another country. The purchase of this import causes the purchasing power to "leak" out of the Fort Lauderdale economy, so it is no longer available for locals to use within the area. The faster the leakage, the lower the output multiplier.

Economists derive multiplier values for a number of important economic variables:

1. Income
2. Employment
3. Output or sales or transactions
4. Government revenue (taxes)
5. Imports[11]

The multiplier effect is the sum of three levels of impact created by tourism purchases. These effects are called *direct*, *indirect*, and *induced* effects. Together they create the total multiplier impact on the area. Direct effects, also called first-round effects, come directly from tourist spending, such as the increase in the number of employees and the amount of wages paid to restaurant employees owing to tourist eating/drinking at the restaurant.

Indirect effects, also called secondary effects, are created from the increase in purchases by tourism suppliers to serve tourist needs, such as the increase in food and beverages purchased from suppliers by a restaurant. Suppliers in turn will need to increase their purchases, and so on. These "ripple effects" are all indirect effects from tourism expenditures.

Induced effects are other increases in economic activity, employment, taxes, and so on generated within the area's economy at large owing to the existence of tourism. For example, the community will see higher expenditures on health care because of the increased number of residents drawn to the area for employment in the tourism industry.[7]

Tracking the Impact of Tourism Expenditures

How big or small can this multiplier concept be? Tourism researchers and economists have tried to estimate the tourism multiplier concept for countries, regions, and even cities. For example, Adrian Bull reported that the tourism multiplier concept for Canada is approximately 2.5: For every new dollar injected into the Canadian economy from an international visitor, $2.50 of purchasing power is generated over time before that original dollar is leaked out through expenditures on imports coming into Canada.[12]

Multipliers are an indicator of the economic independence of a country. The higher the multiplier, the more economically self-sufficient the country. Some countries such as Ireland, Turkey, the United Kingdom, and the United States have multiplier factors of approximately 2 or more. Other countries experience much lower multiplier concepts, for example, 0.8 for the Philippines and 0.7–1.2 for Least Developed Countries and small island states.[8]

Although island countries tend to depend on tourism for economic growth, they also have very quick leakage and, therefore, very low-output multipliers, because almost all goods associated with tourism need to be imported to the area. These imports may be as simple as the food and beverages served to visitors or as complex and costly as the steel to build the hotels. Foreign ownership is another reason why island economies experience high levels of leakage. Transnational corporations (TNCs) are found in many sectors of the tourism industry, and profits are leaked out of a community any time a business (e.g., hotel chain, restaurant chain, rental car chain, etc.) is headquartered outside of the destination. There is a similar case for foreign franchises, and even if the business is locally owned, a portion of the profits will leak out of the community as fees paid to the franchisor.