Measuring the Effect of Tourism Propagation in the Economy

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Abstract

The analyses undertaken to estimate the global incidence of tourism spending on the national economy have highlighted the multiplier effect of tourism. The tourism multiplier refers to the changes caused by the additional expenses of tourists at the level of the income, production, employment and balance of payments of a country. The studies conducted to quantify the global incidence of tourism spending on the national economy have led to the establishment of the multiplier effect of tourism, seen as a continuum of inductions, of changes in the purchasing power of the tourism sector in income and expenditure in the various branches of the national economy where tourism has connections, making new revenue each time.

Key words: tourism, tourist, economy
J.E.L. classification: A1

1. Introduction

Tourism has large-scale effects in any region, both in times when there is a steep rhythm of tourism investment in that area, but also when investment produces economic effects. Any monetary unit that enters the economy of a country, region, area or tourist destination - no matter how this impact has been recorded (investments, government, budget allocations), stimulates the economy and not just once, but in repeated turns. Value inflows of this type generate the multiplier effect of tourists' spending. (Fridgen, 1996, pg.136.)

"It is very clear the link between the tourist phenomenon and the national economy, in the sense that there is an obvious interdependence between tourism development and economic growth, because it involves the demand for goods and services that would otherwise not have been produced or rendered. The structure of tourism expenditures reflects the impulse that these expenditures give to the sectors that contribute to the realization of the tourism product, the process of revenue growth taking place first of all in these sectors and then gradually transferring to other sectors of the national economy through" (Mitea, 2005.) (eg construction industry, road network, airports, water and energy supply, textile industry, food industry, etc.). Revenues from foreign tourists represent exports for recipient countries of tourist flows. As a result, sums of money coming from outside tourists travel to the tourist areas visited, it actually enters the economic circuit. Revenue flow diminishing in geometric progression until the respective amounts leave the economic system.

2. Theoretical background

The prestigious economist John Maynard Keynes named exports from tourism, along with the consumption of material goods, by the term *injections* for the economic system, motivated by the fact that tourist expenses for accommodation, food, transportation, treatment, leisure, tourism-related investments and exports generate revenue. Instead, if money becomes immobilized in the population's economies, or has as destination the payment of duties and taxes, it will lose their stimulating power of spending, so that in the Keynesian conception it will "leak" to other areas.

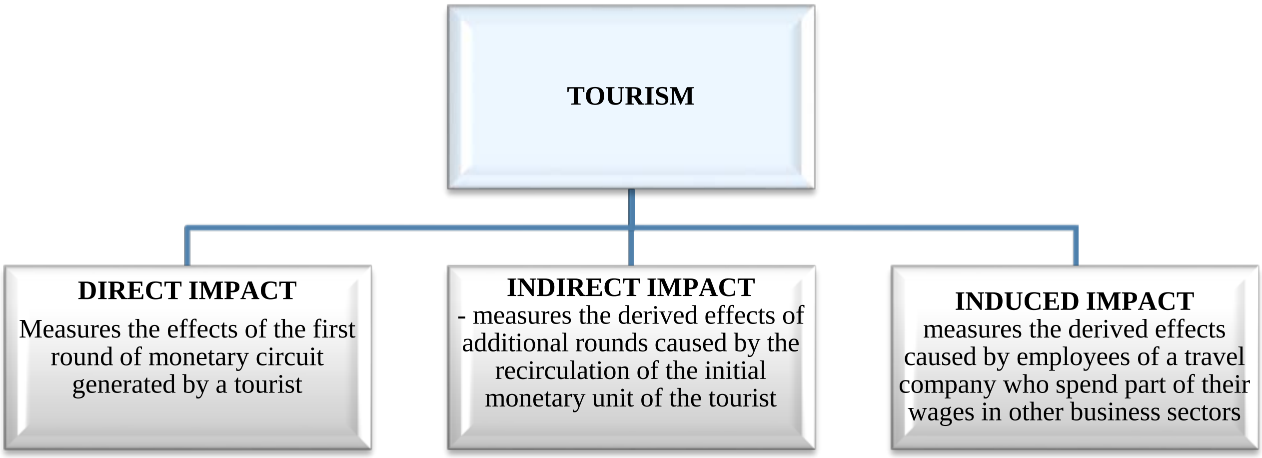
Revenue from the tourism sector will also be directed to different areas of the economy, and so multiplier effects are linked in both cases. The multiplier reflects the influence of investments on income in the economy. Thus, some sectors that have close links with other economic sectors also have a higher multiplication effect, while others have reduced links and multiplication. Thus, the connections will be stronger and the income will be highly multiplied if resorts in a tourist region absorb local labour, acquire goods produced in that area (buy plant and animal products, furniture for the tourist accommodation facilities from specialized economic agents in the area, etc.). The secondary effects of investments in the tourism industry and the multiplier effect of revenues achieved in this industry are two other influences exerted by tourism on the national economy. Thus, at the microeconomic level, cost / benefit analyses can be used to quantify the efficiency of business decisions of the travel and tourism industry, at macroeconomic level this analysis will be used in order to benefit from an overall situation on the whole economy of a country, area, resorts, its purpose being to determine the effects of tourists' expenses as a result of providing tourist activity.

