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VALUING THE IMPACTS OF FESTIVALS
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Introduction
Increasingly, economic assessment is used by festival convenors to support access to public funding. Governments are often asked to provide financial support for festivals, including the allocation of substantial funds to provide or upgrade the facilities required to stage them. As a consequence, governments will generally require credible forecasts of the festival impacts and their comprehensive evaluations. Besides the economic impacts, festivals usually generate a range of other benefits such as enhancing the image of a city or region, facilitating cultural awareness, helping to forge community identity and sense of place, enhancing resident recreational opportunities, social networking and civic pride. On the other hand, festivals and events are recognised as potentially generating adverse social impacts such as disruption to local business and community backlash and adverse environmental impacts such as various forms of pollution (Robertson 2013).

What is a festival?
While different definitions exist (Smith 1990; Getz 2005) we take festivals to be ‘themed public occasions designed to occur for a limited duration that celebrate valued aspects of a community’s way of life’ (Douglas, Douglas & Derrett 2001, p. 358). Typically, they originate within the community in response to a need or desire to celebrate the community’s unique identity (Douglas et al. 2001; Wood 2005).

Festivals are of two key types. First there are the very large festivals that are more akin to a mainstream special event where a key purpose is to attract visitors. Glastonbury, which does not really have a local community dimension, is an example of this type of festival. The second type, which reflects the majority of festivals, is where there is a strong community dimension; indeed, most of these festivals are generated from within the community often to celebrate community values. For this category of festival, visitation, and the expenditure such visitation generates, is a secondary benefit. Characteristically, festivals provide important social and recreational opportunities for local communities. They are also associated with additional demand for destination goods and services generating increased sales, jobs, income, investment in infrastructure and economic development opportunities.
Ideally, festivals also foster a greater sense of community co-operation, goodwill, reciprocity, belonging and fellowship (Lee, Arcodia & Lee 2012). Given their relevance to community, regional and even national identity and pride, creative learning and development, celebrating community values, destination image and branding, they form a fundamental component of the tourism development strategy in many destinations (Jago & Dwyer 2006). Whilst these non-economic objectives are more difficult to measure and thus evaluate, they are real and must be considered in determining the overall value of a festival. Since the focus of this chapter is on the economic contribution of festivals, the evaluation of the non-economic contribution falls largely outside the scope and receives less attention in this chapter. This does not, however, suggest that the authors undervalue the importance of the non-economic dimensions.

For the first type of festival mentioned, the economic analysis is exactly the same as for major events. For the second type, the non-economic impacts are likely to be more important than the economic impacts. The challenge for researchers is to provide techniques which give accurate results while at the same time providing practical use for policymakers, who must make decisions on whether allocating resources to support a particular festival is appropriate and, if so, to what extent.

Evaluation

Given the increasing calls for funds from the generally constrained public purse, it is nowadays essential that the contributions of festivals that draw upon public funds be evaluated. This is done to ensure that their return justifies the public investment compared to the alternate uses of those funds. Justifications for public-sector involvement in planned events include consideration of public good, social equity, return on investment, efficiency, achievement of destination tourism visitation targets, psychic benefits to residents and market failure arguments (Getz 2009).

In general, there is an organisational purpose to evaluation. Evaluation is often driven by internal management requirements (for example, to evaluate against the objectives, evaluate finance and use of resources, audience satisfaction and quality of the continuing planning and management processes). Rather than being an infrequent task for solving problems or generating new ideas; the results of an evaluation can be used to direct the marketing and planning functions; and enable an organisation to continually learn about itself, its environment and ways to improve its performance (Getz 2005). Festival evaluations can inform management processes and procedures for subsequent hosting of events. Festival managers see evaluation as a way of determining success, by reviewing what has been done against the objectives set (whether these are clearly articulated or not), with the aim of feeding results into the planning process for the future. Evaluation is learning from strengths and weaknesses that can be taken into account in future planning and operation. We can identify three basic types of evaluation; formative (pre-event assessment), process (monitoring) and outcome or summative evaluations (post-event), with the latter being the most common (Getz 2005; Robertson 2013).

