Cost of Tax Reform Meets PWBM's Expectations

By Alexander Arnon and Xiaoyue Sun

Earlier this month, the Treasury Department reported that federal tax receipts fell seven percent from June 2017 to June 2018, largely due to a 34 percent decline in corporate income tax receipts. While significant revenue loss is expected in 2018[1] following the passage of the Tax Cuts and Jobs Act[2] (TCJA) last December, the size of the recent decline raised concerns that the legislation may be costing more than anticipated.

In this post, we review the pace of revenue collection over the first six months of 2018 and compare it with PWBM's December 2017 projections.[3] We focus on receipts from the individual and corporate income taxes, since these taxes were the most affected by TCJA.

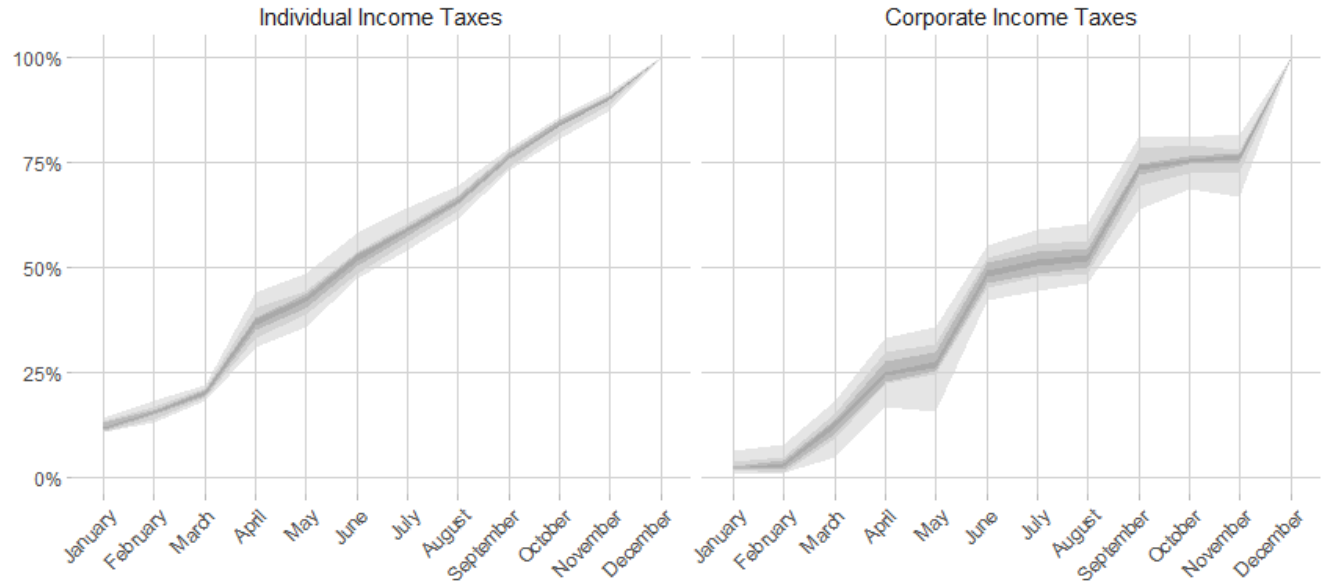
Historical Variation in Monthly Receipts

PWBM is primarily focused on projecting annual revenues and not monthly values. We look to monthly receipts to determine whether the incoming data is consistent with our forecast for the full year, given normal variation in the annual pattern of receipts collection.

Figure 1 plots the share of the year's total receipts collected by the end of each month over the last two decades. The shaded areas indicate, from lightest to darkest, the full range, 10th/90th, 25th/75th, and 40th/60th percentiles of the historical distribution. While there is considerable variation across years, monthly receipts generally follow a consistent pattern.[4] Individual income taxes are paid at a steady rate through the year, with somewhat larger payments around the April filing deadline.[5] Corporate income tax payments are concentrated in the months of April, June, September, and December, when estimated corporate tax payments are due.

