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Estimating the Economic Benefits Associated with a Televised Event – The Case of the Eurovision Song Contest

by

Aliza Fleischer and Daniel Felsenstein

## THE CENTER FOR AGRICULTURAL ECONOMIC RESEARCH P.O Box 12, Rehovot, Israel

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#### Aliza Fleischer<sup>\*</sup>

Department of Agricultural Economics and Management, Hebrew University of Jerusalem P.O. Box 12, Rehovot 76100, ISRAEL email: fleische@agri.huji.ac.il

> Daniel Felsenstein Department of Geography Hebrew University of Jerusalem Mount Scopus, Jerusalem 91900, ISRAEL email: msdfels@mscc.huji.ac.il

\* corresponding author

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# Estimating the Economic Benefits Associated with a Televised Event – The Case of the Eurovision Song Contest

#### Abstract

An empirical analysis of the economic impacts of the Eurovision Song Contest held in Israel in 1999, is presented. Three forms of economic benefits are identified and estimated: producer revenues generated by the expenditures of the delegates and visitors to the event, consumer benefits derived from the competition as a (televised) public good and government benefits generated by the promotional effect of the event. These benefits are combined in a benefit-cost framework. The results show moderate social justification for public support of televised events such as this. The implications of high-profile, broadcast events as an economic growth strategy, are discussed.

**Key Words**: Televised Events, Eurovision Song Contest, Willingness to Pay, Benefit-Cost Analysis JEL Classification:Z10, H50

#### 1. Introduction

The Eurovision Song Contest (ESC) is Europe's premier popular music song competition. It is an annual event held at revolving locations – usually hosted by the country whose representative won the contest in the previous year. While the event is conducted live in front of an invited audience, its main exposure is through the massive television coverage that it generates. As a co-production of the host countries' national broadcasting authority and the European Broadcasting Union (EBU), it reaches audiences in all participating countries (twenty three) and in many other countries who purchase program packages from the EBU. In general, it is estimated that the contest is screened live to 80 million viewers.

Hosting the ESC demands a significant injection of public funds in order to provide a suitable facility and broadcasting infrastructure demanded by the EBU. While some support for staging the contest is provided by the parent organization, the balance has to be found by the broadcasting authority of the host nation who is ultimately responsible for producing the event.

The ESC displays many of the features of a public good. It receives considerable public support and individuals do not pay directly for consuming the good it produces. The cultural product produced by the festival is readily available on national television and does not require any extra payment on the part of the consumer. It meets the criteria of non-rivalry in consumption (one individual's consumption does not deprive another) and non-exclusion in provision (all have equal access to the good)<sup>1</sup>.

In estimating the economic benefits associated with this public investment, we need to account for three forms of benefits that arise from hosting this event. The first is benefit to local producers generated by the delegations and visiting journalists who attend the event (producer surplus). This is the most obvious outcome associated with any cultural, sporting or tourist event. These expenditures generate producer revenues and subtracting the marginal cost of providing these goods and services gives an indication of the producer surplus<sup>2</sup>.

The second impact is the utility generated by the broadcast event, for the local viewer. (i.e. the consumer surplus). A distinctive feature of the ESC is its wide television coverage. Other televised entertainment goods such as sport events or concerts additionally attract large live audiences who purchase tickets to watch the event. Their consumer utility is revealed in the ticket price they pay for the event. In contrast, the utility derived from the ESC is not observable through the price structure as tickets are not sold for the live performance. Thus some preference schedule based on willingness-to-pay of viewers needs to be estimated in order to estimate the benefits derived from the ESC as a public good.

Finally, the ESC also generates benefits as a promotional service for the host country (government surplus). The massive television coverage of the event offers exposure for the promoting country through short image clips screened between the songs. The benefits of this exposure are much more indirect and are realized through increased visitors and total tourism receipts to the host country in the medium to long term.

This paper attempts to estimate these three benefits and combine them, along with the costs of producing the ESC, in a benefit-cost framework. We present the methods used for capturing the various benefits derived from hosting the ESC. Using the case of the contest that was held in Israel in 1999, we present empirical estimates of the benefits and costs from staging this event, to the national economy (producers, consumers and government).

Aside from the novelty of the context of the case study itself, this paper makes several other contributions. Its distinctiveness lies in attempting to combine all the benefits in a single evaluative framework instead of dealing with each in a piecemeal fashion and in including the estimation of the benefits arising from exposure, that are generally overlooked in the literature.

#### 2. Valuing the Benefits of Televised Events

The Eurovision song contest is something of an idiosyncratic event. It attracts intense interest and exposure over a very short period solely due to televised coverage. It is

thus a (popular) cultural good produced by television and offered to an increasingly global market, beyond the confines of the competing countries. In common with other cultural and sporting spectacles it is a media-generated happening but in contrast to them, its' economic impacts are rather different. It lacks any of the large infrastructure investments that go with sporting events such as the Olympics (Foley 1991, Madden and Crowe 1998) and has little of the substantial visitor expenditure that provides much of the economic injection that accompanies festivals and cultural events (Johnson 1996, Scottish Tourist Board 1992). Rather, its singular features are the short-term and intense nature of its media-generated exposure. It is an annual, one-evening, competitive event, held in an enclosed arena or concert hall and not generally open to the public. In this respect it has much in common with other popular sporting and cultural spectacles that are held regularly in front of select audiences and with intense media interest, such as the Oscar awards, the Miss Universe Beauty Pageant and the World Heavyweight Boxing Championships.

