



MONTANA LEGISLATIVE BRANCH

Legislative Fiscal Division

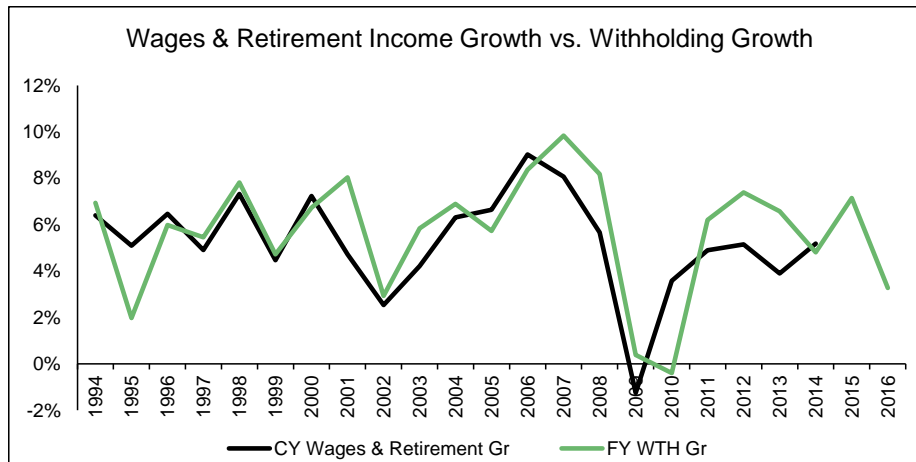
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Director
AMY CARLSON

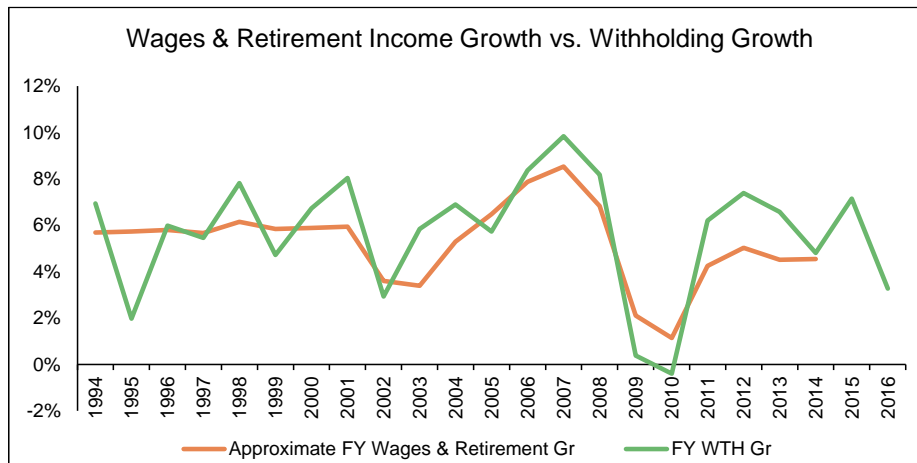
DATE: September 7, 2016
TO: Revenue & Transportation Interim Committee
FROM: Stephanie Morrison, Revenue Analyst
RE: Individual Income Wage Growth vs. Withholding Growth

ISSUE

The difference between year-to-date individual income withholding growth and forecast wage and retirement income growth has generated varying levels of concern by legislators in recent years. However, as the following two charts show, the difference between fiscal year withholding growth and calendar year wage and retirement income growth is not merely a recent phenomenon. The first chart shows actual calendar year wage and retirement income growth with fiscal year withholding growth. Note that although the two series are imposed on the same time line, the fiscal year series actual leads the calendar year series by about six months.



The next chart attempts to correct for the time difference between the two data series by approximating fiscal year wage and retirement income. This is done by summing half of the prior year's income with half of the current year's income. This calculation may be appropriate for wage and retirement incomes, as these income types tend to be evenly distributed over the course of a year.



Withholding growth appears to be quite responsive to changes in wage and retirement income; that is, it both increases faster and decreases faster than the income does. One untested explanation has been that taxpayers could be responding to changes in their nonwage income expectations by adjusting their wage and retirement withholding rates. This memo highlights the analysis done to test that explanation.

