

The Economics of Music Festivals*

BRUNO S. FREY

Institute of Empirical Economic Research, University of Zurich, Switzerland

Abstract. This paper attempts to explain the rapid growth in the number of classical music and opera festivals. Two secularly increasing demand factors – a rise in real disposable incomes and an increased amount of time and money devoted to holidays – are well met by the supply of music festivals which almost perfectly combine culture and holidays. On the supply side, festivals may profit from low marginal cost of production factors and are considered as an effort to avoid restrictions from government regulations and trade unions.

Key words: cultural economics, music festivals, performing arts, non-profit organizations

1. A Multitude of Festivals

Nowadays most cities or regions have a music festival of one sort or another. While festivals as such are not a novelty, it is the vast increase of their number which is astonishing. Music festivals may be traced back to the 11th Century, where French troubadours took part in the festivities of the guilds. The oldest contemporary music festival is the Three Choirs Festival in Gloucester, Hereford and Worcester, which dates back to 1724, followed by the Handel Festivals in Westminster Abbey (1784–87 and 1791).

Among the most acclaimed European music festivals are Richard Wagner's Bayreuther Festspiele (since 1876), the Glyndebourne Festival (since 1934), the Salzburger Festspiele (since 1920) and the Spoleto Festival of the Two Worlds (since 1958). No less famous are: the festivals in Edinburgh, Avignon and Aix-en-Provence; the Würzburger Mozart-Festspiele; the Internationale Musikfestwochen in Lucerne and the Internationale Juni-Festwochen in Zurich; the Carinthische Sommer in Ossiach/Villach and the Steirische Herbst in Graz; the Prague Spring and the Warsaw Autumn, as well as the Opera Festival in Verona and the Bregenzer Festspiele. There are an estimated 1000 music festivals in Europe alone (Pahlen, 1978, p. 7; Dümling, 1992, p. 9); Galeotti puts their number at two thousand.¹ Current prices for tickets are such that most performances are sold out and demand often outweighs supply by far. To give an example: the performances of the Münchner Opernfestspiele (the oldest German music festival) are usually five times overbooked (Popp, 1988, p. 19).

This paper attempts to analyse music festivals from a rational choice point of view (see Becker, 1976; Kirchgässner, 1991; Frey, 1992). There are of course

various types of festivals catering to different demands, such as festivals of jazz music, folklore, dance and films. In this paper, however, I shall concentrate on classical music and opera. The aim is to analyse in a comparative institutional manner the differences between music festivals, opera houses and concert halls, as well as trying to give an explanation for the rapidly increasing number of festivals over the last decades. It will be argued that music festivals can best be understood from the *demand* side as both the result of an increasing demand for culture as well as an increasing availability of time for leisure and holidays; from the *supply* side the explanation given is (1) an evasion of the restrictions imposed on high artistic activity in concert halls and opera houses, and (2) the possibility of gaining high rents by exploiting the comparatively low marginal cost of producing festivals. It turns out that festivals are an important means of overcoming the tendency of ever increasing deficits of live artistic performances (the so-called “Baumol’s disease”).

Within the Economics of the Arts (see e.g. Baumol and Bowen, 1966; Throsby and Withers, 1979; Frey and Pommerehne, 1989; Towse and Khakee, 1992; Throsby, 1994) little work has so far been done on the subject of music festivals. With the exception of Frey’s (1986) contribution on the Salzburger Festspiele, Galeotti’s (1992) paper on the Spoleto Festival,² the analysis has been restricted to two types:

- (i) Impact studies calculating the regional multiplier effects of the government subsidies handed out (e.g. Vaughan, 1980 for the Edinburgh Festival; Kyrrer, 1987 for the Salzburger Festspiele; or O’Hagan, 1992 for the Wexford Opera Festival). This type of study is generally undertaken by private consulting firms commissioned by regional or town tourist boards.
- (ii) Theoretic welfare analyses inquiring into the various reasons for the public support of festivals. The externality and merit good arguments advanced in the literature in favour of festivals (see e.g. Pommerehne, 1992; O’Hagan and Duffy, 1987) do not differ from those given as reasons for supporting any other professional music activity and the arts in general.