While economic impact analyses of cultural and entertainment events acknowledge the existence of economic benefits arising from exposure, publicity and promotion, very little work has been done in the quantitative estimation of these effects. Most studies prefer to concentrate on the economic impacts of those areas more readily quantifiable such as investments and expenditures (Frey 1996,Uysal and Gitelson 1994). The economic benefits arising from cultural or entertainment goods, where prices do not exist, are generally estimated using the contingent valuation method (CVM) (Bille Hansen 1997, Thompson, Throsby and Withers 1983). Economic benefits arising from exposure and image creation are much rarer. This is rather surprising given the fact that many places look to promoting cultural and entertainment spectacles as an active strategy in image-building (Kotler, Haider and Rein 1993).

When this kind of analysis is undertaken, it is often commissioned by local authorities with a vested interest in the event. The objectivity of the results can thus be questionable. For example, a study of the economic impacts of the 'Miss America' Beauty Pageant commissioned by the New Jersey Tourist Authority, estimated that this annual event generated economic impacts of more than \$30m in the regional economy (Robinson 1994). This was a very satisfactory return on a public investment

of \$0.5m. Thirty-eight percent of this impact (more than \$11m) was attributed to the exposure factor that the contest generated for the local economy. However, the method used for estimating this 'exposure value' (value of local exposure on television during the competition, value of 'image-pieces' in the national and regional press), left much to be desired.

When the economic benefits of an event are, in the main, TV-generated, then estimating the willingness-to-pay for the televised event becomes a major component in the events' economic impact. As publicly-funded television is a public, non-market commodity, CVM is most often used to simulate a hypothetical market for this good and elicit willingness-to-pay estimates for television as a good. Additionally, television is a public good with substitutes that have market prices (video, movies, internet etc.) with which the viewing public are familiar. Thus, it is not surprising that the body of work most closely related to the evaluation of a televised event relates to willingness-to-pay (WTP) studies for public broadcasting (Bohm 1972, Ehrenberg and Mills 1990, Schwer and Daneshvary 1995, Papandrea 1999). All of these studies however deal with public benefits derived from the existence of nationally-funded television channels or networks such as PBS stations in the US (Schwer and Daneshvary 1995), BBC1 and BBC2 in the UK (Ehrenberg and Mills 1990) and Swedish Public TV (Bohm 1972). No attention is paid to the economic benefits generated by a single televised event.

Finally the accuracy of values given to televised goods are sometimes called into question (Ehrenberg and Mills 1990). However, comparing willingness-to-pay estimates for public broadcasting with those for other public goods, shows the former to be relatively realistic. A study of WTP estimates across a wide range of public goods has shown that the deviation between mean willingness-to-pay for public broadcasting and the mean actual public outlay (though tax payments) for this commodity, is very small (Throsby and Withers 1994). This would suggest that WTP estimates for public broadcasting are reasonably well informed.

#### **3. Outlining the Benefits**

The context of the present study is the Eurovision song contest that was held in Jerusalem in May 1999. Israel hosted the competition by virtue of gaining first place in the previous years competition held in Birmingham, UK. The overall budget for staging the contest was \$7.10m of which \$3.02m (43 percent) was provided by the EBU with the balance being the responsibility of the host country (Ha'aretz 1999a). This sum, of just over \$4m, was funded in the main (75 percent) by public subsidy with the remaining quarter covered by sponsorship. Thus, the Israeli Broadcasting Authority (IBA) had to allocate nearly \$3m from its 1999 annual budget in order to host the competition.

When estimating the public returns to this investment, the cost -side estimations arising from the ESC are reasonably straightforward. More attention however needs to be directed to outlining the benefits. As noted above, the ESC generates benefits in three forms. These can be defined as;

(1) producer revenues generated by the expenditure patterns of the delegates and journalists who visit the host country due to the ESC. These benefits are appropriated by those who provide goods and services to the ESC visitors (hotels, restaurants, transportation and the like).

(2) consumer surplus derived from the ESC as a public good. These are appropriated by viewers who derive some form of utility from watching the televised contest.These intangible benefits have to be approximated using some form of viewer-derived preferences.

(3) benefits to the host country from the promotional effect that the ESC generates. The exposure factor of the ESC needs to be estimated. Of all the factors, this has the longest term effect in that future flows of tourists may be indirectly attributable to ESC-generated exposure.

