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The Social Value of Football Research Project for Supporters Direct

Working Paper 3

Do We Know the True Value of Football?
A review of methodologies to value public goods

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1 Introduction

Economic theory recognises that some of the costs and benefits from economic activities are not fully reflected in market prices. Costs and benefits which are not expressed in market prices are referred to as 'externalities'. An externality can be defined as the impact of an individual's actions on the well-being of other people not directly involved in the economic decision, where the impact is not expressed in market prices. Basically, the producers and consumers in a market either do not bear all of the costs or do not reap all of the benefits of the economic activity.

If producers do not bear all of the cost in production a *negative externality* occurs. So, for example, air pollution caused by the activity of a company may be experienced as a cost by local residents or by society as a whole, but since clean air does not figure in the costs of production, the company has no incentive to reduce its polluting activity.

When a producer does not bear all the benefit of producing a good a *positive externality* occurs. Imagine an individual who maintains an attractive front garden. It might be argued that the attractive garden provides benefits to other local residents in the form of well-being and even financial benefits in potential increased property values.

The staging of sporting events produces both negative externalities (hooliganism, litter, congestion, noise) and positive externalities (civic pride, social links).

In competitive markets, the existence of externalities mean that either too much or too little of the good is produced and consumed in terms of overall cost and benefit to society. Only when we better understand the true economic value of sport to society can the appropriate policy be developed to ensure that sport gives maximum benefits to society. Therefore, to determine the total economic value of sport and therefore measure the true social utility generated by sport, two steps are necessary:

1. define the externalities created by sport;

2. use the most appropriate methodology to measure the externalities,

In the following sections the various methodologies for valuing externalities are described. Each methodology is introduced along with the associated

advantages and disadvantages. Although many of these approaches were developed in response to environmental issues, more recently they have been applied to understanding the impacts of sporting events. Where possible reference is made to the latest research with respect to sport and sporting events.

2 Methodologies Overview

Economic analysis strives to compare all benefits of proposed actions to all of the costs, with a project said to pass the benefit-cost test if the sum of all the benefits is greater than the sum of all the costs. The issue of external benefits is related to that of *public goods* . Public goods are goods where it is difficult to exclude people from the benefits. Projects involving public goods are therefore seriously defective without money valuation of benefits to those who do not pay for the good.

Methods of valuation for public goods can broadly be classified into two categories, pecuniary and non-pecuniary. Pecuniary methods obtain a money estimation of these goods, while non-pecuniary methods use any relative numerical scale. See Figure 1

3 Revealed Willingness to Pay

The simplest form of pecuniary valuation is Revealed Willingness to Pay (WTP). When a public good has a market, the buyers disclose their WTP by purchasing the good at the price available. Methodologies available include :

- Market Price Method
- Productivity Method
- Hedonic Pricing Model
- Travel Cost Method

In the following sections each method is described in detail, and the associated advantages and issues considered.

