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Muriel Bowser, Mayor

Jeffrey S. De Witt, Chief Financial Officer

Fitzroy Lee, Deputy CFO & Chief Economist

Data revisions give a different picture of Personal Income in DC over the past decade

DC's 4.0% growth rate in the second quarter of 2016: slower than a year ago, and faster than the US average

DC Personal Income reached \$51.1 billion in the 2016.2 quarter and grew at a 4.0% annualized rate of growth in that quarter, according to the latest estimates of state Personal Income by the US Bureau of Economic Analysis (BEA). These estimates, released in September, also included revisions to earlier years going all the way back to 1998. These revisions give a different view of DC Personal Income growth over the past decade:

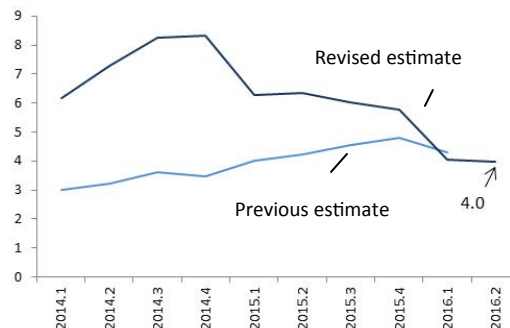
—DC Personal Income has slowed considerably over the past year, primarily because growth in prior years was increased. Last year's 2015.2 quarter is now estimated to have grown at 6.3 % as opposed to the earlier estimate of 4.2%.

—DC Personal Income is growing faster than the US average, which was 3.2% in June. Previous estimates had DC's Personal Income generally growing more slowly than the US over the past two years.

—In the Great Recession which started at the end of 2007, revised data show DC Personal Income falling faster than previously estimated (about the same as the US average), falling not quite so far, and recovering a little faster.

June estimate and September revision of DC Personal Income: 2014.1 to 2016.2 (% change from same quarter of the previous year)

Source: US Bureau of Economic Analysis (The June estimate stopped at 2016.1.)



The changed picture of DC Personal Income growth over the past decade is largely the result of two data revisions: (1) cuts to proprietors' income, which account for almost all of the reduction in DC Personal Income at the time of the Great Recession, and (2) a shift in the past three years in the relationship between income earned in DC by all persons working there and income earned by DC residents regardless of where they work. This shift **reduced** the amount of income earned in DC, but more than offset this with an increase in income earned by DC residents. (Continued on p. 2.)

This briefing document was prepared by Stephen Swaim, DC Office of Revenue Analysis

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Components of DC Personal Income and the recent revisions. DC Personal Income measures the income of DC residents. Earnings, the largest component, includes wages and salaries, benefits (such as health insurance and leave), and proprietors' income. The other income is property income (rent, interest, and dividends) and transfer payments (social security benefits, pensions, and federal medical programs.) In the June 2016 quarter, 68.6% of DC's \$51.1 billion Personal Income was from earnings.

Looking back over the past decade, the September revisions reduced DC's Personal Income before 2013 and increased it after 2013. The average annual rate of growth of Personal Income over the 8 years from 2008.1 (after the recession) to 2016.1 was increased to 4.1% from the earlier of 3.0%. Most of the revisions were to the earnings portion of Personal Income (described in more detail below).

The revisions to DC's Personal Income show why it is necessary to consider DC's Personal Income in the context of all income generated by the District's economy. Although DC's 2016.1 Personal Income was increased by \$1.1 billion (2.2%), the amount of income generated in DC was \$1.0 billion (0.9%) less. This occurred because of what is called the "net resident adjustment." This adjustment starts with amounts earned by everybody in DC, subtracts the portion earned by commuters, and adds what DC residents earn outside of DC. The revised net adjustment's \$1.6 billion positive contribution to DC Personal Income is a combination of DC residents earning more of the income earned in DC (commuters got less) and DC residents earning more working outside of DC. DC Personal Income rose because the adjustment was able to overcome the negative effect of reduced income generated in DC's economy.