For an evaluation to be effective, it is critical that the evaluation be undertaken against the objectives that were set for that particular activity. This highlights the need for clear and, if possible, quantifiable objectives to be established at the outset. In the case of the larger festivals, a key objective is often to attract large numbers of visitors to the destination and to maximise the spending in the area that these visitors make. Given this objective, assessing the economic contribution that these major festivals make to the host region becomes a key
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As indicated earlier, it is necessary to clearly articulate the overall objectives or expectations of the festival if the evaluation is to be in any way effective (O’Sullivan, Pickernell & Senyard 2009). In the case of festivals, objectives may be vague or difficult to quantify. The aims of the Edinburgh festival, for example, are to be ‘the most exciting, innovative and accessible festival of the performing arts in the world, and thus promote the cultural, educational and economic well-being of the people of Edinburgh and Scotland’ (Williams & Bowdin 2007, p. 193). While some of these aims (the economic) are quantifiable, others are not.

There is widespread agreement that events should be assessed in respect of (at least) their economic, social/cultural and environmental impacts. A popular view is that triple bottom line (TBL) evaluation should be used (e.g. Fredline, Jago & Deery 2003; Getz 2005), although with some exceptions (Wood 2008), the specifics of this balanced approach to festival evaluation and implications for festival planning and operations are seldom articulated. For each of the three dimensions of TBL, possible goals, related policy initiatives and a number of performance measures are suggested. More formal methods are likely to be used in festivals that are run by local authorities. No matter which methods are chosen, it is likely that both quantitative and qualitative data will be required to evaluate performance against the objectives.

Attendance

For many festivals, audience size and attendance are the principal means by which festivals evaluate their success. Accurate and robust measurement of attendance has emerged as a critical factor to ensuring the reliability of event monitoring and evaluation. A major challenge for festivals is to estimate attendance numbers as many of the component activities are not ticketed. Even for those festivals that have a turnstile entry, if not paid tickets, there is the problem in identifying how many sub-events attendees attend. Davies, Coleman and Ramchandani (2010) identify a genuine gap in knowledge about the processes involved in estimating attendance figures at festivals. In any case, participation numbers in themselves are insufficient to value a festival. Not only do numbers tell us nothing about a festival’s value or worth to a community, but festivals with similar attendance numbers will have very different impacts (economic, social and environmental).

However, an accurate estimate of attendance at a festival is an essential prerequisite for evaluating the economic contribution of the event. Expenditure data from visitors can be collected via surveys, but unless there is an accurate estimate of the total attendance number, particularly in relation to visitors from outside the host destination, it is not possible to estimate the economic contribution. Even festivals that are largely ticketed often have free components rendering estimates of total attendance numbers problematic. Added to this is the problem that individuals may buy tickets to multiple sub-events, so distinguishing between attendees and attendances is most important.

Much work has been done over the years to estimate crowd numbers at events in general, and festivals in particular (Tyrrell & Ismail 2005), that will reduce the effort required to estimate attendees. Even with more accurate estimates of attendee numbers, it is essential that there are sound estimates of the attendee mix so that the number of visitors to the region can be estimated as it is only the spending by visitors from outside the host region that contributes to the economic contribution of the festival.
**Direct expenditure**

A pragmatic approach to measuring economic activity linked to festivals is the Direct Expenditure Approach (DEA). The DEA involves measuring the first-round ‘direct’ economic expenditures associated with an event, which are injected into the host economy from external sources (Jago & Dwyer 2006). Direct expenditure includes both money spent on the event itself and related expenditure on items such as transport, accommodation, food and beverage, and shopping. In the UK, for example, UK Sport, Event Scotland and Visit Britain, amongst others, endorse the use of the DEA for evaluating events (Davies, Coleman & Ramchandani 2013). The DEA is argued to provide an accessible, cost-effective and practical alternative to multiplier analysis, providing the ‘first stage’ for modelling the indirect effects of the festival on economic variables such as Gross Domestic Product (GDP) and employment.

DEA provides an indicative assessment of the economic scale of an event. There are, however, several problems with the DEA when applied to larger festivals. No information is given as to the economic impacts of the festival on variables such as GDP and employment, and the same injected expenditure can generate different economic impacts. Most importantly, the DEA ignores resident values in festival assessment.

**Economic impact analysis**

Economic impact analysis (EIA) involves estimating the additional expenditure generated by a festival, and then using some form of economic model to estimate how this expenditure affects the destination economy. The economic model identifies and quantifies the linkages between different sectors of the local economy and linkages with other regions. The injected expenditure of visitors and organisers/sponsors stimulates economic activity and creates additional business turnover, employment, value added, household income and government revenue in the host community. The relationship between expenditure and output, income, value added and employment (direct, indirect or induced) can be described by multipliers. The size of the multipliers will depend upon the type of model used to estimate the impacts (Jago & Dwyer 2006).

