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## Tourism and its Contribution to Regional Development: Three Case Studies

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# Tourism and Local Economic Development: Three Case Studies

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Abstract:

Fast growing tourism industries have provided a focus for policymakers and academics concerned with regional and national economic development in periphery areas. General and, in the context of this paper, event tourism, comprise an important development platform for both periphery rural areas facing a bleak future due to depressed agriculture conditions, and for post-industrial and urban areas seeking new industries to replace traditional employment in manufacturing and slow growth service industries.

The promotion of tourism and leisure service industries as a regional growth driver, particularly in peripheral regions, may ignore certain underlying industry characteristics. Often tourism features low wages and unskilled labour, lessening income-related demand effects, and, further, militating against the development of a highly skilled workforce. Moreover, external ownership of large tourism concerns, together with an underdeveloped local tourism infrastructure can limit the contribution of new tourism activity to regional growth prospects.

This paper compares and contrasts the impacts of three very different cases of tourism development in Wales. The first case examines the sustainable visitor related impacts of Blaenavon Industrial Landscape, an exceptionally well-preserved industrial heritage site in the South Wales coalfield. The area has recently received World Heritage Site status, and is to undergo significant preservation works and development of visitor facilities in the next few years. The second case is the now well-established annual Brecon Jazz festival in mid-Wales. This internationally renowned event attracts 50,000 visitors per annum to a rural setting which faces increasing difficulties in traditional agricultural activities, and is searching for diversification opportunities. The third case examines the 1999 Rugby World Cup. The event was hailed as the world's fourth biggest sporting event and was hosted by Cardiff, the capital of Wales in the autumn of 1999.

The local economic effects (forecast in the case of Blaenavon) of each development are examined and compared within the framework of Input-Output tables for Wales, augmented by tourism sector data. The paper examines the very different patterns of visitor spend associated with each case activity, and how far the effects of the activities being promoted square with local economic development needs. Implications for tourism development policy are examined in the context of the research findings.

## **1.Introduction**

The recognition of tourism and leisure as a fast growing industry has led to its identification as a potential driver of regeneration in economically disadvantaged localities. Unfortunately the dynamics of the sector are not always well understood, such that developing a support policy focused upon tourism can be problematic. For example, data regarding the scale and nature of tourism activity and expenditure are often scarce, particularly at a sub-national level. Moreover, the development of targeted policies is further hindered by the lack of an accepted definition of tourism employment or activity, or indeed of a "tourist". Additional to these issues is the question as to how far tourist related sectors are actually dependent upon tourism-generated income. In developed economies, a significant portion of activity in selected tourism sectors may be supported by demand from local residents.

Ultimately, tourism is a far from a homogenous activity, adding further complexity to policy discussions. For example, in rural and peripheral areas the development of high value "green tourism" has been seen as a suitable mechanism for diversification, whilst urban areas strive to attract major global sporting and cultural events, and post-industrial economies focus upon the potential for industrial and cultural heritage to lever visitation. In a number of cases, tourism activity may not only be seasonal but may centre on a major event or activity lasting only days or weeks. Where tourism activity is "one off" or centred on an annual event, an objective assessment of economic impact in terms of local employment and incomes is difficult. Moreover, the identification of longer-term developmental impacts consequent upon such events is particularly challenging.

This paper examines the direct and indirect effects of different types of tourism-related activity in the Welsh economy. The paper examines these activities within an regional input-output framework, and demonstrates that this framework is useful in revealing the developmental potential of these activities. The cases analysed are the annual Brecon Jazz festival, the 1999 Rugby World Cup (Cardiff), and the construction of a visitor offer around the attainment of World Heritage Status by Blaenavon Industrial Landscape.

The next section outlines the issues surrounding the role of tourism activity in UK regional economic development. The third section describes the scale of tourism activity in Wales. The fourth section describes the analytical framework adopted – particularly the construction of tourism sectors within the Wales input-output framework. Following this, each of the three cases, is described briefly and estimates of consequent regional economic impact detailed. The final section concludes with some implications for local development policy.