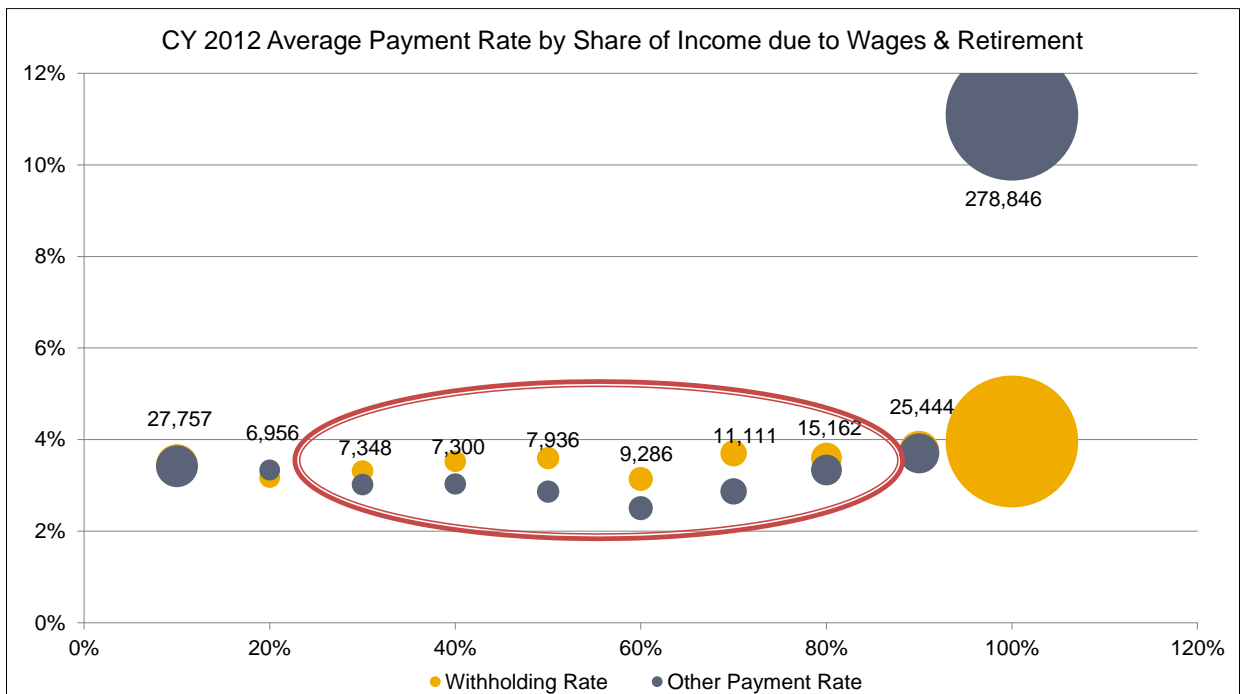
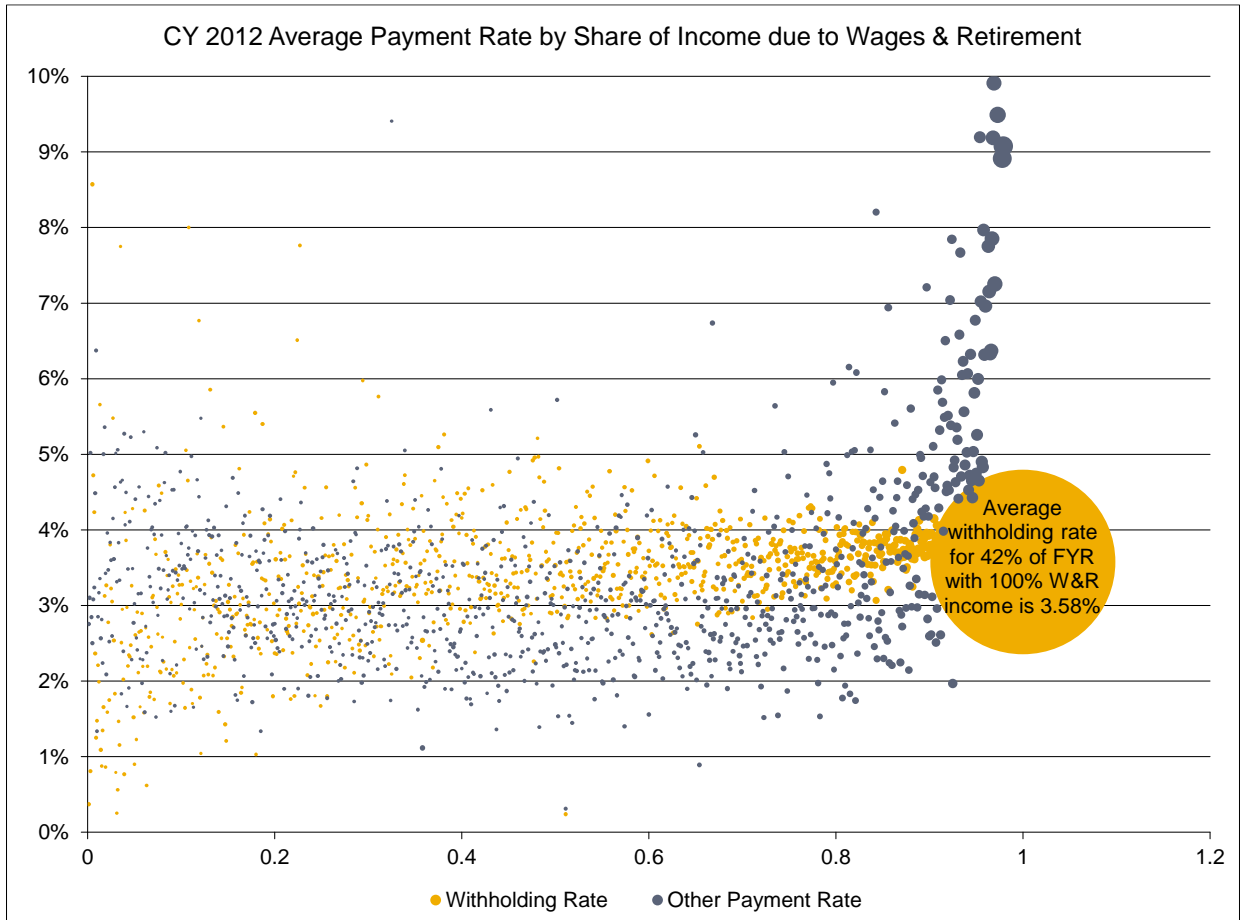
ANALYSIS