**Input–output modelling**

The standard model used for the economic impact estimation of festivals and special events has been through multipliers derived from input–output (I–O) models. The restrictive assumptions of I–O modelling (fixed technical coefficients, no capacity constraints and consequently no impact of the festival on wages or prices) mean that it fails to capture the industry interactive effects that would be revealed in the use of a more sophisticated model for economic impact assessment, thereby exaggerating the economic impacts (Dwyer, Forsyth & Spurr 2004).

**Computable equilibrium modelling**

Computable general equilibrium (CGE) models are designed to capture the complex pattern of price changes, feedback effects and resource constraints which exist in all economies following a demand side shock such as that occasioned by the holding of a festival (Dwyer et al. 2004; Blake 2005). They include more specifications of the behaviour of consumers, producers and investors, thus permitting specific models to be calibrated to actual conditions.
for a particular festival in a particular economy (Dwyer 2015). In contrast to I–O analysis, which always produces a positive gain to the economy no matter how disastrous the performance of the festival, CGE modelling recognises that price rises due to land, labour and capital constraints may limit the increase in economic activity and may even lead to contractions in economic activity in some sectors or the whole economy. CGE models can also be undertaken using different assumptions, which provides transparency rarely offered by I–O models (Dwyer 2015). However, if no suitable model already exists, it is very expensive to construct a new CGE model, thus limiting its use to the largest contexts.

**Criticism of EIA in festival assessment**

EIA is narrow and excludes the wider (social and environmental) costs and benefits of festivals that can be crucial inputs to policy. As indicated earlier, the key objectives for staging many festivals are not economic in focus, and thus EIA provides only a partial perspective to decision makers facing the problem of funding or subsidising a festival. In order for the government to be more comprehensively apprised, the evaluation exercise must transcend a narrow concern with economic issues and embrace the wider range of effects associated with festivals and events (Wood 2005).

A second type of criticism is that, contrary to the standard view, the outcomes of EIA have no direct policy implications. Economic impact studies can only estimate the effect on economic variables such as output, GDP, employment and the like. Since festivals (and society itself) have goals that are not purely economic, EIA alone cannot decide which is the best allocation of public resources in support of festivals (Dwyer, Jago & Forsyth 2016).

Third, EIA neglects community values other than those that are purely economic. EIA regards only expenditure by non-residents (injected expenditure) as relevant to the creation of economic value, treating residents’ festival-related expenditure merely as ‘transferred expenditure’ playing no role in determining economic impacts (Dwyer et al. 2016). This exclusion of resident preferences, including their willingness to pay (WTP) for festival attendance, is generally ignored by theorists and practitioners alike.

**Cost–benefit analysis**

Cost–benefit analysis (CBA) can be used to capture, measure, weight and compare all expected present and future benefits of a festival with all its expected present and future costs. As a result of holding a festival, individual firms, consumers and/or workers may be better or worse off as a result of changes in their own consumption, income and level of effort as well as how they are affected by associated government expenditure. Firms can gain (or lose) if there is a change in the level of profits. Consumers gain (or lose) from the holding of the event, and workers can gain from additional wages less any costs of additional effort. Governments may gain through increased tax receipts at existing tax rates, and they will pass these gains on to the community in a number of ways – through tax cuts or additional expenditures which benefit the community – or they may save their gains and pass them on to future generations.

For a festival to be socially acceptable, the sum of the benefits to society (including private and social benefits) must exceed the sum of the costs to society (including private and social costs). ‘Value’ or ‘benefit’ is measured by WTP – what people are willing to pay (or give up) to get what an event provides and is estimated by measuring the additional consumer surplus and producer surplus of a given option over the ‘do nothing’ or ‘no event’ case (Boardman,
Greenberg, Vining & Weimer (2011). Economic costs are measured by ‘opportunity cost’ – what people or a society give up by investing capital and employing workers in event-related activities as opposed to the best alternative. The method most often employed to estimate non-use values is Contingent Valuation (CV) whereby value is determined through a survey of peoples’ preferences in hypothetical market situations in which people state what they would do in a given situation(s) (Walton, Longo & Dawson 2008; Andersson, Armbrecht & Lundberg 2012). Residents are asked to state their maximum WTP for or, alternatively, their willingness to accept (WTA) specific intangible benefits and costs associated with a festival. Table 5.1 lists indicative types of benefits and costs of holding a festival.