## **2. Tourism Activity in UK Regional Economic Development – Some Issues**

Questions remain over the role of tourism in strengthening the longer term development prospects of UK regions. Whilst in more peripheral areas external ownership of capital, and hence low local retention of value added may be a particular problem, in more centralised/urban settings questions have been raised regarding the levels of earnings, skills development and casual and seasonal employment within tourist related industries. Set against these perceived problems is the very visible growth of leisure time and activity in the UK, coupled in some areas with a dearth of suitable development alternatives. This has ensured that tourism related development retains a policy focus. Indeed, the very flexible nature of tourism employment together with what are often moderate skill requirements may render it suitable for those who cannot obtain more formal employment. Thus, by employing formerly unemployed labour, or more fully utilising the underemployed, tourism may increase regional output or incomes whilst incurring low opportunity costs.

Furthermore, as seen above, tourism related activity might constitute a justifiable development path where alternatives are limited. For example, regions with specific geographies or workforce characteristics may find it difficult to attract more traditional forms of inward investment capital. However, where tourism can be identified as a primary economic driver this may cause hostility in areas formerly dependent upon agricultural (or indeed industrial) production (see Smith & Krannich, 1997 for a US example). It may also be the case that more urban areas that identify tourism and visitation as development drivers risk prioritising visitors at the expense of residents in pursuit of an often ill defined economic goal (Jones, 2001). This is particularly problematic if it is the case that the organisational structure of many major events serve to draw economic benefit away from the host region and towards organising bodies and commercial sponsors (Hiller, 1998).

In the light of the above issues it is important to examine how tourism related activity acts to support growth in the regional or local economy. In analysing these processes the opportunity costs of tourism-based development strategies can be better understood. Unfortunately, in undertaking such an examination there is a substantial data problem. Visitation impacts upon disparate sectors, rather than being an identifiable industry. Moreover, the lack of a national tourism satellite account for the UK makes the estimation of tourism-reliant employment difficult at a national and regional level. Also the extent of local supply linkages and the level of earnings will determine the extent to which tourism indirectly supports employment in other sectors, yet such industry descriptive information is typically unavailable. Despite such difficulties, an objective and measured approach in

estimating the benefits of a tourism development strategy is of great importance. Only then can the potential benefits of encouraging tourism and visitation be judged against alternative policy options, or weighed against potential costs

### 3. Tourism Activity in Wales

In spite of a dearth of accurate economic data on the topic, the outline statistics available, together with anecdotal evidence, reveal that the tourism sector is growing in economic significance in Wales. Current tourism-related expenditures in Wales were estimated at over £1bn per annum in 1998 (in an economy with a GDP of £30bn), and in 1999 an estimated 90,000 persons were employed in defined tourism related sectors (Annual Business Enquiry, 1999). Welsh tourism-related employment grew by 30% between 1995 and 1999, compared to 13% for employment as a whole (Table 1), again reinforcing its identification as a sector that offers good prospects. However, the table demonstrates disparities in the growth potentials of tourism sectors. The bulk of employment growth has occurred in restaurants and bars, with the accommodation sector actually shedding employment. Moreover, expenditure within Wales by UK based tourists grew by only 8.8% over this period, with expenditure growth by overseas visitors weak, casting doubt on the apparently strong industry growth. Unfortunately the sector-based definition of tourism employment is unhelpful: it may be that employment growth in restaurants and bars is driven more by changes in the levels and character of resident expenditure than by increased visitation or visitor expenditure. Thus, the potential of tourism as a development driver, rather than leisure more generally, may be overstated.

Sector	1995	1999	% Change
Hotels & Accommodation	18,500	17,600	-5%
Restaurants & Bars	31,500	49,700	57.8%
Travel Agencies	2,100	3,200	52.4%
Recreational Services	17,500	20,100	14.9%
Total Tourist related	69,600	90,600	30.1%
% Wales	7.4%	8.5%	-

Source: Annual Employment Survey/Annual Business Enquiry

The perception in Wales based on the above figures has been that available tourism resources are underemployed when compared to the similar (although more considerable) tourism offer in Scotland and Ireland. This conception has encouraged a policy focus upon the economic prospects of tourism in Wales, as can be evidenced by the inclusion of tourism

as part of the National Economic Development Strategy, the only sector so included (NAfW, 2000). In Wales, and more generally, public resources devoted to encouraging tourism must increasingly be justified vis-à-vis competing policy options such as the attraction of inward investment, or business support for SMEs. It is difficult for the atomised tourism industry to enumerate direct and indirect employment gains consequent on the investment of public resource as easily as can, for example, a single large industrial or service development: such problems are intensified when variables other than employment, for example the impact of per capita GDP, are evaluative measures or monitoring indicators.