Estimating the producer benefits arising from the ESC involves calculating the marginal profits to local producers arising from hosting the ESC. The consumer benefits derived from the ESC as a public good, are a result of the wide television coverage that the contest generates and its' popularity amongst viewers. Assuming viewers are willing to pay for the utility derived from the Eurovision broadcast and

assuming that Israeli viewers received additional utility from the fact that the contest was broadcast from Israel, then this economic benefit needs to be considered. In fact, the 1999 contest recorded very high ratings figures, as measured by the Israel Audience Research Board (IARB 2000)<sup>3</sup>. As can be seen from Table 1, the contest from Jerusalem was watched by 71 percent of households nationally and recorded an average viewer rating of 43.9%. This was 270 percent higher than a comparable televised 'mega production' - the Miss Universe pageant - that was broadcast 10 days earlier. It was also the highest-ever rating average recorded since the inception of the ratings system in 1998 (Ha'aretz 1999b). An indication of the utility Israeli viewers attributed to local staging of the event, is evident from comparing the average viewer ratings for the 1999 contest with those of the Eurovision broadcast from Sweden a year later. When the event was held in Jerusalem it attracted over 80 percent more local viewers. Comparing the 1999 Eurovision with the European Basketball Championships in 2000 (an extremely popular sporting event locally, which featured Israeli finalists), further underscores the popularity of the former. In this instance, the contest from Jerusalem still registered viewer ratings over 60 percent greater than the basketball finals.

#### Table 1 here

Measuring the benefits from the televised production of the ESC means eliciting willingness-to-pay responses from viewers. This is popular method for generating monetary values for environmental, cultural and entertainment goods where prices do not exist (Carson et al 1996, Bille Hansen 1997, Chambers et. al 1998, Papandrea 1999).

Finally, estimating the economic benefits of the promotional effect of the ESC on the host country is a problematic issue. The ESC 1999 was broadcast to over 30 countries world-wide. The audiences in these countries were exposed to promotional image clips, screened between the songs that subtly market the host country at prime viewing time. This indirect advertising can have long-run and cumulative effects leading to an increase in tourism and visitors into the future. The most direct way of capturing this impact would be a survey of foreign tourists with a view to ascertaining

whether ESC-generated exposure played a part in their decision to visit Israel. Receipts from these tourists would constitute the economic impact.

The costs, accuracy and representativeness of such a survey are likely to call this approach into question. Assigning motivation to visit Israel on such a basis, is also unreliable. An alternative approach adopted here, is to use the alternative cost. We assume that the net benefit to the national economy is the saving in public sector promotional and marketing expenditure that would have occurred in the absence of the Eurovision-generated exposure. We estimate the alternative cost of prime-time promotional broadcasting on European TV in order to estimate this savings.

#### 4. Empirical Estimates

We now proceed to estimate each of the benefits outlined above. The individual estimates are then combined into a summary benefit-cost framework to give an overall picture of economic impacts associated with hosting the ESC.

#### 4.1 REVENUES FROM DELEGATIONS AND VISITORS

Visitor expenditure is often intuitively considered the main economic impact arising from cultural or sporting events. Many impact studies are solely devoted to this issue and do not move beyond estimating the short-term, expenditure-induced impacts. These spending patterns generate revenues streams for local and national service providers in the hotel, food, retail trade and transportation sectors (Gazel and Schwer 1997).

Of the 1,100 foreign delegates and journalists to the ESC 1998, some 800 were handled by a special tour operator and the rest made independent arrangements. According to data provided by the tour operator, the visitors arrived one week prior to the contest for rehearsals and media coverage and left the day following the competition. Average stay in Israel was six days.

In order to estimate their expenditures, we used data from Ministry of Tourism surveys of in-bound foreign visitors that have been conducted over the last five years. According to this source, daily expenditure per foreign visitor arriving for the purpose of conducting business of participating in a conference is estimated at \$121 (Ministry of Tourism 2000). Thus the 1,100 visitors generated over \$0.8m in direct revenues.

# 4.2 ESTIMATING WILLINGNESS-TO-PAY FOR THE EUROVISION BROADCAST

As the ESC is a public good for which viewers do not pay directly, a contingent valuation method needs to be used in order to elicit the value of the benefits the public receives from viewing the televised event. The 1999 contest generated further utility for the Israeli viewing population due to fact that the event was staged locally. This 'local patriotism' effect alongside the high viewing figures the event recorded, needs to be captured on the basis of a viewer's stated preference schedule.

CVM has been increasingly used in these circumstances (Ehrenberg and Mills 1990, Schwer and Daneshvary 1995, Papandrea 1999). The method is grounded in consumer price theory where willingness-to-pay (WTP) for a good equates the value of additional utility one receives from the use or the existence of the good. A questionnaire is used in order to elicit this willingness-to-pay. Respondents are presented with a description of the public good and are asked to state their willingness to pay for it.

It should be noted that this method is somewhat contentious as it is based on subjective answers and it is questionable whether survey-based responses are adequate for eliciting the true value of the willingness to pay. Even if the true value is known the answers can reflect strategic behavior (Mitchell and Carson, 1989). In some cases the value given is pitched too high as respondents want to politically enhance the issue at stake. In other cases, although the respondents derive utility from a public good they declare zero willingness to pay. These 'protest bidders' consider the issue important but object to paying, thereby registering a zero value as a protest (Brouwer and Slangen, 1998).