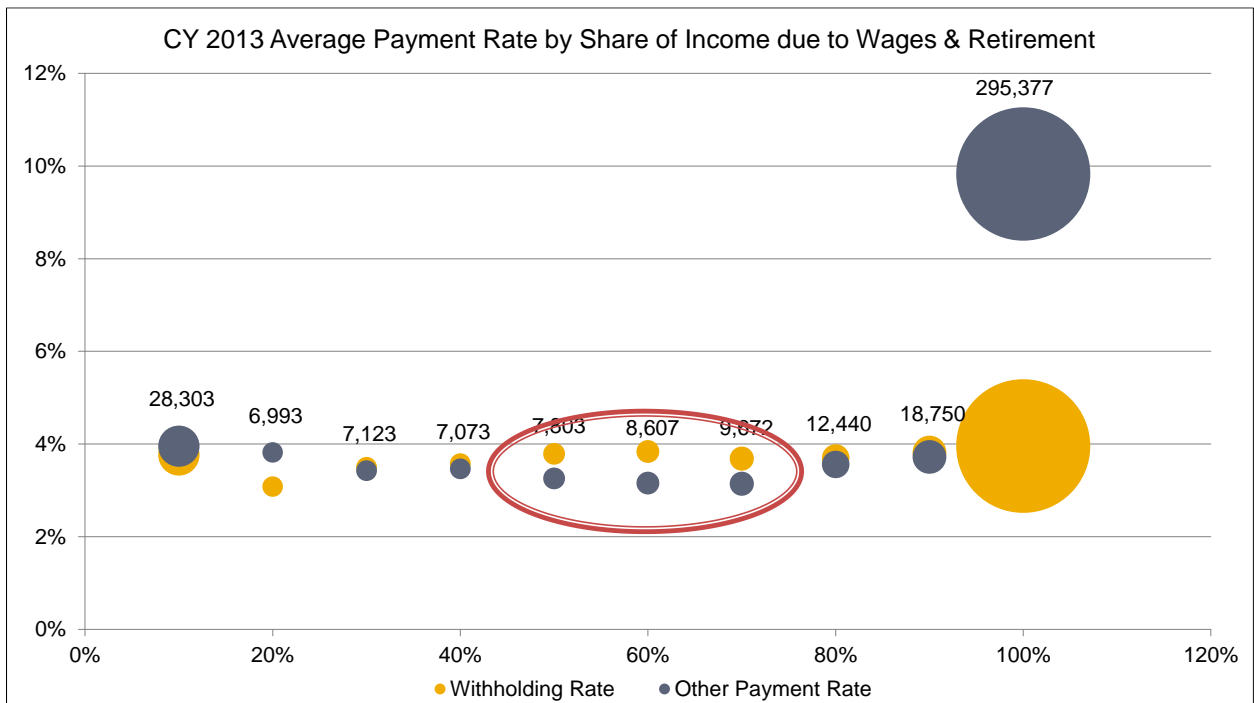
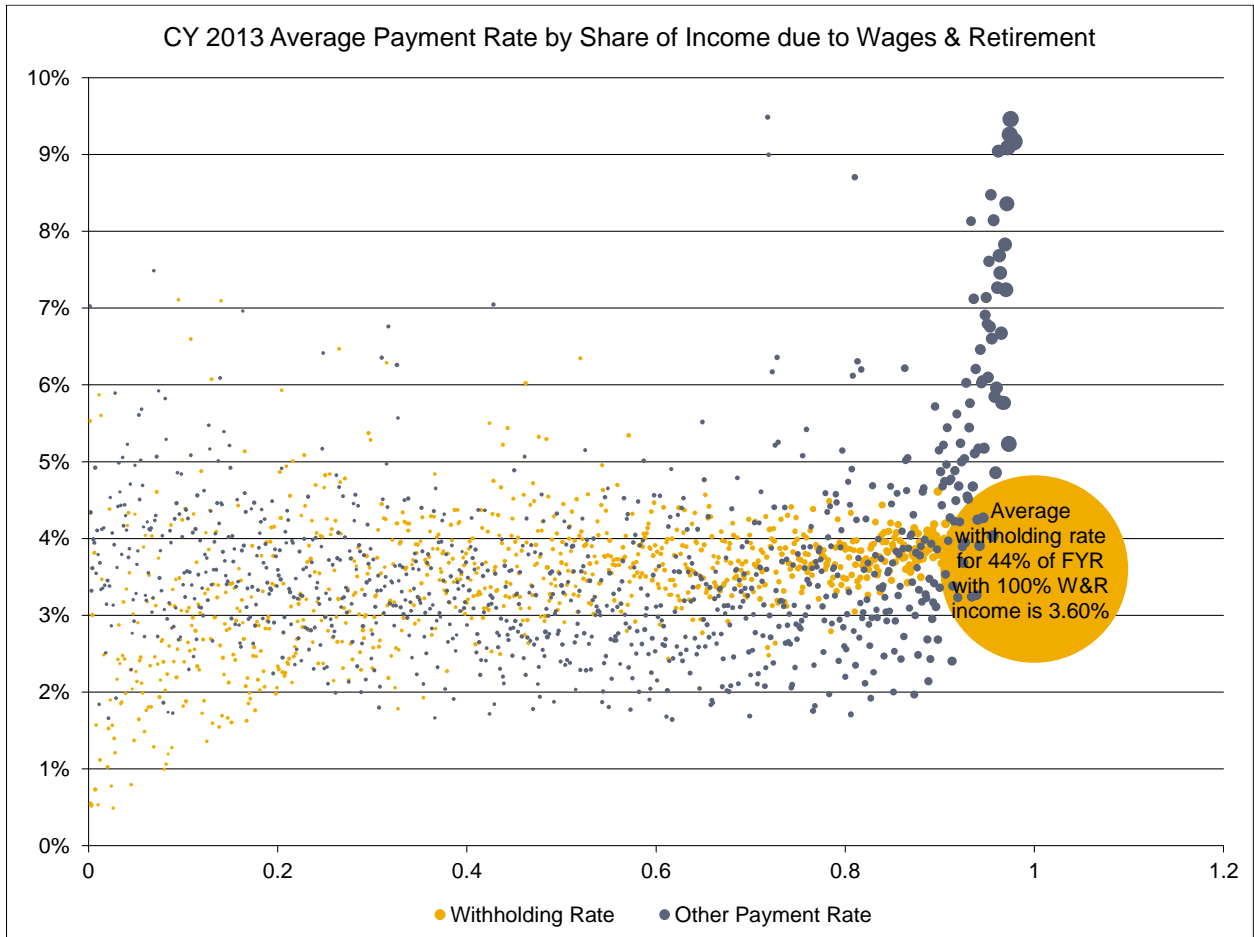
Full year resident (FYR) individual income tax returns for CY 2012 through CY 2014 with at least \$1 of total income was the basis of the analysis. Total income is organized by wage & retirement income, and non-wage income. The independent variable for the charts in this section is the proportion of total income that is due to wage & retirement income. The taxpayers who might adjust withholding to account for changes in non-wage income earnings are likely limited to those taxpayers who have fairly comparable amounts of wage and non-wage income, i.e., taxpayers whose wage & retirement income proportion falls between 40% and 60%.