There therefore exists a requirement for a methodological approach which can provide a reasonable estimate of the direct and indirect impacts of tourism activities, spending and strategies, if possible in terms of impacts additional to employment. Furthermore, the chosen approach must be of sufficient rigour to remain reliable given the undoubted data constraints that exist regarding the nature of economic activity dependent upon tourism and visitation. The next section outline how the Wales input-output framework was adapted to model the impacts of tourism activity.

#### **4. The Methodological Framework**

The outlined tourism planning and impact model described below is still being developed and revised. The Wales Tourist Board supported the project. More information can be obtained from the Welsh Economy Research Unit ([www.weru.org.uk](http://www.weru.org.uk)), or from the Wales Tourist Board ([www.wtbonline.gov.u.k](http://www.wtbonline.gov.u.k)).

The tourism model was constructed within the framework of the Welsh Input-Output tables for 1996. The main tables were developed as part of an on-going research project at the Welsh Economy Research Unit. Tables for the year 1996 detail trade flows between 67 separately defined sectors of the regional economy (see Hill and Roberts, 1996; Brand, Hill and Roberts, 1998). The tables are constructed using a combination of survey and non-survey techniques. The methodology used to construct the 1996 tables makes maximum use of existing and new survey data for Wales, reducing the reliance on UK-level information. With the development of the Welsh Input-Output Project, the survey content of the tables has increased as new primary research is incorporated within the tables, either from purpose-designed questionnaires, or from the results of other sector-specific studies. The Welsh Input-Output Tables have been used in a range of applications, from sector-specific studies through to policy evaluation and estimation of the impacts of infrastructure developments on the regional economy.

An Input-Output approach was adopted to estimate the economic consequences of the three case study developments. There were a number of benefits in adopting such an approach. Firstly, the Input-Output tables provided an excellent resource with which to estimate indirect impacts of economic activity across regional industries. Secondly, the use of existing tables enabled targeted data collection regarding the nature of tourism operators' activity, and tourists' expenditure in Wales with which to refine the appropriate sector estimates. Thirdly, and importantly, input-output frameworks have been used successfully for the analysis of tourist related economic activity in the past. Following the work of Archer (e.g. 1977), input-output tables have, for example, been utilised in the analysis of small area economies (Archer, & Fletcher, 1996); in assessing the local impacts of recreation at environmental sites, notably in the USA (Probst et al, 1998) and to examine the discrete impacts of different types of tourist activity (for example, Andrew 1997). Fourthly, when considering the regional case, the data requirements of other, more complex modelling approaches can be prohibitive.

The use of an input-output framework is not without problems. As has already been noted, tourism is a far from homogeneous activity in Wales. The reliance of Input-Output on an "average" production function for each industry sector is therefore limiting, and requires a considered approach to sector disaggregation. Also changes in demand for output are unlikely to have proportional consequences upon inputs in an industry where business is often a lifestyle choice, and the utilisation of labour is variable over time and space. The scarcity of data at the regional level may also be a problem. As has been noted, the lack of suitable information necessitates a survey of tourism providers to obtain data on business activities, purchasing and labour use patterns with which to construct the tourism sectors. In addition, limitations in the detail of expenditure data available may require further primary data gathering regarding tourist expenditure, or a reliance on other methods of disaggregating expenditure below the broad groups reported.

To construct tourism vectors within the Welsh input-output table framework, a postal questionnaire was sent to some 2,000 providers in Wales, and detailed interviews undertaken with a sub-sample of representative tourism businesses and organisations. The information obtained, covering purchasing patterns, labour use and financial indicators, was used to construct seven tourism sectors within a twenty-sector input-output table (for further information on the survey undertaken please see Wales Tourist Board, 2001).

