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Event portfolios: asset value, risk and returns

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EVENT PORTFOLIOS: ASSET VALUE, RISK AND RETURNS

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ABSTRACT

Purpose: The research question addressed is whether an event portfolio analysis rooted in financial portfolio theory can yield meaningful insights to complement two approaches to event portfolios**.** The first approach is extrinsic and rooted in economic impact analysis where events need to demonstrate a financial return on investment. In the second approach events are valued ally, with every event having inherent value and the entire portfolio being valued for its synergistic effects and contribution to social and cultural goals.

Methodology: Data from visitors to four events in the Sunshine Coast region of Australia are analysed to illustrate key points, including the notion of 'efficient frontier'.

Findings: Conceptual development includes an examination of extrinsic and intrinsic perspectives on portfolios, ways to define and measure value, returns, risk, and portfolio management strategies. In the conclusions a number of research questions are raised, and it is argued that the two approaches to value event portfolios can be combined.

Limitations: Only four events were studied, in one Australian local authority. The sample of residents who responded to a questionnaire was biased in terms of age, education and gender.

Social Implications: Authorities funding events and developing event portfolios for multiple reasons can benefit from more rigorous analysis of the value created.

Originality/Value: This analysis and conceptual development advances the discourse on portfolio theory applied to event management and event tourism.

Key Words: portfolio; asset; value; risk; evaluation; policy; strategy

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INTRODUCTION

The establishment of event value, or worth, is considerably more complex when multiple events in managed portfolios are the subject (Lundberg et al 2017). Event portfolios have tended to evolve naturally as their instrumental value to governments and corporations has increased, but they are also being intentionally created in what Richards and Palmer (2010) have termed "eventful cities". The study of event portfolios is new and evolving, with different perspectives being taken on their management and value. Authors have variously emphasized the tourism and development roles (Getz, 2013), the power of resulting synergies (Ziakas and Costa 2011; Ziakas 2013; Richards 2015) and the satisfaction of diverse needs and interests in the community (Gration et al 2016). In this context there is a need to develop and test new valuation methods and measures, and that is the aim of this paper.

EVENT PORTFOLIOS

According to a number of researchers, and as evidenced by an explosion in the pertinent literature, there has been a large-scale increase in the number and variety of events created by, bid on, facilitated and managed by cities and destinations (see, for example: Getz, 2005, 2008 and 2013; Heere, Van Der Manden, and Van Hemert, 2015; Richards and Palmer, 2010; O'Toole, 2011; Ziakas, 2013). This trend necessitates advances in theory pertaining to the management of event portfolios rather than individual events. When conducting impact forecasts and assessments, and in any political consideration of the worth or value of events, portfolio value comes to the fore.

'Portfolio' literally has two pertinent meanings: (a) a case for carrying loose things (i.e., the mechanism for encompassing a collection), and (b) a collection, as in portfolios of art, published works, goods and services for sale, tasks to complete, or assets to be managed. Theorists and practitioners should be interested both in the collection itself (that is, events) and in the mechanisms for making and managing the event portfolio (i.e., the company or agency in charge, essential stakeholder networking, and related policies and investments).

If a portfolio of events is in fact desired and managed, it might be assumed that the normal strategy will be to maximize cumulative, long-term value. Portfolio managers will have to take into account the need for balancing costs and risks and providing diversity in the benefits attained. Many stakeholders will demand accountability. Although commercial event portfolios can become self-financing through re-investment, with the expectation of overall growth in value, other types of event portfolios cannot be treated simply as monetary instruments, because they are investments of many forms of capital, not the least of which is human energy and emotion corresponding to human and social capital.

O'Toole (2011:8) discussed event portfolios in the context of government strategy and made the following claim: "The importance of the introduction of asset management theory into events management is because it recognizes time and value as integral to management. An asset changes over time. It requires constant management." O'Toole also stressed that the nature of ROI (Return on Investment) is a critical issue, especially as events have tangible and intangible value to different stakeholders.

Intrinsic Versus Extrinsic Value

Within the growing discourse on event-tourism and portfolios, the term 'asset' has been used without a thorough discussion of definitions, meanings and measurement. There is also a need for consideration of practical implications for different stakeholders. For example, conceptualizing an event as a financial portfolio 'asset' might be completely undesirable to many event producers if they are focused on the intrinsic value of art, sport, or doing social good. Yet there is no doubt that those involved in tourism, place marketing and economic development are using the term to describe their expanding mandates and actions, involving events of all types, both one-time and periodic.

Andersson, Armbrecht and Lundberg (2012) provided a model which specifies a range of values assigned to, and/ or benefits derived from planned events. This depiction is based on the work of McCarthy et al (2004) who employed the terms public versus private rather than individual versus societal. Extrinsic value stems from utility and exchanges that provide tangible benefits to either individuals (including social groups and sub-cultures) or society as a whole (including the economy and environment). Intrinsic value is largely intangible and stems from value-based positions held by persons and groups. The perceived worth of an event (or any of its components or outcomes) relates to how individuals or the society judge them, without regard to utility.

Figure 1 compares the two approaches, although it must be stressed that while they are often poles apart in practice, they are not in theory mutually exclusive.

PLEASE INSERT FIGURE 1 HERE

The extrinsic approach has been illustrated by Getz (2013, 23), in the book Event Tourism, and defined in this way: “A full portfolio will consist of various types of events, for different target markets, held in different places, and at different times of the year, in pursuit of multiple goals.” A portfolio of events should have structure and balance, shaped by long-term strategy. Getz (2005) illustrated an event-tourism portfolio consisting of occasional mega-events at the top of the pyramid, and many small, local events forming the large base. Above local events are regional events with some tourist value (both periodic and one-time), and some of these could be elevated into the status of permanent Hallmark Events with high tourist demand and high value. Suggested measures of an event's value within the portfolio included growth potential, market share, quality, image enhancement, community support, environmental value, economic benefits, sustainability, and appropriateness.