These two types of analysis are not necessarily convincing. The impact studies reduce the value of festivals to material benefits for the economy at large, which may lead to an outcome opposing the one desired by the commissioning agency. It may well turn out that another activity, say a car race or some other sport event, produces a higher multiplier effect for the town and region (in which case, following the logic of such studies, that should be undertaken in lieu of the festival). However, what matters of course is not the material impact of a festival but rather the visitors’ and residents’ willingness to pay for having a festival (for evaluation methods, see Pommerehne, 1987), which is quite a different matter.

The theoretic welfare approach by assembling possible reasons for subsidising festivals based on market failure tends to degenerate to a purely normative exercise without any comparative perspective. More relevant is a positive politico-economic analysis of the forces working for, and against, establishing and supporting a festival, the type of analysis which is attempted here.

The arguments proceed in the following order: Section 2 analyses the various factors on the demand side which enabled the evolution and growth of festivals during the postwar period. The respective supply factors are studied in Section 3, and concluding remarks are offered in Section 4.

2. Demand for Festivals

The establishment and growth of a festival can be looked at as a reaction to market incentives induced by demand. In order to be consistent with the empirical observation of a strongly rising number of festivals over the last decades, it is necessary to identify those factors affecting demand which have also increased over this period.

The large increase in real disposable income since the war has furthered the possibility of spending more money on holidays and cultural entertainment. Real growth has been accompanied by significant decreases in working time – at least in Europe (a typical German employee or worker today enjoys 5–6 weeks holidays per year); an ever increasing proportion of the population goes on vacation away from home and is prepared to spend large sums for this purpose. The growth of real disposable income and of education has also led to an increase in the demand for culture.³ These two categories of demand are well met by festivals: most festivals take place during the holiday season (see e.g. Rolfe, 1992) and have on purpose been created to attract holiday makers and to cater to their cultural interests.

Music festivals have also benefited from the fact that the cost of attending such a performance has decreased relative to expenditures for comparable activities. While the opportunity cost of time has in general risen due to the secular rise in incomes (which makes it more costly to spend an evening in the concert hall or opera house), holiday time has, as already noted, strongly increased, so that the time cost of attending a festival during that period has considerably fallen. Furthermore, most performances take place in the evening, so that attending provides a welcome chance for entertainment at little or no time opportunity cost for oneself. Some festivals offer matinees and lunch time concerts in order to attract an audience composed of the elderly. At the same time, travel costs have decreased (see e.g. today's low cost of flying between America and Europe). As a result the incentive to individuals to take advantage of the economies of scope provided by combining holidays and culture has steadily increased; attending festivals has become a more efficient activity for producing the consumer good 'holiday entertainment'.

Another relative price effect working in favour of festivals is the lower transaction cost compared to attending a regular performance at a concert hall or opera house. One of the great handicaps of attending such a performance is the trouble of getting tickets (and of committing oneself to a particular evening; see the discussion on the time opportunity costs above). In the case of festivals, the tickets are often provided by the same travel agency doing the holiday bookings, hence no additional effort is needed. Moreover, as people tend to think in relative terms

(see Thaler, 1980), the entry fee is perceived to be lower than the same sum spent for the same performance back home (spending SFr. 100 is taken to be little if the holiday itself costs SFr. 5000).

Attending performances of classical music is to a considerable extent an activity reserved for the better educated and higher income groups;⁴ there are significant social entry barriers for other groups. Combining festivals and holidays lowers these entry barriers as this cultural activity is then sold as a unit: many tourists are more or less dragged along by the people who are genuinely interested in music. Attending, for example, an opera at Verona's Roman amphitheatre needs very little psychic effort by a visitor booking a trip to Northern Italy, but the same person might not dream of visiting an opera performance during the normal course of the year. Thus, attending a festival performance is often an integral part of a holiday to a particular region; obvious examples are Verona, Salzburg or Avignon. As such package tours tend to be booked more often by people of less than average income and education, festivals are able to attract new social groups (for evidence, see Rolfe, 1992, p. 82). Another new group interested in festivals is found among the elderly (often couples) who now enjoy sufficient pension income to be able to afford such an occasion.

Two groups of agents indirectly increase the demand for festivals because they derive monetary benefits from their existence.