	<b>Output (£m)</b>	<b>% Output attributable to tourism</b>	<b>Intermediate purchases (% non wage exp.)</b>	<b>Total Employment (Full time Equivalents)</b>	<b>Employ. Multiplier (Type II)</b>
Large hotels (10 plus employees)	333.9	55.0	31.2	12,000	1.49
Small/medium hotels	123.3	50.2	58.6	4,750	1.72
Bed & breakfast; guest houses	86.7	95.7	60.0	4,350	1.71
Self catering & holiday parks	46.4	100.0	34.4	2,000	1.51
Caravan and camping	49.2	100.0	42.9	1,455	1.59
Restaurants, bars etc	615.3	51.8	21.1	22,000	1.39
Tourist attractions & museums	125.7	52.5	51.9	4,120	1.65
Total	1380.5	58.6	32.2	50,675	1.51

Within the framework outlined, discrete expenditure vectors determine how differing changes in final demand impact across sectors: for example a £100m increase in consumer expenditure will have different impacts than a £100m increase in government spending. To accurately gauge the impact of a change in tourist expenditure it is therefore necessary to estimate a detailed industry breakdown of tourist expenditure, preferably distinguishable for different types of tourist. This is no small task when, for example in the UK expenditure is reported at only nine broad groups (UK Tourist Boards, 1999).

As part of the survey of tourism operators, estimates were obtained as to how much turnover was attributable to Welsh, UK and overseas tourists as opposed to resident consumers, or sales to business. Together with information gleaned from the Input-Output Tables for UK (Office for National Statistics, 1999), a twenty-sector expenditure vector was estimated for staying tourists and for day visitors. These two expenditure vectors were then apportioned by gross expenditure to provide for Welsh resident and non-Welsh resident estimates, enabling appropriate deduction from existing Welsh consumer spend across the twenty sectors.

Table 2 describes the extent of tourism activity in Wales. The gross output of the tourism-related sectors in 1998 is estimated as £1.4bn – restaurants and bars account for 44% of this total. In most of the sectors only a portion of this gross output is attributable to tourism. For example, the resident population supports around half of output in restaurants and bars. The tourism sectors differ in their local purchasing propensities. Small hotels, and guest houses purchases as much as 60% of their intermediate inputs in Wales – this proportion falls to 21% in the case of restaurants and bars. The estimated number of sector FTEs is 50,675, with nearly three-quarters of these in the restaurants and bars, and large hotels sectors. In summary, it is estimated that tourist demand directly supports over £800m of output in



Wales within tourism related sectors, and a further £600m in other sectors, most notably retail, but including transport, financial services and general recreation activities (including sport, cinema etc.). Indirect and induced impacts result in a total of £2.1bn of supported output, associated with 43,300 direct full time equivalent jobs, and 57,400 FTEs in total, this latter figure around 5.9% of total Welsh employment.

## **5. Applications: Three Case Studies**

Whilst the tourism model was primarily intended to evaluate the impact of broad policy instruments at a regional level, an input-output approach enables the effects of individual developments or events to be assessed, assuming such developments result in an identifiable change in final demand. Whilst the indirect impacts can only be estimated for the region as a whole, the approach can nevertheless provide useful policy guidance. Following are three case studies which utilise the model to estimate the impacts of tourist-related developments. In each case the context is briefly described, brief quantitative results are reported and the policy implications of the analysis are noted.

### *5.1. The Blaenavon Industrial Landscape*

In November 2000, an area at Blaenavon, within the Industrial South Wales valleys, was awarded UN World Heritage Status. The site is an outstanding representation of an early industrial revolution landscape (DCMS, 1999). The site includes an ironworks, early workers housing and a canal system, but the major attraction for visitation is the existing Big Pit coal-mining museum, providing an opportunity to visit an authentic underground coal-face. Substantial development of the cultural artefacts to enable increased visitation is hoped to provide an alternative development path for a small locality suffering the disappearance of traditional production industries, and which has been unable to attract substantial new industrial investment. Whilst the development envisages almost £20m of construction and renewal expenditure locally in the period to 2005, it is hoped that in the longer term the local economy can be sustained and diversified through both employment at the various heritage sites and through capturing off-site visitor expenditure. The future level and type of visitation was assessed with reference to existing market appraisals (L&R Leisure, 1999) amended to account for World Heritage Status and the wider redevelopment. Regional data provided estimates of gross expenditure per head for both day visitors and

staying visitors, which the model translated into changes in final demand. Brief results are provided in Table 3.