Estimated DC Personal Income: June 2016 (2016.2)

Component	Amount (\$B)	% of total
<i>Income from DC resident earnings</i>		
Wages and salaries and related benefits*	\$28.50	55.8
Proprietors' income	\$6.58	12.9
<i>subtotal, earnings</i>	<i>\$35.08</i>	<i>68.6</i>
<i>Income not from earnings:</i>		
Property income**	\$9.33	18.3
Transfer payments***	\$6.70	13.1
<i>subtotal, other income</i>	<i>\$16.04</i>	<i>31.4</i>
Total Personal Income	\$51.11	100.0

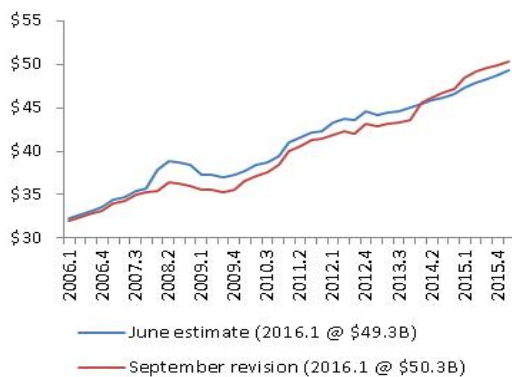
*Does not include employee share of social insurance contributions.

**Rent, interest, and dividends. Does not include capital gains.

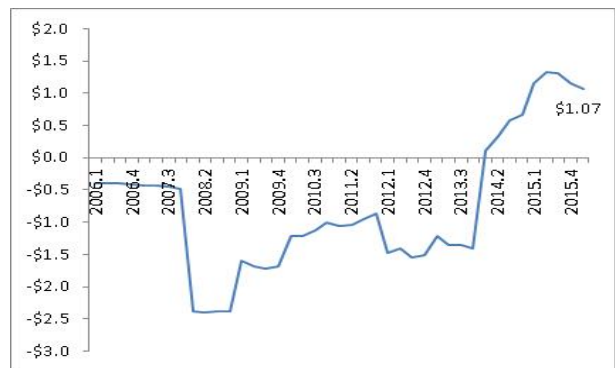
***Social security benefits, pensions, medicare, and medicaid.

Source: US Bureau of Economic Analysis (September 28, 2016)

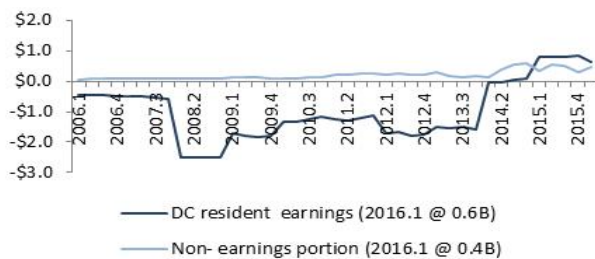
DC Personal Income: 2006.1 to 2016.1 (June estimate and September revision; \$ billion)



Amount by which the September revision changed DC Personal Income: 2006.1 to 2016.1



September revisions to the earnings and non-earnings parts of DC Personal Income: 2006.1 to 2016.1



DC Personal Income: June and September estimates for March 2016 (\$B)

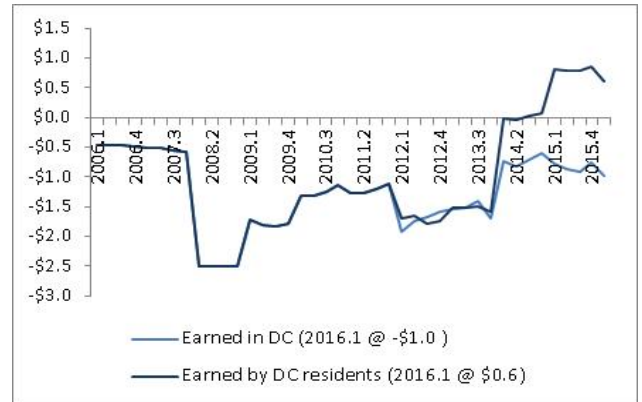
Item	Level in March 2016		Revision	
	June est.	Sep. est.	\$B	% ch
Personal Income	49.28	50.35	1.07	2.2
Amounts earned in DC	85.34	84.36	-0.98	-1.2
Net resident adjustment	-51.29	-49.69	1.60	
Amounts earned by DC residents	34.05	34.67	0.62	1.8
Property income	9.04	9.19	0.15	1.6
Transfer payments	6.18	6.48	0.30	4.8
Personal Income 1 yr. % ch	4.3	4.0		

