

## Economic Impact Analysis: A Brief Introduction

Rebekka Dudensing and Dan Hanselka, Dept. of Ag Economics

The direct value of industry sales or employment is an important measure of an industry's strength. However, an industry's sales or employment figures alone fails to capture the full economic contribution of an industry or an event. When a business makes a sale to a final consumer, a portion of production expenses are paid to the business's local suppliers and wages are paid to employees. Business owners and employees also spend part of their profits and wages in the local economy—eating at local restaurants and buying groceries, clothing and movie tickets. As money circulates through the local economy, it multiplies the original direct expenditure to a larger total economic output.

Economic impact analysis (or economic contribution analysis) is based on the idea that a dollar spent in a region stimulates additional economic activity, or multiplies as it circulates through the economy. This *multiplier effect* recognizes that the total effect on output, employment, personal income, and government revenue in the region is greater than the initial dollar spent. For example, a tourist's expenditure at a souvenir shop contributes not only to that business, but to its suppliers, its suppliers' suppliers, each of their employees' incomes, and tax revenues. Of course, some of the original expenditure leaks out of the regional economy, for example as inventory is imported from other regions, employees commute from other regions, and businesses and households pay state and federal taxes. The portion of the money that remains in the local economy throughout these transactions constitutes the net economic gain. Larger regions contain more economic linkages, which is why large cities and multi-county regions generally have larger multipliers than do small towns or single counties.

Multipliers are calculated based on the purchasing patterns of industries and institutions in the regional economy. Each industry and region combination has a unique spending pattern and a unique multiplier.

Multipliers include three components. The *direct effect* on the economy is the initial economic activity measured—for example, the tourist's expenditure at the gift shop or total annual cotton crop losses due to a severe drought. The direct effect results in two types of secondary effects.

The *indirect effect* results from the purchase of inputs among local industries. The *induced effect* results from the expenditure of institutions such as households and governments benefitting from the increased activity among local businesses.

Four types of multiplier effects are generally reported in impact analyses. *Output or sales multipliers* measure the effect of direct spending (or loss) on overall economic activity in the region. The output multiplier provides the largest economic impact value and therefore is reported in many studies; however, the output multiplier says nothing about how the event affects the welfare of households or the profitability of businesses.

The *value-added multiplier* is a more appropriate measure of regional welfare. The value-added multiplier measures the event's contribution to regional gross domestic product (GDP). It is the value added to the regional economy or the return to local resources used in the production of the event.

The *labor income or personal income multiplier* measures the effect of the event on the incomes of households in the region and is appropriate for discerning the benefit of an event to a region's residents. Labor income is a component of value added, which is part of output, so these figures cannot be summed.

The *employment multiplier* measures the effect of the event on regional employment. Calculation of the employment multiplier assumes that existing employees are fully occupied and does not distinguish between full-time and part-time workers.

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