The first is the *recording industry* and *corporate sponsors*. Discs, tapes and videos of classical music have become a huge commercial enterprise with corresponding high potential and actual profits. Festivals provide an excellent opportunity for bringing superstars under contract into the limelight before an often very large crowd of spectators.⁵ Correspondingly, the recording companies may use festivals to prepare the career of their future stars. As festivals are less regulated than concert halls and opera houses (see Section 3), these companies have a better chance of influencing the program and the artists in their favour. The same applies to sponsorship by firms which produce goods unrelated to the arts. At festivals firms can advertise their product and brand name more prominently than they can in the case of regular concerts and opera performances.

Politicians are a second group of actors benefiting directly from a festival, and they therefore have an interest in their existence and growth. Politicians can identify themselves as patrons of the arts (with the taxpayers' money), and may profit from the accompanying high media attention associated in particular with the opening and gala performances of the most popular festivals.⁶ In addition, they get free tickets and invitations to social events (for the Salzburg Festival, see Frey, 1986). It is interesting to note that several renowned festivals initially did not run a deficit. They did so only when the politicians decided to subsidise the festivals. Subsidies were in such cases not introduced to cover existing deficits, but subsidies *caused* deficits (in the sense of reducing the festival's effort to raise revenues from entry fees and other activities). Thus, for instance, the Spoleto Festival in 1968 earned 57% of revenues from ticket sales. In 1990 this share fell to 25%, in line with

an increase in subsidies from 20% to 60% of revenues (Galeotti, 1992, p. 139; similarly for Wexford O'Hagan, 1992; for Salzburg Frey, 1986).

3. Supply of Festivals

What are the incentives for organising festivals? One is to evade the heavy restrictions imposed upon regular opera houses by the government and trade unions; another is to overcome the ossification of established cultural institutions, and a third incentive is to exploit the lower marginal cost of a music festival as compared to running a regular concert hall or opera house. These supply incentives will be discussed in turn.

Established (stationary) music institutions have increasingly been burdened by a straightjacket of *regulations* and *restrictions* which make it difficult, and sometimes impossible, for enterprising conductors and other musicians to reach their artistic and personal goals. A newspaper report commenting on the situation in German speaking countries states for example: "The large city and state theatres have become immobile dinosaurs with an oversized apparatus with respect to administration and especially technique, in which an army of highly specialized people, secured by generous collective wage agreements, rather hinder than facilitate creative work" (Vitali, 1993). These restrictions are imposed by two quite different actors:

- (i) Orchestras and opera houses are *heavily regulated by the government*. In Europe typical houses are either under close scrutiny of, or are even part of the public administration, with all the consequences of strongly restricted flexibility and of killing off incentives (see Frey and Pommerehne, 1989, ch. 2 and 3). The regulations refer to salaries and wages (there are fixed scales independent of performance), hiring and firing (after some years artists are entitled to tenure, and often have virtually become bureaucrats), the collaboration of private and corporate sponsors and recording companies, and the possibility of appropriating the rents from successful commercial enterprises in the arts. Festivals, in contrast, are usually private institutions in which the government is only one among several owners, and where, as a consequence, the organisers are much freer to pursue a policy suitable to their own ideas. As market wages can be paid, it is easier to hire superstars who in turn attract many visitors and allow high entrance fees. As festivals run only for a short season (often only one or two weeks), there is practically no permanent employment, so that restrictions on hiring and firing are irrelevant. The organisers may choose the form of collaboration with sponsors and recording companies which suits their interests most. Indeed, while concert and opera houses often have fixed contracts with recording firms, festival organisers may improve their bargaining position by playing off one such firm against another. The commercial success of a festival can to a large extent be reaped by the organisers themselves; the profits gained can, for instance, be freely used to pursue other, loss

making artistic ideas (cross subsidization), but they may also be used for more mundane purposes, above all for increasing the organizers' income.

There is an abundance of examples showing the greater freedom festivals enjoy in comparison to normal music establishments. Consider, for example, the Schleswig–Holstein Musikfestspiele originated and promoted by Justus Frantz. He relies heavily on sponsorship⁷ – for which, unsurprisingly, he is ridiculed and despised by the 'art world' and by many intellectuals,⁸ but which gave him a popularity he would have never reached in an established music house.

- (ii) *Trade unions* nowadays restrict artistic activities in established concert halls and opera houses by closely *regulating salaries* and *working hours*. Their power does not only affect artists' activities, but also those of stage workers and administrative personnel. In particular the working time restrictions may be very costly and may strangle artistic creative endeavours. As festivals hire people to perform specific services over a restricted period of time, trade union restrictions apply to a lesser extent, if at all. Due to the changes in the composition of the labour force and short-term employment, union membership is low.