In the present study, willingness-to-pay responses were collected on the basis of a telephone survey of a representative national sample of 500 Israeli adults. The survey was conducted on the two days following the contest. Respondents were asked

whether they watched the ESC and their attitudes towards the competition. They were presented with a hypothetical case of the Israel Broadcasting Authority demanding payment for the costs incurred in staging the Eurovision (through an increase in the television license tax). Respondents were requested to indicate how much they would be willing to pay in increased licensing fees in order to receive the ESC broadcast in Israel and how much more they were willing to pay in order to have Israel host the contest. They were asked to choose from a series of pre-determined WTP values. While there is an on-going debate in the literature about the method of presentation of the hypothetical question (Bohm 1972, Mitchell and Carson 1989, Portney 1994), we opted for a pre-selected range rather than iterative bidding. This was felt to be justified as it avoids 'starting point bias' and because of the familiarity of the Israeli public with the nature of the event being investigated.

As can be seen in Graph 1, the distribution of the bid range is not monotonic. While most of the respondents are not willing to pay, respondents willing to pay concentrate in the extreme ranges, both high and low. Overall, a higher percentage of respondents are prepared to bid for the ESC to be broadcasted from Israel. In order to calculate the average bid, we used the mid-point of the distribution. The average bid for the ESC in general is \$1.45 (standard deviation = 3.4) while the average additional bid for the ESC to be broadcasted from Israel additional bid for the ESC to be broadcasted from Israel additional bid for the ESC to be broadcasted from Israel additional bid for the ESC to be broadcasted from Israel is \$2.35 (standard deviation = 4.1).

#### Graph 1 here

Table 2 describes the attitude, willingness to pay and socio-economic characteristics of viewers according to their revealed behavior (viewers versus non-viewers) and their WTP for staging the event in Israel. As can be seen, 74% declared that they viewed the contest in 1999. In 1998, when the ESC was broadcast from the UK, the corresponding proportion was 56 percent. Even a greater percentage (81%) considered as important the fact that the event was broadcast from Israel. This means that even non-viewers considered this important.

Table 2 here

However, the percentage of respondents willing to pay for viewing the Eurovision (whatever the venue) is of a much smaller magnitude (21%). When Israel is presented as the venue, this figure rises to 33 percent. This may be an indication of protest bidding whereby respondents watch the contest and attribute it some importance but declare zero willingness to pay.

When stratifying the descriptive variables by viewing behavior and willingness-topay, significant statistical differences across mean values are found to exist. As expected, viewers of the contest have a more positive attitude towards it and are willing to pay more. The average difference between viewers and non-viewers is smallest with respect to willingness to pay for the event when broadcast from Israel (48 versus 36 percent) (Table 2). This may suggest that staging the event locally generates a greater non-use value (i.e. the value attached to the public good by nonusers) than when the event is staged elsewhere.

When looking at attitudes, behavior and socio-economic characteristics by declared willingness-to-pay, again those willing to pay for local broadcasting of the event, have significantly higher viewer rates, more positive attitudes towards the event and greater willingness to pay for the ESC, whatever the broadcasting venue. About half of those willing to pay for the local staging of the ESC are also prepared to pay for the event wherever it is hosted. Not surprisingly however, only 6 percent of those unwilling to pay for the local broadcast are prepared to pay for watching the competition when it is broadcast from a foreign venue (Table 2). Socio-economic characteristics such as gender, age, education, income and religious observance are consistently insignificant, no matter how the data is stratified. This indicates that the actual viewing behavior and attitudes towards the ESC are likely to be more important than socio-economic attributes, in determining WTP.

We attempt to estimate the probability of willingness to pay as a function of revealed behavior, attitudes toward the ESC and demographic and social characteristics. As the dependent variable here is dichotomous (willing or unwilling to pay), linear estimation is not appropriate. We use a Probit model which estimates the decision process of whether or not to pay, in probabilistic terms. In the present case, the model estimates two decision processes. The first is the probability of paying

for the ESC when it is broadcast from any foreign venue and the second is the probability of paying when it is broadcast from Israel.

#### Table 3 here

The results reiterate the point made above. All other things being equal, the more one is a likely to watch the event, the greater the importance one attaches to its' broadcast from Israel and the younger the viewer, the greater the likelihood of willingness to pay for the event (whatever the venue). All other socio-economic variables such as income, education, age and religious observance seem to have little influence on the probability of paying for the ESC broadcast

The average and total monetary values of this willingness-to-pay were calculated. Average WTP was calculated by taking the midpoints of the different ranges. Total WTP was estimated by multiplying the averages by 1.9 million which is the relevant adult population of Israel. The large difference between the percentage of respondents willing to pay and the percentage attributing importance to the staging of the ESC in Israel, suggests the existence of protest bidders in the sample.

