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L'ART POUR L'ART?
BEHAVIORAL EFFECTS OF
PERFORMING ARTS ORGANIZATIONS

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ABSTRACT

The institutional forms of cooperative, profit-oriented (private) and government subsidized non-profit performing arts companies affect the behavior of their management systematically. Thus, the managers of profit-oriented theaters, operas, and orchestras tend to let plays run longer, to have a smaller number of new productions and a more narrow repertoire than do public companies. The number of rehearsals will, *ceteris paribus*, be smaller, and more plays suiting the preferences of the general public will be offered. These propositions are derived using the economic model of behavior looking also on the incentive effects of different types of government subsidies.

INTRODUCTION

The economics of the arts can boast considerable achievements in an area which has been dominated by art historians and sociologists [e.g., 1, 2]. The sociology of the arts has emphasized determinants and composition of attendance and has analyzed behavior in the context of the sociological model of man. Economists, on the other hand, have greatly expanded the study of the demand for the arts by explicitly taking into account that behavior is not determined by tastes only,

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but that the constraints imposed by income, prices and time are of major importance. Also the supply provided by art producers has been analyzed using the classical theory of the firm. Finally, the two sides have been connected by explicitly studying the role of markets.

While the economics of the arts has significantly increased our knowledge of the field, it nevertheless has its shortcomings. The two most important are:

1. The individualistic basis has not received sufficient attention. Where individuals play a role, their behavior is often analyzed in an organic way, overlooking incentives.
2. The traditional welfare approach with its 'Nirvana'-orientation is commonly applied. Few analytical comparisons of institutional arrangements can be found.

Our contribution emphasizes individual behavior of rational economic man and studies the incentive effects of different institutional conditions, in particular comparing the mode of organization of the producers of performing art in the United States (mostly private, profit-oriented) and Europe (mostly non-profit, government supported). We will show that differences in financing arrangements strongly affect incentives and accordingly lead to major differences in the behavior of the decision-makers in the theater, opera, ballet, and orchestra.

The next section discusses the cooperative form of production. This institutional arrangement is hardly viable in the long run, but is superseded by two forms: The profit-oriented capitalist organization (discussed in the third section) and the publicly supported organization (dealt with in the fourth section). The final section draws some conclusions.

COOPERATIVE PERFORMING ARTS COMPANIES

In the areas of theater, ballet, opera, and film it is often the case that labor hires capital, and not the reverse (as is the rule in most other areas of society). The typical instance is a small "cooperative" group of actors (say four to five people) with equal voting rights who look for capital in order to realize a particular idea they share. Often such groups are highly informal. The management tasks are usually shared. The company for which Shakespeare wrote and to which he belonged as an actor has been one of those theater cooperatives. A partnership of actors, it remained for more than a quarter of a century a well-knit community of professional associates and friends.

In such performing arts groups joint production by a team is efficient. The monitoring problem relating effort and remuneration is solved by mutual control [3]. This set-up is efficient because much or all information is "impacted" within the team [4, 5]: the input of effort is supervised internally, and any unevenness is amicably dealt with. A centralized monitoring arrangement would be

more costly as information would have to be gathered and would have negative effects on productivity and output, as it would be resented by the members of the group. A calculative environment is not conducive to high artistic achievement in this framework. Accordingly, the "profit," if any, is distributed among the group members without problem.

Such a performing arts group may exist for a long time as long as it stays small. Nevertheless, the purely cooperative form is usually taken over by a more hierarchical set-up in which one member takes a leading (managerial and artistic) role. When the initial enthusiasm slowly evaporates it is no longer certain that the relationship between effort and income is informally fixed.

The monitoring problem gets much more serious when the cooperative performing arts group is successful—i.e., when it gets larger and does more business. The remuneration is no longer automatically fixed because a) the input becomes more differentiated (the artistic, technical and administrative tasks become separated) so that the group members are no longer easily able to evaluate what effort is put in by each one; and b) a split emerges between those who directly reap the artistic success of the production and those who do the less rewarding auxiliary back-stage technical and administrative work. For both reasons, it is no longer easy to distribute the profit (if any) in a way satisfying all group members.

