MEASURING FISCAL STIMULUS IN MAUS

(c) Joel Prakken, Sr. Managing Director

Macroeconomic Advisers, LLC

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The basic approach is to compute the (Fisher) contribution to growth in real GDP that is either direct, through consumption and gross investment, or indirect, through income and consumption, using the structures of MAUS. The computations are static; that is, induced or multiplier effects are not included. There are, however, lagged static effects via the gradual response of consumption to changes in incomes and tax rates. The calculations do not include the impacts of changes in corporate or capital taxes. These are, practically speaking, essentially intractable analytically and so would have to be computed by simulation. Fortunately, they are (usually) very small.

FEDERAL

Consumption & Gross Investment

There are two channels. The first is the direct impact on GDP. This is computed as the growth rate of real federal C&GI times the share of nominal federal C&GI in nominal GDP. The second channel recognizes that federal compensation is part of labor income, and so makes a secondary contribution through consumption. This is computed as the contribution of changes in real federal compensation to the growth of real consumption, multiplied by the share of nominal consumption in nominal GDP. The marginal propensity to consume out of labor income (*mpcyl* ) is 0.72, but spread out over 6 quarters.



Transfer Payments to Persons excluding Unemployment Benefits

This is computed as the contribution of changes in real federal transfer payments to persons to the growth of consumption, multiplied by the share of nominal consumption in nominal GDP. The marginal propensity to consume out of transfer income (*mpcyt*) is 1.0, but spread out over 4 quarters.



In our discussions of fiscal stimulus we often focus on discretionary spending to the exclusion of transfers. There is no compelling reason to do so.

Unemployment Benefits

This is computed as the contribution of changes in real weakly unemployment benefits to the growth of consumption, multiplied by the share of nominal consumption in nominal GDP.



Effective Federal Personal Tax Rate

This is computed as the sum of the contributions to growth of real consumption from changes in the effective federal personal tax rate applied to both labor and asset income. The marginal propensity to consume out of asset income (*mpcya*) is 0.3, but spread out over 7 quarters.



Note that this captures not only statutory changes in tax rates, but also cyclical movements (“automatic stabilizers”) and the effects of real “bracket creep”.

Federal Social Insurance Taxes

This is computed as the contributions to growth of real consumption from changes in the federal contribution rates (and caps) for Social Security and Medicare.





Total Federal Fiscal Stimulus

This is the sum of the 6 components:



STATE & LOCAL

Followed the same approach as for federal fiscal stimulus.

TOTAL

Sum of federal and state & local