Source: BEA

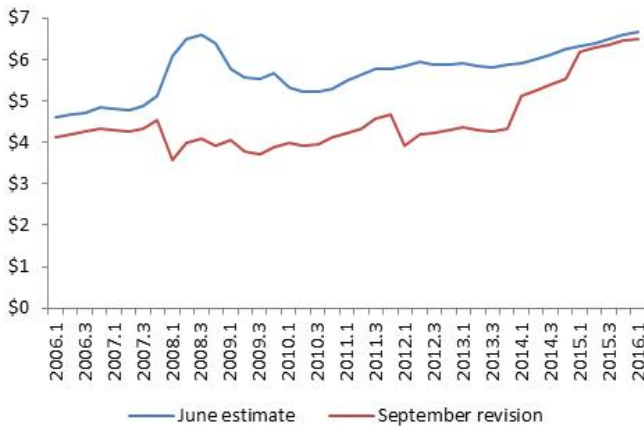
Proprietor's income, the net resident adjustment, and the revisions to earnings. As shown in the graph, amounts earned in DC by all persons working there and amounts earned by DC residents were both revised downward by \$0.5 billion to more than \$2 billion in the years from 2006 through 2013. Starting in 2014, the earnings of DC residents were revised upward by more than \$0.5 billion while amounts earned by everybody were reduced by close to \$1 billion.

The decrease in earnings until 2013 is entirely explained by a sharp downward revision to the proprietor's income portion of the earnings. Because proprietor's income data is derived from DC tax returns, this income is all income of DC residents. Proprietors' income was also reduced after 2013, but this was less of a factor in the overall revision as other factors became more important.

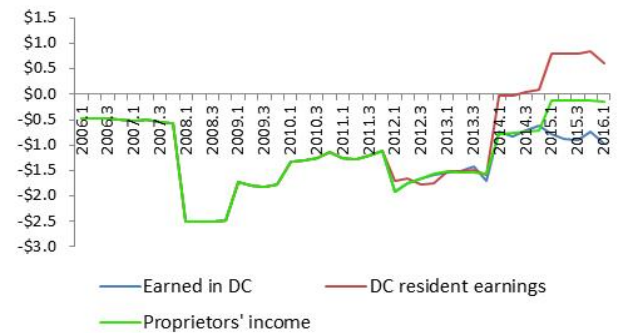
September revision to amounts earned in DC and by DC residents: 2006.1 to 2016.1 (\$ billion)



Proprietors' income in DC: 2006.1 to 2016.1 (June estimate and September revision; \$ billion)

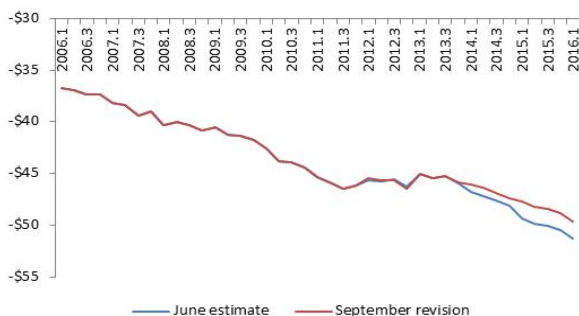


September revision to Proprietors' income and earnings: 2006.1 to 2016.1 (\$ billion)

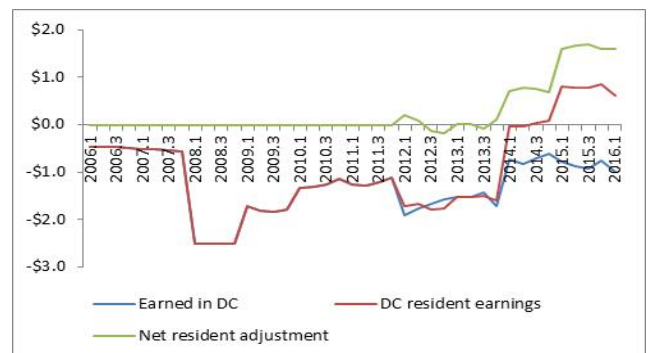


Starting in 2014 the most significant revisions to earnings involved the net resident adjustment. The less negative adjustment increased the earnings of DC residents, enough to more than offset the cut to earnings by all persons working in DC that would otherwise have tended to reduce resident earnings as well. This revision illustrates how important the net resident adjustment is to DC's Personal Income. It should also not be surprising that this is an item where data is revised. DC is the center of a much larger metropolitan area, with 10% of the people, one quarter of the jobs, and lots of commuters (in both directions). The net adjustment is almost as big as DC's Personal Income itself and is an estimating challenge given all the income flows involved.