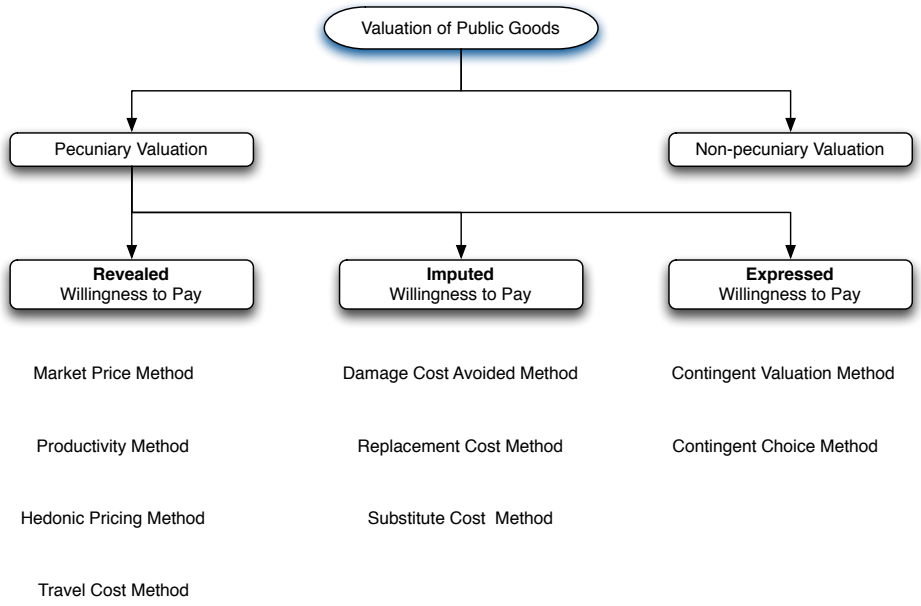

Figure 1: Valuation Methodologies

3.1 Market Price Method

The market price method estimates the economic value of products or services that are bought and sold in commercial markets. The market price method can be used to value changes in either the quantity or quality of a good or service. It uses standard economic techniques for measuring the economic benefits from marketed goods, based on both the quantity people purchase at different prices, and the quantity supplied at different prices.

The standard method for measuring the use value of resources traded in the marketplace is the estimation of consumer surplus and producer surplus using market price and quantity data. The total net economic benefit, or economic surplus, is the sum of consumer surplus and producer surplus.

If we consider supporters of a professional sports team, it is possible that some supporters attending matches would be prepared to pay more to see their team than current price of admission. The difference between the cost of entry and the price the supporter would be willing to pay is the consumer surplus.

3.1.1 Advantages of the Market Price Method

- The market price method reflects an individual's willingness to pay for costs and benefits of goods that are bought and sold in established markets. Thus, peoples values are likely to be well-defined.
- Price, quantity and cost data are relatively easy to obtain for established markets.
- The method uses observed data of actual consumer preferences.
- The method uses standard, accepted economic techniques.

3.1.2 Issues and Limitations of the Market Price Method

- The true economic value of goods or services may not be fully reflected in market transactions, due to market imperfections and/or policy failures. Sport captures the use value via attendance and also television audiences. The Market Price Method fails to account for those individuals who benefit from the staging of a sporting event by reading about it or from civic and national pride.
- Seasonal variations and other effects on price must be considered. In the case of professional sport a key determinant of attendance is the success of the team
- The method cannot be easily used to measure the value of larger scale changes that are likely to affect the supply of or demand for a good or service.

3.2 Productivity Method

The productivity method, also referred to as the net factor income or derived value method, is used to estimate the economic value of ecosystem products or services that contribute to the production of commercially marketed goods. It is applied in cases where the products or services of an ecosystem are used, along with other inputs, to produce a marketed good.

An example from environmental economics is how water quality affects the productivity of irrigated agricultural crops, or the costs of purifying municipal drinking water. Thus, the economic benefits of improved water quality can be measured by the increased revenues from greater agricultural productivity, or the decreased costs of providing clean drinking water.

(Humphreys & Coates 2002) co-authored a study in 2002 that found cities where the team wins a Super Bowl experience a gain in real per capita income of $140 the following year. Humphreys said he believes basking in the glow of a Super Bowl win "somehow makes workers more productive."

3.2.1 Advantages of the Productivity Method

- The methodology is straight forward to implement and relatively easy to understand
- Data requirements are limited, and the relevant data may be readily available, so the method can be relatively inexpensive to apply.

3.2.2 Issues and Limitations of the Productivity Method

- The method is limited to valuing those resources that can be used as inputs in production of marketed goods. With respect to sport it might be that productivity increases as a function of participation in sport or the success of the local team. Building on (Humphreys & Coates 2002), (Davis & End 2008) report that a successful NFL team can lift the per capita personal income of people living in that city by about $100 a year and suggest one reason is the success makes people happier and thus productivity. The study did not find similar results for both basketball and baseball.
- Information is needed on the scientific relationships between actions to improve quality or quantity of the resource and the actual outcomes of those actions. In some cases, these relationships may not be well known or understood. In contrast to both (Humphreys & Coates 2002) and (Davis & End 2008), (Matheson 2005) uses regression to show that winning the Super Bowl has little, if any, economic effect on the victorious team's hometown.

