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## The Wolf Report and Baumol's Curse: The Economic Health of American Symphony Orchestras in the 1990s and Beyond

by

Douglas J. Dempster

To subscribe to *Harmony* or provide support to the Institute, contact:

**Symphony Orchestra Institute**

P.O. Box 1040

Deerfield, IL 60015

Tel: 847.945.3050 Fax: 847.945.1897

e-mail: [information@soi.org](mailto:information@soi.org)

Website: [www.soi.org](http://www.soi.org)

### ***The Wolf Report and Baumol's Curse: The Economic Health of American Symphony Orchestras in the 1990s and Beyond***

**A** decade ago, the report of a study commissioned by the American Symphony Orchestra League was presented during the League's national conference. The subject matter of the study, and the report, was an analysis of the economic status of the symphony orchestra industry in 1991. Harmony readers who were involved in the industry at that time will recall the hue and cry prompted by "The Financial Condition of Symphony Orchestras."

Author Douglas Dempster, in the pages that follow, revisits the 1992 report. He begins with a recapitulation of the report's history and conclusions. He then adds to the mix an explanation of "Baumol's Curse," the classic analysis of performing arts economics published in 1966, and an underlying tenet of the report's conclusions.

The author next fast-forwards to the current year and inquires, "Where does the orchestra industry find itself 10 years after Thomas Wolf's address to the League?" He then proceeds with a detailed analysis.

#### **Paradigm Shift?**

In the 1992 report, Thomas Wolf called for a "paradigm shift" in the way orchestras did business as the only possible solution to the dire future he foresaw. Dempster suggests that such a shift did not occur and explains why.

The author completes his analysis with a discussion of what has gone right for the industry over the past 10 years, and what has gone wrong. He concludes with a tantalizing question.

This essay is, indeed, technical. We are fortunate that Douglas Dempster is a talented analyst who makes the material easily comprehensible. The topic is worthy of consideration by all symphony orchestra organization participants. We encourage you to read on!

## The Wolf Report and Baumol's Curse: The Economic Health of American Symphony Orchestras in the 1990s and Beyond<sup>1</sup>

Ten years ago, in June 1992, Dr. Thomas Wolf stood before the national meeting of the American Symphony Orchestra League and delivered the bad news. America's orchestras were in trouble, trouble with a capital "T"—a "T" that rhymed with "D," for deficits.

If orchestras could not learn to pursue their art and deliver music to their audiences in a fundamentally different fashion—Wolf called for a "shift of paradigms"—then the industry would continue to sink, inexorably, beneath a tide of growing deficits, aging audiences, and increasing cultural isolation and irrelevance as classical music became an elite and unaffordable cultural tradition.

Without "changes . . . in the way orchestras do business—changes that are substantial and systemic . . ."—including significant downsizing of the core orchestra, reduction of concerts and services, consolidation of municipal orchestras into regional orchestras, a move away from performing in grand venues in city centers, and even de-emphasizing the live-concert experience—the Wolf Report projected that the industry would, by the year 2000, have sunk over \$64 million into deficit<sup>2</sup>—twice the aggregate deficit of orchestras in 1991.<sup>3</sup> This "status quo" trend projected deficit spending accelerating relative to revenue growth: the report projected total industry revenues, into 2000, at just over \$946 million for the industry as a whole,<sup>4</sup> a 40 percent increase over total industry revenue of \$675.7 million for 1991.

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Wolf's dire projections were based on a simple extrapolation from the five years preceding the 1990-1991 season. Yet, as the report clearly pointed out, economic conditions could change, government support could become more generous, labor negotiations could become more amicable, private giving could save the day; any number of conditions that aggravated the economics of orchestras during the 1980s could, over the short run, delay the outcomes projected by the report.

However, the report took a long, historical view of orchestra economics and argued, from sound cultural economic theory, that the trends sooner or later

### **How Many? How Much? How Representative?**

The American Symphony Orchestra League (League) estimates a “world” of 1,800 American orchestras. That number includes youth, student, collegiate, and community orchestras. Approximately 900 of these are members of the League. Of these, nearly one third are wholly nonprofessional orchestras. The remaining two thirds, 625 members, are, in some sense, “professional” orchestras. The League Statistical Survey categorizes these orchestras into eight “groups” by size of budgets. In a typical year, approximately 200 of these professional orchestras respond to the League’s statistical survey. The statistical survey for 2000-2001, includes responses from 190 orchestras, whose expenses range from as little as \$26,000 for the season to as much as \$70 million. The League, in monitoring the economic status of the industry, must extrapolate from self-selecting respondents to the entire range of professional orchestras.

An overwhelming percentage of the measurable economic activity among professional orchestras is attributable to a comparatively small number of the largest-budget orchestras: approximately 70 percent of all expenditures and revenues in the industry are generated by the largest 55 orchestras—fewer than 10 percent of all professional orchestras. Because of the lopsided nature of the data, most discussions of the economic health of the industry focus on these top 10 percent of orchestras. But it would be a huge misrepresentation to equate this top 10 percent with the orchestral culture of the United States. These 55 orchestras, though economic heavyweights, produce only about one third of the annual professional orchestral concerts in the United States. Obviously, were we to add in the concerts of nonprofessional orchestras, the overwhelming majority of all U.S. symphonic concerts would occur outside the scope of these economic analyses.<sup>1</sup>

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<sup>1</sup> Membership data provided by League Research Department.

would lead to the same place: artistic expenses, inexorably, outpacing earnings; private giving less and less capable of closing the widening gap between earnings and expenses; and public support for the arts continuing to wane. The Wolf Report was uncertain on the question of “when,” but was utterly unequivocal on the question of “whether” the industry faced this crisis. Without a “paradigm shift” in the way that orchestras were doing business, growing deficits would erode the viability of the industry and threaten the culture of orchestral performance.

The Wolf Report was a thorough economic analysis that was also very sensitive to the realities of the orchestral culture. It was based on the American Symphony Orchestra League Statistical Survey, the best and most extensive data available

on any one segment of the performing arts world. The economic theory underlying the analysis, William Baumol and William Bowen's seminal work<sup>5</sup> on the economics of the performing arts, is accepted wisdom for the field. The lead researcher, Thomas Wolf, took an unbiased view of the orchestral industry and was motivated by a lifelong passion for the legacy and future of the American symphony orchestra.