Cooperative performing arts companies find it difficult or impossible to survive on a larger scale. The problems hinted at may be overcome in three different ways:

1. The cooperative group is dissolved and the more enterprising members form new small (cooperative) groups.
2. The actors hire a manager with the task of monitoring the effort of the individual members [see 6]. If each group member retains his voting rights, there is an insufficient incentive to monitor the manager because of the public good problem. This allows the manager to pursue his own goals (one of which is to earn higher income) which are not necessarily identical, and possibly in conflict, with the goals of the actors. A more definite solution to the monitoring problem is to set up a classical capitalist firm in which the group members are the share owners and distribute the residual among themselves. In that case, the manager's behavior is also monitored by the (financial) market [7, 8]—i.e., the manager's discretionary leeway may be limited in the case of the performing arts, too. Indeed, the first opera was founded in Venice by Ferrarri in 1637 as a profit-sharing venture among the members of his company. In London, between 1720 and 1728, Haendel's opera companies took the legal form of joint-stock companies. The company members are the managers; they monitor the efforts of the employees of the firm and hire and dismiss actors (in the extreme case, including the share-owning actors) according to whether their wage is lower or higher than their marginal productivity to the firm. An incentive problem among the share-owners/managers exists so long as several

of them are residual claimants. Only if one capitalist-owner takes all the profit, does he have an undiluted incentive to monitor the group members.

Clearly, the capitalist performing arts corporation represents a dramatic shift from the cooperative team of actors. It is, of course, completely open whether this transformation presents a viable solution for survival. It may well be that the calculative environment inherent to the capitalist organization destroys the artistic atmosphere—but it need not be so.

3. A third solution for a cooperative performing arts company to survive is to gain government support. As will be shown, government help may take many different forms, with specific effects on the behavior of the performing arts institutions supported.

The following section deals with the behavior of the capitalist, profit-oriented performing arts institutions.

PROFIT-ORIENTED PERFORMING ARTS INSTITUTIONS

Conditions for Existence and Survival

Achieving sufficient income to guarantee survival in the performing arts is impossible if either the set-up costs (directing, rehearsing, scenery and costumes, and maintenance costs of the building which are unrelated to audience size) are high and/or demand is small [9]. The fixed cost cannot be distributed over a large enough number of spectators willing to pay a sufficiently high price. The demand curve lies over the whole range of output below the average cost curve. There is no ticket price that will generate enough revenue to cover total cost.

Profitable production is possible in the performing arts though this is not always recognized in the literature. Indeed, in various areas of the performing arts the following conditions obtain:

Small fixed costs – Travelling stage companies have relatively low fixed cost because they eschew the (high) fixed cost of keeping up a house and its technical outfit. They can, moreover, often use the technical and administrative staff of the hosting theater. A higher use of capacity makes it possible to benefit from the decreasing average cost. Fixed cost may also be small in the case of experimental groups who purposely use simple technology and play in shacks or warehouses. In the short run, fixed cost can be transformed into variable cost if the actors do not have a permanent position but are hired for a specific task, and if decorations are not produced within the theater but ordered from independent outside firms. Set-up costs are fixed only with respect to “quantity,” but are influenced by the competitive pressure of firms entering and exiting the market, which may result in a change in the quality of performances.

Large audiences – Many spectators can be attracted by performing the same play *en suite* rather than having a broad repertoire. Obviously, large audiences

can be reached in large cities. As Baumol [10] has convincingly shown, classic Athens had too low a population to support the Greek drama productions by authors such as Aristophanes, Euripides or Aeschylus, even if played only once. The performances were possible only because they were financed by public and private donors for religious reasons (the festival of Dionysus in March, and of Lenaia in January). A large audience can also be gained by visiting the potential spectators; that is the solution taken by the touring companies.

Price discrimination – A downward sloping demand curve is a reasonable assumption, for the performing arts presumably have an element of monopoly. Since secondary markets are of minor importance, audiences with a high willingness to pay can be charged a high price. In this way, consumer surplus may be transformed into revenue to a degree sufficient for recovering the total cost.

There are a great many possibilities to capture consumers' surplus:

- seats with a better view and more comfort can be sold at a higher price;
- based on the effect of newness and the social event surrounding it, the prices for the opening night can be raised. In the same way, prices can be differentiated according to the day of the week and season (peak-load pricing);
- prices can be differentiated according to the type of the performing art (e.g., between drama and opera), and between particular performances (e.g., between chamber music and symphonies);
- prices can be raised when the production managers and/or the actors and singers are particularly prominent.

In all these cases it is assumed that the spectators preferred better seats, first nights, particular types of performances and artists have a particularly high willingness to pay and price inelastic demand. Empirical evidence suggests that it is likely to hold in reality (see for instance, marketing studies using interviews among attenders and non-attenders in various American cities [11, 12]). Satisfactory estimates of the willingness to pay for performing arts with respect to the above mentioned criteria are, however, difficult to obtain, because of the problem of separating preferences from constraints).