3. Methodology

For the purpose of determining the multiplier effect, three elements contributing to the measurement of the overall economic impact of a certain amount of tourism expenditure are taken into account:

- "Direct Impact - Measures the effects of the first round of monetary circuit generated by a tourist (the proportion between the expenses of a restaurant for purchasing the raw and auxiliary raw materials needed to prepare the food ordered by tourists and for the salaries of the staff and the amount of money spent by the tourist in that restaurant);
- Indirect Impact - measures the derived effects of additional rounds caused by the recirculation of the initial monetary unit of the tourist (procurement of goods by the companies from other sectors that contributed to the supply of raw materials to the restaurant, necessary to provide the catering services required by the tourist);
- The induced or stimulated impact - measures the derived effects caused by employees of a travel company who spend part of their wages in other business sectors (hotel employees spend some of their income for clothing, food, etc.)." (Snak, Baron and Neacşu, 2001, pg. 73)

Figure no. 1. The direct, indirect, induced impact of tourism



Source: Adaptation after (Snak, Baron and Neacsu, 2001, pg.72)

Thus, the overall economic impact is equal to the sum of the three impacts, and the multiplier effect of tourism (K) is calculated as the ratio between total economic impact and direct impact (formula is adopted after Keynes multiplier).

K = (direct impact + indirect impact + induced impact) / (direct impact)

The tourist multiplier should not be approached only as an indicator that automatically reflects the increase of the revenues, being also a reflection of the amounts coming out of the economic circuit by the imports made for the tourism needs, the savings made from the incomes obtained from the tourist activities.

Traditionally, the research on the economic impact of tourism has been achieved on the use of multipliers (Keynesian type), linking tourism and production expenses, income, jobs, or any other result aggregate of interest. Among the advantages of using multipliers, it should be remembered that they are easy to compute and provide a quick and easy path, to determine the effects of changing the size of travel expenses. In fact, the term multiplier is used to show the change that occurs in production due to the change in travel expense. Under these circumstances, it is considered that the real impact of tourism is not represented by the initial spending made by the tourist but by the final impact it has on the economy. (Ennew)

Table no. 1. Presents the types of tourist multipliers of expenses and revenue as well as the usefulness of each one.

SALES / TRANSACTIONS MULTIPLIER	sales multiplier measures the additional turnover achieved by an extra unit of expenses **Sales multiplier = (direct sales + indirect sales + induced sales) / (direct sales)**
RESULTS MULTIPLIER	similar to the sales multiplier, quantifies the extra outputs earned based on an extra unit of travel expenses;
REVENUE MULTIPLIER	**measures additional domestic revenue generated by an extra unit of tourist expense;**
EMPLOYMENT MULTIPLIER	measures highlights the increase in the number of jobs determined by an additional unit of tourist expenditure;
GOVERNMENTAL REVENUE MULTIPLIER	measures the extra net income created by an extra unit of tourism expenditure (all forms of government revenue are included);

Source: Adaptation after (Cooper, Fletcher, Fyall, Gilbert and Wanhill, 2005)

Table no. 2. The multiplier effect of tourism results

Country / Region	Results multiplier
▪ *economically and industrially developed countries*	2.00-3.40
▪ *Cities*	1.24-1.51
▪ *Rural areas*	1.12-1.35

Source: Adaptation after (Cooper, Fletcher, Fyall, Gilbert and Wanhill, 2005)

4. Findings

The higher the level of economic development in a country, the more the initial cost made by the tourist for the purchase of goods and services is found in several economic cycles, contributing to a larger extent to the increase in production and net income.

The statistical data tells us that in the case of the less developed countries, the multiplier effect of tourism is two, three or even four times lower than in the economically developed countries, as shown in Table 2.

Regarding the multiplier effect of investments, the situation is the same in the sense that investments in tourism, in the development of a tourist reception structure, for example, is the source of income for the construction industry, the construction materials, the workers from these sectors, all of which ultimately contributed to the increase of net income, of production as a whole.

5. Conclusions

There are, in practice, numerous techniques to measure the economic impact of tourism, starting with the model of the theory, the model of Keynes' multiplier, continuing with input-output analysis and ending with ad hoc models. Although there is a wide variety of mathematical formulas to express the multiplier effect of tourism, the rigorous quantification of the overall impact of tourism, worldwide and regionally, has been a difficult task. The data obtained, which is the basis of the calculations, were mostly incomplete, as there was no unity in how they were collected at each country level. Thus, the results obtained at a global level often did not reflect the real impact of tourism on society as a whole.

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