3.3 Hedonic Pricing Method

The hedonic pricing method is used to estimate economic values for ecosystem or environmental services that directly affect market prices. It is most commonly applied to variations in housing prices that reflect the value of local environmental attributes.

It can be used to estimate economic benefits or costs associated with:

- environmental quality, including air pollution, water pollution, or noise
- environmental amenities, such as aesthetic views or proximity to recreational sites

The basic premise of the hedonic pricing method is that the price of a marketed good is related to its characteristics, or the services it provides. For example, the price of a car reflects the characteristics of that cartransportation, comfort, style, luxury, fuel economy, etc. Therefore, we can value the individual characteristics of a car or other good by looking at how the price people are willing to pay for it changes when the characteristics change. The hedonic pricing method is most often used to value amenities that affect the price of residential properties, such as parks and schools.

Despite many of the modern football stadia being located on out of town sites, many old football stadia are still located in areas of housing. It is conceivable that some people might be willing to pay to live close to a stadium, whilst others might see the close proximity of the stadium and the associated issues on a match day as a disadvantage. The hedonic pricing model could be used to determnine the value of the stadium by looking at variations in house prices.

3.3.1 Advantages of the Hedonic Pricing Method

- The methods main strength is that it can be used to estimate values based on actual choices.
- Property markets are relatively efficient in responding to information, so can be good indications of value.
- Property records are typically very reliable.
- Data on property sales and characteristics are readily available through many sources, and can be related to other secondary data sources to obtain descriptive variables for the analysis.

- The method is versatile, and can be adapted to consider several possible interactions between market goods and environmental quality.

3.3.2 Issues and Limitations

- The scope of environmental benefits that can be measured is limited to things that are related to housing prices.
- The method will only capture peoples willingness to pay for perceived differences in environmental attributes, and their direct consequences. Thus, if people arent aware of the linkages between the environmental attribute and benefits to them or their property, the value will not be reflected in home prices.
- The method assumes that people have the opportunity to select the combination of features they prefer, given their income. However, the housing market may be affected by outside influences, like taxes, interest rates, or other factors.
- The method is relatively complex to implement and interpret, requiring a high degree of statistical expertise.
- The results depend heavily on model specification.
- The time and expense to carry out an application depends on the availability and accessibility of data.

3.4 Travel Cost Method

Travel cost method of economic valuation uses the cost of time and travel to define the value people place on something in the absence of a market price, by observing actual human behaviour. Travel cost analysis is a revealed preference methodology applied to determining recreational demand such as parks and beaches, heritage sites, and recreational activities including fishing and hunting.

The methodology aims to calculate willingness to pay by sampling visitor data using he time and travel cost expense incurred as a proxy for the price of access to the site. Both the average distance travelled and the average travel cost to the site under study are determined to create a Visit Rate Curve. The Visit Rate Curve can then be used to obtain estimates for

the number of visitors at a given cost to travel to the amenity. A demand curve is then derived by regressing the number of visitors against the cost. The area under the demand curve is the willingness to pay analogous to any marketed good based on quantity demanded at different prices.

3.4.1 Advantages of the Travel Cost Method

- The travel cost method closely mirrors conventional empirical techniques to estimate economic values based on market prices.
- The method is based on actual behaviour i.e. what people actually do rather than stated willingness to pay from a hypothetical situation e.g. Contingent Valuation Method.
- The method is relatively inexpensive to apply through on-site surveys providing large sample sizes and high response rates as visitors tend to be interested in participating.
- The results are relatively easy to interpret and explain.

3.4.2 Limitations of the Time Travel Cost Methods

- The travel cost method assumes that people perceive and respond to changes in travel costs the same way that they would respond to changes in admission price.
- The most simple models assume that individuals take a trip for a single purpose to visit a specific recreational site. Thus, if a trip has more than one purpose, the value of the site may be overestimated. It can be difficult to apportion the travel costs among the various purposes.
- Defining and measuring the opportunity cost of time, or the value of time spent travelling, can be problematic. Because the time spent travelling could have been used in other ways, it has an "opportunity cost." This should be added to the travel cost, or the value of the site will be underestimated. However, there is no strong consensus on the appropriate measurethe persons wage rate, or some fraction of the wage rateand the value chosen can have a large effect on benefit estimates. In addition, if people enjoy the travel itself, then travel time becomes a benefit, not a cost, and the value of the site will be overestimated.