In Event Tourism, Getz (2013: 154) provided a model entitled "Managing an Event Tourism portfolio" showing events arrayed in a matrix defined by a horizontal axis showing increasing costs and risk and a vertical axis signifying increasing value. In this model Hallmark Events were assigned the highest value and the lowest risks and costs, while events with high risks and costs are either in the quadrant labelled "move or remove" or, if they have higher value, "move or lower costs/risks". Events with low value and minimal costs and risks pose the question "grow them?” (cf. table 4 below).

Others have taken a more balanced approach in which multiple value perspectives are assumed. For example, Chalip (2004, 2006) described an event portfolio as a leverageable resource, and suggested strategies for the economic and social leveraging of events. Chalip and Costa (2005) argued that the strategic incorporation of sport events into destination branding requires that each event be cross-leveraged with others in the destination's event portfolio. Ziakas and Costa (2011) said a portfolio constitutes a strategic patterning of events and their interrelations and suggested that events can be symbiotically interrelated and benefits maximised in a number of ways: through cultivating markets, transferring knowledge, utilizing common theming, and mobilizing shared resources.

Ziakas (2013), in Event Portfolio Planning and Management: A Holistic Approach, defined a managed portfolio in broad terms (p.14): “An event portfolio is the strategic patterning of disparate but interrelated events taking place during the course of a year in a host community that as a whole is intended to achieve multiple outcomes through the implementation of joint event strategies.” According to Ziakas (2013: 3), "The task, then, for event planners and policy- makers is straightforward: rather than capitalizing on single events, each event needs to be cross- leveraged with others in the host community's portfolio in order to maximize intended outcomes. To this end, event planners need to create synergies among different events and associated economic, tourism, leisure, sport, or sociocultural objectives."

Portfolios, Change and Sustainability

Complexity for policy makers and managers will increase with the number and diversity of events held in an area, as well as their size and impacts. The long-term sustainability of the portfolio itself is a challenge, but as well the event portfolio should positively contribute to sustainable cities and destinations. It is the synergies among funded and managed events that present opportunities for maximizing benefits and avoiding or ameliorating costs and problems. An emerging perspective is that of viewing portfolios of events within wider social networks and examining their role in fostering change.

Richards (2015: 553,554) examined events in the network society, saying: "The argument presented here is that events not only have different impacts individually, but that events can also play a role as important social actors in shaping their own environment through systemic and structural effects." Events in this context are viewed as having the potential to "both sustain and transform social systems," and as being able to link "localized small world networks with the global space of flows." Within event portfolios there is a need to examine interactions, looking for wider network effects. Richards said that "pulsar events" challenge and change structures while "iterative events" reinforce existing structures - yet can provide the necessary platform and skills for pulsar events - the example given for pulsars is Barcelona's hosting of the Olympics. (Richards, p.564) concluded "…one might also argue that such network effects may ultimately be more valuable than achieving a balanced portfolio of events for a specific place." Although the focus of this paper is on possible measures of asset value, the broader perspective on event portfolios as agents of change should be kept in mind.

'Asset' Defined

InvestorWords.com describes assets in the context of an "investment portfolio", pointing out the inherent dependence upon goals and the various parameters influencing investment decisions:

> "A compilation of assets working in concert designed to achieve a specific investment objective based on parameters such as risk tolerance, time horizon, asset preference, and liquidity needs. Portfolios are usually constructed with a mix of assets that have the potential to achieve the desired returns, while minimizing risk and volatility through proper diversification and balance."

Events can definitely have income-producing value, and consequently there has been a surge in for-profit events and professional event management companies. Events that have owners and are won through bidding also have a market value, but it is usually subject to negotiation. How much biddable events are 'worth' will vary a lot, related mostly to how many competitive bids are received. In the absence of competitive bidding, an event's value will be depreciated. In accounting terms, planned events might own capital assets including land and equipment that can be sold, and they often hold intellectual/creative capital that can generate rent when made available at a fee to others. There can be real monetary value attached to events as platforms for sponsorship, where sponsors are looking for sales, marketing returns and/or goodwill. Regional economic value accrues from events that are tourist attractions, as they generate economic benefits for regions.

The value attached to many planned events will often be linked to intangibles such as image-making and its role on place marketing. Image-enhancement effects potentially combine synergistically within portfolios and, over time, create greater attractiveness for the host area. A city or destination branding itself as an events 'capital' or world-class event-tourism destination has this effect in mind. Single events have mostly been studied for their image-making potential with little attention being given to overall imagery related to event portfolios in particular cities or areas.

Events and Capital

'Capital' of various kinds must be invested to create events and portfolios. Mykletun (2009) discussed seven types of capital in the context of his research on a successful extreme-sports event in Norway. He identified the critical role of social capital, specifically an informal, innovative leisure network in the host community of Voss. Cultural capital was evident in volunteering and the culture of sports. Human capital included entrepreneurship and the role of sports clubs. The natural capital of the area was the original attraction for extreme sports, with the mountains and fiord providing outstanding scenic beauty and opportunities for diverse sporting activity. Physical capital took the form of infrastructure for sport and visitors. Also required was financial capital, but the area was low in this essential ingredient and had to find external sources. Finally, administrative capital came from government and policy makers supportive of the event.

These various intangible forms of capital perhaps constitute the greatest asset value within portfolios, to the extent that these assets can be redeployed if an event is terminated and can be applied to assist other events (i.e., creating synergy). Capital may also be an outcome and additional value can be attributed to the roles of events in generating innovative solutions to various problems, like logistics, and to being catalysts for growth in the creative and leisure/lifestyle sectors. The literature includes many assertions that events can generate social and cultural benefits. Mayfield and Crompton (1995) identified reasons why non-profit and government entities stage festivals, including recreation/socialization, culture/education, tourism, internal revenue generation, natural resources, agriculture, external revenue generation, and community pride/spirit. Other desired outcomes include arts development (Snowball, 2005; Quinn, 2006), creation of cultural capital (Snowball and Willis, 2006), community development (Dwyer et al, 2000), civic pride (Wood, 2006), social capital formation (Yuen and Glover, 2005), and social integration (Schwarz and Tait, 2007). Taken together it becomes clear that assets within event portfolios do not always have to meet tangible criteria for success.