<b>Table 3 Potential for Sustained Employment Impacts – Blaenavon Industrial Landscape</b>					
	<b>Big Pit mining museum</b>	<b>Associated manufacturing units</b>	<b>Other Landscape Projects</b>	<b>Off-site Visitor Expenditure Impacts</b>	<b>All Employment</b>
<b>DIRECT EMPLOYMENT (FTE)</b>	<b>48</b>	<b>25</b>	<b>14</b>	<b>n/a</b>	<b>87</b>
<b>INDIRECTLY SUPPORTED EMPLOYMENT (FTE)</b>					
Agriculture & food	*			*	2
Manufacturing & Energy	*	**		*	5
Construction	*				2
Retail & Wholesale	**	**	*	***	15
Accommodation	*			***	9
Restaurants & Bars	*			***	8
Transport		*		*	2
Finance & Business	*	**	*	*	9
Recreation & Other		*	**	**	11
<b>TOTAL INDIRECT</b>	<b>14</b>	<b>14</b>	<b>5</b>	<b>31</b>	<b>64</b>
<b>TOTAL EMP. (FTE)</b>	<b>62</b>	<b>39</b>	<b>19</b>	<b>31</b>	<b>151</b>
<b>Employment Multiplier</b>	<b>1.29</b>	<b>1.57</b>	<b>1.35</b>	<b>n/a</b>	<b>-</b>

Notes:

1. \* Indicates the relative strength of employment impacts across broad sectors. Specific figures have not been provided, as they would imply an inappropriate level of accuracy.
2. Visitor expenditure impacts are those that occur throughout the region but outside named project sites as a result of tourist expenditure.
3. The WHS landscape includes associated manufacturing units in part intended to house SMEs in tourism and heritage related sectors.

Source: WERU (2001a)

The analysis estimated a total of almost £6m annual regional output directly and indirectly stimulated by increased visitation and other related expenditure, correlating to around 150 FTE jobs. Whilst half of this employment is directly supported within the Blaenavon locality, the remainder is supported indirectly and may be local or accrue further afield, depending upon the nature of supplier links, local labour market patterns and, crucially, the nature of off-site spending by visitors to Blaenavon Landscape. The Input Output approach indicated to which sectors indirect impacts are likely to accrue, notably retail and wholesale; recreation; accommodation; and finance & business. Currently, the retail and hospitality offer locally is extremely poor with little prospect of leveraging off-site spend, and the same is true of local services in general (Welsh Economy Research Unit, 2001a).

This analytical approach can inform a suite of recommendations for local policymakers, aimed at maximising local benefit. Whilst it may be intuitive that retail and hospitality sectors are likely to benefit from visitation, an estimate of the sums involved can determine

whether locally provided services are likely to be economically sustainable. Further, once key sectors are identified, decisions can be made as to how to progress the local offer, for example, through encouraging quality retail and accommodation. It may be that the provision of higher value products may be inappropriate for local residents with weak purchasing power, and the economic benefits must in this case be weighed against any costs to residents (Smith & Krannich, 1997).

### 5.2. Brecon Jazz

Brecon Jazz is a three-day cultural festival every August of some seventeen years standing in the heart of rural Wales. The festival, organised and run largely by local volunteers is of international repute attracting the top echelon of jazz performers. Financing for the event is provided through a mixture of ticket sales and sponsorship, with the overwhelming proportion of visitors from outside the area ensuring a large net expenditure effect on the locality: indeed of half of attendees are from outside Wales itself (Welsh Economy Research Unit, 2001b).

Details of visitor expenditure were gained from a visitor survey undertaken on the 2000 festival weekend. Expenditure on event tickets was discounted to avoid double counting the expenditure of the Brecon Jazz organisation itself. As can be seen from Table 4, impacts are substantial within the context of a small market town economy, amounting to almost £1m and 23 person-years of employment for the festival held in the year 2000, although a portion of these will accrue to the region more generally.