Two methods were therefore employed to estimate the WTP. In the first (Method A), we estimated the average WTP as declared by the respondents, including zero values in the calculation. In the second (Method B) we tried to identify the protest bidders and exclude them. Following Mitchell and Carson (1989) we attempt to elicit responses from zero bidders as to why they did not want to pay for the good. Respondents declaring that they 'did not want to pay in principle' (35% of respondents refusing to pay for the ESC and 40% respondents refusing to pay for the ESC from Israel) were identified as protest bidders who received utility but did not want to pay for it. All other responses (such as 'the ESC does not interest me' and ' I can't afford it'), were considered as true representations of zero-bidders. The characteristics of the protest bidders were checked against the full sample and no significant differences were found. They were thus excluded from the sample and from the calculation of the sample averages.

Average and Total willingness to pay estimates are presented in Table 4. As is apparent from the table, respondents are willing to pay more for the event when broadcast from Israel than when broadcast from elsewhere. The average bid for the Eurovision is \$1.46 (or \$1.64 depending on the method) versus a \$2.37 (or \$2.63) additional bid for the ESC when held in Israel. This seems to suggest that 'local patriotism' confers more utility than the Eurovision contest itself. The total benefit derived from the televised event is the average sum of the two bids; the bid for broadcasting the Eurovision and the additional bid for broadcasting the event from Israel. The correction for protest bidders created a small increase in the average bid.

#### Table 4 here

Multiplying the average bid by the relevant adult population, we arrive at estimated benefits worth between \$7m and \$8m. This represents the value of the utility of the broadcasting the ESC from Jerusalem to the adult population of Israel. This figure is probably biased downwards as it excludes the population below the age of 18 who, by all reports, are avid viewers of the ESC. They are excluded from the present analysis due to the inherent difficulties of eliciting reliable WTP responses from this population.

#### **4.3 ESTIMATING THE PROMOTION BENEFITS**

Promotional clips featuring scenes, views and historical landmarks of Israel were screened between the songs of the ESC. These were roughly 30 seconds each in length and in total summed-up to 38 minutes of exposure at prime viewing time across Europe. These promotional benefits also have to be taken into consideration. Israel's Ministry of Tourism engages in targeted marketing efforts worldwide and the exposure that the country received through hosting the Eurovision contest, certainly augmented those efforts.

This form of publicity however is only likely to show returns over the medium to long terms. Even if ESC-induced promotion does result in a larger future stream of tourists to Israel, it is also very difficult to estimate the precise extent exposure to advertising is a factor in the tourist's decision to travel abroad, amongst the multitude of other factors. Short of direct surveying of incoming tourists with the hope that they will be

able to attribute their decision to visit Israel to the impact of advertising, one way of estimating the ESC's exposure effect is to estimate the alternative cost of advertising Israel abroad. This method was chosen due to the availability of data and due to the fact that the Israeli Ministry of Tourism launches periodic promotion campaigns on European television. We estimate the benefits accruing from the savings in the government budget as a result of ESC-generated exposure and the benefits that accrue to producers of tourism services. It should be noted, that the range of adverstizing fees is very large and contingent on a variety of factors to do with the advertizing campaign. Consequently, we have chosen upper and lower costs reflecting a range, rather than an exact figure.

We estimate the cost of promoting Israel on prime time on the major national television networks in those countries to which the ESC was broadcast. This cost represents the savings to the national tourism authorities in advertising fees. The promotional benefits of the ESC are thus the alternative savings in advertising and promotion abroad. Due to the range of advertising rates in the different countries, we use a maximum and minimum estimate. The maximum estimate is based on rates obtained from a leading local advertising agency that deals with commercial publicity on foreign television networks. Based on \$10,000 for a 10-second advertising slide, we arrive at an exposure cost of \$2.28m. As the rate for 38 minutes would probably be more favorable, we take this figure as the maximum estimate. The minimum estimate is derived from CNN advertising rates for the period 8.30-9.00 pm. Their rates of \$4,500 per 30-second clip, translates into an exposure cost of \$.342 m. This is considered the minimum estimate. The true cost is probably located somewhere between these two extremes.

#### 5. Benefit-Cost Estimates

We now present a benefit-cost analysis of the 1999 Eurovision competition to the Israeli national economy. Initially, we construct a 'balance-of-payments' account of the ESC. The event is regarded as 'export' of entertainment services and the benefit of this activity is the net foreign currency gain to the local economy. After that we estimate producer and government benefits. The former are represented by profits to

local producers arising from producing the ESC and from delegates expenditures. The latter relates to savings to the public budget through ESC-generated advertizing exposure. Consumer benefits are estimated as the difference in utility derived from staging the ESC versus an alternative event. These estimations are based on internal Israel Broadcasting Authority data on the ESC budget and on the viewer survey (described above).