It's all the more puzzling, looking back 10 years later, to realize that none of the report's simple projections was even close to being right. The financial health of American orchestras improved steadily throughout the 1990s. For the 1999-2000 season, the League reported total revenues of \$1.267 billion, a \$591 million increase over aggregate revenues in the 1990-1991 season, as reported in the Wolf Report. More importantly, the industry enjoyed its expansion and prosperity while restraining its appetite: the League reported an industrywide \$84.5 million surplus, above expenses that grew at a comparatively slower pace than revenues.<sup>6</sup>

Of course, growing prosperity and restraint have been balanced by comparatively bad seasons in 2000-2001 and 2001-2002, as the economy entered and worked through a recession. The coming season, 2002-2003, for various reasons that will be discussed later, is likely to be as, or even more, challenging than the past two seasons. All this needs to be considered in reflecting back on the Wolf Report and looking forward to the future economics of the industry.

How was the crisis averted? Did the orchestral industry shift its paradigm? If not, how did it avoid the sobering forecast of the Wolf Report? Did the booming 1990s simply forestall the inevitable outcomes predicted by Wolf? And will the current downturn in the economy unleash the crisis once again? Alternatively, how could so thoughtful an analysis as the Wolf Report seem to get it so wrong?

## History of the Wolf Report

In 1990, The Wolf Organization, Inc. was contracted by the League to do an analysis of the economic status of the symphony orchestra industry. Everyone knew that the analysis was not likely to bring good news: orchestras had struggled through the 1980s with many labor disputes and financial challenges. By design, the analysis by Wolf and his associates was intended as "Phase I" of a three-phase reform program instigated and led by the American Symphony Orchestra League. The Wolf Organization's report—which is formally titled "The Financial Condition of Symphony Orchestras," but has been known since its completion as the "Wolf Report"—was to be followed by a more forward-thinking investigation of ways that the industry might reform itself. This second phase was completed and the results were published as *Americanizing the American Orchestra*.<sup>7</sup> These first two phases were intended to provide the research and

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blueprint needed for a third and final phase that would lead to sweeping reforms supported by external funding.

The strategy never came to fruition. The Wolf Report and the *Americanizing* document touched off such controversy that no major, national funding initiative grew out of the effort. A feel for this controversy can be found in reactions to the Wolf Report. Some, like Deborah Borda, then managing director of the New York Philharmonic, read the Wolf Report as a call to arms for the industry:

Therein lies the first and crucial step. The "Holy Deadlock" that exists today between most boards, orchestras, and staffs must be broken. If we can't find a more productive way of working together toward genuine change, we will eventually drive off that cliff. For any of the valid issues and questions posed by Wolf to be addressed so as to create meaningful change in our industry, we must begin to consider some fundamental changes in our governance functions. We must create a new protocol.<sup>8</sup>

Older hands like Peter Pastreich, then executive director of the San Francisco Symphony, took the unflappable view that crises come and go; that orchestras need to respond, but not panic:

***“Though the initiative represented by the Wolf Report and by Americanizing the American Orchestra never led to a third, funding phase of reforms, it would be a mistake to underestimate the influence of the reports.”***

We do have a critical financial problem. The orchestras are spending more than they are taking in, and if they don't stop doing that soon there will be some disrupted seasons and lowered living standards for musicians and administrators. But the situation is not critical, not serious, and music will survive. What we don't need to do is to allow the financial problems which have developed from over optimism, poor management, and admirable generosity to drive us to "solutions" which are worse than the problem. What we do need to do is balance our budgets: take in more money and spend less. And continue to be an innovative, living force in the American cultural scene.<sup>9</sup>

The reliably cranky critic Samuel Lipman had this to say in the *New Criterion* about the League's efforts through the Wolf Report and *Americanizing the American Orchestra*: "[S]o great is this disgrace that it provides ample grounds for the dissolution of the American Symphony Orchestra League. The League clearly does not have in mind either the interests of our beloved symphony orchestras and their audiences or the future of great music."<sup>10</sup>

Though the initiative represented by the Wolf Report and by *Americanizing the American Orchestra* never led to a third, funding phase of reforms, it would be a mistake to underestimate the influence of the reports. Both reports were broadly disseminated and digested. They set off a widespread debate and, without a

doubt, had an enormous influence on the expectations of managers, musicians, board members, funders, training programs, and others with a stake in the orchestral culture and business of the country.

## The Wolf Analysis

The Wolf Report made a simple argument based on excellent data and sound economic theory. Professional orchestras had managed to cover approximately 40 percent of their operating expenses out of earned income, including ticket sales, fees for performances, and recording income. The balance of operating expenses were covered by private and foundation gifts, public subsidies, and endowment income.<sup>11</sup> However, the Wolf Report's analysis showed an increasing earned "income gap" over a 20-year period. In 1971, earned income provided 44 percent of the cost of providing 13,000 concerts, leaving an income gap, per audience member, of \$2.78 that had to be raised from other sources. By 1981, earned income had sunk to 37 percent of expenses for 20,100 performances. Combined with revenue and expenses that had nearly tripled in 10 years, this left a per-audience-member income gap of \$7.95 that had to be raised. In 1991, earned income had improved as a percentage of expenses, coming in at 39 percent, yet revenue and expenses, again, more than doubled over that 10-year period, creating a per-audience-member gap of \$15.91 to be covered by unearned revenue.<sup>12</sup>

On the face of it, this trend would seem to be reason for celebration: the numbers revealed a rapidly growing nonprofit performing arts industry with a record of being able to generate additional revenues to fuel growth. Beneath the surface, however, the Wolf Report saw that the industry was dependent on revenue growth, both earned and unearned, that would somehow have to keep pace with very large, annual cost increases. The report was soberingly pessimistic about those traditional revenue sources being able to continue the same rapid growth that was affecting orchestras on the expense side.

Government spending on the performing arts showed only faint signs, in 1991, of any growth. The "Culture Wars" had so politicized public support for the arts that there was, at that time, every reason to think that the public sector might get out of arts sponsorship altogether.

In spite of spectacular growth in general philanthropy through the 1970s and 1980s, the report worried about the trend toward symphony orchestras and the performing arts generally receiving a shrinking share of that overall giving. If philanthropy overall were ever to flatten or decline, orchestras could expect declining revenues from individuals, foundations, and corporations.<sup>13</sup>

*"The report was soberingly pessimistic about those traditional revenue sources being able to continue the same rapid growth that was affecting orchestras on the expense side."*

Finally, the report foresaw few prospects for ticket prices, expanded services, or endowment growth to close the growing earning gap.

Why not assume that orchestras, like other businesses facing diminishing income, could control expenses? Why, in 1991, did the Wolf Report's analysis not project that orchestras would and could react to growing deficits and the growing income gap through constraining costs? The answer to this is complicated.