Other income – The artistic production may be used as a means to earn income in addition to the box office receipts. An important and promising possibility is to sell performances to the media, i.e., to radio, TV, video, or to the film. Modern media can reach a huge audience by historical standards. The showing of *Hamlet* on American TV (even if viewed by only a small share of all the TV owners) assembles an audience which is larger than that which has seen the play since 1601. The main difficulty is that TV and film may produce their own versions of the plays and operas so that the theaters have a limited possibility to generate much revenue in this manner.

Behavior of Profit-Oriented Institutions

Performing arts institutions that are private and (endeavor to) make a profit are discussed here to enable a comparison with the non-profit, publicly supported type of theater (including opera and orchestra) prevalent in Continental Europe. Artistic production leading to ticket receipts and revenue from sources related to this production are distinguished.

Profit maximizing suppliers in the performing arts choose the quantity, quality and technology of production so as to meet the marginal conditions—i.e., they consider the effects of incremental changes in these variables on revenue and cost. The necessary and sufficient conditions are easy to state formally and are, of course, the same as in any other profit maximizing firm. What is of interest here are the special and possibly unique features of quantity, quality and technology in the performing arts.

Quantity – The number of spectators and/or of performances offered to the public within a year is the quantitative aspect of the performing arts. The same attendance can be achieved by various combinations of:

- the number of repeated performances of a particular play,
- the number of different plays per season, and
- the repertoire consisting of the plays which may be activated for performance.

The choice among these aspects depends on the particular cost and demand characteristics. As already noted, profit-oriented theaters have only a restricted repertoire and often perform only one play per season, keeping a particular play on stage as long as there is sufficient demand for it. Historically, this happened when city populations grew large enough for stock companies to keep one play running for a very long time. Thus, in seventeenth-century London eight performances were considered a success, but in 1728 John Gay's *Beggar's Opera* made theater history by reaching sixty-two performances. The number of plays with very many performances has also strongly increased in recent times, but the order of magnitude is, of course, different. In the season 1927/28 only three out of 156 plays on Broadway reached more than 400 performances. More recently, producers have adjusted to the changed cost situation by either closing a production after a very short period (sometimes after one or two evenings), or letting them run for a very long time. In the 1957/58 season, for example, fourteen out of the 116 Broadway plays had over 400 performances. These figures also document that over this period the producers chose to perform a smaller number of plays [13]. Even more demand can be activated by giving guest performances in theaters located elsewhere. American producers used to launch shows on Broadway, where they hoped to cover their production cost; the profits they expected would come from the road [13].

Quality – In the performing arts, the qualitative aspect is of overriding importance. Even a “difficult” play or opera which is considered to be of high quality by (part of) the potential audience (which is therefore willing to pay high entrance prices) may be financially successful.

In contrast to many other areas of the economy, it is uncertain how a high quality of a *particular* production can be achieved. Neither the necessary nor the sufficient conditions are well known. On average, however, it may be expected that a high quality of inputs leads to a higher quality of output. Thus, the better the managing producer and the cast, the more lavish the scenery and costumes, and the larger the number of, and the better the facilities for, rehearsals the better is the quality of the output *on average*.

But what is the “quality” of the performing arts output? While it is difficult to evaluate, quality is determined by rather confused processes in the “art world” composed of insiders, namely directors, performing artists, auxiliary artistic personnel, and, of course, the professional art critics of local and national newspapers. This definition of “quality” is the one accepted and produced by an enlightened elite. Economists, however, use another yardstick for “quality”: the willingness to pay of individuals. This individualistic evaluation, while probably not independent of the enlightened elite's one, is certainly not identical with it. The economic approach does not attempt to determine the *content* of “art” or its “quality.” This has the somewhat disturbing consequence that *Oklahoma* is on the same footing as the *Zauberflöte*, or a Dean Martin TV show as *Faust*, provided the aggregate individual willingness to pay is the same. The approach does not even differentiate between a performance in sports and in the arts. The advantage of sticking to a process view (namely the evaluation by the individuals) lies in circumventing the elusive and useless discussion of “what art really is.” Nobody has ever found a generally acceptable and clear-cut definition, and some artists such as Joseph Beuys refuse to restrict artistic production to artists, claiming that everybody is an artist.

Technology of Production – As has been pointed out, the production function relating inputs to the quality of performance is insufficiently known and contains strong random elements. The difficulty for spectators and even for the “art world” to evaluate quality may even lead them to measure it by the subjectively perceived quality of the inputs, in particular the fame of the actors and of the stage director. Consequently, “technology” in the performing arts is not restricted to technical aspects (such as in traditional production functions) but contains aspects of subjective evaluations of demanders.