Figure 1: Share of year's total receipts collected year-to-date, 1998 to 2017

Percent of annual receipts



Sources: PWBM, Treasury Department

If we assume that 2018 tax collections are similar to previous years, we can use the range of historical variation shown in Figure 1 to determine if receipts from January through June are consistent with PWBM's December projection for the full year.

The TCJA's First Six Months: January - June 2018

In December 2017, PWBM projected that TCJA reduces federal tax revenues by more than $2 trillion over the next decade. For 2018, we projected individual income tax revenues of $1.6 trillion and corporate income tax revenues of $230 billion.

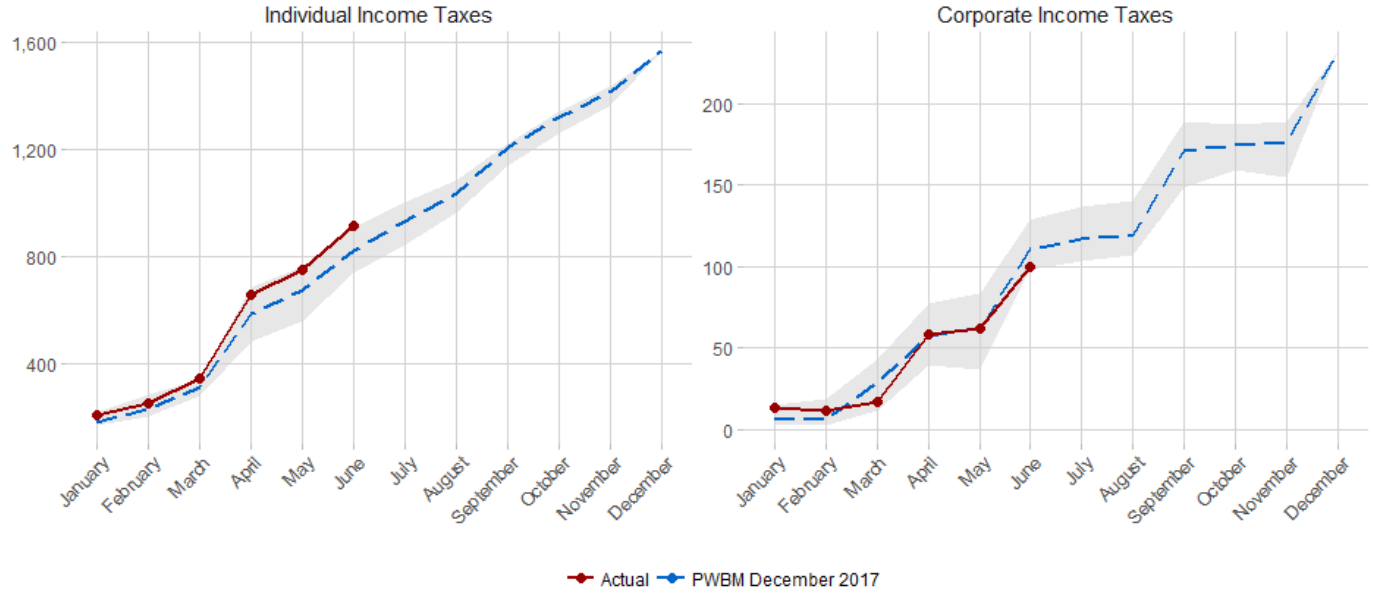
Figure 2 plots PWBM's December projections for 2018 against the first six months of actual receipts. The red line shows cumulative receipts through June; the dashed blue line shows PWBM's monthly projection; and the shaded area shows the range of monthly receipts that is historically consistent with our projection for the full year. If actual receipts remain within this range, PWBM's December projection remains a reasonable forecast for 2018.