In the Wolf Report's analysis, the growing gap between earned income and expenses was a trend being driven largely by artistic expenses. Why, exactly, the report came to this conclusion is puzzling; the supporting data are, at best, ambiguous. The report admitted that ". . . the real growth of artistic personnel expenses over the past five years [i.e., 1986-1991] was about the same for expenses overall."<sup>14</sup> The report went on to say, however, that:

The figures provided represent *aggregate totals for the industry* and there are many *individual* orchestras in which artistic personnel expenses did drive overall expense increases. This was particularly true for larger orchestras where artistic personnel expenses kept significantly ahead of inflation. . . . The largest orchestras (those with budgets in excess of \$8.5 million) saw real growth in average weekly salaries of 6.2% between 1986 and 1991 after adjusting for inflation.<sup>15</sup>

***“What’s puzzling about this analysis is that even through 1991, the industry had done pretty well at managing a very rapid expansion as measured by aggregate budgets, number of orchestras, number of concerts, and the aggregate size of the audience.”***

Given that fewer than 10 percent of member orchestras in the League make up more than 70 percent of all economic activity in the industry, a highly inflationary trend in the compensation of musicians in top orchestras was reason for genuine concern.

The report also speculated that the increasing cost of other expenses such as marketing and fundraising, though they kept pace with artistic expenses, were also, in effect, artistic costs. “The decision on how many concerts to play seems not to be established by audience demand, but instead by the collective bargaining with musicians.”<sup>16</sup> Better compensation for musicians has meant extended seasons and more services, which have in turn required expanded marketing, more savvy programming, civic partnerships, and greater fundraising to create or find audience demand or, simply, to stimulate more giving. The picture painted by the report is of an industry expanding under pressure from the supply side—musician and union insistence on expanded contracts—rather than being drawn into growth by expanding audience demand.

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**Table 1: Budget Surplus/Deficit History of American Orchestras**

(Dollars in millions)

	1971 <sup>†</sup>	1981	% Change 1971-1981	1986	1991	% Change 1981-1991	% Change 1971-1991	2000 <sup>††</sup>	2001 <sup>†††</sup>
Aggregate Revenues	\$84.7	\$294.8	248%	\$483.9	\$675.7	129%	697.8%	\$1,267.1	\$1,335.0
Aggregate Expenses	\$87.5	\$295.2	237%	\$493.9	\$698.9	137%	698.7%	\$1,182.7	\$1,350.0
Aggregate Surplus/(Deficit)	(\$2.8)	(\$0.4)		(\$10.0)	(\$23.2)			\$84.5	(\$15.0)
Surplus/(Deficit) as a % of Revenue	(3.3%)	(0.1%)		(2.1%)	(3.4%)			6.7%	(1.1%)

<sup>†</sup> Data from 1971-1991 are taken directly from the Wolf Report's analysis of 254 orchestras.

<sup>††</sup> Data from 2000 are taken from the ASOL's "Quick Orchestra Facts from the 1999-2000 Season." These data are taken from usually fewer than 200 orchestras that report on the annual statistical survey, and are applied to all orchestras, which number over 1,600.

<sup>†††</sup> Data from 2001 are extrapolations from the 190 orchestras responding to the ASOL's Statistical Survey for that year to 625 member orchestras of ASOL.

### **Comparing Apples and More Apples**

Comparing figures on the orchestral industry is tricky business. The American Symphony Orchestra League Statistical Survey collects financial data for orchestras grouped by size of expenditure. Averages, medians, and ranges in this survey are a consequence of which orchestras choose to respond. Large, well-staffed orchestras are more likely to report, other things being equal, than smaller orchestras or orchestras facing financial hardships. Any orchestra with good news is more likely to report than an orchestra with bad news. Response rates in the statistical survey are high for high-budget orchestras—virtually 100 percent for Group 1 orchestras—and diminish for smaller-budget orchestras. Fewer than 15 percent of the lowest-budget professional orchestras responded to the League's statistical survey for 2000-2001.

The Wolf Report, which aggregated data from 20 years' worth of surveys, included 254 professional orchestras, including the largest orchestras, but avoided the dicey business of generalizing to a larger population. The League does some aggregate financial reporting on the overall industry in its "Quick Orchestra Facts," but these aggregate figures are based either on samples different from those selected by the Wolf Report or on "extrapolations" from those samples. The author's review of the 2000-2001 statistical survey included 190 participating orchestras with extrapolations being made to a population of approximately 625.

In sum, comparing aggregate numbers that have been derived by different methods, from different surveys, with different groups of self-selecting, respondent orchestras is inherently error-prone. Nevertheless, by exercising caution, some broad tendencies and trends are conspicuous enough.

expansion as measured by aggregate budgets, number of orchestras, number of concerts, and the aggregate size of the audience. Even deficits, which grew during the 1980s, were kept comfortably in scale with the expansion of revenues.

To be sure, aggregate deficits grew rapidly between 1986 and 1991, calling for some strong fiscal medicine. But the spectacular expansion of the professional orchestral industry in the United States dates back at least to the mid-1960s. In fact, the Wolf Report's own analysis shows aggregate deficits for the industry—taken as a percentage of aggregate revenues—growing insignificantly over that 20-year period (see Table 1). Deficits actually declined between 1971 and 1981, the industry's period of most rapid expansion, proving that orchestras were capable, at least during that period, of rapidly generating revenues to match the rapidly increasing costs of expansion.

## Baumol's Curse

Part of the reason for interpreting these industry trends in a most pessimistic fashion has to be found outside the data themselves. William Baumol and William Bowen published their classic analysis of the economics of the performing arts in 1966.<sup>17</sup> Among many observations, their most important insight was to explain a feature of the economics of performing arts organizations that they referred to as the “income gap,” but which has since come to be called “the cost disease,” “productivity lag,” or sometimes just “Baumol's Curse.” The Curse foresees that “performing organizations typically operate under constant financial strain—that their costs almost always exceed their earned income,”<sup>18</sup> and that “rising costs will beset the performing arts organization with absolute inevitability.”<sup>19</sup>

While Baumol and Bowen's explanation is elaborate, the underlying idea is simple enough. Orchestral musicians have supremely specialized talents that have been developed, typically, over a lifetime of training. Nonetheless, as Baumol and Bowen observe, over time, orchestras draw from the same talent pool as universities, hospitals, software developers, automobile manufacturers, or the mining industry, for that matter. Some professions are more remunerative than others, but Baumol and Bowen's insight was that the cost of talent in any one of these industries is affected by the comparative cost of talent in other industries. Electrical engineers don't, of course, compete with bass players in orchestral auditions. But in the long run of an economy, the orchestral industry competes with other industries in attracting talented, young people who have a choice of professions.

