Frank, Björn; Geppert, Kurt

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Corporate Donations to the Arts: Philanthropy or Advertising?

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Björn Frank and Kurt Geppert

Corporate Donations to the Arts: Philanthropy or Advertising?

Berlin, October 2002
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Corporate Donations to the Arts: Philanthropy or Advertising?

by Björn Frank and Kurt Geppert

German Institute for Economic Research (DIW)

October 2002

Abstract

This paper is an attempt to provide evidence on two questions: Why do companies sponsor art events, and where exactly does the money go?

We analyse data collected on the revenue structure of cultural institutions in Berlin and Hamburg. This data set not only tells us where the money goes, it also allows us to draw conclusions with respect to donors' motives. We regress sponsorships received on the number of visitors and other independent variables. The results are significantly different from those which one would expect if sponsoring were merely a form of advertising.

JEL classification: Z1, H4, C24

Corresponding author: DIW Berlin, 14191 Berlin, Germany; bfrank@diw.de; ++49-30-89789-684.
I. Introduction

Why do companies sponsor art events, and where exactly does the money go? This paper is an attempt to provide evidence on these two questions. As far as the first question is concerned, we are following in the footsteps of a considerable number of empirical papers, though our approach and data are markedly different. Concerning the second one, evidence so far is extremely scarce. This is regrettable because to understand how exactly firms allocate the money they have decided to donate is much more relevant for public policy than the question why they donate at all. If there are in principle good reasons for public support of the arts, but if private institutions sponsor some cultural events but not all, then the state might want to allocate its funds in a complementary fashion, helping those who are overlooked by firms making donations without running the risk of crowding out sponsors.

Public policy implications of research on firms' motivation is less clear; yet any kind of research on motives of decision makers in the economy is warranted per se. Existing evidence focuses on the side of the donors, either by providing survey results or by trying to identify econometrically which of the donors' characteristics might explain their decisions. These approaches will be briefly surveyed in section 2. Our own approach, described in section 3, is to analyse data collected on the revenue structure of cultural institutions in Berlin and Hamburg. While it is obvious that this data set tells us where the money goes, we will argue that it is also possible to draw conclusions with respect to donors' motives. The results are provided in section 4, and a discussion, including tentative policy conclusions, in section 5.

II. Previous research: decision-making by the donors on total donations

A good example for a survey studying donors' motives is Hitters (1996) who interviewed 60 companies in Rotterdam which donate to the arts. Commercial motives were often named as the main motivation, or one of the main motivations: marketing/public relations (55 per cent), customer and business contacts (33 per cent) and community relations (25 per cent)\(^1\). By comparison, "corporate responsibility" and "personal commitment" were a relatively rare motivation (15 and 13 per cent, respectively). Another survey, by O'Hagan and Harvey (2000), does not provide more evidence for mainly altruistic motivations, which are not likely to be
understated by those who are interviewed. Nevertheless, one would like to see the survey evidence supported by "harder" data. Beginning with Johnson (1966) and nicely surveyed in Leclair and Gordon (2000), quite a few studies have investigated the determinants of corporate donations. Leclair and Gordon (2000), however, were the first to distinguish between groups of recipients and hence consider cultural donations separately. They find that it makes a difference who the recipients are: donations intended to support education, health and human services and civic/community causes do not correlate with an industry's advertising/sales ratio, whereas arts sponsoring does. This suggests that arts sponsoring is considered as a promotional tool, at least to a certain extent.

A major shortcoming of all these studies is their failure to consider that altruistic and commercial motivation might be intertwined. Once a decision has been taken on the amount to be allocated to the arts, based on the perceived contribution to corporate image, the decision on exactly which institution or which event is to receive the money might be guided by different criteria. These might include: "What is good for society?", "Which kind of art generate more positive externalities?" etc.. In the next section we describe our research approach which is designed to shed some light on the allocation of sponsoring funds to different cultural events or institutions.

III. Who receives cultural donations? Data and hypotheses

In this study, we use survey data obtained from 84 cultural institutions (theatres, museums etc.) in Berlin. For the years 2000 and 2001, we asked about the sponsorship received (S) and for the number of visitors (V), among other (control) variables. The focus is on the relationship between S and V, which can be argued to shed some light on the reasons behind sponsoring.

To begin with, assume that arts sponsoring is a promotional tool just like advertising. Then its effects are roughly proportional to the number of visitors: According to an empirical study by Schwaiger (2001, p.20), sponsors of cultural events are noticed mainly by these and only to a very low extent by non-visitors through media coverage etc.. Given the high number and thus

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1 However, all of this is clearly different from classical advertising, as to "enhance brand recognition" was a main motivation only for 13 per cent of the donors. Sponsoring is typically more suitable for promoting the corporate image as a whole than for the branding of the firm's single products.

