Dear Comptroller, Treasurer, and Secretary:

As would be expected, the now prolonged federal government shutdown is having a significant impact on Maryland residents. In the aggregate, we estimate that approximately 172,000 Maryland residents are currently impacted by the shutdown. Each bi-weekly payroll for which these residents are not paid results in $778 million of lost wages. With regard to State revenues, those lost wages translate to roughly $57.5 million less in combined State and local income tax withholding and $2.1 million less in sales tax collections. These estimates account for only the direct impact, the macro impact would be somewhat larger. Additionally, other less immediately visible impacts may materialize, uncertainty always reduces business investment.

Below are key metrics related to the shutdown and appendices to discuss methodology and sources:

**Direct Federal Employees**

- We estimate that between 230,000 and 245,000 thousand direct federal jobs are held by residents
  - As many agencies are currently funded through other budget appropriations or special funds, we estimate that 90,000 are impacted by the shutdown (either furloughed or working without pay)
  - Assuming that those impacted employees are “average,” the bi-weekly wage loss is $408 million
  - We presume that these employees will be compensated for their lost time once a budget deal is reached

**Government Contractor Full Time Equivalent (FTE) Employees**

- We estimate that there are 163,356 private sector residents that are federal contractors (excludes grant funded positions) and are impacted by the shutdown
  - Of those, some may receive a salary from their private sector employer, others may be paid based on the number of hours that they work; the former would still be compensated, the latter would lose compensation
  - There is not data to determine the number of residents in either compensation system, we assume that 50% would lose wages
  - The 50% assumption translates to 82,000 employees
  - Assuming that private sector FTE compensation in commensurate with direct employment, the bi-weekly wage loss is $369 million
  - It is unlikely that these employees will be compensated for their lost time once a budget deal is reached
Methodology:

Number of Impacted Jobs Held by Maryland Residents:

An article published in Governing.com on January 4, 2019 titled “How the Shutdown Affects Federal Employment in Each State” has estimates of the number of federal employees working for agencies “without appropriations”, AKA agencies that are shut down, as well a partial list of agencies with and without appropriations.

The federal Office of Personnel Management (OPM) releases data on the number of federal jobs by department and location as well as the average wage for those jobs, which allows us to arrive at the agencies’ total annual payroll. Combining this data with the information from Governing.com, we can add the total payroll of shut down jobs to the estimated number of shut down jobs. We do this for both Maryland and the District of Columbia, where many Marylanders work. We exclude Virginia as Maryland residents make up a far smaller share of federal jobs in Virginia. We refer to these employees as direct federal employees, or federal employees for short.

Federal government contractors are also impacted by the shutdown. We refer to these employees as contractors, or private sector employees. Unfortunately, even the Congressional Budget Office, is “unaware of any comprehensive information about the size of the federal government’s contracted workforce.” In short, the federal government does not know how many contractors it employs. A 2017 issue paper from The Volcker Alliance titled “The True Size of Government” provides estimates of the size of the contractual workforce. The most recent estimate, from 2015, is that the contractual workforce is 1.81 times larger than the direct federal workforce. We also do not know what arrangements contractors may have, such as whether they will make up lost hours, be reassigned to other projects within their companies, etc. We assume, with no data to base this on, that half of the federal contractual workforce will permanently lose pay in the shutdown.

Using the most recent commuter data from the American Community Survey (ACS), we estimate that 48% of direct and contractual federal jobs in DC are held by Marylanders. And that 5% of direct and contractual federal jobs in Maryland are held by non-residents. The ACS does not have this data by job type or employer. As a result, these figures assume that commuting patterns are the same for federal direct and contractual employees as for all employees.

Impact on Wages and Withholding:

We assume federal contractors are paid the same average wage as direct federal employees. With the number of jobs and average wage by agency we arrive at a total bi-weekly payroll figure for all impacted employees. This tells us the amount of income foregone for each missed paycheck. We then apply the average rate at which wage income is withheld for income tax purposes to estimate the foregone withholding collections for the State.

Impact on the Sales Tax:

To arrive at a ballpark estimate of the impact on the Sales and Use Tax (SUT), we assume that 78% of wage income for relevant employees is spent on consumption. This is a proportion approximately equal to the rate of consumption reported for the fourth quintile of money income in the Bureau of Labor Statistics’ Consumer Expenditure Survey. We further assume that 16% of consumption expenditures are taxable under the SUT, a figure arrived at in previous research into the impact of the 2017 Tax Cuts and Jobs Act.
However, there are behavioral factors that complicate an estimate of the impact of the shutdown on the SUT. First, direct federal workers will almost certainly get paid for the time they were furloughed or working without pay, as they have in every past shutdown. This means they will either continue consuming in expectation of that income, and/or delay consumption. We assume that 90% of their consumption expenditures are merely delayed rather than foregone. Federal contractors will not be so fortunate. We assume that 65% of their typical consumption expenditures will be foregone. We do not assume a higher percentage because some level of consumption is unavoidable regardless of income. The percentage of foregone consumption we assume for contractors is informed by the composition of expenditure categories in the consumer expenditure survey. Contractors may also expect to work more hours later to make up for working fewer hours now, resulting in some level of delayed rather than foregone consumption. These assumptions are among the least certain we make, but it would be less realistic not to make them. People must consume something regardless of income, and expectations of the future impact behavior in the present.

References:


Sincerely,

Andrew M. Schaufele