Some sectors of an economy, especially manufacturing industries, are able to achieve great advances in worker productivity through technological innovation. Greater productivity, to an economist, is simply more units of output, whether that's goods or services, per unit of labor input. Obviously, industries that achieve greater productivity per labor unit are able to generate more income for some fixed amount of labor. That greater income affords the opportunity to raise wage or compensation rates in a competitive labor market. Increasing compensation rates in one industry have, then, an indirect effect on the compensation rates in other industries—whether or not those industries have been able to achieve comparable gains in productivity. Industries that are not able to improve the comparative productivity of their talent pools are faced, as a result, either with a deterioration of the talent attracted to the industry or with the need to increase compensation rates without offsetting gains in earned income. Whence the “income gap.”

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### Technological Innovations

Radio, the LP, CDs, and the Internet all stimulated the audience and market for classical music. As technological innovations, they also presented a gigantic potential for gains in economic productivity for orchestras. A large concert hall can accommodate a few thousand patrons, but a radio broadcast or CD can reach tens of thousands or even millions. Alas, you can't put "potential" in the bank. Orchestras, notoriously, have had a terrible time realizing any direct income from electronic media. There may be some consolation in knowing that the same is true for the overwhelming percentage of all commercial recordings: few break even regardless of musical style or format, even without the huge overhead costs of recording an orchestra. However, for many professional musicians, electronic distribution of their work is more nearly a marketing cost that enhances concert attendance and ticket prices. Viewed as such, these technological innovations may greatly enhance the productivity and perceived value of an orchestra.

Baumol and Bowen considered all "service industries," (e.g., education and food preparation, as well as the performing arts) as opposed to manufacturing, to be vulnerable to the Curse.<sup>20</sup> (More recently, Baumol has called these the "stagnant services."<sup>21</sup>) They single out the performing arts as the very best example of a stagnant service industry that benefited very little, in terms of productivity, from technological innovations. A string quartet still requires four musicians a fixed amount of time to perform, regardless of 250 years of technological innovation since the genre became well defined.

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So, in sum, the cost of talent rises "inevitably" in a growing economy, yet the unit productivity of performers does not. Ergo, the cost of presenting a performance to an audience inevitably outstrips the earning potential of that performance. Trouble with a capital "T."

Now this is, of course, a vastly oversimplified account that should, properly, raise all sorts of questions and challenges. Radio, various generations of recording media and playback devices, and more lately, the virtually mediumless distribution of music over the Internet have created enormous potential for increased productivity in various entertainment industries, including orchestral music. Larger concert halls and summer festival venues are, in effect, technological innovations that increase the

audience capacity for a concert or an orchestra. Educational and other programming formats that tend to require less rehearsal preparation are also ways of increasing the productivity of an orchestra.

Be that as it may, whatever innovations may marginally improve the productivity of orchestras, Baumol and Bowen argued that, as an industry, the performing arts were at a technological disadvantage relative to other industries, and that this was enough to ensure that the performing arts would struggle with an ever-growing gap between earned income and expenses.

In many ways, the Wolf Report was simply a case analysis of the orchestral industry viewed through the prism of Baumol and Bowen's theory of the economics of the performing arts, and it confirmed, 25 years later, their pessimistic forecast for the performing arts.

## Ten Years Later

Where does the orchestra industry find itself 10 years after Thomas Wolf's address to the League? For the 1999-2000 season—the season for which the Wolf Report projected a \$64 million deficit—the industry posted, according to the League, an estimated \$84.5 million surplus (extrapolated from 203 responding orchestras to approximately 1,800 orchestras). Total revenues and expenses for the season were, respectively, \$1.267 billion and \$1.183 billion.<sup>22</sup> The Wolf Report projected 2000 revenues at \$946.5 million and expenses at \$1.01 billion, greatly underestimating the prospects for growth in the industry.

"Extrapolations" and "self-selecting respondent orchestras" are likely to cause suspicion among statisticians. Deficit trends, perhaps in different sectors of the industry, may be hidden in industrywide, aggregated averages. However, when the League controls for that kind of error, the outcomes are equally impressive. When the League looked at a constant sample of reporting orchestras over the nine years between the 1990-1991 and the 1999-2000 seasons, there were 109 orchestras that, in aggregate, produced an overall surplus in 1999-2000 of \$12 million. That same group of orchestras, in 1990-1991, reported an overall deficit of \$26.7 million.<sup>23</sup>

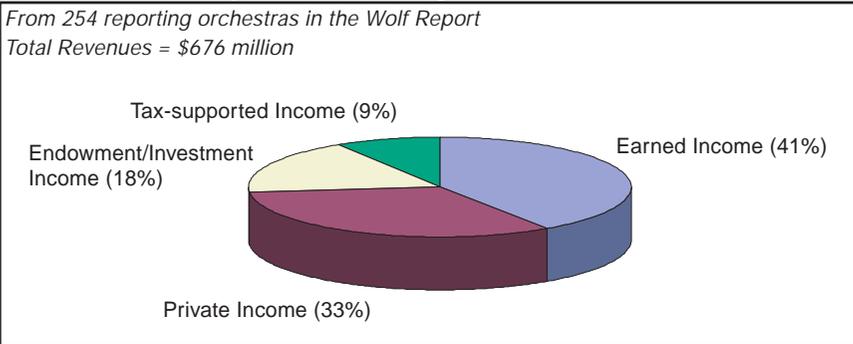
The Wolf Report's surplus/deficit projections were clearly mistaken. Given the controversy that swirled around the report, that's the outcome that will matter most to many reading this article. However, it could easily distract us from a more important, if less salient, prediction: the report was remarkably accurate in predicting the scale of growth that the industry enjoyed through the decade of the 1990s. The Wolf Report calculated that industry revenues and expenses, in nominal dollars, grew nearly 800 percent in the 20 years between 1971 and 1991, a period of spectacular growth. By contrast, between 1991 and 2000, in nominal, non-inflation-adjusted dollars, the industry grew only 90 percent over a nine-year period, a healthy but much slower rate of growth than in previous decades. The Wolf Report clearly anticipated the trend toward decelerating

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growth, which may, in the end, prove far more significant to the industry than its periodic slumps into modest deficits.