The Temporal and Spatial Dimensions

Portfolios cannot be considered as static creations, as the temporal dimension is always critical. O'Toole (2011: 8) paid attention to the asset value of events for nations, saying that unlike most physical assets, like infrastructure and machinery, events can and do appreciate in value over time. Portfolio managers will specifically aim for growth in one or more value categories - while some will want the portfolio to become financially self-sufficient, others will be happy with intangible outcomes in the context of social and cultural policy.

But O'Toole (2011:9) also commented on the life-cycle of assets: "An asset will reach a stage when the costs of the asset will be beyond the benefits plus the cost of its replacement. At this point the asset must be sold or scrapped." The concern expressed by O'Toole is that events left beyond their "use-by-date" will become a burden, and difficult to terminate. But whether or not this is a valid concern within event portfolios has not been demonstrated through research. Indeed, many so-called Hallmark events are permanent, having become institutions in their host communities that meet multiple goals (Getz and Andersson, 2008). Others do appear to follow a typical lifestyle from creation through maturity and decline (Walle, 1994).

Many events are rooted in one community, and in branding terms are permanently co-branded with the destination. These have been called Hallmark Events, and it has been argued by Getz (2013) that they present the greatest asset value for the least cost and risk, within an event portfolio. There are also many community events that are produced by and for residents, but they might not possess the potential to be elevated into a permanent institution. In contrast, many events are not defined by, nor fixed in location. Footloose events can be won through bidding, and they can go anywhere - their value to a destination is fleeting, although some mega events can leave a permanent, valuable legacy. As well, there are events that are held in multiple locations, while some are moveable, others are looking for a home, and some might return to the same place occasionally. Assigning these footloose or moveable events value within a portfolio probably has more to do with their collective and cumulative roles than the benefits derived from any one of them.

Assets in Financial Portfolio Theory

In developing classic financial portfolio theory, Markowitz (1952) emphasized uncertainty in the allocation of financial assets and how risks can be reduced. A portfolio should consider overall risk-reward characteristics, and be diversified. When considering an individual's or corporation's financial-asset or product portfolio a frequent assumption is that investors and owners are risk averse, and therefore willing to accept a lower return for a lower risk level. Similarly, it could be assumed that event portfolio managers prefer a planning situation with low uncertainty even if this means lower returns. However, some element of risk can be built into a balanced event portfolio, and every investor or portfolio manager has to decide the appropriate comfort level. Similarly, cities and destinations must decide how much to invest, and under what circumstances. For example, bidding on a mega-event entails considerable cost and risk, and some managers or politicians will not sanction that kind of bold action.

Risk and uncertainty in financial portfolio theory (Markowitz, 1952) is measured by the standard deviation of the 'return' measure. Thus in a time series of annual returns on a capital asset one may find that these returns vary for each year. A calculation of the mean value of the return for all observed years will also yield a standard deviation which indicates the extent that annual values vary. A high standard deviation indicates a large variation which therefore also indicates a large risk, while a small standard deviation gives opposite indications.

In the context of event assets, measures of returns and risks should be grounded in the priorities of the stakeholder making the analysis. If, for example, one assumes that the local government gives highest priority to the goal of creating welfare for local residents, then the welfare created for each local resident and the standard deviation of local residents' experienced welfare change should represent return and risk respectively in a portfolio analysis. It is then assumed that local residents' welfare change can be measured in one dimension as willingness-to-pay as done in cost-benefit analysis. For event portfolio theory we can then formulate:

In general:

Expected return on the event portfolio is the sum of average goal attainment for each event weighted by its relative size.

$$\mathrm{E}(R_p) = \sum_i w_i \, \mathrm{E}(R_i) \qquad \text{…………………..} \qquad (1)$$

Event portfolio risk and volatility depends also on the correlations between the returns of the events in the portfolio.

Portfolio return variance:

$$\sigma_p^2 = \sum_i w_i^2 \sigma_i^2 + \sum_i \sum_{j \neq i} w_i w_j \sigma_i \sigma_j \rho_{ij}, \qquad \text{……………….} \qquad (2)$$

Alternatively the expression can be written as:

$$\sigma_p^2 = \sum_i \sum_j w_i w_j \sigma_i \sigma_j \rho_{ij} \quad , \qquad \text{……………….} \qquad (3)$$

where $\rho_{ij} = 1$ for $i=j$.

Portfolio return volatility (standard deviation):

$$\sigma_p = \sqrt{\sigma_p^2} \qquad \text{…………………} \qquad (4)$$

LEGEND:

- E (R_i) is the expected return (goal attainment - R_i) from event i
- R_p is the return on the event portfolio,
- w_i is the weighting of event i (e.g. the proportion of visitors to event "i" in the portfolio).
- ρ_{ij} is the correlation coefficient between the returns on events *i* and *j*.

A number of concepts from financial portfolio theory are relevant also for event portfolio management. We now examine "efficient frontier", "diversification", "systematic and specific risk".

Efficient Frontier

The events in the portfolio can be plotted in a risk- return space where the left boundary includes the efficient frontier on the left part of the boundary (sometimes called “the Markowitz bullet”). The events with low risk for a given level of expected return will be on the efficient frontier thus indicating the degree to which the other events are underperforming. This is achieved in practice by simply fitting a line in the “north-west” corner joining the events that are furthest to the “north”, “north-west” and “west”. In theory, a new event should only be included in the event portfolio if it improves the risk-return of the event portfolio (i.e. the new event is closer to the efficiency frontier than the portfolio is before inclusion of the new event.)

Diversification

An event portfolio manager can reduce the portfolio risk by holding a portfolio of events with returns that are not positively correlated. This is illustrated in equations (2) and (3) where a negative value of the correlation coefficient will reduce the portfolio risk. This means for example holding a portfolio of events that appeal to different segments of the population.