More is known about the production function relating factor inputs to the quantity of output. A production function for thirty-three symphony orchestras and twenty-seven theaters in Canada (1971/72) has revealed strongly increasing economies of scale [14]. For forty-two theaters in the United Kingdom (1968/69) and for thirty-four theaters in Australia (1971/74) the estimates of long run cost functions show increasing economies of scale up to a level of output around

150,000 attendances per year in the United Kingdom and 100,000 in Australia. Thereafter, unit costs are found to increase sharply. For opera, ballet and music companies, at least in Australia, scale economies are even more pronounced over a wide range of company sizes; the minimum of long-run average cost is reached at an attendance of 260,000 per year [15].

It is often thought that the performing arts production is characterized by fixed coefficients, and that therefore changes in relative factor costs have no effect on input mix. There are obvious limits to substitution for a *given* play. Most performances require an exactly determined number and type of actors, singers, musicians, and time. But there are exceptions even here: In the royal dramas by Shakespeare which sometimes require large crowds, one actor has been used who holds up a table indicating that the spectator should imagine a crowd of people. Moreover, one actor may perform various roles in the same play. It has been shown for typical (small) American theaters that these possibilities for substitution have indeed been used [16].

Additional substitution possibilities arise as soon as the choice between plays is considered. One effect of the relative rise of the cost of labor (actors) relative to capital may be that an increasing number of plays with few actors are chosen. According to the artistic director at the Aldwych Theater in London ". . . if there's now an equal choice between a play with twenty-five characters and one with ten we choose the one with ten" [17]. The Experimental Traverse Theater in Edinburgh cut the average size of its cast from 8.1 (1975/76) to 4.3 (1980/81) [18]. Recently, in the United States there seems to be a tendency to substitute less expensive chamber music for the costly symphonies [19]. Relative price effects may also have had an effect on playwrights who see a better chance of having their work staged if the cast is small. Other substitution possibilities exist in the preparation of a production, in particular with rehearsals and the use of the stage.

Profit maximizing performing arts institutions have an incentive to seek revenue from lines of activity that are only indirectly related to art production. While selling attractive programs and running profitable bars and restaurants is easy enough, selling of performances to the media creates a problem, because the (future) demand for the particular productions may be reduced. This would little affect the decision of an individual company provided its share of the market is small, because then the fall in demand is a public bad. In the performing arts, a supplier may thereby effectively spoil the market. Experience with permitting the televising of cultural performances in American cable television suggests that there are quite small financial benefits to the performing arts organizations making such a deal: often the fee for permission just about covers the increased costs [20]. On the other hand, showing a performance in the media (especially on TV) increases exposure to the public, thus increasing demand for the live performance. Aspects of this issue are discussed, and some confirming empirical evidence is collected, in Semenik and Young [21]. An "addiction" to

the arts might be created among the TV viewers and radio listeners [22]. Again, there is a public good element because the rise in future demand does not only benefit the theater concerned, but all performing arts institutions. The main effect should still fall on the theater presenting the particular performance, however.

In addition to these possibilities for raising revenue from other sources, profit-oriented theaters have also made a determined effort at facilitating the acquisition of tickets: Reservations may be made by telephone and immediately paid by credit card. A centralized ticket office has been instituted for all commercial Broadway theaters. Price discrimination has been introduced by offering unsold tickets on the day of the performance at half the regular price. This experiment has resulted in a considerable increase of attendance, turning out to be a financial success [23, 24].

Particularly controversial new means of financing have been used by some American museums which depend on outside finance: The New York Museum of Modern Art has sold its air rights to a developer for \$17 million and participated in the development of a fifty-two-story residential tower of its galleries [25]. For a general analysis of the supply side in museums see Frey and Pommerhne [26].

Importance of Profit-Oriented Performing Arts Institutions

At the beginning of this section, four conditions of profitability in the performing arts were listed. These conditions were satisfied in many countries and periods in the past. In England private theaters have always been of great importance. This applies not only to popular theaters but also to those producing the (undisputed) highest quality of "serious" plays such as those by Shakespeare. Under the reign of Elizabeth I (1558-1603) the first regular playhouses were built in London, including the Globe, Swan, and Red Bull. Operating licenses were normally granted to an entrepreneur whose management aimed at making a profit. At present, private theaters still exist in England. This is partly achieved by extremely long runs of successful plays such as the *Mousetrap* by Agatha Christie which has been continually on stage since 1952.

In the United States, private performing arts institutions had been the rule until World War II. Today, Broadway theaters may still be profitable without receiving public support, but profitability varies a great deal. Similarly, most Off-Broadway productions, summer, dinner, and road theaters are commercially viable [9].