The 30-year trend toward growth and prosperity seemed to continue through the 1990s, with expenses growing rapidly, and revenue, in the form of earned and unearned income, keeping pace. Over this period, according to the League,<sup>24</sup> income from ticket sales (i.e., part of overall earned income) rose more than 50 percent. By 1999-2000, individual giving had doubled the rate of a decade earlier, growing from \$90.5 million to \$188.5 million. Business and foundation giving improved very significantly, though not at the huge rate of individual giving. Public subsidies, not surprisingly, seem to have shrunk for orchestras during the 1990s from the approximate range of 9 percent of total revenues reported by

**1990-1991 Industry Revenues – Figure 1**



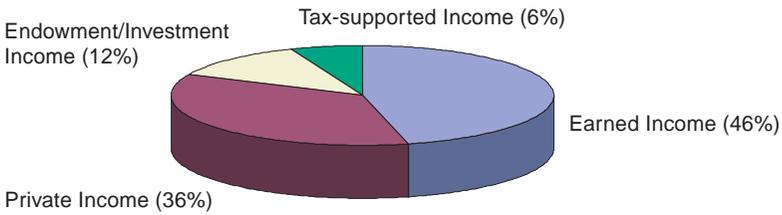
the Wolf Report for the 1990-1991 season to approximately 7 percent for the 2000-2001 season (see Figures 1 and 2). But even this has to be understood against the background of orchestra budgets having nearly doubled through the decade. Though public subsidies shrank as a percentage of budgets, total public funding for orchestras grew very substantially through the 1990s.

This growth and prosperity, so at odds with the forecast of the Wolf Report, might be chalked up to a booming economy throughout the 1990s, which surged, as a matter of good luck for all, right through the season of 1999-2000, the arbitrary year chosen for the Wolf Report's projections. We might wonder, naturally enough, whether the underlying reality of a growing income gap was just waiting to wreak its "inexorable" deficit havoc once the economy leveled off or declined.

There's no need to speculate about this. The 1980s ended with a slowing economy that entered a genuine recession in 1990 and 1991, which influenced, in part, the projections of the Wolf Report. The economy of the 1990s behaved very similarly, surging into the second half of the decade and cycling, we now know, into a recession in the first three quarters of 2001.<sup>25</sup> In fact, the last two quarters of 2000 saw a dramatically slowing economy, even before entering the 2001 recession. Consequently, this weak economy fell, without warning, on the entirety of the 2000-2001 season and fiscal year, making it the most challenging season in the previous 10 years.

**2000-2001 Industry Revenues – Figure 2**

From 190 reporting orchestras in League survey  
 Total Revenues = \$1.073 billion



How did orchestras fare? In spite of bad news from Toronto, St. Louis, Baton Rouge, San Jose, and most alarmingly, at the fiscal gold-standard for the industry, the Chicago Symphony Orchestra, one would have to conclude that the orchestral industry as a whole managed very well. All together, orchestras did suffer an aggregate deficit for the 2000-2001 season, but they did not come close to the 7 percent deficit (i.e., expenses in excess of revenues) projected by the Wolf Report in 1992. The 190 participating orchestras in the League's 2000-2001 statistical survey reported a cumulative deficit of \$17.5 million, only 1.6 percent more in expenditures than revenue. Most impressively, of a total \$1.083 billion in revenues, those 190 orchestras earned \$488.5 million through concert income and other services.<sup>26</sup> That's fully 45 percent of total revenue from earned income, a significant improvement over the 41 percent earned income for the 254 orchestras represented in the Wolf Report (see Figures 1 and 2). The largest 25 orchestras, which constitute 71 percent of all the measured economic activity in the industry, earned 47 percent of their expenses during the 2000-2001 season.

**Table 2: Earned Income as a Percentage of Expenses, by Size of Orchestra**  
 (From 2000-2001 Orchestra Statistical Report, ASOL)

	Budget Ranges (millions)	Avg. earned income as % of expenses
Group 1	>\$13.25	47%
Group 2	\$4.80—13.24	40%
Group 3	\$2.40—4.79	40%
Group 4	\$1.60—2.39	40%
Group 5	\$0.87—1.59	40%
Group 6a	\$.627—.869	45%
Group 6b	\$.385—.626	39%
Group 7a	\$.173—.384	34%
Group 7b/8	≤ \$.173	37%

That's not quite the same thing as increasing productivity, in the strict sense of the economist, but it is a clear indication that orchestras are resisting a fate projected by the Wolf Report and foretold by Baumol's Curse. Contrary to the warnings of the recent Rand report on the performing arts,<sup>27</sup> the author's analysis of earned income among orchestras responding to the 2000-2001 statistical survey showed no special disadvantage for mid-sized orchestras. If anything, it's the smaller orchestras that seem least able to cover their expenses through earned income.

The news is not all good, of course. Orchestras are performing many more concerts than ever in order to reach the same number of audience members. According to League estimates, total audience attendance for orchestra concerts has grown little, if at all, over the last several years. By contrast, the number of concerts performed, again according to League estimates, has grown and continues to grow by leaps: by as much as 23 percent since the 1995-1996 season and by as much as 45 percent since 1990-1991.<sup>28</sup>

*“... the real measure of productivity is in the number of performance services orchestras require to generate a fixed number of concerts or ticket sales.”*

On the face of it, that represents an extraordinary loss of productivity that would have to be offset by rapidly increasing ticket prices or other sources of income. Indeed, average ticket prices increased 70 percent between 1985 and 1995.<sup>29</sup> The truth, however, may not be so alarming: the real measure of productivity is in the number of performance services orchestras require to generate a fixed number of concerts or ticket sales. Performances that require less rehearsal time, or programs that can be frequently repeated, allow an orchestra to increase the number of concert events without increasing underlying costs. Nonetheless, it's certainly not a good thing that many more concerts are required to reach the same size audience, especially not

if that comes only with less variety in programming, with fewer rehearsals, and at a higher cost to the audience.

The decline in public subsidies for orchestras is worrisome, but no surprise (Figures 1 and 2). Between 1991 and 2001, tax-supported revenues for orchestras shrank from 9 percent to 6 percent of total revenues for the industry. This was in spite of the fact that total government appropriations for the arts grew steadily through the decade of the 1990s. However, as has been well understood for some time, larger appropriations are being divided among more and more constituencies through the very politicized process of public arts funding. That orchestras have even held onto such a large share of these subsidies (even while that share shrinks as a percentage of rapidly growing budgets in the industry) is a political and economic success for the industry.