Systematic and specific risk

Systematic risk or event portfolio risk refers to the risk common to all event portfolios such as a slump in consumption on a general regional or national level. Systematic risk is therefore equal to the volatility of the national event industry. Specific risk is the risk associated with individual event portfolios that contain events that are vulnerable to specific risks such as changed preferences regarding music styles. It is a diversifiable risk that can be reduced by changing the composition of events in the event portfolio.

Stakeholders' intrinsic and extrinsic perspectives

Stakeholder theory has been used frequently to describe both the development and management of events, and to emphasize the necessity of considering multiple perspectives on the value or worth of events. (e.g. Getz and Andersson, 2008; Brown et al, 2015). Portfolio analysis must be grounded in the priorities and goals of the stakeholder and different stakeholders therefore need different portfolio analyses. Two major stakeholders of many events are local government, with a predominantly intrinsic perspective, and the tourism industry with an extrinsic approach. To a large extent these two stakeholders have the same goals in supporting events - to attract visitors to the region who will spend money and benefit owners of the tourism firms, as well the society through an increase in employment and welfare. For society-at-large as well as the local government, the intrinsic perspective and welfare of local residents in terms of, say, entertainment opportunities and exciting experiences is, however, a more important goal. Welfare is used in this study as an intrinsic concept meaning utility and including material, immaterial as well as social benefits. The underlying assumption is that local government is striving to maximize welfare for the local residents.

The extrinsic perspective is focused on an analysis of the financial impact from visitors to the destination caused by events in the event portfolio. The tourism industry is one stakeholder with a predominantly extrinsic perspective.

METHODS

An online survey was directed both at residents and visitors, collecting data related to their attendance at four named events. It was thought that questioning of expenditure and willingness to pay would have more meaning if respondents could relate to specific events. The four selected events represent a small sample of some of the most popular events and festivals in the region and are held in different sub-regions, so that a broad geographical coverage of the Sunshine Coast region was achieved. The four events included in the study, all of which receive local-authority funding, are:

- Noosa Longweekend (Northern sub-region),
- Sunshine Coast Real Food Festival (Hinterland sub-region),
- Mooloolaba Triathlon (Central sub-region) and
- Caloundra Music Festival (Southern sub-region).

These events occur in the four tourism sub-divisions of the region and are well known across Queensland and beyond. Noosa Longweekend is described as ten days of music, cabaret, theatre and fun (http://www.noosalongweekend.com). The Real Food Festival occurs in Maleny in the rural part of the municipality and seeks to help position Sunshine Coast as a destination for foodies (http://realfoodfestivals.com.au). The Triathlon has international standing and has been packaged as a three-day festival including "...the popular Asics Five Kilometre Twilight Run, Mooloolaba Ocean Swim, Seven Mooloolaba Sport and Lifestyle Expo and lastly, the Courier-Mail Superkidz Triathlon for kids of all ages." (http://www.sunshinecoastpoint.com.au/events/mooloolaba-triathlon-festival). Caloundra Music Festival (http://www.caloundramusicfestival.com) is designed for a family holiday complete with fireworks and fringe festival.

Sample Selection

Ethics approval was gained through normal University processes. Subsequently a draft questionnaire based on a literature review, was pilot tested (n = 253), questions were refined and the final survey tool established. Invitations to participate in the online survey were arranged through publication of two advertisements in the Sunshine Coast Daily Newspaper and through e-mail distribution via customer_databases of the four identified event organizations and Sunshine Coast Council. A total of 1,501 e-mail recipients opened the questionnaire but only 1,066 answers were complete and used for analysis (71%). The number of 'local residents' and 'event tourists' were 738 and 328 respectively.

Sample Representativeness

There are limitations regarding generalizability since the sample of residents does not represent the population well enough. Those aged 18 and younger were explicitly excluded, whereas more educated, middle-aged and older females, and those who attended events are overrepresented. A large majority of the respondents (75%) was female and respondents were primarily between the ages of 40-49 (21%) and 50-59 (25%). Respondents tended to be tertiary educated (Bachelor's degree: 28%; TAFE or trade qualification: 27%; postgraduate qualification: 26%). The top three occupations were professionals (26%), managers and administrative workers (10%) and community or personal services worker (5%); 23% were retired. Two-thirds (67%) replied that they lived or worked in close proximity to one or more event venues. Approximately 70 per cent of resident respondents perceived no direct or indirect benefit from tourism or events in the Sunshine Coast region. Over three quarters of resident respondents were married/partnered (76%) with most indicating that they currently did not have children under 18 years old living with them (69%).

In the context of this exploratory research the limitations are however not critical. As well, it could be argued that the sample reflects those segments most likely to engage in a political dialogue about events, tourism, and other social issues in their community.

Attendance at Events

Respondents were asked which of the four named events they had attended most recently. As shown in Table 1, each of the four events attracted approximately equal proportions among local residents. Thirty per cent of local residents most recently had attended Caloundra Music Festival, making it the most popular, whereas Mooloolaba Triathlon is the most popular event among visiting event tourists.

PLEASE INSERT TABLE 1 HERE

Variables Used in the Portfolio Analyses

To perform a portfolio analysis, measures of risk and return are fundamental. The equivalents of risk and return in a tourism setting will be based on the intrinsic and extrinsic goals of the stakeholders. Two stakeholder perspectives will be illustrated in this study:

1. Local residents and local government of the region representing an intrinsic approach for whom welfare is a goal and return therefore will be measured in terms of welfare increases from the festivals.
2. The tourism industry in the region for which extrinsic effects is a goal and return therefore will be measured in terms of direct economic impact on the region.