- The availability of substitute sites will affect values. For example, if two people travel the same distance, they are assumed to have the same value. However, if one person has several substitutes available but travels to this site because it is preferred, this persons value is actually higher. Some of the more complicated models account for the availability of substitutes.

- Those who value certain sites may choose to live nearby. If this is the case, they will have low travel costs, but high values for the site that are not captured by the method.

- Interviewing visitors on site can introduce sampling biases to the analysis. The Time Travel Cost method only measures use value, ignoring non use value. Therefore sites that have characteristics that are valued by non users will be underestimated.

- In order to estimate the demand function, there needs to be enough difference between distances travelled to affect travel costs and for differences in travel costs to affect the number of trips made. Thus, it is not well suited for sites near major population centers where many visitations may be from "origin zones" that are quite close to one another.

- As in all statistical methods, certain statistical problems can affect the results. These include choice of the functional form used to estimate the demand curve, choice of the estimating method, and choice of variables included in the model.

- The travel cost method is limited in its scope of application because it requires user participation. It cannot be used to assign values to on-site environmental features and functions that users of the site do not find valuable.

4 Imputed Willingness to Pay

Public goods can also estimate consumer's WTP by measuring the cost of actions they are willing to take to avoid the eventuality that the good were discontinued. Three closely related methodologies are proposed to measure Imputed Willingness to Pay:

- Damage Cost Avoided Method

- Replacement Cost Method
- Substitute Cost Method

Such techniques are based on the assumption that the costs of avoiding damage, replacement costs or supplying a suitable substitute good or services is at least equal to the value of the good being studied. Unlike the methods discussed so far, these methods do not provide a value based on individuals willingness to pay. As such these methodologies are best applied in circumstances where damage avoidance or replacement costs have actually been made such as environmental economics. There application to recreation and professional sport is therefore limited as discussed below.

4.1 Damage Cost Avoided Method

The damage cost method is often used in environmental economics using the potential cost avoided from damage as a proxy for the value of an amenity or action.

The damage cost avoided method is of limited use when valuing recreation and sport. Unlike in environmental economics, individuals do not bear costs of protecting against a future event such as flooding.

4.2 Replacement Cost Method

The replacement cost method is used to determine the cost of replacing a good or a service with another that performs the same task. Although this has been used in environmental economics it is difficult to see the applicability to professional sport.

4.3 Substitute Cost Method

The premise of the substitute cost method os that a substitute can be found for the good or service under study and a cost for the substitute can be determined. In order for the valuation to be valid the substitute must be equal to or be greater than that of its predecessor.

5 Expressed Willingness To Pay

Many public goods, however, have no market in which they are traded. This creates the difficulty of 'revealing' an individual's WTP. Nor is it always

possible to 'impute' WTP by the threat of loss or replacing the good. A third group of methodologies deals with surveys designed to make people face an artificial scenario in which they are directly asked their WTP given the hypothetical situation. The data from the survey a person's WTP can be estimated. Two methods are used :

- Contingent Valuation Method
- Contingent Choice Method

5.1 Contingent Valuation Method (CVM)

For at least 30 years economists have recognised the possibility that individuals who have and may never intend making active use of an amenity might derive satisfaction from its existence alone. This concept has come to be known as 'existence value' and forms the major part of what is defined as 'non-use' or 'passive-use' value.

Widely used in environmental economics, Contingent Valuation Method (CVM) is a survey based methodology which uses a carefully designed and administered questionnaire to directly elicit an individuals passive or non-use value for entities where no direct market transactions exist. Examples of Contingent Valuation (CV) techniques include valuing beaches, rivers and even the value placed on the existence of birds, and more recently sport. Despite the criticisms of CVM, which will be described in detail later, according to (Bonnieux & Desaigues 1998) more than 1500 CVM studies have been carried out across 40 countries over 30 years allowing economists to improve the method.