#### 5.1 THE BALANCE OF PAYMENTS ACCOUNT

Receipts from staging the ESC as a televised event ('export' of entertainment services) include a transfer payment from the EBU to the Israeli Broadcasting Authority for staging the spectacle and the expenditures of the foreign delegations in Israel (Table 5). Additional receipts relate to the alternative cost of promotion. These are not actual receipts but can be considered as payment in kind. Since the national tourism authorities do not actually spend these sums in advertising and promotion and since the exposure effect of the ESC is not via direct advertising but rather a by-product of staging the event, we adjust this receipt by 50 percent in order to obtain a more realistic estimate.

#### Table 5 here

On the expenditures side, the costs of importing goods and services for the production include actual costs of renting equipment from abroad (such as a special mobile broadcast studio imported from Belgium). The transfer from the EBU was spent in Israel in order to cover production costs. Local spending however has an import component, taken here as 25% (the share of imports, excluding defense imports, from total consumption expenditures is around one quarter (CBS, 1999)). Therefore, for each dollar received from the EBU and spent in Israel, 25 cents returned abroad to cover the import component of these expenditures. The same assumption was applied to the expenditures of the delegations; for each dollar they spent in Israel, one quarter left the local economy as import payments. The total budget for the ESC was \$7.1m. Of this, \$5.5m was used to purchase goods and services in the local economy. The import component of ESC costs is thus \$1.384m (i.e. 25%). In sum, the net gain in foreign currency to the local economy is estimated at between \$1.2m and \$2.2m (depending on the level of promotional benefits).

#### 5.2 BENEFITS TO PRODUCERS AND GOVERNMENT

The balance of payments estimates allow us to calculate benefits to producers and government. Producer benefits are the marginal profits to local producers that accrue from the staging of the ESC in Israel. From Table 5 we can see that extra revenues accruing from hosting the ESC are \$3.026m, transferred from the EBU and \$0.8m.revenues from the delegations spending. In addition, \$2.7m leaves the local economy as imports so only \$0.267m remains as revenues for local producers. Furthermore, most of the expenses in the ESC budget are in the services sector. The profit margin in these sectors in Israel is less than 10% (CBS, 2000) therefore we assume the average is 5% (Table 6). Most of the revenues from the expenditure of the delegations are in the hotels and restaurants sectors. Marginal costs in these businesses are negligible (Bull 1995) and here we assume a marginal cost level of 10% out of total revenue revenue. Total benefits from delegations expenditures are thus \$0.72m. Benefits to government are the budgetary savings resulting from ESC exposure (savings in advertizing costs). Total benefits calculated in Table 6 therefore lie between \$0.9m. \$1.8m.

#### **5.3 BENEFITS TO CONSUMERS**

Analyzing the consumer surplus derived from the ESC means estimating the benefits of the event as the utility derived from staging the contest plus the extra utility derived from staging it in Israel. The cost in this instance, is the foregone utility that could have been derived from an alternative televised event produced with the same level of public support.

The Israel Broadcasting Authority reallocated \$2.9m from its budget to the production of the ESC. The net benefits of the ESC as a public good are therefore the estimated benefits in Table 4 minus the benefits that could be derived from alternative programing that would have cost \$2.9 m. It is reasonable to assume, that in order to produce the ESC, the IBA in fact forfeited marginal programs that probably do not generate much utility.

Obtaining information on the costs of alternative programs however, is a problematic issue. On the one hand, the Israel Broadcasting Authority, along with some 30 other

national public broadcasting agencies, is a member of the EBU to whom it pays membership and in lieu, receives license to broadcast a package of programs. It is hard to estimate the relative weight of the costs of the ESC in this fee. On the other hand, it is very difficult to obtain accurate estimates of the utility of programs forfeited due to the production of the ESC.

Our approach has therefore been to assume, that in the absence of the Eurovision, the IBA would have allocated funds to alternative programming that would have elicited benefits no greater than those derived from the broadcasting of the ESC from a foreign county. If this is the case, then the net utility derived from the ESC is that marginal benefit derived from the staging of the event in Israel.

#### 5.4 THE BENEFIT-COST ACCOUNT

In light of the foregoing assumption, we can now proceed to assemble the benefits and costs of the Eurovision as both a form of export of entertainment services and as a public good, in one unified framework (Table 7). Net benefits to producers and government (as calculated in Table 6) and consumer benefits of the ESC as a public good, appear on the benefits side of the ledger. For the foreign currency account, minimum and maximum estimates refer to receipts as reported in Table 5. In the case of consumer benefits, upper and lower limits are based on the two methods for calculating willingness-to-pay as outlined in Table 4. Similarly on the costs side, the alternative costs of staging the event in Israel are represented by the value of consumer benefits that would have been derived from an alternative program that could have been produced with those funds (Table 4).

#### Table 7

Net gain from producing and broadcasting the ESC ranges from \$2.6m to \$3.7m. The ESC does seem to pass a benefit-cost test, if not by a wide margin. There does seem to be some social justification for public assistance of a televised event such as this. However, this result is only achieved when some of the less 'conventional' impacts (such as promotional benefits) enter the analysis. On the basis of pure expenditure-induced impacts alone, we would not have been able to reach such a conclusion.