Return will be measured differently for the intrinsic welfare assessment and the extrinsic financial assessment. Measures are elicited in terms and willingness-to-pay for the welfare analysis and in terms of total tourism expenditure for the financial analysis. Willingness-to pay for attending an event was sought by a contingent valuation analysis using total expenditure as the payment vehicle by asking respondents the following question: *"Which is the highest total expenditure you would find acceptable and still think that you got value for money from attending the event?"* This question was asked after the actual expenditure question, thereby providing an anchor value to strengthen the content validity. Use value describes the value that event participants experience at the event (Andersson, Armbrecht and Lundberg, 2012) and is therefore suggested as a valid measure of welfare.

The extrinsic value of expenditure for attending an event is calculated as the sum of expenses for: Ticket and expenditure made at the event destination for Accommodation, Food and Beverage, Shopping and Other. This sum represents the gross direct economic impact which was used in this study. Thus the cost of displacement effects or other opportunity costs were disregarded.

Risk was measured by the standard deviation of the mean value for willingness to pay for local residents, and the standard deviation of the mean value for total expenditure by event tourists, to provide a risk measure for the intrinsic value and the extrinsic value respectively. All questions were related to the event that the respondent had indicated as "the most recently attended event".

RESULTS

Four annual events in the Sunshine Coast region's event portfolio are used to illustrate portfolio analysis from the intrinsic perspective of creating welfare for local residents as well as from the extrinsic perspective of creating economic impact for the tourism industry. For most destinations, including the Sunshine Coast, the event portfolio contains considerably more than four events, so the illustration provided here is far from complete and generalizations are not possible except in conceptual terms. Two illustrations will be provided based on the two perspectives. First, a welfare analysis will be performed assuming that welfare return is the priority of local government and politicians. Second, financial return is assumed to be the priority for the owners and employees in the local (tourism) industry.

An Intrinsic Portfolio Analysis of Value Created for Local Residents

Intrinsic value created for local residents, corresponding to "return" in a risk-return diagram will be measured in terms of use value elicited as willingness-to-pay for attending the event (cf. the methods section above). With information about willingness to pay as well as total expenditure by local residents related to event attendance, it is possible to calculate consumer surplus which also indicates local residents' satisfaction. By analysing consumer surplus in relation to total expenditure one obtains a measure of the relative size of the consumer surplus (in percentage terms) per dollar spent. This new measure of "Value for Money-Return on Investment" is also displayed in table 2 to give several comparable measures of intrinsic value created by the four events in the event portfolio of Sunshine Coast.

PLEASE INSERT TABLE 2 HERE

Comparing the Four Events in Intrinsic Terms of Return and Risk for Local Residents

Caloundra Music Festival is the favourite event among local residents. It is the event that most respondents have attended most recently and it is also the event with the highest average use value, which indicates that respondents highly value the experiences at Caloundra. Worth noting is that expenditure is closely correlated with use-value not only for Caloundra Music Festival but for all four festivals. This further underlines that there are rarely any conflicts between the two goals of welfare for local residents and the economic impact.

Caloundra is also the best event of the four in terms of risk-return, with a coefficient of variation below 1 (i.e. a standard deviation that is lower than the mean value). This puts Caloundra on the efficient frontier in a risk-return diagram (Figure 2) together with the Real Food Festival which has the lowest standard deviation - although it also has the lowest mean use value. The Real Food Festival is second among the four as "most recently visited event". Local residents seem to spend less at this festival but still experience a considerable value which means that the consumer surplus per spent dollar (26%) is the highest among the four events indicating that "value for money" is higher at the Real Food Festival than it is at the other three events. Mooloolaba Triathlon is the event furthest from the efficiency frontier (figure 2) in an analysis of use value created for local residents. The use value is comparatively big, but there are major variations in the value assessments among local residents resulting in a large standard deviation. Local residents' expenditure at Mooloolaba Triathlon is almost of the same size as the use value and willingness to pay, leaving a very small consumer surplus for local residents and consequently also the smallest "Value for Money – ROI" of only 5% (see table 2).

PLEASE INSERT FIGURE 2 HERE

The risk-return diagram (Figure 2) indicates that the Portfolio, measured as the weighted average of the four events, is off the efficient frontier and that the Portfolio could be more efficient by e.g. improving local residents' value of participation in Mooloolaba Triathlon. The large risk (standard deviation) of this event may indicate that there are a number of residents that should be better informed and/or that certain negative experiences of the event for locals should be eliminated. That this sporting event does not appeal to everyone is indicative of the need for event portfolios to provide variety and to carefully target a range of audiences.

An Extrinsic Portfolio Analysis of Event Tourists' Expenditure in the Region

A portfolio analysis of the economic return and risk of the events is more straightforward. Return will be measured by the total expenditure made in the region by the average visiting tourist. Risk will be measured by the standard deviation of the expenditure made in the region by visiting event tourists (table 3). This is possible to achieve with data from one year, whereas access to a time-series of expenditure at the four events over several years would allow a portfolio analysis identical to financial portfolio analysis.

PLEASE INSERT TABLE 3 HERE

Comparing the Four Events in Terms of Extrinsic Value for the Local Tourism Industry

Mooloolaba Triathlon, which underperformed in the welfare analysis, stands out as the most frequently attended event by event tourists. It is also performing second best in terms of economic impact, with a coefficient of variation as low as 0.64 - which indicates stability. Noosa Longweekend attracts few event tourists (table 1) but generates more expenditure per visitor than the other three events - although there is also a large variation in visitor expenditure (table 3). The direct economic impact calculated and used in this study is a gross value without considering negative effects such as displacement or other opportunity costs.

PLEASE INSERT FIGURE 3 HERE

In a risk-return diagram (Figure 3) based on an analysis of visitor expenditure in the region, Mooloolaba Triathlon and Noosa Longweekend determine the efficient frontier. The Real Food Festival underperforms with a low expenditure per visitor and a very high coefficient of variation which indicates that a large number of visitors spend considerably less than the already low average. The Portfolio of four events is off the efficient frontier and the risk-return diagram indicates that an increase in returns from the Real Food Festival would push the Portfolio upwards and closer to the efficient frontier.