CV studies provide respondents with information about a hypothetical situation. This usually outlines a situation where something that currently exists is either under threat or is potentially going to be damaged when compared with current situation. Questions are then posed to allow the respondent to state their preference for contributing to the preventing the loss or keeping the status quo with respect to the amenity. This may take the form of an open ended question in which the respondent is asked what the maximum amount is they would be willing to pay for the suggested amenity. Alternatively the CV survey may take the form of a hypothetical referendum where the respondents are told how much each would have to pay if the motion was passed. The question posed asks for a simple 'yes/no'

vote in support of the motion.

In 1986 the importance of the efficacy of measuring passive-use took on a new dimension. The Comprehensive Environmental Response, Compensation, and Liability Act, in the US, listed passive-use values amongst the losses which trustees could seek to recover in the event of natural resource damage. It was not long before the legislation was used and the CVM faced its first major test in a real life situation. On March 23rd, 1989, the Exxon Valdez, an oil tanker heading for California, struck Bligh Reef off the coast of Alaska spilling an estimated 11 million gallons of crude oil. The oil spill caused one of the largest natural disasters to date in a region that is a natural habitat for many forms of aquatic life. CV techniques were used to assess and value the damage caused [need references and outcomes].

The NOAA Report (Kenneth Arrow 1993) notes a dramatic rise in the 1990's in the use of the CV technique in both academic papers and presentations in response to a growing interest at an international level in environmental policies and problems. The increased interest in, and employment of passive-use values in damage assessment cases has placed CV techniques under increasing scrutiny and in 2001 a panel of eminent experts convened to critically review CV practices. The Contingent Valuation Method has been the subject of controversy since being used. In the next section the main criticisms of CVM outlined in the NOAA report are outlined.

5.1.1 Criticisms of CVM

Central to the CVM debate is just how reliable individuals responses are when faced with a hypothetical situation. Conjoint analysis and other methods of eliciting preference and Willingness To Pay often relate to a marketed good. Respondees are asked a series of questions, in the case of conjoint analysis asked to rank their preferences at given prices. Using statistical techniques it is possible identify the combinations of attributes and prices to fairly accurately reflect what individuals will pay for and at what price. Once the product is available on the market further work is possible to find the accuracy of the initial estimates derived from the conjoint analysis. This is in stark contrast to a CV study where a hypothetical scenario is central to the questions being asked: "Tigers are in danger of becoming extinct", "What if ..."

A number of studies have attempted and experimented with comparing theoretical willingness to pay derived from a CV survey to actual response when presented with an opportunity to contribute. These surveys note two points of interest. Firstly, that both response rates and expressed willingness to pay via the survey mechanism was greater than *immediate* or *real* willingness to pay. What the experiments did find however was that there was only a small difference in size of contribution between hypothetical and actual from those respondees who said that they were willing to contribute.

Other experiments have been conducted using less direct methods to test the "reality" of CV results by estimating willingness to pay for ordinary market goods and then compare the results with actual purchasing behaviour.

The NOAA's literature review of available CV studies concludes with the following six concerns with CV findings to the date of publication, namely:

1. the contingent valuation method can produce results that appear to be inconsistent with assumptions of rational choice
2. responses to CV surveys seem implausibly large in view of the many programs for which individuals might be asked to contribute. Surveys and respondents fail to properly take into account substitutes for the resource, good in question
3. relatively few previous applications of the CV method have reminded respondents **forcefully** of the budget constraints under which we all must operate
4. it is difficult for the CV survey to provide adequate information regarding the scenario for which values are being elicited and it can be ensured that the respondent has absorbed and accepted this information as a basis for their responses
5. it is difficult to determine the "extent of the market" by generating aggregate estimates in the CV survey
6. respondents may be expressing "warm glow" or feelings of public spiritedness of giving rather than an *actual* willingness to pay for the program in question

5.2 Contingent Choice Method (CCM)

CCM (also known as conjoint analysis) mirrors CVM in all ways except in the structuring of the questions posed to respondents. Developed in the fields of marketing and psychology the surveys are designed to measure an individuals preference for different characteristics or attributes of a good or service. The survey is based on asking the individuals their WTP, contingent on a specified hypothetical scenario, on a range of combinations of alternatives.