#### 5. Conclusions

The implications of the above analysis relate to the role of cultural events in producing economic benefits for the local economy. While sports competitions, cultural festivals and the like are often touted as having growth effects on regional or even national economies (Kotler et. al 1993), the effect of these are often transient. Short-run effects can be realized through infrastructure investments and visitor spending and these are the impacts most commonly identified and measured. However, longer-term effects relating to image and exposure are rarely noted and even more infrequently, estimated.

In the case of many high-profile sporting and cultural events, the economic importance of television coverage often overshadows the income and employment multiplier effects arising from the infrastructure investment and consumer spending associated with the event. The impact of the latter is often limited to the city or region in question, while the economic impact of television coverage is not spatially bound. Events of all scales, from the 'mega'-scale (e.g. Olympics and Expos) down to local festivals, look to television exposure a major economic and promotional instrument (Getz 1997). This importance does not just lie in the royalties to be received for advertising and sponsorship rights. Additional benefits to be derived from a televised presence as illustrated here, relate to the utility derived by the local viewer population from an event that takes place locally and the promotional impacts that the event generates. The latter is particularly important as many places use cultural and sporting events as a means for 'getting on the map' and up-grading their public profile.

In some ways however, the ESC is a slightly idiosyncratic event. As hosting the contest is a result of success in the competition the previous year, this kind of entertainment event cannot be used a strategy for economic growth. The findings presented above do suggest that the opportunity staging the ESC affords, can be used as leverage for other economic development efforts. Our results have shown that the non-use value of the televised event is higher when the event is staged locally than when is held elsewhere. This is reflected in the small average differences between viewers and non-viewers in willingness to pay for the Eurovision competition when

held in Israel. Combining this public acceptance of the importance of holding high profile entertainment spectacles along with the exposure benefits to be derived from the event, suggests that this is not an opportunity to be passed up. Successfully hosting a media-intensive event such as this generates a demonstration effect and opens the door for future events. The justification for public support of the ESC may therefore be broader-based than implied by the benefit-cost results presented here.

#### Notes:

1.It should be noted that the ESC may not be a 'pure' public good. We are not suggesting, tautologically, that the ESC is a public good because it receives public support. Rather, it exhibits certain characteristics of a public good in that it affords non-depletable benefits to everyone from each unit of entertainment produced. Furthermore, the marginal value of each additional unit of this 'good' is determined by its' aggregate value to all consumers and not by the highest bidder.

2. It should be noted that these private, producer benefits are appropriated from the public support given to the ESC. Ironically, impact analyses that look simply for the largest multiplier effects in order to justify public support for a project or an event, will overlook the fact that these expenditure impacts are 'private' benefits.

3. The Israel Audience Research Board monitors viewing levels for Israel's main television channels. Audience viewing levels are measured using a 'peoplemeter' system. This involves monitoring the actual viewing patterns of a representative panel of nearly 400 households (representing over 1,300 people). 'Peoplemeters' are installed in the homes of those selected for the sample. The sample is derived from a sampling frame of over 6,000 families who, are selected on the basis of detailed survey work. Average viewer ratings are calculated on the basis of programs with at least 20 minutes of consecutive viewing.

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Table 1: Average Viewer Ratings by Household, for Selected Tele	vised
Events	

Televised Events	Date	Duration (Mins)	Average Viewer Rating (%)	% Households
Miss Universe Beauty Pageant 1999	27 May 1999	127	26.8	46
European Basketball Finals 2000	20 April 2000	100	26.9	47
Eurovision Song Contest 2000	13 May 2000	180	24.3	45
Eurovision Song Contest 1999	29 May 1999	196	43.9	71

Source: Israel Audience Research Board

Variable	Total	Viewers	Non-	Willing to	Unwilling to
	sample		Viewers	pay:	pay:
	-			Broadcast	Broadcast
				from Israel	from Israel
Viewer <sup>1</sup>	0.74	_	-	0.87*	0.67*
	(0.43)			(0.3)	(0.46)
Importance <sup>2</sup>	0.81	0.88*	0.61*	0.92*	0.75*
	(0.39)	(0.32)	(0.48)	(0.26)	(0.42)
WTP for the	0.21	0.26*	0.08*	0.53*	0.06*
$ESC^3$	(0.41)	(0.43)	(0.27)	(0.5)	(0.23)
WTP for the	0.33	0.48*	0.36*	-	-
ESC from Israel <sup>3</sup>	(0.47)	(0.02)	(0.03)		
Gender <sup>4</sup>	0.5	0.57	0.48	0.46	0.52
	(0.5)	(0.49)	(0.5)	(0.5)	(0.5)
Age <sup>5</sup>	38.6	39.1	37.2	37.5	39.1
	(16.25)	(16.4)	(15.8)	(17.5)	(17.5)
Education <sup>6</sup>	2.6	2.6	2.6	2.56	2.65
	(0.94)	(0.94)	(0.95)	(0.86)	(0.97)
Religious	1.42	1.42	1.42	1.43	1.42
Observance <sup>7</sup>	(0.65)	(0.63)	(0.7)	(0.59)	(0.68)
Income <sup>8</sup>	3.11	3.1	3.0	3.18	3.08
	(0.98)	(0.97)	(0.99)	(1.04)	(0.95)
Observations	506	376	130	167	339

Table 2: Variable Descriptions and Summary Statistics: Viewing Behavior and<br/>Willingness-to-Pay

Standard deviation in parentheses

An asterisk indicates that the means are significantly different at the 1% significant level.