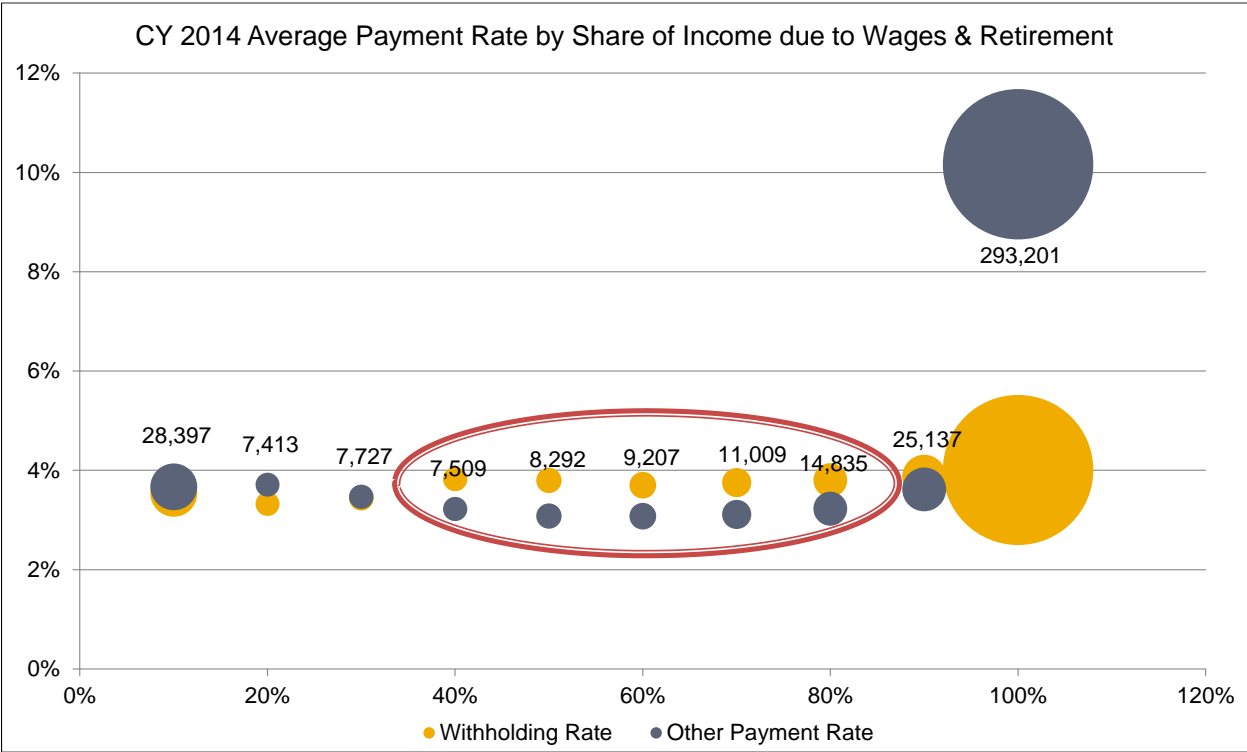
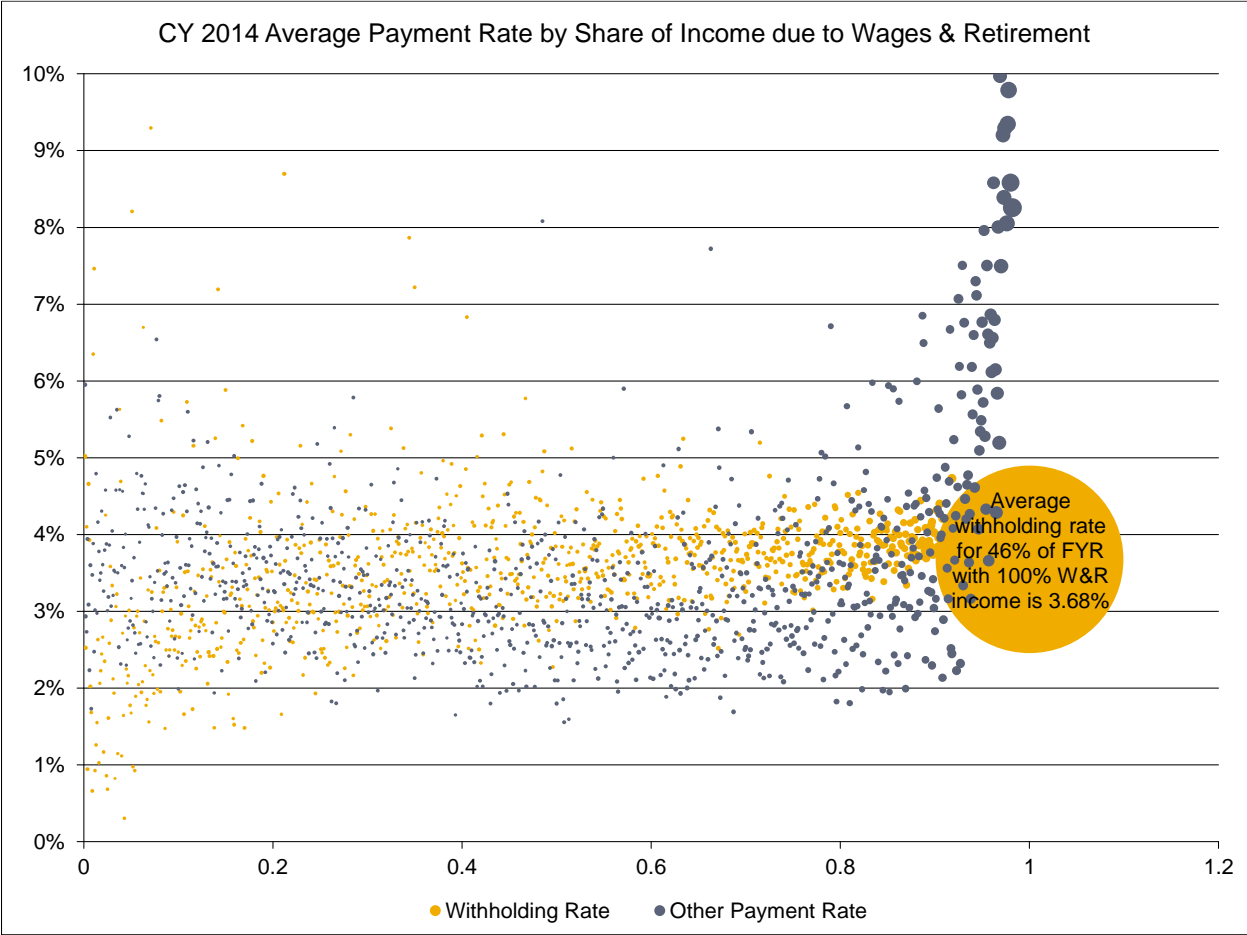
Payments as identified on tax returns are from the following sources: withholding, mineral royalty withholding, pass-through entity withholding, estimated payments, and extension payments. For purposes of this analysis, payments are grouped into two categories, withholding and other payments.

