EVENT ECONOMICS

Event Evaluation 2.0

Context

Major events are recognised globally as being important drivers of social and economic prosperity. Cities now compete strongly with one another for the right to host major events, often paying millions of dollars in hosting and delivery fees to capture the anticipated benefits. But what are the benefits, and how much should a city pay to secure them?

This is a classic investment problem that every city faces. It is a problem not only because the benefits are uncertain at the time the investment decision needs to be made, but also because some benefits are not easy to measure. The former can be managed to some extent by an experienced event analyst, but accurate measurement is a recurring problem that most cities would like to resolve.

What problems does Event Economics solve?

The first objective of Event Economics is to develop a best-practice event evaluation framework that is capable of including, and valuing, the wide range of costs and benefits major events confer upon a host city. This includes both values that are revealed by observable prices like ticket revenues (market values), and things that do not have an observable market price like greater social capital (non-market values). The inclusion of non-market values is particularly important because they are absent from current evaluation frameworks, or appear as unvalued addendum, and therefore receive little consideration in the decision-making process.

It is important to differentiate between the role of the *framework*, which defines and organises the things that need to be valued, and the *measurement techniques* that are used to derive the values. In the first instance, Event Economics is focussed on developing and socialising an enduring fit-for-purpose event evaluation framework. Once that has been achieved, the focus will be establishing and improving the measurement techniques used to populate the framework with values.

The second objective of Event Economics is to enhance the accuracy and integrity of the event evaluation process. Almost every event evaluation reports a positive economic impact, usually denominated in Gross Domestic Product (GDP). The numbers in these reports are regularly accused of being overly optimistic, as well as being based on naïve assumptions about how economies work. This criticism is generally justified and is discussed further below.

The third objective of Event Economics is to provide a transparent and repeatable event evaluation process that can be applied consistently within cities, and across cities. This addresses a major consistency problem that currently exists within New Zealand, while also reducing the dependence of cities on external consultants. This should result in costs savings as cities become more capable and self-sufficient.

Event Economics uses Cost-Benefit Analysis (CBA) to achieve these three objectives. CBA is a well-established evaluation framework that government agencies and businesses use to make investment decisions. It replaces Economic Impact Assessment (EIA) as the preferred event evaluation methodology in New Zealand.

Why is CBA the ideal evaluation framework for events?

CBA is based on welfare economics, which is concerned with the maximisation of social wellbeing in the broadest possible terms. What this means in practice is that any type of cost or benefit can be included in a CBA, as long as it can be given a credible value. This is highly attractive because it allows the analyst to design an appropriate evaluation process for each event, rather than trying to fit an event into a restrictive and partial evaluation framework like EIA.

The main benefit of CBA is that it treats market and non-market costs and benefits equally, which means that social outcomes are given the same status as economic outcomes in the evaluation process. This allows a community festival to be evaluated in the same way as a major concert or sports event.

There are three broad steps in the CBA process:

1. Identify all of the relevant costs and benefits associated with the event. In the first instance this just requires a brief description of each cost and benefit. There are no restrictions on what can be included, but for practical reasons only material costs and benefits should be carried forward to the next stage.

2. Assign a monetary value to the each of the relevant costs and benefits. This should be relatively easy in cases where there is an observable market price or financial transaction. It will be more difficult when there are no market valuations to take guidance from, but there is an extensive body of academic literature devoted to the valuation of non-market costs and benefits. It is generally accepted that a rough estimate of value is better than no estimate at all - arguing about the value of something is more constructive than being criticised for omitting it.

3. Add up all of the costs and benefits, and if the gross benefit exceeds the gross cost then the event is viable. In practice this means that investing in the event will increase social wellbeing, relative to the counterfactual (scenario where the event doesn't exist) of not investing in the event.

The benefits in a CBA are defined as "surpluses". A surplus is created when the benefit derived from an activity exceeds the cost incurred. CBA recognises two types of surplus: consumer surplus and producer surplus.