**Estimating benefits of events**

Unfortunately, many of the benefit items in Table 5.1 are often ignored in festival evaluation. The use of EIA has resulted in the neglect of both surpluses to businesses and surpluses to labour. Techniques exist for estimating these two types of surplus from festival-related net expenditure (Dwyer et al. 2016). Economic techniques can help to estimate ongoing (legacy) benefits to residents from construction of assets for the festival (or festivals), but follow-on benefits to residents resulting from future visitation to the destination (brand benefit) are notoriously difficult to estimate with any precision.

**Table 5.1 Indicative types of benefits and costs of a festival**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Costs</th>
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<tbody>
<tr>
<td>Payments to festival organisers (e.g. ticket revenue, sponsorship and advertising revenue and media payments)</td>
<td>Capital expenditures on festival-related infrastructure</td>
</tr>
<tr>
<td>Consumer surpluses of local households (derived from attending the event)</td>
<td>Operating expenditures (e.g. festival management and staging, security, catering, administration, marketing/promotion)</td>
</tr>
<tr>
<td>Consumer surpluses of local households from attending associated off-site events/activities (e.g. satellite events, public screenings and off-site parties)</td>
<td>Festival-related costs incurred by government agencies (e.g. road agencies, police, fire brigade and state emergency services)</td>
</tr>
<tr>
<td>Other benefits of local households (e.g. pride, excitement and satisfaction)</td>
<td>Social costs (e.g. disruption to business and resident lifestyles, traffic congestion, crime, litter, noise, crowding, property damage)</td>
</tr>
<tr>
<td>Surpluses to destination businesses (the operating profits of local owners of visitor-related businesses)</td>
<td>Environmental costs (e.g. environmental degradation, air/water pollution, carbon footprint)</td>
</tr>
<tr>
<td>Surpluses to destination labour (the net benefits to local labour after compensation for working and tax)</td>
<td></td>
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<tr>
<td>Follow-on benefits to residents (resulting from future visitation to the destination)</td>
<td></td>
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<tr>
<td>Ongoing (legacy) tangible benefits to residents (from construction of assets for the festival)</td>
<td></td>
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<tr>
<td>Ongoing (legacy) intangible benefits to residents (from values experienced, preserved and generated by community)</td>
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Some outcomes of a festival on a destination are not sufficiently well accepted or measurable to be included in a CBA. These are often referred to as ‘intangible’ outcomes which vary from one festival to another, depending upon size and type. They include such beneficial items as increased business confidence, enhancement of business management skills, emergent values such as increased community interest in the issues relevant to the festival ‘theme’ and enhanced destination image. Ongoing benefits from intangible values experienced, preserved and generated by community as a result of the festival are notoriously difficult to measure.

Estimating costs

The cost of employing capital, land and labour for the festival is the value of what those economic resources could have produced in their best alternative use. Governments often allocate resources to support a festival, and whilst festivals are much less likely than other types of events to require new infrastructure, they do require support in other forms, such as policing and security. Many relevant costs can be based on balance sheet figures of government departments and agencies. Any time devoted to festival management issues by public servants has an opportunity cost, estimated with reference to some measure of average wages of public service employees. However, volunteers, who often take leave from their employment to provide services at a festival, would not be included as costs. While their time has an opportunity cost, there is no practical way of putting a value on it.

Estimating the social and environmental costs of festivals poses some difficulties. In each case, the valuation process requires two steps: estimating the amount of physical change (e.g. to recreation areas and amenity, traffic diversion and congestion, and noise), and thence estimating the value associated with that change. Standard methods are available for valuing temporary disruption to resident lifestyles through loss of land uses, traffic congestion, noise and air quality impacts on property values and time lost due to congestion (Boardman et al. 2011). The increased incidence of crime associated with a festival can be estimated from statistics for previous events, as can property damage, accidents and vandalism (Weimer & Vining 2005). Costs of removing litter and cleaning festival sites can also be estimated. The standard economic method of valuing such benefits is WTP or WTA.

The carbon costs of festivals can also be estimated (Collins, Jones & Munday 2009; Andersson et al. 2012). Different festivals have different carbon footprints, and techniques for measuring the carbon footprint of an economic activity are available on the web. It should be noted, however, that valuing such impacts is not always straightforward. There are some festivals that involve preservation of valued environmental resources (e.g. a wilderness area for cross-country skiing), and the value attached to preservation of such areas will include the types of non-user values and measurement approaches identified earlier.