2 About 200 cultural institutions in Berlin and about 100 in Hamburg were contacted in February and June 2002; 105 responded, but only 84 were able to give information on the composition of their revenues.
relatively low bargaining power of possible recipients of donations, we should then expect the cultural donations $S$ to be proportional to the number of visitors $V$, or:

$$S = a \cdot V$$

Media planners would put it this way: the "cost per thousand contacts", $S \cdot 1000/V$, is constant. The simplest functional form which captures the possibility that donations per visitor are not constant across events is:

$$S = c + a \cdot V$$

For any value of $V$, we can then calculate the elasticity of $S$ with respect to $V$; however, the regression coefficients can be interpreted in a more straightforward manner after transforming the variables into logs:

$$\ln(S) = c + a \cdot \ln(V),$$

where $a$ is a direct estimate of the elasticity, constant across the range of $V$. The elasticity should be 1 if sponsors solely pay for contact with visitors.

Now, can we expect that the magnitude of $a$ also depends on something else, namely on the sponsors' altruistic motivation? And what would be the effect, i.e., what distinguishes altruistic (philanthropic) donations from sponsoring for profit, driven by the same motivation as advertising?

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**Figure 1: Hypothetical demand curves corresponding with different types of cultural institution**
Consider the hypothetical demand curves for cultural events A and B in Figure 1. Price (entrance fee) $P$ is the same for both, where B attracts more visitors. A, however, is a high-brow event, with average benefits to those who do come being either higher or equal to benefits for visitors of B. Figure 1 depicts the former case. While advertising-like donations would be allocated between A and B according to the relation $X_A/X_B$, philanthropic considerations might lead to an allocation which is relatively more favourable for A, for a number of reasons:

First, donors might simply have preferences for this kind of other people's cultural consumption (mirroring the famous hypothetical case of a preference for other people not reading *Lady Chatterley's Lover* described by Sen (1970)).

Second, donors might want visitors to go to A rather than to B for the visitors' own sake - presuming that people misperceive what is best for them to consume. Whenever donors think paternalistically like this, their donations can be presumed to favour smaller, elitist events like A over mass-attractive events like B.

Third, firms might want to give their donations to events which create the highest positive externalities per visitor, and it is again reasonable to presume that donors perceive these to be higher for A than for B.

Fourth, consumer surplus is possibly higher for A than for B, which is surely the case in Figure 1. This is the only argument which assumes that the demand curves for A and B run in a certain way to the left of their point of intersection. A related argument can be found in the economic literature on "free", i.e., advertising-financed, television. Cave (1989, p.21-22) and Owen and Wildman (1992, p.118-119) use figures similar to our Figure 1 to illustrate the concern that programs which attract the highest number of viewers and hence advertising revenues do not necessarily generate the highest welfare. Any attempts to correct this again favour A-like events over B-like events.

Empirically, we will not be able to disentangle these four effects. Their direction, however, is always the same, and if we find that donors favour small, high-brow recipients, then sponsoring is to a certain extent more than just another form of advertising.

We will control for a handful of variables, specifically for the kind of art (performing arts versus fine arts), as managers might simply have a special preference for one or the other. We
also control for the receiving institutions' own advertising and public relations budget, as donors might feel that, ceteris paribus, it makes more sense to sponsor institutions with a higher visibility in the public. The most interesting control variable, however, is a dummy variable for the location of the respective institution. Both Hamburg and Berlin are city states, similar in their function for the respective hinterland. However, whereas in Berlin public expenditures for the (performing and visual) arts were € 230 per capita in 2000, they were only € 87 in Hamburg (Frank et al., 2002, p.37). As public subsidies have been found to (partly) crowd out private donations elsewhere (see Steinberg 1993 or Brooks 2000 for an overview), this might also be the case here. Hence our hypothesis is that sponsoring plays a more important role in Hamburg, which, incidentally, is sometimes considered to be "Germany's capital of charitable foundations".

IV. Results

The magnitude of sponsoring in Europe is generally perceived as being lower than in the US, as confirmed for our Berlin subsample where the median share of sponsorships (in relation to total revenues) is only 2 percent, but not for Hamburg, where it is 15 percent. One institution in Berlin, however, receives so much more sponsorship per visitor than any other\(^3\) that it is excluded as an extreme outlier from the following analysis.