Net resident adjustment in DC's Personal Income calculation: 2006.1 to 2016.1 (June estimate and September revision; \$ billion)

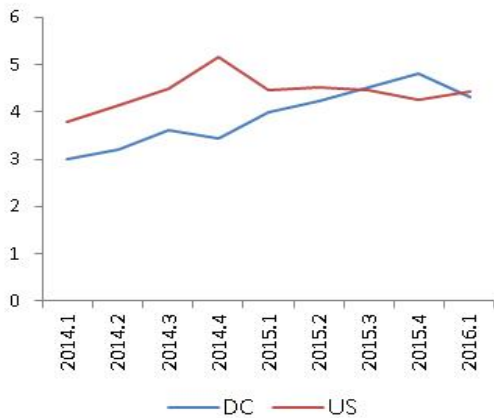


September revision to the net resident adjustment and to DC earnings: 2006.1 to 2016.2 (\$B)

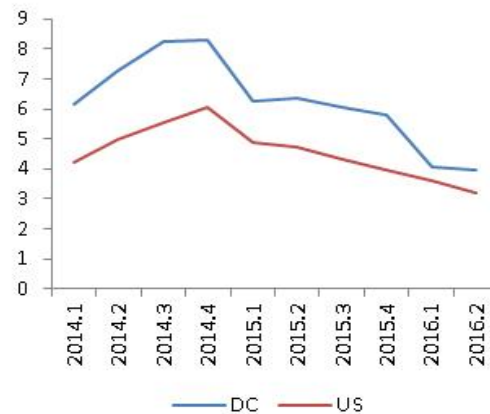


DC and the US average. In June, BEA said that US Personal Income growth remained fairly steady for the two years from 2014.1 to 2016.1, varying between 4% and 5% annual growth rates in each quarter, with DC growing more slowly until the last quarter of 2015. In the revised picture, US Personal Income fell steadily from 6.1% in the 2014.4 quarter to 3.2% in the second quarter of 2016, and DC Personal Income grew at a faster annual rate than the US in each quarter of the past two years.

June estimate of the 1 year % change in DC and US Personal Income: 2014.1 to 2016.1



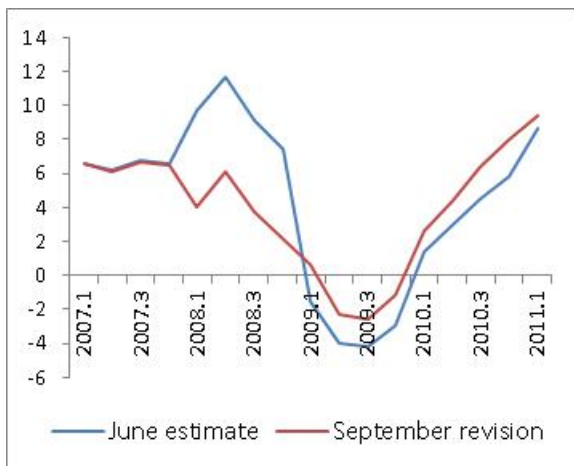
September estimate of the 1 year % change in DC and US Personal Income: 2014.1 to 2016.2



DC Personal Income and the recession.

Until this revision, BEA income data showed that DC’s Personal Income continued to grow after the Great Recession started in December 2007. The revised story is that DC’s income fell after the recession at about the same pace as it did nationally. DC’s income growth did not, however, fall as far into negative territory as previously estimated, and it grew faster in the recovery. As noted earlier, the key revision to the data was a substantial reduction in proprietors’ income.

% change from the prior year in DC Personal Income: 2007.1 to 2011.1
(June estimate and September revision)



% change from the prior year in DC and US Personal Income: 2007.1 to 2011.1
(September estimate)