	<b>Output</b>	<b>Income</b>	<b>Employment (FTE)</b>
Agriculture and Food Processing	£36,000	£4,000	<1
Manufacturing/Construction	£74,000	£8,000	<1
Retail & Distribution	£139,000	£41,000	4
Accommodation	£158,000	£49,000	7
Restaurants & Bars	£113,000	£24,000	4
Transport etc.	£38,000	£9,000	<1
Financial & Professional Services	£215,000	£40,000	3
Recreation & Tourist Attractions	£39,000	£12,000	1
Public sector & Other services	£96,000	£31,000	3
<b>All Industries</b>	<b>£907,000</b>	<b>£217,000</b>	<b>23</b>
Multiplier (Total/Initial spend)	1.49	1.37	1.28

Source: WERU (2001b)

Whilst, unsurprisingly the retail sector, accommodation, and restaurants and bars benefit significantly, the largest portion of demand accrues to financial and professional services.

This is in large part due to the expenditure by "front line" operators on such services regionally, for example in terms of mortgages on business premises. This figure illustrates how Brecon Jazz contributes to business sustainability within the local tourism sector, albeit on a single weekend annually.

A concentration upon the results of quantitative modelling can draw attention away from the wider socio-economic impacts such events can have. For example, Brecon Jazz is largely volunteer run and these efforts, financially unreported, are not estimated in the modelling framework. However, the high degree of organisational skill necessary to host such a major event may result in local residents gaining transferable skills that would otherwise be difficult to obtain in a rural setting (Bristow, 2000). The nature of such processes is ill understood within an industry often criticised for its low demands on workplace skills.

Tourism is lauded as a potential development path for market towns and rural areas facing an uncertain future. However, the social costs of tourism are illustrated in Brecon, with the small town in many ways ill suited to hosting tens of thousands of festival-goers annually, similar to other rural tourism centres (Mordue, 1999). Further a minority of attendees have a history of some low level antisocial behaviour. Whilst the undertaking of an economic analysis does not in itself abrogate these costs, it does mean they can be judged in the context of an event which brings demonstrable economic benefits, and any judgement on the worth of such an event is thus better informed.

### *5.3. The 1999 Rugby World Cup, Cardiff*

The 1999 Rugby World Cup (RWC99) was the last major sporting event of the millennium, and one which attracted global interest and coverage. As a city of only 300,000 Cardiff "punched above its weight" in attracting such an event, albeit in collaboration with other cities in the UK, Ireland and France. The Wales Tourist Board estimated some 600,000 visits were made to games during the five weeks, with many more unable to obtain tickets (Wales Tourist Board, 2000). There has been a growing focus on the role that major sporting events can play in economic development through expenditure and recognition/exposure effects, and the event was seen very much in this light within Wales, as Cardiff strives to become an "European" capital. Moreover, in the wake of newly inaugurated devolved political arrangements, the hosting of the event was seen as a cultural statement by a revitalised nation, now prepared to participate on the world stage (Jones, 2001).

It was estimated that a gross expenditure of £56m, after leakages such as taxes and first round imports, boosted demand in the regional economy by an estimated £34m initially. Multiplier effects, through supplier linkages and induced income effects resulted in an further economic impact of £51m. This translated to around £12m of employment income, and 1,365 person years of employment (Table 5).

	<b>Output</b>	<b>Income</b>	<b>Employment (FTE person-years)</b>
Agriculture and Food Processing	£0.5	£0.1	10
Manufacturing/Construction	£6.2	£0.5	50
Retail & Distribution	£10.5	£3.0	285
Accommodation	£10.1	£2.8	390
Restaurants & Bars	£9.6	£2.0	340
Transport etc.	£2.2	£0.5	40
Financial & Professional Services	£6.5	£1.2	90
Recreation & Tourist Attractions	£4.2	£1.3	130
Public sector & Other services	£1.2	£0.4	30
<b>All Industries</b>	<b>£51.0</b>	<b>£11.8</b>	<b>1365</b>
Multiplier (Total/Initial spend)	1.5	1.4	1.3

Here again there were substantial impacts in accommodation, restaurants and bars and retail. However, these figures do not constitute a net additional impact upon the Welsh economy. The organisation of the split event meant that of the nine matches held in the Principality, the Welsh team were involved in four, and attendance at these largely consisted of Welsh residents, who indeed also attended other games. To the extent that these residents would not have otherwise spent money used for attendance at RWC99 on purchasing foreign goods and services, this portion of expenditure should be treated as a switch from alternative Welsh goods, rather than a net addition to demand, with predictably uncertain results. A reasonable estimate of net additional regional demand (or employment) as a result of RWC99 therefore requires far more data than an estimate of the impact of RWC99 which does not consider displacement. Perusal of impact studies associated with major sporting events reveals an incompleteness in dealing with displacement and opportunity cost: a criticism often levelled at the impact assessment process more generally. Furthermore, as already noted input-output analysis relies upon average regional production function for each industry: the staging of a unique event such as Rugby World Cup is unlikely to be analogous to an increase in demand for tourism product more generally, and commentators have noted the extent to which higher value activities are retained by event organisers at the expense of host regions (Jones, 2001).