Festivals also have the power to destroy cultural heritage by creating the commoditisation of culture to meet the needs of an increasing number of visitors (Getz 1997; Douglas et al. 2001). Social attitudes can be monitored using community tracking surveys to gauge the trend of support/discontent for a festival over time. More detailed study of the effect of resident perceptions on the measurement of event-related costs and benefits is needed by researchers. In particular, a greater research effort is required to specify ‘trade-offs’ between particular social outcomes and the associated losses (or gains) by way of the economic contribution of different festivals.
A hybrid approach

The standard approach to festival evaluation has been for researchers and consultants to estimate the economic impacts and then, alongside these, consider some of the possible wider effects that are not captured in the economic modelling. This has resulted in a less than satisfactory approach to event evaluation since the EIA and the CBA can give conflicting results (Dwyer & Forsyth 2017). Standard EIA and CBA focus on different aspects of the festival evaluation problem. While an EIA of events emphasises the injected expenditure associated with events as the basis for further analysis, a CBA recognises that the consumer surpluses of residents are essential to event evaluation. As noted earlier, EIA modelling treats resident expenditure simply as ‘transferred’ expenditure which is then ignored. In contrast, by making residents’ values central to the assessment, CBA improves the information base for public-sector decision-making, thereby assisting in the assessment of relative funding priorities.

The projected net benefits of a festival represent the ‘bottom line’ for determining the extent, if any, of support from public funds that is warranted. However, since a CBA cannot measure the level of economic activity generated from the event or the wider flow-on effects on Gross Regional Product and employment, an EIA is required to identify and measure these effects. For larger festivals in particular, CGE modelling would pick up general equilibrium impacts which the partial equilibrium CBA is not capable of detecting. Since neither technique is completely comprehensive, there is a need for an integrated approach to festival evaluation that includes the advantages of each separate approach. Research is currently being undertaken on this issue (Dwyer et al. 2016). The motives for staging festivals are different to major events, and thus the techniques used to evaluate festivals need to reflect this. While many issues relevant to the development of an integrative approach to festival assessment demand further exploration, the dual approach allows the advantages and limitations of each approach to be exposed and the methods refined for future research. This ‘dual’ approach seems to be particularly relevant to festival evaluation given that festivals typically have different and wider objectives as compared to other types of special events.

In practice, festival organisers, governments, the community and other stakeholders may have to settle for a less than ideal assessment exercise. Conducting a full-scale EIA and/or CBA can be costly and is unnecessary for many festivals, particularly those of small scale. This suggests not only that there are cost limitations to festival evaluation but also that the practicalities of evaluation have to be fully considered in the context of organisation funds. This flags the need for a better understanding of the relationship between events and public policy agendas (Whitford 2009).

Conclusion

This chapter has attempted to set down some elements of ‘best practice’ in festival evaluation. Unfortunately, much of the research literature, including special events evaluation, seems uninformed by economic theory. While economic objectives may not be the most important in various festivals held worldwide, and, indeed, for some festivals they are of minimal consideration, they need to be considered explicitly when any form of public subsidy is sought by festival organisers. Economic approaches to valuation can also play an important role in valuing the social and environmental effects of festivals. For smaller festivals, DEA provides an indicative estimate of the festival economic scale without confronting the challenges of developing and using economic models with assumptions subject to debate. However, for the majority of festivals, much more focus is needed to document and measure
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the non-economic objectives. Economic techniques are available both to estimate larger festival economic impacts and to measure the net benefits to society from festivals taking account of resident and other stakeholder values. Economic techniques can also play an essential role in identifying and measuring the trade-offs between achievement of a festival’s economic, social and environmental objectives.

Recently, arguments have been advanced to the effect that the attainment of a sustainable and responsible events sector will require the institutionalisation of a new paradigm, one that employs a TBL approach both to the determination of the worth of events and to evaluation of their impacts (Getz 2009). The key challenges are how to compare values (economic, social and environmental) that seem to be ‘incommensurable’ and the current underdevelopment and underutilisation of economic approaches to value the wider (economic and non-economic) impacts of festivals. The implications of a ‘new evaluation paradigm’ should be explored further for the festival context, including its consistency with calls for paradigm change in the wider tourism context (Dwyer 2017).

References


