised down from 2.4% to 1.7% (and has stayed there for at least a month). Recent experience would suggest that downward revisions might be expected.

-- Looking back all the way to the "good old days" of 2005, the mix of contributions to the GDP growth rate were substantially different. For that full year the headline annualized growth rate was 3.1%, with "C" contributing 2.24%, "I" kicking in .91% (of which .39% was residential construction), "G" a modest .14%, and "(X-M)" contributing a net -.23%. What has changed most strikingly are the volatility of "(X-M)", the growth rate for the governmental sector and the collapse of residential construction.

In summary, the headline number came in towards the lower end of consensus projections -- still showing growth, but also far weaker than one might expect for the fifth quarter of an NBER designated recovery. Within the GDP's components the strength of the headline number came from improved growth in consumer services, accelerating growth in inventories and a moderating growth rate for imports -- all while fixed commercial investments ground to a halt.

For the economy as a whole, the BEA's actual bottom line is the "real final sales of domestic product" (the net sum of all the GDP components except the inventory adjustment). By that measure the third quarter economy grew at just a .6% annualized rate, compared to an growth rate of .9% during the second quarter -- giving back a third of an already anemic growth rate. Based on that bottom line it would be small wonder if "Main Street" Americans failed to notice any change as they headed to the polls.