DISCUSSION

Stakeholders normally have different goals related to their involvement in events. They may be non-conflicting goals, but nevertheless require different indicators. To illustrate portfolio analysis, intrinsic and extrinsic perspectives were contrasted. First assessed was an intrinsic welfare perspective, assuming that the priority goal (for e.g. the stakeholder local government) is to create value for local residents. Second was an extrinsic financial perspective that assumed the priority was the goal of creating a large financial inflow to the region, which will be most relevant to stakeholders in the tourism industry. These two priorities are hardly conflicting. In fact, financial wealth is often used as synonymous to welfare, and an expanding tourism industry will also generate more employment and more tax income to be used for welfare benefits.

The two illustrations also demonstrate that all four events are beneficial in terms of both extrinsic economic impacts and intrinsic local welfare. However, the relative importance for each event in terms of goal fulfilment differed. Two events (Mooloolaba Triathlon and Noosa Longweekend) stand out as the superior tourist events in creating a larger extrinsic effect and financial contribution to the city. Caloundra Music Festival and The Real Food Festival, on the other hand, are more important for the local residents and create a larger intrinsic effect and more local welfare in terms of entertainment and experience value.

Local welfare has been assessed by the use value experienced by local residents visiting the event. This approach places a monetary value on experience value, and is an element in the social impact of events (Andersson, Armbrecht and Lundberg, 2016). Use value comprises both the direct use of attending the event and the indirect use of festivities and extra experiences surrounding the event. Local residents that do not attend any events are, however, excluded from this analysis. Their assessments would be captured by the non-use value, and an inclusion of non-use value experienced by all local residents would give a more complete assessment of the welfare impact of events on the community.

These welfare and financial perspectives are important in assessing event portfolios, but not to the exclusion of other factors. Stakeholders with other goals and priorities (e.g., sports clubs, media, hotels etc.) could assess the importance of the events in the portfolio differently and according to their specific goals but still use the analysis of returns and risks illustrated herein.

Getz (2013: 154) suggested a grid analysis entitled "Managing an Event Tourism Portfolio" that is able to include several perspectives in a qualitative assessment. The model shows events arrayed in a matrix defined by a horizontal axis showing increasing costs and risk and a vertical axis signifying increasing value. The grid provides strategic advice for developing a strong portfolio of events. The logic behind this grid is similar to a financial portfolio analysis, and in addition it can be a strategic tool by showing how an event is positioned within the four named quadrants (see table 4). Applied to the four events in the Sunshine Coast portfolio, Caloundra Music Festival as well as Mooloolaba Triathlon would belong to the category "Hallmark Events" to "keep and develop". Noosa Longweekend is a "move or lower risk/cost" event in need of a more stable demand, while the Real Food Festival is a "grow them" event with promising future prospects.

PLEASE INSERT TABLE 4 HERE

Events appeal to different segments of the population. This is an important issue for a well-balanced portfolio in welfare terms, namely there should be events for most people in the community. The Sunshine Coast portfolio sample analysed in this study has two of the four events creating high intrinsic value for the local residents and the remaining two events creating high extrinsic value for the tourism industry and thus seems to be a well-balanced event portfolio in terms of welfare and financial goals.

The analysis of the event portfolio sample of the Sunshine Coast region is based on one specific year and it is therefore not possible to separate the systematic portfolio risk from the specific event risk. With a longer time-series it would be possible to identify the systematic event portfolio risk common to all events in the portfolio, such as a slump in consumption on a general level. It is not possible to avoid this risk by portfolio management. Specific risk is, however, the risk associated with a specific portfolio; diversification is an answer, and risk can be reduced by changing the composition of events in the event portfolio. In theory, new events should be included in the event portfolio if they improve the risk-return of the event portfolio, and the new event is closer to the efficiency frontier than the overall portfolio.

Limitations

There are certain limitations related to data used in this empirical study that should be rectified to enhance the analysis. Respondents only answered questions in relation to the "most recently visited event" and it was therefore not possible to analyse correlations between residents' preferences for different events in order to understand diversification and risk reduction in the portfolio. This might be achieved by asking a sample representing the local population to assess all events in the destination's event portfolio.

A sample representing all local residents would also make it possible to further develop the welfare assessment by eliciting non-use values, and positive as well as negative impacts of the events. A longer time-series of data for events in a portfolio would make it possible to assess the risk over time and also to differentiate systematic from specific risks. An analysis of risks in terms of standard deviation of a series of annual values would give a risk measure related to temporal volatility more similar to financial analysis. The risk measure used in this study relates to variation among visitors and visitor segments.

CONCLUSIONS

This paper has attempted to provide greater clarity and precision in the discourse on event portfolios, first by comparing two general perspectives that reflect extrinsic versus intrinsic approaches to value creation, and then by exploring the meaning and measurement of assets, risks and returns. Data from research in the Sunshine Coast of Australia have been re-examined to provide a possible approach to portfolio evaluation in which the concept of 'efficient frontier' is introduced.

When considering the risks and returns generated by events and portfolios of events, various stakeholder perspectives must be considered: both intrinsic values and extrinsic measures of performance can be employed. In our case, value to residents and to the tourism industry was considered, but there are other perspectives that can be taken. Tourist expenditure and willingness to pay measures were employed but these are not the only possible measures.

Future Research

A number of questions arise that researchers should examine. Should event portfolios be designed and managed to reduce risk and maximize long-term value, or to become self-sufficient? Should they always grow? Should weak or non-performing events, like financial assets, be terminated and replaced? These propositions arise mainly within an extrinsic-value orientation, such as tourism and place marketing.

Growth and value can be measured in a variety of ways, both as Return on Investment and as goal-attainment. In complex situations, stakeholders will have to seek common ground and agree upon goals and evaluation criteria - a mix of quantitative and qualitative criteria will then likely emerge.

The 'learning curve' should result in less uncertainty and risk. Currently, little is known about event portfolio impacts over time, and that means we cannot predict what effects the impacts of one event will have on others in the portfolio, and vice versa. The event portfolios will have to adapt to changing environmental conditions such as economic cycles, consumer trends and politics. Research is required on all of these issues.