A much greater concern—perhaps the single greatest concern—is that endowment and investment income has declined relative to other sources of revenue (Figures 1 and 2). Between 1991 and 2001, endowment and investment

income for all orchestras declined from 18 percent of total revenues to 12 percent, fully a one-third reduction. The author was not able to obtain data on orchestra endowments. However, the fact that endowment income did not grow at the pace of earned income or private giving suggests that too little revenue has been invested for future income, even when private sponsorship was at all-time highs. The industry has to be concerned that orchestras may have been balancing budgets, even during a boom economy, by drawing too aggressively on their endowments. Now, as the economy recovers from a recession, with the threat of decreased public and private support, orchestras may not have the endowment resources they should in order to cushion against imminent declines from these other sources of income.

Having weathered the 2000-2001 recession, the orchestral industry, though having the advantage of being on guard, is likely to face worse in the next two seasons. The 2001-2002 season was, of course, rocked by the disaster of September 11. In the end, however, the economic effects of September 11 will prove less significant than many other factors. As this article is being written in the summer of 2002, personal income has recovered very rapidly after the 2001 recession. Consumer spending remains strong and consumer confidence is recovering, with vacillations, from a hard fall after September 11 and a recession. Inflation is modest. New claims for unemployment are going down. Manufacturing inventories are climbing again. That's the good news.

***“The bad news is that much of the unearned income raised by most orchestras is threatened from an equities market that has lost as much as one-third of its value over the last 18 months.”***

The bad news is that much of the unearned income raised by most orchestras is threatened from an equities market that has lost as much as one-third of its value over the last 18 months. Individual, foundation, and corporate contributions and sponsorships, influenced by the value of these equities, will, with certainty, go down or take longer to be realized. Orchestra endowments, which are not as large as they should be after a decade of strong economic growth, will have grown little or will have even shrunk over the last year. Unless orchestras have a very conservative investment and endowment-spending discipline, short-term loss of income from endowments will be very painful.

State and local tax revenues, a very significant part of all public subsidies for orchestras, have been stagnant since 2000.<sup>30</sup> For fiscal year 2002, for the first time in six years, total appropriations to state arts agencies decreased from the previous year, from \$446.8 million in 2001 to \$411.4 million in 2002.<sup>31</sup> The industry as a whole, then, can expect reduced tax-supported income in 2002-2003. (The bad news about reduced overall public funding for the arts has to be balanced against the good news that a majority of states have actually increased appropriations for the arts, and that the National Endowment for the Arts has seen the single largest increase in its

appropriation in more than 15 years, an initiative that came out of the U.S. House of Representatives.)

Many orchestras are struggling to contain deficits incurred in 2001-2002. Early anecdotal indications are not encouraging. However, costs and deficits are much more containable than they were 20 years ago, just by virtue of the much greater size and diversity of many orchestral programs and operations. Though painful and regrettable, orchestras can make up large savings by reducing administrative staffs, cutting noncore programs such as tours or recording projects, controlling operational overhead, and scaling down marketing costs. All of this can be done before cutting into the core artistic and/or educational mission of the orchestra. Admittedly, these can be drastic remedies with a potential for setting off a spiraling decline; the perils of cost reduction have to be weighed prudently against incurring deficits and carrying debt burdens. But the important point is that an economic downturn for the industry needn't trigger a trend toward the uncontrollable income gaps and deficit spending predicted by the Wolf Report and Baumol and Bowen's economic theory of the performing arts.

### **Did the Paradigm Shift?**

To avoid, or forestall, the fulfillment of Baumol's Curse, Thomas Wolf, in 1992, called for a "paradigm shift" in the way orchestras did business. Did that paradigm shift occur? Is that why orchestras enjoyed nearly 10 years of growth and prosperity and seem to be weathering an economic recession in comparatively good health? Did the Wolf Report help avert the Curse?

The most obvious and straightforward answer is a simple "no," nothing like the called-for paradigm shift happened. In fact, the last decade seems to have been business as usual, just more so. The size of full-time "core" orchestras has not shrunk noticeably. Greater productivity has not been achieved, as Wolf urged in 1992, by shrinking the number of concerts or consolidating municipal orchestras into regional orchestras. In fact, the number of concerts presented has grown nearly 50 percent over 10 years, rather than shrinking, even though total audience participation has been stagnant. In Tokyo, Japan, two of the city's nine major professional orchestras, the Japan Shinsei Symphony Orchestra and the Tokyo Philharmonic, did merge in 1999. The only comparable merger in the United States is the recent decision to combine the Utah Symphony and the Utah Opera.

Perhaps most surprising, the grand, centrally located, urban concert halls—shining palaces for the performing arts—have not become the victims of suburban sprawl, as suggested by Wolf and others. If anything, constructing grand concert venues has become more crucial to the marketing strategies of orchestras than ever before. Indeed, for many cities struggling to remedy the loss of business and retail anchors in the urban core, arts and entertainment, including grand concert halls for classical music, have provided an answer. Heidi Waleson, in a recent article on the subject in *Symphony* magazine, concludes that ". . . after

decades of moribund development and suburban flight, downtown is hot again—and concert halls are a prime component of the turnaround.”<sup>32</sup> A 1993 study by the Association of Performing Arts Presenters showed that fully one-third of all performing arts venues in the United States had been built between 1980 and 1993, with the pace of construction apparently accelerating in the 1990s.<sup>33</sup>

New, major concert halls, often in multipurpose performing arts centers, have been recently completed or are in various phases of planning and construction in Newark, Seattle, Philadelphia, Fort Worth, Atlanta, Los Angeles, Detroit, Kansas City, Austin, Nashville, and Denver. Many other major concert halls across the country, such as Avery Fisher Hall in New York City, are being planned for major renovations. The early success of the Philadelphia Orchestra in Verizon Hall, part of the recently completed \$265 million Kimmel Center, will not be lost on other orchestras and their communities. The Philadelphia Orchestra reported, as a result of resold subscription tickets, 102 percent attendance for concerts presented in the new Verizon Hall<sup>34</sup> (concerts overall for the season reached 99 percent of capacity), in spite of the fact that top price for single tickets in 2001-2002 was \$110 and next season will go to \$130.<sup>35</sup> As early as June 2002, the orchestra reported a 78 percent subscriber renewal rate for the 2002-2003 season.

***“The core symphonic repertoire, which makes up the backbone of classical recording sales, has been exhaustively recorded by orchestras around the world, overwhelming record buyers’ appetites for collecting.”***

Orchestras have also been largely frustrated in their efforts to reach larger audiences through electronic media, one of the imperatives of Wolf’s new paradigm. Very few orchestras can any longer attract recording contracts that satisfy union pay scales. The recording industry, which is seeing shrinking profit margins on the few recordings that can get beyond a break-even point, is more reluctant than ever to subsidize high-cost recording projects with symphony orchestras. The core symphonic repertoire, which makes up the backbone of classical recording sales, has been exhaustively recorded by orchestras around the world, overwhelming record buyers’ appetites for collecting.