Variable Definitions:

1. 1= watched ESC 1999 ; 0 = otherwise.

2. 1= respondent completely agreed or agreed with the statement that it was important to broadcast the ESC from Israel;0 = otherwise.

3. 1= willing to pay; 0= otherwise.

4. 1 = male; 0 = female.

5. Age in years.

6. 1= elementary school or less; 2= high school; 3= post high school; 4= university graduate and above.

7. 1= non-religious; 2= traditional; 3= religious.

8. 1= significantly below average; 2= below average; 3= average; 4= above average; 5= significantly above average.

Variables	WTP for the Eurovision	Additional WTP for
		Eurovision from Israel
Viewer	0.58*	0.47*
	(0.19)	(0.16)
Importance	0.25*	0.35*
-	(0.09)	(0.08)
Gender	-0.0006	-0.11
	(0.14)	(0.13)
Age	-0.01*	-0.007*
-	(0.004)	(0.003)
Education	0.09	-0.11
	(0.07)	(0.07)
Religious Observance	0.02	0.03
-	(0.1)	(0.09)
Income	-0.01	0.03
	(0.07)	(0.06)
Constant	-2.2*	-1.8*
	(0.56)	(0.49)
Number of observations	462	459
McFadden R-squared	0.06	0.08
Probabilty (LR statistic)	0.00	0.00

 Table 3: Probit Model estimates of the Probability of the Willingness-to-Pay

Standard deviation in parentheses. Asterisk indicates significant at 5%.

	Average WTP (\$)	Total WTP(\$m) <sup>*</sup>
Method A: Average includes protest bidders with bid of 0		
	1.46	2.77
(1) WTP for ESC broadcast from abroad	2.37	4.50
(2) Additional WTP for ESC broadcast from Israel		
(3) Total WTP for ESC from Israel (1)+(2)	3.83	7.28
Method B: Average excludes protest bidders		
(4) WTP for ESC broadcast from abroad	1.64	3.12
(5) Additional WTP for ESC broadcast from Israel	2.63	5.00
(6) Total WTP for ESC from Israel (4)+(5)	4.2	7.99

### Table 4: Average and Total WTP Estimates With and Without Protest Bidders

\* Total WTP was calculated by multiplying the average by 1.9 million (the relevant adult population of Israel).

# Table 5: Balance of Payment Account for the ESC in Foreign Currency

Receipts	\$ Th.	Costs	\$ Th.
Transfer from the European Broadcasting Union (EBU) <sup>1</sup>	3,026	Rental of technical equipment from abroad <sup>1</sup>	1,173
Expenditures of the delegations in Israel	800	The import component in ESC costs	1,384
Alternative cost of promotion: i. Minimum ii. Maximum	$170 \\ 1,140$	The import component in the expenditures of the delegations in Israel	200
Total	a.3,996 b.4,966	Total	2,757
Net gain: a. 1,239 b. 2,209	,	м	

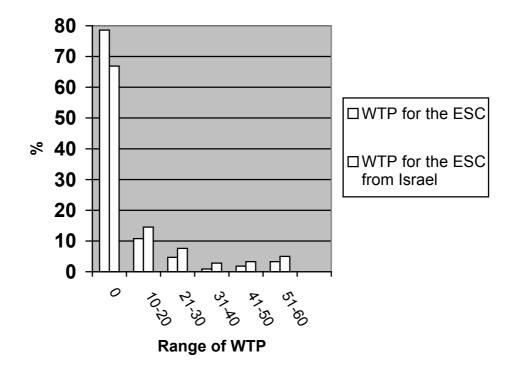
<sup>1.</sup> Based on the ESC budget data.

	Calculations	Total Benefits (\$Th.)
Benefits to Producers		
Profits from transfers of the EBU	(3,026-2,757) x 0.05	13
Profits from delegations expenditures	800 x 0.9	720
Savings to Public Budget		
Alternative cost of promotion:		
a. Maximum		1,140
ii. Minimum		170
Total		i. 903
		ii. 1,873

## Table 6: Benefits to Producers and to the Government

	Maximum estimates	Minimum estimates
Benefits (\$m)		
Net total benefits to producers and government (see Table 6)	1.8	0.9
Total public benefit from broadcasting the ESC from Israel	5.0	4.5
Total	6.8	5.4
<b>Costs (\$m)</b> The alternative cost of broadcasting the ESC from Israel	3.1	2.8
Total	3.1	2.8
Net gain (\$m)	3.7	2.6

# Table 7 : Total Benefit-Cost Analysis of the ESC



**Graph 1 : Distribution of Willingness to pay**