Rather than directly asking an individual to place a pecuniary value on the good, values are inferred by making choices and trade offs between the varying attributes. A WTP for each attribute can be inferred by the various responses.

Several formats of CCM exist :

1. Contingent Ranking - respondents are asked to compare and rank alternatives with varying characteristics and associated costs.
2. Discrete Choice - respondents are simultaneously shown a number of alternatives, their characteristics and associated costs and asked to select their preferred option
3. Paired Ranking - respondents compare two alternate scenarios, rating them with respect to strength of preference

CCM data is statistically analysed using discrete choice statistical techniques to determine the relative values for the different attributes or characteristics. As price is one of the characteristics tested, pecuniary values can be calculated and hence a WTP can be derived.

Because the respondent is not asked about their WTP directly, CCM employs 'Discrete Choice Analysis' which includes a variety of experimental design techniques, data collection procedures and statistical procedures.

5.2.1 Issues of CCM

The methodology of tradeoffs used in CCM causes several limitations. Like CVM, if the topic is unfamiliar to the respondents they may find it difficult to evaluate and information bias may ensue. The decision making process

of individuals also comes under scrutiny. Unlike CVM, where a direct question, usually binary in nature is asked, CCM respondents may simplify if choices offered are complicated. The complexity of surveys grow at least quadratically depending on the number of characteristics tested. The more attributes tested the larger the number of tradeoff questions needed, leading to a risk of loss of interest or psychological inconsistency.

6 Administering a CV Survey: Bury FC Case Study

To understand if professional sports clubs are valued by people who never or very occasional attend matches, a suitable methodology is needed to capture the value of non-use. Unlike the other methodologies described which measure use value alone, CVM studies importantly capture not only use value but non-use value as well.

In the the next sections, the design, administration and costs of such surveys are described.

6.1 Design Principles

The design of the survey and construction not only of the questions but also the how the survey is presented impacts the success of surveys. (Dillman 2007) outlines the key issues to consider when designing mail surveys and suggests the Tailored Design Method (TDM) to increase the chances of success. In the following section we discuss the core elements of TDM and if and how these were implemented in the mail survey to residents of Bury.

- *Content of cover letters and personalisation.* Dillman's research suggests that the quality of the stationary and the amount of personalisation i.e. hand written signatures increase the chances of a response. In this study a cover letter was designed clearly displaying the University of Salford's logo, a contact name, address, phone number and email address. The name of the recipient was hand written and each cover letter personally signed.

- *Appearance of envelopes.* Dillman argues that the use of a real stamp as opposed to a franked envelope conveys a value and again has been found to increase response rates. Dillman also suggests the use of first class mail. For this study real stamps were used, however second

class stamps were used on both survey and return address envelopes to reduce the overall cost of the survey.

- *Easy to understand*, user friendly layout with interesting questions. The survey was split into four sections, namely Introduction (2 questions), About You (12 questions), Local Professional Sport (11 questions) and CVM Scenario (7 questions), concluding with a Thank You.

- *Incentives.* Dillman identifies the use of small incentives to stimulate replies. This could take the form of a small cash offering to including a pen with the survey. For the purposes of this study no incentives were offered to limit the overall cost of administering the survey. In the case study to keep costs to a minimum it was decided to offer no incentive to stimulate replies.

- *Pre notice and follow up.* TDM suggests that rather than just sending the survey that the prospective respondent is contacted and told that they *will* receive a survey in the coming weeks. After the survey has been sent, TDM suggests a follow up postcard to jog the memory of any recipients yet to reply. This once again has been found to stimulate responses, however the trade off with cost prohibited this being used in this study.

Distribution of the survey was split into three for both time and logistical reasons between May and the beginning of June 2008. All results were received by early July 2008.

