

Taking Account...

BEA paper looks at RIMS II multipliers

In a recent paper, Zoë O. Ambargis, of the Bureau of Economic Analysis (BEA), and Rebecca Bess, formerly of BEA, discuss the proper use of the popular BEA regional input-output multipliers, known as RIMS II, providing helpful background information, practical tips, and examples.

The RIMS II multipliers are widely used in the public and private sectors to estimate the local impact of a change in economic activity.

These multipliers are constructed from a detailed set of industry accounts that measure the commodities produced by each industry and the use of these commodities by other industries and final users.

By incorporating information about inter-industry relationships, the RIMS II multipliers can estimate the impact of economic activity on particular industry sectors within a region. (However, input-output models do not account for price changes that may result from increased competition for scarce resources).

When using RIMS II, there are four measures of changes in total economic activity that can be estimated—gross output, value added, earnings, and employment.

In the public sector, federal government agencies use these multipliers to study the impact of government regulations. In

addition, state transportation departments use the multipliers to estimate the regional impact of airport construction projects.

In the private sector, analysts and consultants use RIMS II to estimate the regional economic impact of a variety of projects, such as the development of shopping malls and sports stadiums.

The RIMS II multipliers have proven to be a cost-effective way for many analysts to estimate the economic impacts of changes in a regional economy.

However, it is important to keep in mind that like all economic impact models, RIMS II provides approximate estimates of economic impacts. RIMS II multipliers are best suited for estimating the impacts of small changes on a regional economy.

Users should also note that RIMS II multipliers are not the same as macroeconomic multipliers, also known as Keynesian multipliers, which are used to assess the effects of fiscal stimulus on gross national product. While the two sets of multipliers share some similarities, they were designed with different goals in mind.

Macroeconomic multipliers are based on behavioral assumptions related to how individuals adjust their labor supply, saving, and consumption decisions in response to an initial economic change that affects their income. The value of macroeconomic multipliers largely stems from the fact that they are con-

structed from empirical estimates of the interrelationships between related economy-wide measures of activity.

By contrast, one of the main advantages of RIMS II multipliers is that they can be used to estimate industry-specific changes in economic activity.

Examples of cases in which the RIMS II multipliers can be useful include the following:

- A refrigerated warehousing company that expands its facility.
 - A local winery that has “gone green” by installing solar panels to generate its own electricity increases exports.
 - A local alpaca apparel manufacturer that hires more workers and invests in new computers to meet an increase in demand for its products.
 - A construction project funded by a federal grant to replace an existing school.
 - An amusement park that experiences an increase in sales after installing a new roller coaster.
 - A local tractor manufacturer that lays off 100 employees because of a decrease in demand for its tractors.
- The paper is available on the BEA Web site at www.bea.gov.
- For more information about the BEA RIMS II multipliers, including background, a detailed user handbook, and information about how to order the product directly online, please visit www.bea.gov/regional/rims.