

Economic impact: developing a standard methodology?

Analytical foundations

The evaluation of the economic impact of mega-sporting events is always the subject of numerous disputes between experts, while it triggers passionate debates in public opinion on the legitimacy, or otherwise, of countries or cities hosting such events. In its simplest version, it is sufficient to assess the short-term economic impact. The study then excludes the measurement of social, environmental or long-term legacy impacts. Similarly, the impact assessment is only carried out at the national level, and no estimate is made for each host city, even when there are multi-site events such as the football World Cup. This simplest approach to the economic impact is a good opportunity to emphasise the development of a rigorous methodology and thus avoid the over-estimation that is too often seen in the work of many consultancy firms. It is indeed surprising to note the differences in evaluation between private firms and university laboratories, the former often proposing a considerable impact of major sports events; the latter being satisfied with much more modest results. Two points need to be discussed: the definition of economic impact and the choice of a theoretical model.

- ***Definition and impact***

The impact of a sporting event measures the net amount of what the event brought to the host territory compared to the hypothetical situation where the event would not have taken place. Such a counterfactual exercise is of course very perilous. How can we quantify what would have happened in the absence of the event? Hypotheses are necessary in order to establish one or more scenarios. These include the responsibility attributed to the sports event in the implementation of a certain number of actions (for example non-sporting infrastructures); the arrival of foreign tourists, which is not necessarily linked to the holding of the event. These two examples show that there is always a risk of overestimating the impact of a sporting event by attributing it economic contributions for which it is not responsible. The general principle is therefore to exclude from the calculation all investment or consumption expenditure that was already planned by the stakeholders, even in the absence of the sporting event. Moreover, this must be done transparently.

Furthermore, the impact must always be defined in terms of added value and not in terms of turnover. The aim is to measure the net increase in wealth in the region as a result of the event. Two examples are significant. First, there is the failure to take into account

leakages outside the national circuit (imports, payments to service providers outside the reference territory, repatriation of profits or dividends by outside owners, etc.). The omission of such leaks is the cause of considerable overestimates of the real impact. This is a very common error in many studies. Then there is the failure to exclude expenditures that are not wholly or partly externally funded. Indeed, in the case of domestic funding, if this capital had not been invested in the sporting event, it would have been invested in other sectors of the economy anyway. It is therefore a simple redistribution of national euros that are not added to the economy. Counting them in the impact calculation is once again an overvaluation.

In short, many errors are commonly made as a result of an incorrect definition of the concept of economic impact. Whether it is in the assessment of the economic situation without the event or in the reasoning in terms of net income, these errors systematically lead to a considerable overvaluation of the actual impact of sports events.

- ***Choice of a theoretical model***

Three types of models are generally used to calculate the economic impact of mega-sporting events: the input/output model, the computable general equilibrium model and the Keynesian model. These three models belong to different paradigms and the choice of one of them is therefore not neutral. Beyond the doctrine inherent in each model, such a choice will also be guided by the availability of information.

The input/output model has been commonly used for many years in the English-speaking world and is now being used by many research firms in France to evaluate the secondary impact of mega-sporting events. However, this model has been the subject of much criticism in the academic world insofar as, by construction, it tends to considerably overestimate the economic impact of an external source of revenue in a given territory.

Computable general equilibrium models have often been accused of attaching more importance to theory than to data. They can be intellectually appealing in overcoming the shortcomings of input-output models. However, this poses a dilemma: should we use a model that is theoretically satisfactory but that requires information that is very difficult to obtain, which forces concessions with respect to the perfect model? Wouldn't it be better to settle for models that are less sophisticated but that allow for the use of quality information? It is the latter view that we have adopted. We prefer less theory but more quality information that will allow the emergence of reliable results.

We, therefore, advocate the open economy Keynesian model to calculate the impact of mega-events at the macroeconomic level and the Keynesian version of the economic base model to

measure the impact at the sub-national level of the host territories. An external injection of income causes an increase in demand which leads to an increase in production and a distribution of income, again leading to an increase in demand. Leakages out of the circuit occur in the form of savings, taxes, imports and even crowding-out effects. These three stages of the calculation present specific difficulties in mobilising information, but the evaluation of the primary impact (net injection) is certainly the most important stage. Indeed, this primary impact measures the external shock to demand compared with the territory's economic situation without the event. It is at this stage of the calculation that the most accurate possible assessment must be made, as any error in the primary impact assessment is then amplified by the multiplier used to calculate the secondary impact (indirect and induced effects). The value of this multiplier must remain within the limits of the academic studies already conducted.

