The Hutchins Center’s Fiscal Impact Measure

Hutchins Center on Fiscal and Monetary Policy’s Fiscal Impact Measure (FIM) is a gauge of the contribution of federal, state, and local fiscal policy to near-term changes in the gross domestic product, the tally of all the goods and services produced in the economy. When FIM is positive, the government is contributing to growth in real Gross Domestic Product (GDP), and when it is negative, it is subtracting from it.

The FIM includes both the direct effects of government purchases as well as the more indirect effects of government taxes and government transfers. The FIM is closely related to a measure of fiscal stance developed by Federal Reserve Board staff (see Cashin et al. 2018). In addition to **policy changes**, the FIM captures the effects on the economy of trend growth in spending and the automatic stabilizers.

**Trend Growth in Spending**: When Medicare or Medicaid spending increases because health costs increase, this does not entail any legislative changes, but does represent a larger infusion of government spending into the economy.

**Automatic stabilizers**: These are changes in government taxes and spending that happen automatically when economic conditions change. When economic growth slows, spending on unemployment benefits and Medicaid increase because more people are eligible. Similarly, a slowdown in GDP leads to a reduction in tax rates that help to boost personal consumption spending.

The Hutchins Center FIM doesn’t include any government spending multipliers. It measures the first order effects of government policy on GDP, but not any second-round effects whereby higher GDP in one year stimulates hiring which then boosts GDP further in later years. Nor does it include potential offsets from monetary policy. For example, a surge in government spending when unemployment rates are low could induce the Federal Reserve to raise interest rates, a response that might undo the effects captured by the FIM.

INTERPRETING THE HUTCHINS CENTER FIM

As noted above, when FIM is positive, the government is contributing to real GDP growth, and when it is negative, it is subtracting from it. In order to calculate the contribution of government policy to the economy, however, it is necessary to specify a counterfactual; in other words, we need to know what the effects of a particular set of policies are compared to some alternative. The counterfactual assumed by the FIM is that taxes and spending rise with potential GDP--the level of output that would be obtained if the economy were at full employment. A positive FIM value, indicates that fiscal policy is expansionary in the sense that it is pushing GDP growth above potential growth. When the FIM is negative, policy is contractionary in the sense that it is lowering real GDP growth relative to potential growth.

Under this framework, the Fiscal Impact would be zero or neutral—neither dragging nor boosting growth—when inflation-adjusted government purchases, taxes, and transfers are growing with potential GDP.

CONSTRUCTING THE FIM

The Hutchins Center FIM uses quarterly data from the U.S. Commerce Department’s Bureau of Economic Analysis (BEA) to measure the contribution of fiscal policy to GDP growth.

The **FIM for purchases** is defined as the actual contribution of real government purchases to GDP less the contribution that would have prevailed if real purchases were growing with potential GDP. To calculate the actual contribution of real purchases to GDP, we take the growth rate of real government purchases times their share of GDP; for the counterfactual we perform the same calculation but use the growth rate of real potential GDP.

Likewise, the **FIM for taxes and transfers** is measured as the contribution of consumption to real GDP growth given actual net taxes (taxes less transfers) less the contribution that would have occurred had net taxes been rising with potential GDP. Calculating the contribution of taxes and transfers to consumption requires a number of assumptions. In particular, we make an assumption about the magnitude of the effect of a change in taxes and transfers on consumption (the MPC, or the marginal propensity to consume) and the timing of the effects (consumers may not respond instantaneously to changes in taxes or benefits). We then calculate what consumption growth would have been in the hypothetical scenario in which taxes and transfers rise with potential GDP—the counterfactual net taxes. The difference between that growth rate and the actual growth rate represents the share of consumption growth attributable to fiscal policy. To get an estimate of the contribution to GDP growth, we multiply the contribution to consumption growth by the nominal ratio of consumption to GDP.

Assumed Marginal Propensities to Consume

Our assumptions about marginal propensities to consume (MPCs) are similar to those discussed in Cashin et al. (2018). For transfers, we assume that the MPC is 0.9, reflecting the fact that some transfers—like Medicare and Medicaid—are likely to increase spending one for one, and others, like temporary changes in unemployment benefits, are received by liquidity-constrained households that are likely to spend most of their benefits. For individual taxes, we assign an MPC of 0.6. The MPC out of a corporate tax cut is much smaller, since most corporate equity is held by high-income individuals and pension plans, who are less likely to be liquidity constrained. Part of the effect may also be viewed as a responsiveness of investment to corporate tax changes. Cashin et al. (2018) note that changes in MPC do not have a large effect on their fiscal stance measure.

**Personal taxes, contributions to social insurance, and production and import taxes:**

MPC = .6.

60 percent of the effect occurs in the first year, and 40 percent in the second.

**Corporate taxes:**

MPC = .4.

Effect occurs smoothly over 3 years.

**Transfer payments:**

MPC = .9.

Effect occurs smoothly in the first year.

PRojecting FISCAL IMPACT

The FIM forecast focuses on the near-term outlook for fiscal policies—in particular, expected changes over the next two years. While the effects of mandatory spending programs are relatively straightforward to forecast over the medium term, forecasting economic growth and the stance of other fiscal policies would introduce significant uncertainty to any forecast of the FIM beyond a near-term horizon.

We begin with the Congressional Budget Office’s (CBO) 10-year economic and budget projections to construct forecasts of government spending, taxes, transfers, GDP, and inflation. In particular, we construct forecasts of these components as follows.

PURCHASES

We begin with CBO’s quarterly economic projections for federal, state, and local government purchases. At the federal level, these forecasts reflect current legislation that appropriates funds for government purchases and the expected path of the economy.

At the state and local level, projected purchases largely reflect expected demand for government services and state and local finances, which fluctuate with GDP growth.

TAXES AND TRANSFERS

We assume federal taxes and transfers will grow in a manner consistent with CBO’s budget projections for the main categories of federal tax revenues and mandatory spending, sometimes making adjustments to the timing of the payments that are consistent with budgetary fluctuations.

At the state and local level, we assume that taxes and transfers will grow in line with the projected path of the economy.