A second incentive to turn to festivals is that – at least from the point of view of many artists and musical directors – established concert and opera institutions are ossified. The taste of the visitors attending these establishments has indeed fallen much behind contemporary musical productions.⁹ The average age of operas produced in German speaking countries has, for example, increased from 44 years during the 1911/12 season to 107 years during the 1965/66 season (Frey and Pommerehne, 1989, p. 26–27). A major reason for this development are season ticket holders who tend to be even more conservative than the rest of the visitors. By specialising on particular types of music, festivals offer the possibility of breaking new artistic ground – by performing more modern programs. Examples would be the festivals at Donaueschingen or Lockhausen, devoted to contemporary music performances. However, the chance of breaking new ground is rarely taken (most festivals perform the same type of classical music as do established houses) because the prospective visitors' willingness to pay for concerts or operas by contemporary composers is rather limited. The organisers who can (to a large extent) appropriate the rents have a clear interest in gaining high revenues and playing established classical music. Festival directors have, however, an incentive in providing classical music in an innovative setting, such as e.g. the 'concerti di mezzogiorno' at the Spoleto Festival (see Galeotti, 1992).

A third major incentive for music festivals is that they can be provided at *lower marginal cost* in comparison to regular concert halls and opera houses. Most employees (administrative, technical and artistic staff) have their main and permanent occupation at a concert hall or opera house which pays their fixed costs, i.e. old age pension, health insurance and holidays. These expenditures make up a considerable share of gross income. Festivals, in contrast, can be run with a very

small number of permanently employed staff members (for evidence see e.g. Rolfe, 1992, p. 49). Most people are only employed for a limited period (in particular the artists and the technical personnel) and can be hired at marginal cost which is much lower than average cost. The deal is profitable to both sides: the employees receive additional income during their 'spare' time (which they would otherwise not easily get, or only at worse conditions),¹⁰ and the festival gets artists and workers whom it could otherwise not hire. This does not mean that a festival's artists and employees are badly paid; quite the opposite may be true.¹¹ The prospective employees do have bargaining power especially when they form part of a festival's image, which is true for instance for the Wiener Symphoniker and the Salzburger Festspiele. The festival directors may, on the other hand, threaten to turn to different orchestras and artists and can therefore prevent their own rent from being dissipated.

The festival directors have further opportunities to exploit the fact that most artists have double (or multiple) employments. They can implicitly subsidise the festival by shifting part of the cost so that it is carried by someone else. A director may for instance pay an employee more at his 'home' concert or opera house than he or she would get on the market, with the understanding that he or she will work at a lower than market wage during the festival. In this case, both the festival organizers and the employee are better off, and the cost is paid by the taxpayer who (usually) has to make up for restrictive employment practices by increased subsidies. How far such opportunities for crosssubsidization are actually exploited is an open question. Another opportunity of lowering wage costs is to employ young performers or even students at very low salaries which is regarded as a merit because future artists are thereby supported. In the case of festivals, even the trade unions may approve of such hiring practices which they would not do in the case of permanent concert and opera houses.

In many cases, festivals may also take advantage of low marginal costs by using the existing structures and production technology of a permanent concert hall or opera house (since these halls and theatres are normally unused during the festival period in summer), or they may take place in churches. In both cases, the owners are often prepared to rent their buildings at a low price; if they are government or church property, often for free (for Britain, see Rolfe, 1992, p. 62; for Italy, see Galeotti, 1992, p. 145). Again, festival directors have many opportunities of shifting cost, in particular if the local concert or opera director is involved in the festival. This may be an important practical reason why such people are included on the board of directors of local festivals or set one up themselves.

Festivals may be interpreted as an effort to evade 'Baumol's cost disease' (see Baumol and Bowen, 1966). According to that 'law', live cultural performances are bound to face increasing deficits because their wage costs rise at a rate determined by the growth rate of productivity in the economy as a whole (i.e. in line with average wage increases), while there is little scope for productivity increases in the performing arts. Switching to festivals with lower (marginal) wage and capital cost and higher income from recording firms and corporate sponsors constitutes a

discontinuous shift towards live performances with better profit opportunities. For this reason Baumol's cost disease (which is however disputed by some authors like, e.g. Peacock, 1984) might not apply and live artistic performances are not doomed. On the contrary, damaging cost and productivity tendencies in the permanent concert halls and opera houses (analyzed by Baumol) are mitigated by turning to festivals. Overall, the number of live artistic performances seems, if anything, to have increases in total, and there is little reason to fear that concerts and operas will disappear. On the contrary, as their high and steadily increasing number suggests, they are alive and well.