Main sources of impact overestimation

- ***Failure to take the substitution effect into account***

The substitution effect concerns consumption or investment expenditure linked to the event that does not bring additional value to the territory compared to the state of the economy in the absence of the sporting event. If the event had not taken place, the actors would have spent their income or invested in other sectors of activity. This is a simple substitution of expenditure and does not create additional wealth within the economy. Four types of expenditure are concerned and must be excluded from the calculation: those of actors belonging to the event's host region; those that benefit from internal funding within the region; those of occasional visitors who attend the event but whose trip was already scheduled for other reasons; those of visitors who have postponed their trip to take advantage of the event but who would have come anyway. In all these cases, there is a simple substitution of expenditure and not a net increase in wealth.

- ***Failure to take the crowding-out effect into account***

In terms of consumption, foreign visitors may have been dissuaded from coming to the host region, or local consumers may have been encouraged to leave the region because of the sporting event: fear of saturation, price increases or various nuisances. The question arises as to whether the expenditure of these deterred potential spectators is of the same nature and magnitude as that of actual spectators. The calculation of the crowding-out effect is not easy. It is possible to approach it with an evaluation method that consists of comparing the foreign tourist attendance of a hypothetical period without the event with the actual attendance.

- **Multiplier**

The estimation of the multiplier is still the subject of controversy amongst academic experts. In order to retain a reliable value, it is possible to calculate a multiplier based on simulations of an exogenous spending shock using a macro-econometric model of the EMS-GAE type (Econometric Model for Simulation and General Analysis of the Economy). At a sub-national level, we use a multiplier that takes into account both the specifics of the spending agents and the specifics of the host territory. The important thing is not to propose multipliers that are too far from the ceiling value often accepted in the economic literature: of the order of 1.3 at a macroeconomic level; possibly a little higher at a given territorial scale depending on the degree of integration of the territory.

Key Learning

- **For a standard method of impact calculation**

Such standardisation would have multiple advantages:

- This would avoid the circulation of studies with serious flaws in the impact calculation and subsequent damage to the image of the event. Too many gross errors have been made to date, which can lead to a rejection of this type of expertise by public opinion. Such rejection can harm the sporting movement and event organisers. For example, the referendums organised to test the social acceptability of the Olympic Games ended in rejection, as public opinion was no longer satisfied with fanciful figures.

- Such standardised studies could be compared. It is possible to compare results obtained with the same methodology. Sporting events could thus be ranked in relation to each other. This ranking can be useful for the public authorities to assess the profitability of their investment in a particular event.

- Finally, it would be possible to make valid comparisons of the results obtained by standardised studies before and after the event. This seems to us to be particularly desirable as a means to delegitimise complacent ex-ante studies that overestimate the real impact with unrealistic hypothetical calculations to avoid subsequent rejection by public opinion, who believe they are being deceived.

- **For a relativisation of the results**

Calculations of the economic impact of major sporting events are highly prized by the public authorities and public opinion, which see them as a criterion of the social acceptability of these events. It

is necessary to denounce the inadequacy of putting forward an absolute figure for the impact, which in itself does not make much sense. Saying that Euro 2016 had an impact of 1.2 billion euros on the French economy is more impressive than saying that this amount represents 0.05% of French GDP. This only confirms the academic results of other mega-sporting events: their impact is negligible on a macroeconomic scale. This even remains true for the Olympic Games.

We must also deplore the instrumentalisation of the ex-ante impact calculation to justify the hosting of the sporting event. At the very least, it is possible to calculate the return on investment of public funds invested in the event, but that is all. It should be remembered that it is not possible to justify the hosting of a sporting event by the extent of its economic impact. This requires another decision-making tool, the cost-benefit calculation, or even other negotiation tools. This means that beyond a single economic impact figure, there are more important elements to be considered, such as all the externalities linked to the event or its long-term legacy.

Further information:

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Andrew ZIMBALIST, *Circus Maximus*, Brookings Institution Press, Wash. DC, 2015.

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