It’s worth pointing out as well that the quality of carefully performed and engineered recordings is generally so high, that for the vast majority of the record-buying public, there’s an indiscernible difference in interpretation and quality of performance between one performance of *Ein Heldenleben* and the 72 other recordings currently available through the Amazon.com

listing. For the vast majority of the listening public, there’s insufficient product differentiation in orchestral recordings to justify the abundance of choices.

There’s little doubt that the total “extended” audience for classical music—and by that I mean the radio-listening, CD-buying consumer, as opposed to that special class of listener, the live-concert attendee—has grown enormously

as a result of electronic access to a diverse range of high quality, “classical” music. That vastly increased audience is a pool of at least minimally literate listeners: listeners who are familiar with Mozart, Beethoven, and Tchaikovsky. While the aficionado may denigrate the “casual” listener, at least the casual listener hears differences and similarities in these compositional and performance styles, though he or she may have trouble expressing these observations. More importantly, even the casual listener will have, however naïve, preferences for music within the tradition—“I like Beethoven and Leonard Bernstein, but you can keep that ‘modern’ stuff.” These naïve preferences are the stuff that more sophisticated musical appreciation—and perhaps even an appetite for live-concert experiences—are made of. Cheap, abundant, electronic access to high-quality classical music has been a huge stimulus to the culture and industry of classical music. Orchestras are, in spite of the frustrations of turning a buck on classical recordings, clearly enjoying the economic benefits of that enlarged audience base. To that extent anyway, the industry has “shifted” in the direction pointed out in the Wolf Report. But marketing and performing through radio and recordings hardly seems an innovation for the industry.

*“Orchestras are, in spite of the frustrations of turning a buck on classical recordings, clearly enjoying the economic benefits of that enlarged audience base.”*

Thomas Wolf proposed other important aspects of the industry paradigm shift:

- ◆ greater ethnic diversity among orchestra players, management, and board members;
- ◆ more innovative programming strategies;
- ◆ educational programming designed around more thoughtful pedagogical assumptions;
- ◆ the need for orchestras to pursue more creative community partnerships; and
- ◆ the importance of greater player involvement in orchestral governance and strategic planning.

Progress toward these goals has been mixed. The ethnic diversity among orchestral musicians, managers, and board members seems to have changed little if at all over the last 10 years, in spite of various efforts among training programs and orchestras. With the sponsorship of organizations such as the Knight Foundation, programming strategies, at least among the prosperous organizations that can afford to experiment with their audience bases, have become more inventive. Orchestras are investing much more in educational programming. They are reforging strong community partnerships that have, with little doubt, been key to the prosperity of many. And orchestral governance

and organizational culture are subjects of broad discussion and occasional innovation.

Progress is progress, even if modest, and as such, worthy of recognition and applause. But these modest advances hardly seem so sweeping as to constitute a “paradigm shift” in the industry, hardly seem a change in the fundamental way of going about the orchestral business, and hardly seem an explanation of how the industry averted the grim projections of the 1991 Wolf Report. That’s the simple answer, anyway.

## What Went Right? What’s Gone Wrong?

The more complicated answer is that the Wolf Report, and the subsequent *Americanizing* report, very likely did much to frighten the industry into fiscal sobriety. Looking back to the American Symphony Orchestra League’s national meeting of 1992 and the exchange between Thomas Wolf and various orchestra representatives, Peter Pastreich’s veteran advice seems to have called it closer than anyone. The industry was facing a challenge and not a crisis; orchestras were spending more than they were taking in. In Pastreich’s sober judgment, they would all have to cut that out. Not a paradigm shift, but shrewder management; more aggressive marketing and fundraising; program innovations; cost controls; and more efficiency where efficiencies were possible. More and better concerts; better programming; better business.

The most important and remarkable fact is that orchestras have, somehow, done what accepted theory in cultural economics seems to say they should not be able to do. Stagnant service industries, Baumol warns us,

... suffer from a rise in their costs that is terrifyingly rapid and frighteningly persistent . . . as financial stringency becomes more pressing, it is understandable that spending on these services is cut back or, at most, increased by amounts barely sufficient to stay abreast of the overall price inflation in the economy. But since the costs of the stagnant services are condemned to rise, persistently and cumulatively, with greater rapidity than the rate of inflation of the economy, the consequence is that the supply of these services tends to fall in quantity and quality.<sup>36</sup>

*“The most important and remarkable fact is that orchestras have, somehow, done what accepted theory in cultural economics seems to say they should not be able to do.”*

Orchestras have, indeed, seen nearly a doubling of average annual expenditures over the past 10 years. That would be terrifying but for the fact that the percentage of total expenditures covered by earned income has actually increased over that period. Baumol and Bowen’s theory predicted that the earned-to-uneared income ratio would inevitably decrease as the income gap steadily widened.

The theory would also lead us to expect that the expense of artistic personnel would steadily grow in comparison with other aspects of an orchestral operation, such as financial management, marketing, stage operations, fundraising, and education, all of which can benefit from technological efficiencies. But that hasn't happened either. The cost of artistic personnel in orchestras has remained stable at 51 percent of total expenditures for many years. In fact, the largest and most prestigious orchestras (League Group 1 Orchestras, with average budgets of \$30 million)—those in which the cost of artistic personnel is not only the highest but also the most critical to the orchestras' success—spent, on average, only 48.7 percent of total expenses on artistic personnel in 2000-2001.<sup>37</sup>

In the face of such facts, the theory would predict a deterioration in the quality of the talent and concerts, or in the quantity of performances offered by the industry, as a result of the industry's constraining the cost of artistic labor in a competitive labor market. But the opposite seems to be true.

Clearly, there's something wrong with the underlying theory. Or, more likely, there's something wrong with the assumption that the orchestral industry is a "stagnant service" industry. In fact, if we take the theory seriously, it would be something of an economic enigma that there is anything like a 150-year-old orchestral industry at all. One would expect the business to have wasted away long ago due to the long-term debilitating effects of the cost disease.

While the performance of a Beethoven symphony takes the same number of musicians the same number of minutes (within a few musicians and minutes, anyway) to perform as it did 200 years ago, greater productivity may have been achieved in other ways. For instance, orchestras may be finding ways to decrease the rehearsal time required to prepare and stage a concert. Or the absurdly large number of American music students (i.e., something on the order of 8,000 music students graduate from accredited music programs each year) being trained for the profession of orchestral performance, and trained at higher and higher levels, is infusing orchestras with extremely high-caliber musicians. This bears more careful study.