6.2 The Contingent Scenario

A key dimension for using CVM is the credibility of the hypothetical scenario. In the study of professional sport and specifically professional football, Bury FC recent history provides an excellent case. Bury FC recently faced the very real recent threat of extinction or at the very least the football club losing professional status by dropping out of the Football League for the first time in the club's history, and continues to struggle financial to date. For the hypothetical situation, respondents were presented with the following scenario:

Bury FC have struggled for a number of years to compete in the lower reaches of the Football League. The current ownership of the club might not have enough money to support a payroll for a team that can maintain Bury

FC's place in the Football League. If more funding is not found, Bury FC could lose its place in the Football League with relegation to the Conference.

Some argue that football clubs play an important part in the community, as well as promoting the town of Bury from the media coverage of matches each week when the name Bury is read out on the football results bringing the name Bury into households nationally and potentially, internationally. One suggestion is that taxpayers' money is used to ensure Bury FC's league status and to better compete in the Football League. A challenge of eliciting individuals WTP in a CVM study is the use of a meaningful payment vehicle to reduce strategic behaviour and thereby obtaining a more realistic valuation from the respondent. If a respondent believes that payment in unlikely to be enforced there is a risk over overstating their contribution and bias may be introduced into the study. The vast majority households in Bury are responsible for paying Council Tax to the Metropolitan Borough of Bury and therefore this provides the ideal payment mechanism for the CV study.

Council Tax is readily and commonly understood by respondents, removes questions of enforcement and therefore reduces bias due to strategic behaviour and over valuation as all households would be required to pay. There is, however, a potential downside of using Council Tax in the scenario. Tax is always a controversial topic and asking respondents to consider a situation in which a tax increase is needed might increase the chance of protest behaviour, whereby the respondent simply answers in protest to the mechanics of the tax rather than considering the extent of the value of the existence of the professional sports team to the community it serves.

In summary, there are two key issues to consider in the application of a CV study to measure the value of football:

- The first is that it requires that the hypothetical scenario presented must be believable. In the case of Bury the chances of the club losing its professional status by relegation from the Football Leagues was a constant threat over a number of recent seasons.

- The payment mechanism used must be readily understood and be enforceable to prevent overstating of individuals willingness to pay.

In the next section the associated costs of administering a CV study by mail are highlighted.

6.3 CV Studies: Indicative Costs

For the Bury case study 1200 households in the Bury area were sampled. Previous surveys suggest response rates to vary between 10 and 20%, therefore the number of replies was expected to be between 120 and 240. The costs of administering a CV study can be attributed to:

- Sampled Data. The use of a professional sampling company can save time in compiling an unbiased dataset for use in the study. The names and addresses of 1200 individuals who pay their council tax to the Metropolitan Borough of Bury were purchased from `http://www.tracesmart.co.uk`. Tracesmart includes the official edited Electoral Roll database covering the past 5 years. It was hoped that use of electoral role data would improve the response rate of the survey as the data provided both an address and a name in line with design principles suggested. The sample cost £280.

- Stationary. Each survey consisted of two envelopes (one for posting and one in which to return the response). Each envelope had a printed address label attached. The survey consisted of 2 pages of questions on both sides as well as a covering letter. The total cost of stationary and photocopying was in the region of £600.

- Postage. Each survey required two stamps: one to send and one for the reply to increase the chances of a response. Second class postage was used to minimise the cost. The total cost of postage was £650.

- Time. Arguably the largest cost was time to organise the material, add stamps and address labels and pack each envelope to the specified design. The time required to prepare 1200 surveys should not be underestimated!

The total cost for the survey, excluding time, was in the region of £1500.

6.4 Bury FC Case Study: The Results

The key findings of the survey include:

- The survey received 180 responses;

- 25 of the responses where considered to be spoiled due to incomplete information;

- the cost of each response to be £9.70.

7 Conclusions

Most studies that try to identify the value of professional sports teams focus on use value failing to recognise the potential benefits to people who never interact with the club. This could significantly under value the presence of a professional sports team and have implications on policy in sport.

The Bury FC case study is believed to be the first such use of CVM for a professional sports team in Europe. Now that the research has demonstrated significant non use value, it is hoped that by carrying out new studies on other clubs, the benefits of professional sport to the communities they serve will be better understood.

Despite the criticisms, unlike other methodologies, a properly conducted CV survey has the power to elicit both use and non use value leading to results that better reflect the benefits professional sport to a community.

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