Concluding Remarks

The paper argues that there are four major factors responsible for the rapid increase in the number and importance of festivals:

- (1) A rise in real disposable incomes of which an increasing share is spent on the arts.
- (2) An increased amount of time and money devoted to holidays, particularly during the summer months.

These two secularly increasing demand factors are well met by the supply of music festivals which almost perfectly combine culture and holidays.

- (3) Existing (regular) concert and opera institutions face increasing restrictions from government regulations and trade unions, and have generally ossified over time. Festivals can thus be considered as an effort to break away from these restrictions.
- (4) Festival organizers are able to profit from the low marginal cost of using both labour and capital otherwise employed in the regular music institutions because they do not have to pay the fixed cost of employment.

These two supply factors constitute a major reason why so many festivals have been founded and have expanded all over Europe. The situation is different in the United States, where at least some opera houses – the Lyric Opera in Chicago and the Metropolitan Opera in New York for instance – are private (but they get indirect government support, as donations are tax-exempt) and therefore do not suffer from public regulations to the same extent as do European performing arts institutions. Organizers of festivals have, for the same reason, less chance of shifting fixed cost to the regular concert and opera houses. One would therefore expect lower incentives to establish music festivals in the United States. There certainly exist some festivals – the best known being the Berkshire Musical Festival known as Tanglewood, the Aspen Music Festival in Colorado and the Wolf Trap Festival near Washington, D. C. (for a survey see Rabin 1990) – but it does not seem to be the case that “regular festival presentations are held in virtually every city [as in Europe]” (Slonimsky, 1989, p. 105). Thus, the empirical evidence seems to be consistent with the theoretical proposition.

Some of the determinants identified for the growth of festivals also apply to the visual arts. Art museums have benefited from the rise in the demand for culture to an even larger extent than the performing arts, and they have also been subject to government and trade unions restrictions. Indeed, some of the major museums are almost completely ossified, as the collection presented may not be changed in any way for historical reasons (this applies in particular to famous paintings in a collection). Moreover, many such museums are not given the necessary funds to acquire additional art objects. Since they are neither allowed nor are willing (see Frey and Pommerehne, 1989; and Frey, 1994 for the reasons) to sell any art object in their possession, the composition of their collection remains fixed. In order to break away from these restrictions and ossification, enterprising museum directors put on special exhibitions with which they can pursue their artistic goals, gain prominence in the art world and attract large crowds (see e.g. Feldstein, 1991). 'Blockbuster' exhibitions like music festivals have become important for the tourist industry. The organizers of such art exhibitions may also profit from comparatively low marginal costs. In particular, existing exhibition halls may be used at preferential rates, and if they take place in the organizing museum itself (which is often the case), this part of capital is used free of charge. This may be a major reason why art exhibitions are normally put on by the local museum directors and therefore remain more closely related to the existing art suppliers than is the case for festivals which are more often organized from outside, and are administratively independent. Frequently, special exhibitions of regular art galleries are mounted in connection with festivals, the Scottish National Gallery at the Edinburgh Festival being an example.

Music festivals are an art form in constant flux – one may indeed speak of an endogenous 'festival cycle'. According to our analysis, they are mainly created to break the restrictions imposed on concert and opera houses by public regulations and trade unions. In the beginning, festivals are typically created by private initiative without government intervention, and often against the official, publicly subsidized and regulated concert and opera activities. At first, some festivals have been known even to be profitable (e.g. for Salzburg see Frey, 1986, for Wexford see O'Hagan, 1992). The temptation for the organizers to accept subsidies from official sources is strong, however, so that over time, governmental involvement increases. As subsidies are given only if official regulations are observed, the festivals tend to be recaptured. This development provides incentives to create spin-offs to the established festivals in an attempt to regain discretionary power (an example would be the Osterfestspiele in Salzburg). After some time, these festivals acquire a life of their own, thus restarting the 'festival cycle'.