On the European Continent, *Boulevard* and *Tournée* theaters are still able to attract sufficiently large audiences to be profitable. They play *en suite* and choose popular plays, mostly comedies. In large cities such as Berlin, the profitable theaters perform in their own houses, but more often stage companies tour the country and attract the audiences by some star known from TV.

GOVERNMENT SUPPORTED PERFORMING ARTS INSTITUTIONS

General Institutional Setting

The development of a capitalist, profit-oriented institutional arrangement in the performing arts is only one—and historically a less important—mode of organization. The dominating institutional form of performing arts has been the establishment in a hierarchical setting by the Church, later by princes and kings, partly emerging from cooperative companies. The example for the creation of the *Hoftheater* was set by Joseph II in 1776 by incorporating the *Theater an der Wiener Burg* as part of the imperial household. Mannheim 1777, Munich 1778, and Berlin 1786 followed suit. After World War I these theaters were taken over in Germany by the Länder in the form of the Regietheater. They became part of public administration; their budget is accordingly part of the public household of the Länder, or the municipalities [27-29]. In other European countries, especially in Italy, France, and Austria with their old and prestigious performing arts traditions, the important institutions have also been purely public. The system of state opera and state theater is not restricted to such famous institutions as *La Scala di Milano*, the *Opéra de Paris* and the *Wiener Burgtheater*, but applies equally to hundreds of theaters and operas in the capitals and provinces.

To give a general impression of the role of public subsidies over time, the example of German non-profit public theaters is given in Table 1 (for other countries statistics are lacking or are highly unreliable).

Table 1. Percentage Breakdown of Earned Income and Subsidies of
Non-Profit Public Theaters in Germany, 1911/12 to 1981/82

	1911/12	1926/27	1934/35 ^a	1957/58	1965/66	1973/74	1981/82
Box office and subscriptions ^b	63.2	59.0	47.5	24.3	20.2	12.0	10.9
Radio and TV income	—	0.1	2.5	1.0	0.6	0.2	0.3
Other earned income ^c	5.7	8.1	6.6	13.1	6.2	5.4	3.9
Private support	3.9	1.0	—	1.6	0.5	0.7	0.1
Government subsidies	27.2	31.8	43.4	60.0	72.5	81.7	84.8

Note: Non-profit public theaters comprise all public institutions, associations, foundations, and those joint-stock companies whose shares are held by public institutions.

^a Only municipal theaters.

^b Including sales to students, associations, etc.

^c Programs, cloakroom receipts, guest appearances and tours.

Source: Montias [30] and own computations from the *Theaterstatistik* (Deutscher Bühnenverein, Cologne), various years.

As may be seen from this table the income from ticket sales dramatically dropped from 63 percent before World War I to 11 percent in 1981/82. Private support has always been low, and is now practically zero. In contrast, government subsidies by the Länder and municipalities increased from 27 percent in 1911 to 85 percent in 1981/82. This illustrates the dominant importance of direct monetary government support for German non-profit public theaters; a quite similar situation obtains in most other countries of Western Continental Europe (a major exception being the Netherlands, see [30]).

Types of Government Support and Behavior

Public support has important incentive effects, changing behavior in the performing arts considerably. A different type of theater with a different content is brought about. Public support has an effect on:

- the quantity and quality of the works performed;
- the prices of admission charged;
- the technology of production used;
- the non-ticket receipts; and on
- the internal organization of the theater, including factor payments.

The differences in behavioral modification depend on the particular form of giving public support. Four types are distinguished:

1. lump sum subsidy;
2. support by tax expenditure;
3. ticket subsidies; and
4. deficit coverage.

These forms will be discussed in turn. A formal analysis of the effects of the first three types of public support on the quantity, quality, and "social welfare" (in terms of consumer surplus) is given in Hansmann [31] and in Le Pen [32]. They assume that the performing arts suppliers maximize the quantity of the audience, the quality of the performance, or the total budget. They do not, however, consider that the kind of subsidy may have an effect a) on the objective function, b) on the incentive of the performing arts institutions to get more subsidies, and c) on other instruments beyond the quantity and quality of the performance.

Lump sum government subsidy — A subsidy is given to a performing arts institution on the sole basis of its *existence* but unrelated to its output, input or prices. The amount granted cannot be influenced by the receiving organization through its output decision. Such a lump sum subsidy may (at least in the short run) facilitate the survival of a performing arts institution which otherwise would have to close down for commercial reasons. Thus, government support has

no marginal effect on the quantity and quality of the performance. To a limited extent, governments give *à fond perdu* subsidies to newly formed theatrical groups to enable them to overcome the initial financial problems. Normally, however, the subsidy bears *some* direct or indirect relationship to the characteristics of the artistic group's behavior. In particular, no subsidy is received (or it has to be refunded) if there are positive profits. This fact has strong incentive effects on the subsidy recipient. Profits are attached a cost in the form of a loss of the subsidy, and therefore the incentives to earn profits are strongly diminished. An art policy is chosen in which no financial profits (or at least no visible ones) appear, in particular by improving quality above the level desired by the audience, distributing rents to actors and other personnel, concentrating on the "artistic" side and disregarding other sources of revenue.