It should be noted that while expenditure impacts are an important economic rationale for the hosting on major sport events, other factors are assumed to play a part. For example the effects of media exposure on the visitation and investment is often noted as a significant gain for the host region. This area is largely outside the scope of a quantitative impact assessment, be it input-output or otherwise, except insofar as return visitation by attendees can be measured. Indeed, data on how the behaviour of individuals is affected (if at all) by remote spectation of sporting or other major events are scarce, as there is not yet a widely accepted methodology for tracing such links. Until such time as a causal relationship is proved, the analysis of the economic effects of major events will remain focussed upon the expenditure benefits, often measured using input-output based methodologies.

## **6. Conclusions and Discussion**

A focus on discrete events and developments, using a quantitative methodology, illustrates the significant employment and other benefits that tourism activity can bring to a host locality. Moreover, results disaggregated by industrial sector can inform the policy process and aid the development of sophisticated policy instruments, whilst providing an estimate of potential economic gains (Parlett et al, 1995).

A bare quantitative analysis is, in itself, inadequate. This can be illustrated with reference to the proceeding case studies. For example, Blaenavon is unlikely to capture of a significant portion of off-site spending visitor by those visiting the cultural artefacts. An informed and contextualised analysis therefore suggests the development of quality hospitality and accommodation to lever greater benefit from assumed future visitation. In addition, Blaenavon is a deprived locality with few development options; indeed it is difficult to envisage an economic strategy based upon anything other than tourism and cultural heritage, which would be likely to succeed given current local economic conditions.

Brecon Jazz provides both a contrast and comparator to Blaenavon. It is also a small town facing the decline of traditional activity and turning to tourism for an answer. Here, however, the situation differs, with an already developed hospitality sector able to lever a large portion of expenditure locally. The analysis provided an estimate of impact which is reasonably transparent and can show both potential sponsors and local residents that as well as cultural significance, the event is of economic benefit. Moreover, this benefit can now be weighed against the social cost of hosting the event, together with other public costs such as policing.

Although an annual event lasting a single weekend is very different in nature to a large-scale museum and cultural development, the same technique of analysis can provide reasonable results in both cases. Similarly, input-output is of use in contextualising the impacts of a major one off event such as the Rugby World Cup hosted by a fast growing regional capital. Here, again, the locality is, in theory, well placed to trap the bulk of visitor expenditure on hospitality services, although in common with other major events there is a question as to how far economic benefit (including, for example, ticket revenue) accrues to event organisers rather than the host locality (Jones, 2001). Input-output frameworks can play a part in assessing the expenditure benefits of such events: indeed, should data allow, an estimate of economic costs due, for example, to the displacement of existing shoppers and visitors away from the host city during the event could be made. At the very least, a quantitative expenditure analysis can estimate the "baseline" of economic benefit which accrues to the locality, whilst also providing an indication of what gains might be had, for example if the host city could retain a higher portion of gate receipts; undertake higher value event-related activities; or encourage a higher instance of return visitation.

This paper has examined three, very different, tourist related activities within Wales. It has illustrated that a single approach can be of benefit to policymakers in these disparate situations, provided that numerical results are used to inform strategic recommendations that are intended to maximise the level of economic benefit to the host region or locality. Unfortunately such quantitative analyses are often viewed with scepticism, with some justification. Proponents of events and developments often misuse multiplier type analyses to exaggerate benefits, with the intention of quelling local opposition to developments: it is rare for an assessment to be undertaken by a disinterested party. Further, it is difficult within such analyses to fully account for social costs (such as congestion); economic costs due to displacement; or the opportunity cost of resources. Until the advent of an acceptable "holistic" approach that is not overly costly, Input Output may remain the best approach, albeit a partial one, to enumerating the impact of tourism activity upon the economic fabric of its host.

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