The notion of a 'balanced' portfolio will be difficult to put into practice, as little is known about the complementarities and conflicts among various types of events. Many event development agencies are not interested in broad-based portfolios, being focused on sports and business events while often ignoring cultural celebrations and leaving entertainment to the private sector. Balance and diversity might take the following forms: events of different types for special-interest groups (high segmentation); size variations (small and local, versus large and international); ownership (public, not-for-profit, and private owners), and one-time versus permanent. It can be suggested that permanent events, as institutions, will generate the highest long-term value with the least cost and risk, but this is largely an unknown.

Practical Implications for Event Portfolio Managers

There are few if any people with this title, yet cities and destinations with growing event numbers and diversity realize they do have this function. Longer-term perspectives will have to be taken, and by implication cumulative impacts have to be evaluated. An appropriate starting point for managers and strategists is how assessments differ when single events are in focus compared to event portfolios. This comparison forces attention on how the portfolio itself is a much more complex entity to create and manage, suggesting that specific value measures and strategies are required.

There is little merit in creating and managing portfolios unless risk and return can be measured, so an initial requirement is to determine what will be measured and how, followed by its utilization within a policy context. Likely this will necessitate a multi-stakeholder process. Those professionals who conduct feasibility studies on bids or proposed events are in a position to extend their methods to event portfolios. Evaluators already have tools to apply to event portfolios.

Numerous cities and tourist destinations have a fractured approach to event-related policies. The work of developing and marketing events is usually divided among various agencies including those that bid on events, provide grants to arts or leisure, build venues and infrastructure, and regulate all aspects of event production. Event-development agencies are seldom involved in producing events. In this context it will be difficult to promote an integrated approach that leads to effective portfolio management. Integration may be further exasperated when the event interests of multiple event portfolio holders collide (e.g. local and state government bodies sponsoring an event through separate funding arrangements).

The state of event evaluation and impact assessment, including forecasting, is not that well developed (Brown et al, 2015). Economic impacts assessment predominates, while social and environmental impact methods and measures are in great need of development and standardization. How to make a triple-bottom-line approach work in practice, and how to define and achieve sustainable events and sustainable event portfolios is a major challenge (Andersson, Armbrecht and Lundberg, 2016). While research into individual event evaluation methodologies and practices is widespread (Getz and Andersson, 2008) no similar rigorous research has been undertaken into event portfolios.

The bulk of literature on event portfolios pertains to tourism, place marketing and other settings in which a return on investment is desired and quantitative measures are therefore stressed. It has also been argued that social and cultural agencies, and not-for-profit organisations, might prefer the intrinsic-value model. These are not mutually exclusive approaches to portfolio design and evaluation, as both must carefully articulate aims and evaluation criteria. Cost, risk, and performance are constants within any approach to portfolios. Therefore we argue for a mixed approach in all complex situations where multiple perspectives exist. Stakeholders will have to be brought together for identification of common goals and measures, and some degree of agreement on how events and portfolios are to be managed to achieve multiple aims.

Looking at even more challenging theoretical developments, the study of the power of event portfolios as agents of change and sustainability in cities and destinations is in its infancy. Not only is there little understanding of the synergies that can be cultivated, but longitudinal research that considers cumulative impacts has been absent. While the 'efficient frontier' offers a contribution, the research frontier is much greater in scope.

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The authors also note that subsequent to this research being undertaken the single local government area of Sunshine Coast has been divided into the two local government council areas of Sunshine Coast Council and Noosa Council.

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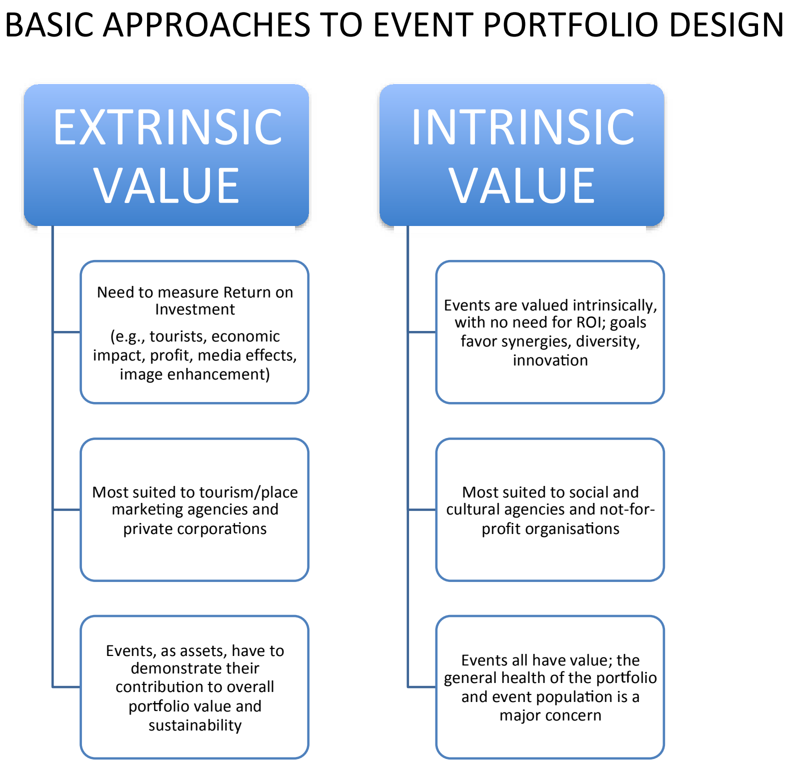