20 percent of the cultural institutions in our sample did not receive any sponsorships at all in 2000 and 2001. This magnitude is also a reasonable estimate for institutions who did not respond, as the questionnaire did not obviously focus on sponsoring (see Frank et al., 2002), hence selectivity does not emerge directly. However, small institutions are more likely not to receive any sponsoring at all (see footnote 4 below), and they would be underrepresented if large ones were more inclined (or better able) to answer surveys like ours. Missing precise information on the size of non-respondents, we cannot really check whether the latter is true, but it is noteworthy that some very large and prominent institutions did not reply, whereas a considerable number of small ones did. But even if a selectivity bias is at work in our sample, it does not affect our central results, as we do not include zero observations of the dependent variable, which would lead to biased estimates in any case. Hence the regression results,

\(^3\) More than five times as much as the institution which ranks second in this respect, and 20 times as much as the average.
reported in table 2 and discussed below, refer only to non-zero observations\(^4\). The descriptive statistics in table 1, however, refer to our complete sample.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>amount of sponsoring received (averaged over the years 2000 and 2001; for theatres amount for the season 2000/2001)</td>
<td>131034 €</td>
</tr>
<tr>
<td>V</td>
<td>number of visitors per year (or season, respectively)</td>
<td>57289</td>
</tr>
<tr>
<td>DB</td>
<td>Dummy variable; 1 for cultural institutions in Berlin, 0 for those in Hamburg</td>
<td>0.70</td>
</tr>
<tr>
<td>DM</td>
<td>Dummy variable; 1 for museums, 0 for other institutions</td>
<td>0.35</td>
</tr>
<tr>
<td>ADV</td>
<td>the cultural institution's yearly advertising and PR budget</td>
<td>184020 €</td>
</tr>
</tbody>
</table>

Starting with the reasonable equation (column 1 of table 2), we find that 31% of the variance in sponsorships received is explained when the effect of the number of visitors V is allowed to be different in Hamburg and Berlin (through the interaction variable DB*V, where DB is a dummy variable for institutions in Berlin).

\(^4\) Though not essential to our argument, we have also done a probit analysis of sponsorships received. The probability of receiving something at all is estimated as

\[
\text{prob (sponsoring > 0)} = 1.34 + 4.3 \cdot 10^{-6} \cdot V - 0.84 \cdot DB - 6.3 \cdot 10^{-7} \cdot ADV
\]

75 observations (15 thereof 0), Pseudo R\(^2\)=0.13, all variables significant at the 10 percent level.

Column 1 of table 2 can be re-estimated by entering the inverse Mills' Ratio from the above probit model as a regressor, but this Heckman model, which we also tried out, did turn out to be superior according to a likelihood ration test on independent equations (\(\chi^2 = 1.72, \text{prob}>\chi^2 = 0.19\)).
Table 2: Regression results for positive amounts of sponsoring received

<table>
<thead>
<tr>
<th>dependent variable and regression method</th>
<th>sponsoring received, OLS</th>
<th>sponsoring received, OLS</th>
<th>ln(sponsoring received), OLS</th>
<th>sponsoring received, median regression</th>
<th>ln(sponsoring received), median regression</th>
</tr>
</thead>
<tbody>
<tr>
<td>V (visitors)</td>
<td>3.58 (2.46)</td>
<td>1.75 (2.13)</td>
<td>1.37 (32.46)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB (berlin)</td>
<td>209,014.3 (2.00)</td>
<td>163,340.6 (2.11)</td>
<td>31,785.85 (4.39)</td>
<td>2.94 (1.69)</td>
<td></td>
</tr>
<tr>
<td>DB*V</td>
<td>-3.03 (2.00)</td>
<td>-1.90 (2.11)</td>
<td>-1.27 (30.42)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DM (museum)</td>
<td>131,624.5 (1.50)</td>
<td>1.57 (5.03)</td>
<td>28,202.2 (4.19)</td>
<td>1.62 (4.82)</td>
<td></td>
</tr>
<tr>
<td>DM*V</td>
<td>1.45 (1.82)</td>
<td></td>
<td>0.74 (22.73)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADV</td>
<td>0.69 (3.09)</td>
<td></td>
<td>0.20 (32.68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ln(ADV)</td>
<td></td>
<td>0.53 (5.36)</td>
<td>0.62 (4.92)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ln(V)</td>
<td></td>
<td>0.58 (3.14)</td>
<td>0.59 (3.17)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB*ln(V)</td>
<td></td>
<td>-0.20 (-1.11)</td>
<td>-0.28 (-1.75)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-69,537.5 (-0.78)</td>
<td>-180,187.1 (-2.16)</td>
<td>-1.96 (-1.32)</td>
<td>-30,408.97 (-4.26)</td>
<td>-2.93 (-2.20)</td>
</tr>
<tr>
<td>R²</td>
<td>0.31</td>
<td>0.57</td>
<td>0.69</td>
<td>Pseudo R² = 0.31</td>
<td>Pseudo R² = 0.51</td>
</tr>
<tr>
<td>N</td>
<td>65</td>
<td>60</td>
<td>59</td>
<td>60</td>
<td>59</td>
</tr>
</tbody>
</table>