Support by tax expenditure – Contributions to non-profit institutions of performing arts are deductible under the income tax both for individuals and corporations. This represents by far the most important form of support of the arts in the United States: Individuals may deduct up to 50 percent of their gross income for charitable institutions which include the performing arts. Corporations may deduct up to 10 percent of taxable returns. In Europe, there is much less scope for deducting donations to the arts from the tax bill. While Switzerland allows tax deductions of up to 20 percent of taxable income (depending on Cantonal tax laws), the Federal Republic of Germany limits them to 10 percent of individual and corporate income; finally, in France, tax deductions are restricted to 1 percent of taxable income for individuals, and for corporations it is as little as one-tenth of 1 percent. In Britain tax deductibility for the performing arts is quite restricted, too. True deductibility mainly applies to business sponsorship for the arts, sports, and other promotional activities. Companies can give money to arts organizations as part of their marketing effort, provided it is "wholly and exclusively for the purpose of trade." Such donations therefore qualify as an allowable pre-tax cost.

Tax deductible contributions to the performing arts amount to a matched government grant as X dollars of subsidy are given for every dollar in donation received by a performing arts institution. The incentive to attract donations is raised due to the change in relative price. The willingness to give donations is increased because the marginal cost of giving to the donor equals the marginal price paid times one minus his marginal tax rate. The total loss of tax receipts induced by the various national laws cannot be estimated at present, even in rough magnitudes, because no reliable comparative statistics exist.

A performing arts institution has to take a basic decision whether it wants to attain and keep tax-deductible non-profit status. The disadvantage of having non-profit status is the dependence on the public sector and the interference by both the public administration and private donors. Its advantage is that survival may be secured or become possible altogether. Therefore, a performing arts institution will only renounce tax deductible status if it wants to make productions

not acceptable to the government, or where complete independence from the public purse and private donors is essential for the product. A political cabaret for example may lose its *raison d'être* if it is in any way connected with the government or private business. A tax deductible status may also be rejected if the art production is expected to yield high profits, such as, e.g., in the case of the production of certain films.

Tax deductible status affects behavior fundamentally because acting in a profit-oriented way would endanger survival of the arts institution. There is every incentive to avoid profits by charging low or "social" prices (this strengthens the case for tax deductible status) but also to take out profits in the form of various kinds of "rent" (a concept defined below) that show up as costs.

Performing arts institutions choosing the tax deductible status also have an incentive to attract private donations. This means that much effort and highly skilled resources are devoted to that purpose. Donations are only received if the performing arts company stands for an artistic production because if the company, in order to avoid losses, resorts too much to pleasing popular tastes, individuals see no reason to give grants. There are two ways to please donors, thus inducing them to give tax-subsidized money:

1. The impression is given that the donations are well used. What counts is that the donors have the feeling that they have made a worthwhile contribution to the "good cause" of the arts. For the potential donors it is important that the performing arts institution has a good reputation in the public and the media; they prefer to deal with non-profit companies because they have more trust in them, in the same way as consumers have the feeling that non-profit institutions do not exploit the advantage over the consumer from contract failure [33]. In the world of art a good reputation is actively gained by providing high quality performances, and by inviting well-known actors and opera stars, whose names (potential) donors are familiar with.
2. The second means to attract donations is to publicize the donor's contributions, thus enhancing their prestige. The arts institutions have developed an elaborate structure of honors ranging from appropriate attributes (contributor, benefactor, etc.), to naming rooms, wings, and whole buildings after the donor.

It has been argued that tax expenditures in the form of contributions to the performing arts may be looked at as "a form of voluntary price discrimination" [31]. Individuals deriving a high consumer surplus from the arts production are potential donors. Therefore, theaters are reluctant to use price discrimination (to reduce deficit or increase profits) because exploiting the surplus of intramarginal consumers discourages donations. There is, however, a competing politico-economic explanation of why price discrimination is little used by non-profit theaters. Under that explanation, they may even set subequilibrium prices, leading to (possibly virtual) waiting lines and other

queuing phenomena. The reason is that a donor dependent performing art institution benefits from being able to give a selected group of would-be spectators (of which the most important are the donors) otherwise unavailable tickets. This privilege cannot be bought on the (ticket) market but can only be gained by entering the ranks of donors.