Consumer surplus allows us to recognise and assign value to activities that consumers engage in. These could be priced activities (e.g. buying a ticket to an event) or unpriced activities (e.g. attending a community festival). In either case, the consumer incurs a cost to engage in the activity i.e. the price of the ticket, and/or the opportunity cost of the time they spent at the event. If the activity meets or exceeds the consumer's expectations then it is reasonable to assume that they derive a benefit equal to or greater than the cost incurred. The amount by which the benefit exceeds the cost is defined as the consumer surplus.

Producer surplus allows us to recognise and assign value to activities that producers (businesses) engage in. These are generally priced activities that the producer is on the sell-side of e.g. selling goods and services to event visitors. In this case the producer generates revenue by selling some of its product, but it incurs a cost in servicing this demand e.g. cost of goods sold, staff costs, overheads. The difference between revenue and cost is defined as the producer surplus, which also matches the definition of profit.

All CBAs have a built-in counterfactual, because the opportunity cost of the resources consumed by the event are always factored into the analysis. This ensures that the results of a properly conducted CBA can be interpreted as an estimate of net benefit.

What is wrong with Economic Impact Assessment?

EIA has been the event evaluation framework of choice in New Zealand for many years. It is based on national accounting principles and seeks to estimate the impact of a major event on key economic metrics like gross output, GDP, household income and employment. There are two broad steps in the EIA process:

4. Estimating the change in gross output (business revenue) caused by the event. This involves identifying and valuing cashflows that will bring new money into the economy, and those that will remove money from it.

5. Using economic multipliers to convert the change in gross output into changes in GDP, household income, employment etc. The GDP impact is generally used as the headline metric for reporting purposes.

A major issue with this approach is that it is based on accounting principles and therefore doesn't consider the value, or opportunity cost, of the resources required to deliver the increase in GDP. For example, if Council invested $1m in an event and all of that money was spent in the local economy, this would be considered a zero-sum game i.e. it would be neither a cost nor a benefit to the city because the money hasn't left the economy. In reality, the $1m spent by Council would be a cost to the city and the $1m received by businesses would be a benefit to the city, but the businesses would need to expend close to $1m worth of resources to service the additional demand. EIA overlooks the final part of this equation. This series of transactions should result in something close to a $1m cost to the city, but EIA says that it is $0. This is one of the main reasons EIA's almost always produce positive results.

Another major issue is that GDP impacts are interpreted as benefits, which is not correct. In practice GDP is equivalent to pre-tax profit generated by businesses plus wages & salaries paid to workers. Pre-tax profit can loosely be interpreted as a benefit, although post-tax profit would be more accurate within a regional context. Wages & salaries cannot be interpreted as business benefits, because they are actually business costs. They also can't be interpreted as household benefits, because wages & salaries compensate workers for the time they spend at work. The true benefit to workers is the difference between what they get paid and the opportunity cost of the time they devote to their work (essentially the worker's "profit margin"). In an efficient labour market this is likely to be a small percentage of what they get paid.

The issues above are magnified by the use of economic multipliers to convert changes in gross output to changes in GDP. The multipliers are derived from sophisticated but relatively blunt economic models, and therefore have large error margins. When these multipliers are applied, an additional dollar of gross output can result in close to an additional dollar of GDP. Apart from inflating already erroneous measures of benefit, the multiplier effects can only be realised if there are unlimited resources in the economy to absorb additional demand. This is often not the case, and it is certainly not the case in some parts of New Zealand where labour constraints are a major issue e.g. the construction sector in Auckland. When such constraints exist, servicing an increase in demand in one part of the economy generally requires the reallocation of resources from another part of the economy. What this means in practice is that one part of the economy wins at the expense of another. The net impact on the economy therefore ends up being much smaller than the impact on the part of the economy that wins.

The final issue with EIA is that it can only assign value to financial transactions. This is a major constraint that often results in material costs and benefits being excluded from the evaluation process. The exclusion of relevant information introduces decision-making risk, and generally undermines the integrity and credibility of the evaluation process.