(Average) elasticity of sponsoring with respect to visitors

| Berlin                                   | 0.28 << [F=12.51]        | 0.16 << [F=35.43]        | 0.38 << [F=56.52]             | 0.17 << [F=22374]                      | 0.31 << [F=30.08]                        |
| Hamburg                                  | 1.81 [F=1.21]            | 1.09 [F=0.04]            | 0.58 ▲ [F=5.14]               | 0.79 ▲ [F=116.31]                      | 0.59 ▲ [F=4.82]                          |

The F-statistics in brackets refer to the test that the respective elasticity equals 1

<<: significantly smaller than 1 at the 1 percent level

▲: significantly smaller than 1 at the 5 percent level
Adding two further control variables greatly increases the R² (column 2). DM is a dummy variable for museum – the only kind of visual art in the sample. ADV - the cultural institution's yearly advertising and PR budget - is intended to measure its "visibility" in the public. Inclusion of this variable decreases the number of observations due to missing data. A strong correlation of ADV and the number of visitors might be suspected, but two standard measures for multicorrelation indicate that this is not a problem: for column 2, both the Condition Number (8.16) and the variance inflation factor VIF (5.16) are smaller than 10. As far as the correlation between S and ADV is concerned, it has to be interpreted with care: advertising does not necessarily attract sponsors directly. Rather, both variables might be determined by the institutions' business-orientation, or sense for marketing and communication with customers as well as sponsors.

Column 3 gives the results for the log-log-specification. As is typical for this transformation, the interaction variables did not work well (results not reported). Column 4 and 5 essentially confirm the results in columns 1 to 3 with a different regression method. One main advantage of median regression (Koenker and Hallock, 2001) is that it is less susceptible to outliers.

A further variable we experimented with was the respondents' estimate of the percentage of visitors from the respective city. The interregional appeal of a theatre or museum could be seen as a proxy variable for its reputation or possibly its kudos. However, this variable was never significant (hence not reported in table 2).

The bottom row of Table 2 reports the elasticity of S with respect to V and whether it is significantly smaller than 1. This is always – i.e., irrespective of specification – the case for Berlin. According to these estimations, a 10 percent increase in the number of visitors of a cultural institution in Berlin should lead to a 1.6 to 3.8 percent increase in sponsorships received. This is not in line with the perception of survey respondents, of which more than 60 percent did not think that the number of visitors matters for the amount of sponsoring. However, we also do not find empirical support for the hypothesis that sponsoring is just a kind of advertising, in which case an elasticity of 1 was to be expected.

The picture which emerges for Hamburg is less clear. In three out of five specifications, the elasticity of sponsoring with respect to the number of visitors is significantly smaller than 1. In any case, it is markedly higher than for Berlin, suggesting that the higher importance of sponsoring in Hamburg goes hand in hand with more market (or marketing) oriented criteria.

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5 For some enlightening speculation about why managers might hold visual arts in high esteem for signalling
when firms allocate the sponsoring budgets. Thus if non-commercial artists and institutions had to make a choice between the two cities, it would not be an easy one to make.

V. Conclusions

"This event was made possible by..."

"Computer equipment provided by..."

"This exhibit is a gift from..."

To a certain extent, arts sponsoring "buys" these messages as a means to contact (potential) customers (Abbing, 2002, p.200). However, if making certain events possible, or showing certain objects in the public, was completely motivated by marketing considerations, then the elasticity of sponsoring received by cultural institutions with respect to the number of visitors should be 1. This is not what we find. Hence our main conclusion that the allocation of sponsoring indicates a partly altruistic motivation – good news for those who are concerned that sponsoring might lead to a bias in favour of large-scale "commercial" projects, such as musicals.

An ideal data set would inform us exactly which firms give money for which cultural events. As such a data set is not available, previous studies have used data on donors' characteristics, whereas this study has focused on the receivers. The former have found that the decision whether and how much to give to the arts is to a considerable extent driven by marketing considerations. On the other hand, our results indicate that when it comes to the allocation of the funds to the cultural institutions, altruistic criteria also play a role, which is not necessarily a contradiction.

Apart from indirect evidence on sponsors' motivations, we also gain an impression of different patterns of sponsoring in Germany's two largest city states, Hamburg and Berlin. Different corporate cultures with respect to giving to the arts seem to have emerged in the two cities. To what extent this results from the different level of state subsidies is unclear, however; it might as well be the case that the local governments set the level of subsidies according to the willingness to sponsor in their city. The matter of causality is certainly a subject for further research.

purpose rather than aesthetic reasons, see Ullrich (2000).
6 One could then test the hypothesis that the relative importance of marketing and altruistic considerations depends on the market structure and the sponsors' profitability, among others.
References


