

## Teaching the Spending Multiplier

By Patti Brazill

Since the Aggregate Expenditure Model is no longer on the Macroeconomics exam, teachers have asked how to present the multipliers without building the entire model.

I stopped teaching the model about 5 years ago, and have found students can learn the multipliers well without it. The following is the barebones approach I take with my classes. There are of course many more complexities to discuss with your students.

The basics must still be presented. Start with reminding students that a person can only do two things with a dollar: spend it or save it. Students need to understand the concepts of Marginal Propensity to Consume and Save, the Average Propensity to Consume and Save, the simple spending multiplier ( $1/(1-MPC)$ ), the tax multiplier ( $-MPC/(1-MPC)$ ), and the Balanced Budget Multiplier ( $1 \times$  change in spending).

Stress with your students that an injection of new spending, whether from Investment Spending, Government Spending, or new Net Exports, will cause a ripple effect throughout the economy in either direction. New spending becomes income, becomes spending, becomes income, etc. Be sure to teach that the multiplier goes in both directions.

Students need to learn that a change in spending, multiplied by any of the above multiplier formulas may cause a larger change in the GDP. There are three parts to the problems presented to the students: the multiplier, the GDP gap or the change in income generated by the change in spending, and the desired spending. For example, students may be given an MPC of .8, a GDP gap of \$500 billion and will be asked how much government spending could eliminate the gap; or students could be told there was an injection of \$20 billion of new Government spending at full employment, given an MPS of .10 and would be asked to calculate the size of the Inflationary gap.

The balanced budget multiplier is best presented with an example. If the government wants to increase spending by \$60 billion matched with an increase in taxes of \$60 billion, and the MPC is .8, then the spending multiplier is 5 and the tax multiplier is (-4). If the injection of spending can generate \$300 billion in new income and the increased taxes can reduce spending by \$240 billion, then the net change in the GDP will be \$60 billion. It is worth taking the time to work these problems on the board with your students.

Another important point to stress with your students is that the tax multiplier results in a smaller change in the GDP because people tend to save some of the tax cuts, and people pay tax increases by both less spending and by saving less. Therefore the tax multiplier is smaller.

Present these concepts clearly and provide students varied practice questions, and they will be prepared for the questions on the exam.