Notes

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1. It is difficult to define exactly which cultural activity is a festival and which is not, and thus to effectively count them, since a particular festival may embody a number of quite different types of performances and may take place in various locations. The Edinburgh Festival for example consists of a film festival and a Military Tattoo and nearly a thousand events take place on The Fringe; The Holland Festival takes place in Amsterdam, the Hague, Rotterdam, Utrecht and Eindhoven. Nevertheless, Merin and Burdick's (1979) data give a rough indication. See also Pahlen (1978) and, for German speaking countries, Popp (1988).
2. See also O'Hagan and Purdy (1993) for an application of the Theory of Non-Profit organisations on the Wexford Opera Festival.
3. Throsby and Withers (1979, p. 113), for example, find an income elasticity for performing arts services of 1.55 for the United States 1949–73, and of 1.4 for Australia 1964–74 (full income). The rise in attendance at performing art events is also documented in Baumol and Baumol (1984).
4. See e.g. Throsby and Withers (1979, ch. 7).
5. The phenomenon of superstars has been introduced into economics by Rosen (1981); see the recent discussion by Towse (1992).
6. In Germany, for instance, the Richard–Wagner–Festspiele in Bayreuth and the Ruhrfestspiele in Recklinghausen receive a yearly subsidy of roughly DM 7.4 m. and DM 6.8 m., respectively, while the other 26 music festivals have to share the remaining fifty percent of the total subsidy of DM 28.3 m. (Deutsche Theaterstatistik 1990/91, p. 103–104).
7. There is an intricate system of sponsorship, ranging from three major firms contributing over half a million DM each (giving them the privilege of placing advertisements and the firm's logo in all publications and on the tickets and invitations to the glamorous receptions) to ordinary supporting members contributing about one hundred DM a year (Popp 1988, p. 88).
8. See Spahn (1991) quoting '*Der Spiegel*', the most popular magazine among educated Germans, which called Frantz "der blondlockige GTI des niederdeutschen Kulturunwesens, ... der in Sponsorenlimousinen ruhelos durch das Tiefland bretters, um in den 'Herzen der Menschen ein Urlicht' zu entzünden".
9. This is a phenomenon of this century. Mozart, in contrast, had to join a company for 'old music' in order to hear the music of composers who had just died; generally audiences at that time were prepared to listen only to new music written no more than a decade earlier. See Baumol and Baumol (1992, p. 12).
10. The 'Internationale Musikfestwochen' in Lucerne for instance were initiated in 1937 by the conductor Ernest Ansermet in order to find work for his 'Orchestre de la Suisse Romande' during the summer season.
11. As, for instance, at the Salzburg Festival, when workers, the administrative staff and the artists get incomes clearly above market wages, i.e. they derive sizeable rents (see Frey, 1986).

References

- Baumol, William J. and Hilda Baumol (1984) 'On inflation in the Arts: A summing up', in Hilda Baumol and William J. Baumol (eds.), *Inflation and the Performing Arts*. New York and London: New York University Press, pp. 173–195.
- Baumol, William J. and Hilda Baumol (1992) 'On the Economics of Musical Composition in Mozart's Vienna', Research Report 92–45, New York: C. V. Starr Center for Applied Economics, New York University.
- Baumol, William J. and William G. Bowen (1966) *Performing Art – The Economic Dilemma*. Cambridge, Mass.: Twentieth Century Fund.
- Becker, Gary S. (1976) *The Economic Approach to Human Behavior*. Chicago: University of Chicago Press.
- Dümling, Albrecht (1992) 'Vorsicht Kommerz! Musikfestivals am Scheideweg', *Neue Zeitschrift für Musikwissenschaft* 7/8, 8–12.