Over the first six months of 2018, individual income tax receipts were consistently higher than PWBM expected in December. At least in part, this gap reflects two unanticipated complications in the implementation of TCJA. First, updated withholding tables for 2018 were not available in January, leading some workers to withhold too much. Second, the IRS has yet to release detailed guidance for TCJA's 20 percent deduction

for income from pass-through entities, known as the 199A deduction. Many pass-through owners are uncertain of their eligibility for the full deduction and tax advisors are reportedly encouraging clients to make payments in excess of their estimated liability as a precautionary measure.

Figure 2: Total receipts in 2018 versus PWBM's projections

Billions of dollars



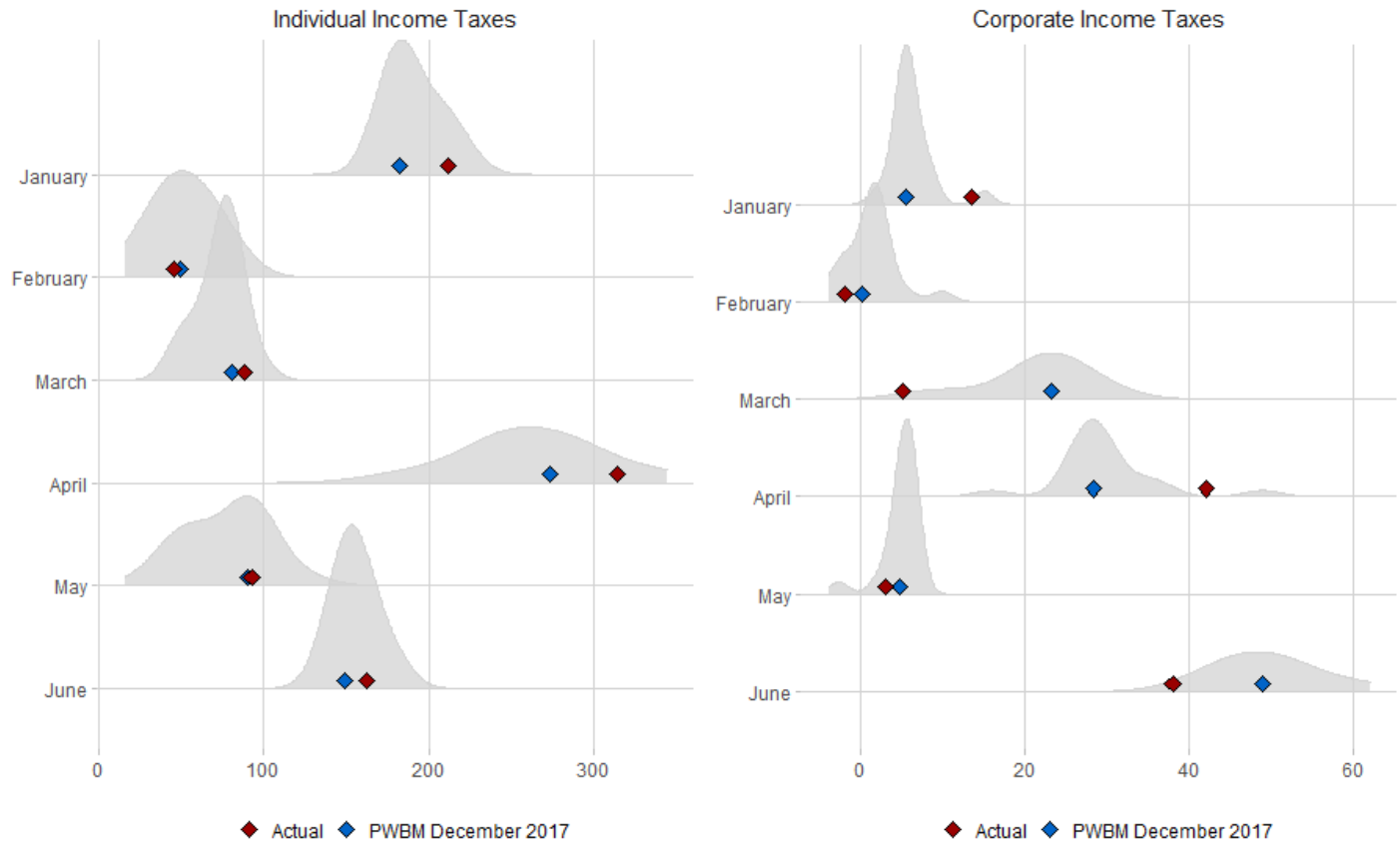
Sources: PWBM, Treasury Department

PWBM's December projections assumed smooth implementation of the new tax law and we anticipate that the effects of these implementation issues will be short-lived. The delay in adjustments to withholding has now been resolved and the effects of ambiguity about the 199A deduction are temporary and may reverse over the next six months. If the IRS issues guidance for pass-through owners and some find that they did overpay, they will likely underpay for the rest of the year to compensate. Recent reports indicate that the guidance may become available in the coming weeks. If so, offsetting underpayments will take place primarily in September, when the next quarterly estimated tax payment is due. We therefore anticipate that individual receipts will remain higher than expected at least through September, but will move back towards our projection in the year's final months.

Corporate income tax receipts were generally close to PWBM's projection through May but were weaker than expected in June. However, monthly corporate receipts have been unusually volatile in 2018, which means each additional month provides less information about the full year than it normally does. In Figure 3, the red diamonds show monthly receipts; the blue diamonds show PWBM's projections; and the shaded area shows the distribution of receipts for that month that is historically consistent with PWBM's projection for the full year. Note that these figures show receipts within a single month, rather than cumulative receipts through the end of each month.[6]

Figure 3: Monthly receipts in 2018 versus PWBM's projections

Billions of dollars



Sources: PWBM, Treasury Department