The reluctance to use price discrimination is, however, not restricted to donor dependent theaters but is also widely practiced by performing arts institutions receiving direct public subsidies. Hansmann's explanation of why price discrimination is little used is therefore deficient. A more general explanation is to look at the incentives of the managers of such institutions.

Subsidies and taxes on tickets – The public support of the performing arts may take the form of giving a fixed subsidy per admission (independent of the price charged) or to match total ticket receipts, using a fixed factor. This type of subsidy is uncommon. But its negative counterpart is widespread, *viz.*, a sales tax imposed on box office receipts. The change in relative prices induced work against enlarging the size of the audience and in favor of other goals such as raising artistic quality. This negative subsidy often does not only apply to commercial but also to public performing arts institutions.

Deficit coverage – A large portion of European Continental performing arts institutions are—as pointed out above—part of the public administration. In particular, they have to observe cameralistic budget principles. One of them is the principle of specificity with respect to content and time. This means that the various items of the budget may neither be substituted nor transferred over time. Even more important is the principle of non-affectation, saying that a surplus due to higher receipts and/or lower costs may not be used by the institution concerned for its own purposes. These funds have to flow back to the general public treasury.

The subsidy is granted on the basis of a projected deficit. The likely deficit is not “given” but is the result of a process of bargaining between the particular performing arts institution and the responsible ministry of culture (and the ministry of finance in case of a substantial deficit). The bargaining process takes place in the context of an information asymmetry in favor of the subsidy seeking institution [see 37]:

1. On the one hand, cost increases are easy to document because they are in good measure due to the fact that the institution is part of the public administration. Most important, the technical and administrative staff are either public employees or personnel whose wages increase in line with those of public employees.
2. On the other hand, the ministry finds it difficult to demonstrate convincingly that reductions in the projected deficit are feasible. Corresponding suggestions are easily shown to affect the “artistic quality” by the theater managers, and they therefore pertain to an area for which the directorate of the performing

arts institution claims exclusive authority. Public officials in the ministries concerned accept this claim because of lack of competence, but even more because they have little incentive to interfere. They gain more by having an amicable relationship with the theater people, who in turn acknowledge this by accepting them in the art world (e.g., by providing them with tickets for opening nights, and inviting them to social events).

Given asymmetric information (and incentives), bargaining rules have been established to facilitate the process. Past deficits and subsidies are taken as the cornerstone for projecting the new deficit. Foreseeable cost changes are added. The general financial situation of the public purse represents a countervailing force which also affects the theater. If, for instance, public expenditures have to be reduced across the board, the theater subsidies are not exempted.

A direct consequence of linking current subsidies to past deficits is that reducing its deficit has a double cost to the management of the performing arts institution: Achieving a surplus or decreasing a deficit is completely lost to the theater; the implicit tax applied is 100 percent. Moreover, future subsidies are reduced.

The directors of public theaters therefore have a strong incentive *not* to reduce the deficit, but rather to increase it above the projected level. The sanctions are low. Sometimes, the unbudgeted deficit is simply covered at the end of the year, and there is a good chance to be able to get a higher deficit budgeted in the future. Only under unfortunate circumstances the unbudgeted current deficit is subtracted (partly) from the future subsidy. Such a reaction is, however, not in line with the standard budget practices of a public administration. Only if the director of a public theater consistently overruns the budgeted deficit by sizable amounts does he run a risk of being reprimanded and possibly not being reappointed when his contract runs out. Nevertheless, such behavior would endanger the friendly relationship with the money giving public administrators and may not pay in the longer run.

Subsidies covering deficits have marked effects on the behavior of managers of performing arts institutions. They have a low regard for market efficiency and can indulge in the pursuit of other goals in their utility function, such as prestige in the art world; performance excellence; monetary income (mainly indirectly through the use of additional income sources such as directing plays in other theaters, participating in festivals, etc.); and a good atmosphere in the theater (beyond the efficient amount) consisting in satisfied co-workers and employees. For them again, a restricted work-load and the possibility of earning outside income are particularly important.

A particularly illustrative case of deficit coverage strongly shaping behavior is provided by the *Salzburger Festspiele*. This festival belongs to the most prominent and highly cultural events in the summer season. Founded in 1920, it now attracts a yearly crowd of more than 160,000 people; the visitors attend

one or several of the over one hundred performances of operas, theater plays and concerts by 1700 artists [35]. The festival is organized by the Salzburger Festspielfonds consisting of four directors and a president.