- Feldstein, Martin A. (ed.) (1991) *The Economics of Art Museums*. Chicago: University of Chicago Press.
- Frey, Bruno S. (1986) 'The Salzburg Festival from the Economic Point of View', *Journal of Cultural Economics* **10**, 27–44.
- Frey, Bruno S. (1992) *Economics as a Science of Human Behaviour*. Boston: Kluwer.
- Frey, Bruno S. (1994) 'Cultural Economics and Museum Behaviour', *Scottish Journal of Political Economy*, Forthcoming.
- Frey, Bruno S., and Werner W. Pommerehne (1989) *Muses and Markets. Explorations in the Economics of the Arts*. Oxford: Blackwell.
- Galeotti, Gianluigi (1992) 'Riflettori sull'iposcenio: elementi per un'analisi economica del Festival di Spoleto', in Brosio, Giorgio and Walter Santagata (eds.), *Rapporto sull'economia delle arti e dello spettacolo in Italia*. Torino: Fondazione Agnelli, pp. 125–147.
- Kirchgässner, Gebhard (1991) *Homo Oeconomicus: Das ökonomische Modell individuellen Verhaltens und seine Anwendung in den Wirtschafts- und Sozialwissenschaften*. Tübingen: Mohr (Siebeck).
- Kyrer, Alfred (1987) *Der wirtschaftliche Nutzen von Festspielen, Fachmessen und Flughäfen am Beispiel der Region Salzburg*. Regensburg: Transfer Verlag.
- Merin, Jennifer, with Elizabeth B. Burdick (1979) *International Directory of Theatre, Dance and Folklore Festivals*. Westport, Conn.: Greenwood Press.
- O'Hagan, John W. (1992) 'The Wexford Opera Festival: A Case for Public Funding?', in Ruth Towse and Abdul Khakes (eds.), *Cultural Economics*. Berlin: Springer, pp. 61–66.
- O'Hagan, John W. and Christopher T. Duffy (1987) *The Performing Arts and the Public Purse. An Economic Analysis*. Dublin: Irish Arts Council.
- O'Hagan, John W. and Mark Purdy (1993) 'The Theory of Non-Profit Organisations: An Application to a Performing Arts Enterprise', *The Economic and Social Review* **24**, 155–167.
- Pahlen, Kurt (1978) *Erster Europäischer Festspielführer 1978*. München: Goldmann.
- Peacock, Alan T. (1984) 'Economics, Inflation and the Performing Arts', in Hilda Baumol and William J. Baumol (eds.), *Inflation and the Performing Arts*. New York and London: New York University Press, pp. 71–85.
- Pommerehne, Werner W. (1987) *Präferenzen für öffentliche Güter. Ansätze zu ihrer Erfassung*. Tübingen: Mohr (Siebeck).
- Pommerehne, Werner W. (1992) 'Opernfestspiele – ein Fall für öffentliche Subventionen?', *Homo Oeconomicus* **9**, 229–262.
- Popp, Stephan (1988) *Das Management von Musikfestspielen*. Mimeo, Dept. of Management, Fachhochschule des Landes Rheinland-Pfalz.
- Rabin, Carol Price (1990) *Music Festivals in America*. Great Barrington, Mass.: Berkshire Traveller Press.
- Rolfe, Heather (1992) *Arts Festivals in the U. K.* London: Policy Studies Institute.
- Rosen, Sherwin (1981) 'The Economics of Superstars', *American Economic Review* **71**, 845–858.
- Slonimsky, Nicolas (1989) *Lessons on Music*. New York: Anchor.
- Spahn, Claus (1991) 'Mit Vollgas in den Festivalbetrieb', *Neue Zeitschrift für Musikwissenschaft* **1**, 14–17.
- Thaler, Richard H. (1980) 'Toward a Positive Theory of Consumer Choice', *Journal of Economic Behavior and Organization* **1**, 39–60.
- Throsby, David C. (1994) 'The Production and Consumption of the Arts: A View of Cultural Economics', *Journal of Economic Literature* **XXXII** (March), 1–29.
- Throsby, David C. and Glenn A. Withers (1979) *The Economics of the Performing Arts*. London and Melbourne: Edward Arnold.
- Towse, Ruth (1992) 'The Earnings of Singers: An Economic Analysis', in Ruth Towse and Abdul Khakee (eds.), *Cultural Economics*. Berlin: Springer, pp. 209–217.
- Towse, Ruth and Abdul Khakee (eds.) (1992) *Cultural Economics*. Berlin: Springer.
- Vaughan, David Roger (1980) 'Does a Festival Pay?', in James L. Shanahan, William S. Hendon, and Alice J. MacDonald (eds.), *Economic Policy for the Arts*. Cambridge, Mass.: Abt Books, pp. 319–331.
- Vitali, Christoph (1993) 'Die Unvernünftigen sterben wohl wirklich nie aus', *Die Weltwoche* **13** (1. April), 41.