In four of the six months – January, March, April, and June – corporate receipts deviated substantially from PWBM's forecast, falling at the extremes of the expected distribution. However, these deviations have largely offset each other over the course of the year: receipts were higher than expected in January and April but lower than expected in March and June. Because of this volatility, the available data tell us relatively little about PWBM's projection for the full year. For example, PWBM's forecast for cumulative receipts through May was within $250 million (or 0.4%) of the actual amount (just under $62 billion), but this precision reflected large offsetting forecast errors of more than $10 billion in March and April. Hence, while low receipts in June might signal that PWBM has overestimated total corporate receipts for 2018, it is at least as likely that June was just another unusually weak month and will soon be followed by an unusually strong month.

By contrast, individual income tax receipts were higher than PWBM anticipated in every month except February but were generally well within the expected range. Moreover, the timing of deviations from our forecast is suggestive. Actual receipts exceeded our expectations by most in January, April, and June. Delayed adjustment of withholding primarily affected receipts in January, while April and June contained due dates for quarterly estimated tax payments by pass-through owners. This timing is consistent with our view that over-withholding temporarily boosted receipts and that some taxpayers are making payments greater than their actual anticipated liability.

Conclusion

Over the first six months of 2018, receipts were generally in line with PWBM's December projections. While individual receipts are somewhat higher and corporate receipts somewhat lower at the end of June than expected, both are within the range of historical variation consistent with our projections for the full year. PWBM will continue assess its projections as more data becomes available.

---

1. All years refer to calendar years. ↩
2. Public Law 115-97 ↩
3. PWBM's December 2017 projections do not account for the effects of any policies implemented in 2018 other than TCJA. ↩
4. The bands in Figure 1 reflect the range of observed historical variation and not a statistical confidence interval, which would be considerably wider. ↩
5. The increase in individual income tax receipts in April primarily reflects payments of taxes due on the previous year's income. ↩
6. Each monthly distribution is estimated independently of previous months' receipts. ↩