In 1950 the Österreichische Nationalrat (federal parliament) passed a law stating that the federal government, the state and the city of Salzburg are *required* to cover any deficit of the Festspiele. The budget constraint to be observed by the organizers is extremely weak, since all the expenditures have to be covered by law irrespective of costs. An effective constraint on the size of the deficit exists only in so far as the organizers must not demand so high subsidies that the financial capacities of the institutions covering the deficit are overtaxed and the law is consequently changed.

The institutional conditions under which the directorate acts result in a redistributive policy of the Salzburger Festspiele. (For a more elaborated analysis with detailed empirical evidence, see Frey [36]). The Austrian taxpayers are burdened by the subsidies while the gains are shared by the directorate, the staff and part of the spectators. The redistribution is not purposeful (from the taxpayers' point of view) but rather the unintended consequence of behavior.

The large discretionary leeway which the directors have results in three typical rent-seeking characteristics observable in the case of the Festspiele:

1. The tickets for the performance at the Festspiele are sold at *prices* significantly *below equilibrium* so that demand much exceeds supply. In 1981/82 175,000 demanded admissions but 35,000 had to be refused [35] which documents how difficult it is to get tickets (in the official market). Setting sub-equilibrium prices increases the directors' utility in various ways, and is therefore no oversight or miscalculation but rather a systematic policy: The directorate can claim to be "socially" oriented by keeping ticket prices low (while the anonymous taxpayers have to bear the cost), thereby serving their prestige. Moreover, the organizers' influence is increased by being able to distribute tickets that are otherwise almost impossible to acquire to people whom they choose. The main recipients are public officials, some of whom are supposed to monitor the Festspiele, people closely connected to the Festspiele in an artistic, administrative or business capacity, the press, as well as people selected by the directors because of their support of the Festspiele.
The rise of a black market for tickets [37] due to sub-equilibrium official prices is another source of influence and possibly income for the organizers because it enables a large group of people (such as hotel employees who sell tickets to visitors) to derive rents from the existence of the Festspiele.
2. The directorate also increases its utility by paying the administrative staff as well as the performing artists *higher salaries* than required—i.e., they pay out pure rents. These rents not only take the form of monetary income, but also old age pensions, settlements and prerequisites such as free tickets, use of cars, presents, and monetary contributions to feasts and excursions.

3. The organizers of the Festspiele have little incentive to keep down *costs* and to aim at an efficient management of the festival, because their behavior is insufficiently restricted due to quasi-automatic coverage of any deficit. As a drive for efficiency would result in less amicable relationships with the artists and the employees, while cost savings would result only in a reduction of the subsidies received (which is of little or no benefit to the organizers) they are rational to behave in this inefficient way. They have, on the other hand, an incentive to buy the "best possible" artistic performance irrespective of cost. The organizers choose the plays to be performed independent of the expected monetary net return, and sometimes even against cost considerations.

CONCLUDING REMARKS

The central idea of this article has been that institutional differences affect the behavior of the management of performing arts institutions significantly and systematically. It has been shown that theaters, operas, ballet and orchestras behave differently with respect to output, inputs and the production process depending on whether they are cooperative, profit-oriented and private, or non-profit oriented and public. It has also been shown that the type of government subsidy also affects behavior.

The theoretical analyses of the effect of institutional arrangements on the incentive structure of individuals allows to indicate some testable hypotheses. In particular it is possible to derive empirical propositions about the difference in behavior between a profit-oriented and a publicly run performing arts institution.

With respect to *quantity*: The run of plays tends to be shorter in public theaters because the goals mentioned cannot be served by long runs. On the other hand more new productions will be presented as this gives the chance to gain prestige in the art world. The repertoire of theaters whose deficit is covered by the public purse tends to be broader.

With respect to *quality*: This aspect is by far the most important to favorably impress the art world—i.e., to be acknowledged and to become famous. The managers of a public theater will therefore tend to take in more high quality producers, singers and actors, irrespective of whether they have success with the audience, to allow more rehearsals, and to choose more plays which suit the preferences of the leaders of the art world and not necessarily the broad public. It is to be expected that more modern and unknown plays and operas of an experimental nature will be performed.

With respect to *technology*: The interest in performance excellence leads the managers of public theaters to buy more of the best available technology, even if it is rarely used.

The managers of performing arts institutions whose deficit is covered by government also have less incentive to get revenues from selling programs, from running a profitable bar and restaurant, from facilitating the possibility to

acquire tickets (e.g., to have opening hours of the ticket office suitable for potential spectators), and from selling productions to television.

The economics of the arts as we understand it does not endeavor to reduce the role of art and culture in society, nor does it necessarily argue that public support should be curtailed. What should be achieved is that the resources used for the arts are not wasted, that the possibilities for rent-seeking in the arts are minimized, and that individual preferences are observed.

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