CY 2012 to CY 2014 offer three potentially different views with respect to taxpayers' ability to adjust their withholding rates. Non-wage income—especially capital gains realizations—increased at the end of CY 2012 in response to the expiration of lower tax rates due to the federal fiscal cliff. Given the likely timing of the realizations, it is unlikely that taxpayers adjusted their withholding rates by a large enough margin to be detectable in CY 2012. Non-wage income in CY 2013 declined relative to CY 2012, probably also as a result of the early fiscal cliff realizations of income. CY 2014 was a very good year as measured by stock market growth; taxpayers may have anticipated taking advantage of the stock market gains and adjusted their withholding accordingly.

The top charts on the next three pages show a weighted scatterplot of withholding rate versus wage and retirement income proportion. The bottom charts on each of the three pages aggregate the scatterplot data into ten groups. The CY 2014 aggregated chart implies that taxpayers with a wage and retirement income proportion between 40%-80% may have increased their withholding rate.

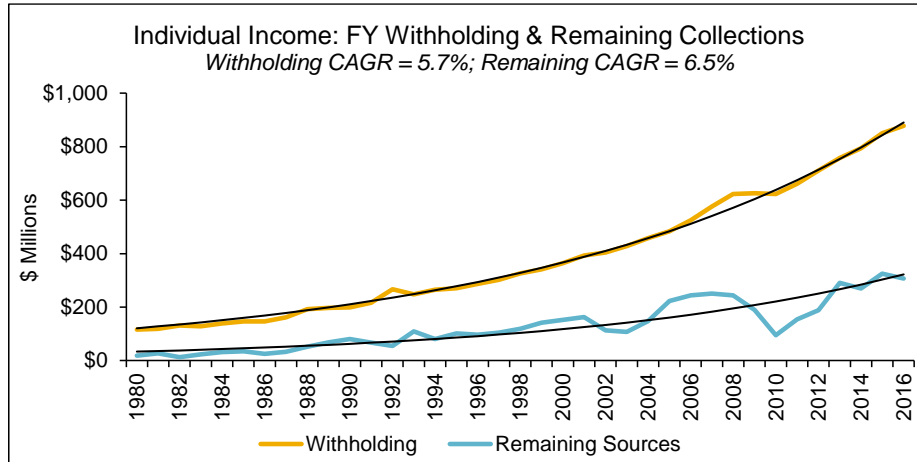






CONCLUSION

While there is some suggestion that taxpayers may adjust their withholding in response to their changing expectation of non-wage income, the evidence is not robust enough to implement a corresponding modelling modification. However, as the chart below illustrates, withholding has a very close fit with a compound annual growth rate (CAGR) trend line based on 5.7% annual growth. The combined Withholding and Remaining CAGR trend lines may be extended into the forecast years and summed to provide a check against the model-produced estimate.



The individual income tax forecast has been revised to include an adjustment based on year-to-date revenue collections. The adjustment may be positive or negative depending on how year-to-date revenues compare to the baseline forecast. If the adjustment is positive, analysis on previous estimates suggests that the adjustment be applied to the first year of the estimate and carried through subsequent years. Not enough information is available regarding negative adjustments, so they should only be made in the first year of the estimate.