Figure 1: Intrinsic and extrinsic value approaches to event portfolio design

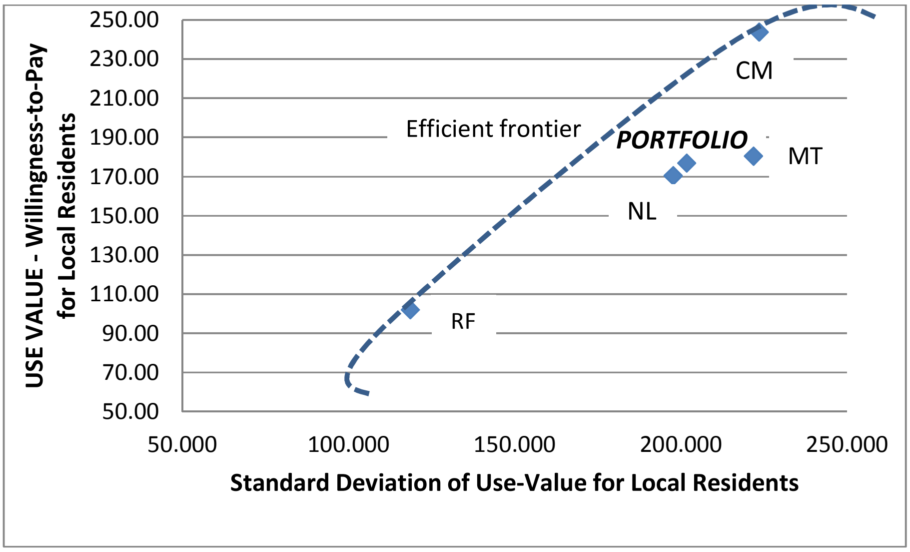

Figure 2: A risk-return diagram of the four events in the event portfolio in terms of welfare impact on local residents.

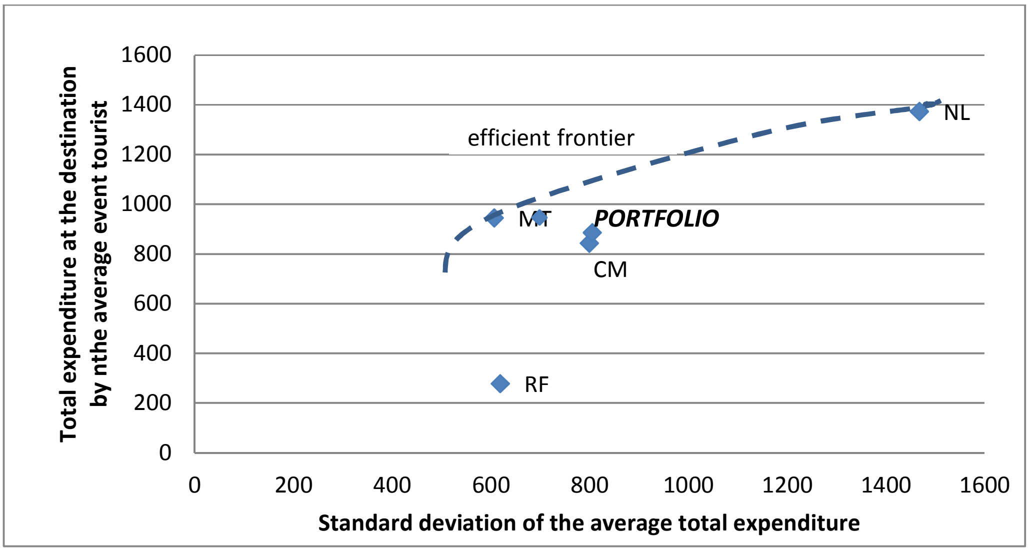

Figure 3: A risk-return diagram of the four events in the event portfolio in terms of economic impact.

Table 1: Most recently attended event in the Sunshine Coast region by respondents

Are you a resident of the Sunshine Coast?	Which of these events did you attend most recently?			
	Real Food Festival (Maleny)	Caloundra Music Festival (Caloundra)	Mooloolaba Triathlon (Mooloolaba)	Noosa Longweekend (Noosa)
Local residents	25%	30%	21%	24%
Event tourists	11%	21%	58%	10%

Table 2: Measures of value created by the events for local residents

Which event did you attend most recently?	**Real Food Festival (Maleny) (RF)**	**Caloundra Music Festival (CM)**	**Mooloolaba Triathlon (MT)**	**Noosa Long-weekend (NL)**	**Total**
Local residents	**Mean (N=189)**	**Mean (N=220)**	**Mean (N=158)**	**Mean (N=171)**	**Mean (N=738)**
Use-Value - WTP (Return)	**102,1**	**243,7**	**180,51**	**170,4**	**176,9**
Standard Deviation (Risk)	**118,7**	**223,6**	**221,8**	**197,7**	**201,8**
Total expenditure (EXP)	**80,83**	**215,51**	**171,24**	**141,38**	**154,61**
Consumer Surplus (CS=WTP-EXP)	**21,23**	**28,18**	**9,27**	**29,06**	**22,31**
”Value for Money - ROI” (CS/EXP)	**26%**	**13%**	**5%**	**21%**	**14%**

Table 3: Measures of expenditure created by event tourists for the local economy and tourism industry.

Which event did you attend most recently?	**Real Food Festival (Maleny) (RF)**	**Caloundra Music Festival (CM)**	**Mooloolaba Triathlon (MT)**	**Noosa Long-weekend (NL)**	**Total**
Event tourists	**Mean (N=38)**	**Mean (N=69)**	**Mean (N=191)**	**Mean (N=30)**	**Mean (N=328)**
Total expenditure by tourists (Return)	277,7	842,4	944,6	1373,0	885,0
Standard Deviation (Risk)	618,9	799,6	606,5	1468,2	805,2
Coefficient of variation (Risk/Return)	2,23	0,95	0,64	1,07	0,91

Table 4: "Managing an Event Tourism portfolio" - a grid analysis suggested by Getz (2013: 154)

Characteristics of each event relative to the event portfolio	**Low risk/cost**	**High risk/cost**
High Value	***"Hallmark events"*** Caloundra Music Festival & Mooloolaba Triathlon	***"Move them or lower risk/cost"*** Noosa Long weekend
Low Value	***"Grow them?"*** The Real Food Festival	***"Move or remove them"***