Or perhaps the theory is neither ill-conceived nor mistaken in its assumption about the "stagnancy" of the orchestral industry. After all, being a "stagnant" service industry means only that an industry cannot achieve gains in productivity comparable to other industries competing for talented employees. There's little question that the orchestral industry is "stagnant" relative to computer manufacturing or pharmaceuticals, and even in comparison with other entertainment industries, such as spectator sports, which have achieved enormous productivity—albeit one-time gains—through the mass media.

The real problem may not be that Baumol and Bowen's theory is mistaken in some fundamental way. Indeed, their work made a compelling argument for the performing arts not, as a rule, ever being able to flourish without subsidies that exceeded their earning power. Indeed, without that understanding, there would be no orchestral industry in this country to speak of.

In the end, the problem with the theory—and with the Wolf Report that applied the theory—is not that it is mistaken so much as that it explains so little, as a theory, about the economics of the orchestral industry and other performing arts. The orchestral industry is “stagnant.” It does suffer from the cost disease. In spite of that, it has prospered and grown, steadily, over a 40-year period. Few orchestras of any importance have dissolved over that period, and those that have, such as the San Diego Symphony, were, in short order, reorganized and revived. Rather than a theory that explains how vulnerable and nonviable these organizations are, we need to understand why they are so durable and resilient—in spite of the validity of Baumol and Bowen's theory. In spite of Baumol's Curse, most orchestras have been able to close the income gap through unearned income that has managed, somehow, to keep pace. But “somehow” explains little. We need to better understand how these nonprofit, high-culture performing arts organizations have cultivated such generous, and growing, private and public subsidies and what the long-term prospects are for this trend.

*“Most importantly, orchestras have managed to keep the income gap, as a percentage of total revenue, from growing over the last 10 years.”*

Most important, orchestras have managed to keep the income gap, as a percentage of total revenue, from growing over the last 10 years. In fact, the industry has gained some ground, improving the ratio of earned to unearned income by better than 10 percent over the period. There are several reasons for this, but one of the clearest and most significant has been the ability to pass along highly inflationary costs to the audience through greatly increased ticket prices. The performing arts, like education and health care, have grown not through greater productivity, but through greater perceived value. In each case, consumers have proved a willingness and the wherewithal to spend a larger and larger portion of their incomes on these “stagnant services.”

The key to understanding the economics of symphony orchestras and other performing arts is not in understanding the perils of productivity lag. Baumol and Bowen explained that. The key is to understand how these organizations control the perceived value of their service in order to keep pace with highly inflationary costs so as to sustain growth in earned income, as well as in private and public subsidies. How and why this is happening needs an explanation. The future depends on it.

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*Douglas Dempster is Senior Associate Dean and Marie and Joseph D. Jamail Senior Regents Professor of Fine Arts in the College of Fine Arts at the University of Texas, Austin. He also serves as a member of the Board of Advisors of the Symphony Orchestra Institute.*

## Notes

- <sup>1</sup> Thanks to Dr. William Glade for his advice on economic theory and data. I am indebted to Dr. Thomas Wolf for his candid and thoughtful reflections on the 1992 American Symphony Orchestra League report, *The Financial Condition of Symphony Orchestras* (known throughout the industry as the Wolf Report), and on the recent economics of symphony orchestras. Thanks are also due to Jack McAuliffe and Jan Wilson of the American Symphony Orchestra League for their trust in sharing the League's proprietary data. Paul Judy and Fred Zenone of the Symphony Orchestra Institute deserve our thanks for their support of *Harmony* and the Institute as a forum on the past and future of the American symphony orchestra.
- <sup>2</sup> The Wolf Organization, Inc. 1992. *The Financial Condition of Symphony Orchestras* (the Wolf Report). Washington, D.C.: American Symphony Orchestra League (ASOL), vi, 24.
- <sup>3</sup> Wolf Report, A-13.
- <sup>4</sup> Wolf Report, 24.
- <sup>5</sup> Baumol, William J., and William G. Bowen. 1966. *Performing Arts: The Economic Dilemma*. New York: The Twentieth Century Fund.
- <sup>6</sup> American Symphony Orchestra League. 2001. *Quick Orchestra Facts for the 1999-2000 Season*. New York: ASOL.
- <sup>7</sup> American Symphony Orchestra League. 1993. *Americanizing the American Orchestra: A Task Force Report*. Washington, DC: ASOL.
- <sup>8</sup> Wolf Report, B-3.
- <sup>9</sup> Wolf Report, D-2.
- <sup>10</sup> Lipman, Samuel. 1993. Who's Killing Our Orchestras? *The New Criterion*, September. At the time, Lipman's comment was quoted approvingly by the editor of *Senza Sordino*, the newsletter of the International Conference of Symphony and Opera Musicians (ICSOM). Vol. 32 (1). October 1993.
- <sup>11</sup> As performing arts organizations go, orchestras tend to do better at earning expenses than most other performing arts, with the exception of theater companies and commercial music companies. See: McCarthy, Kevin, et al. 2001. The Performing Arts in a New Era. < <http://www.rand.org/publications/MR/MR1367/>> Santa Monica, CA: Rand, 83.
- <sup>12</sup> Wolf Report, 13-15.
- <sup>13</sup> Wolf Report, A7-8.
- <sup>14</sup> Wolf Report, 12.
- <sup>15</sup> Wolf Report. Emphases in original.
- <sup>16</sup> Wolf Report, A-7.
- <sup>17</sup> Baumol and Bowen. Op. cit.
- <sup>18</sup> Baumol and Bowen, 161.
- <sup>19</sup> Baumol and Bowen, 169.
- <sup>20</sup> Writing in 1965, on the brink of the "information age," Baumol and Bowen did not anticipate the gigantic efficiencies achieved in various service industries through the use of digital technologies.

- <sup>21</sup> Baumol, William J. 1996. Children of Performing Arts, the Economic Dilemma: The Climbing Costs of Health Care and Education. *Journal of Cultural Economics* (20): 183-206.
- <sup>22</sup> *Quick Orchestra Facts for the 1999-2000 Season*.
- <sup>23</sup> *Quick Orchestra Facts for the 1999-2000 Season*.
- <sup>24</sup> *Quick Orchestra Facts for the 1999-2000 Season*.
- <sup>25</sup> U.S. Department of Commerce. Bureau of Economic Analysis. 2002. < <http://www.bea.gov/bea/dn/nipaweb/TableViewFixed.asp#Mid>> : Table S.1.
- <sup>26</sup> American Symphony Orchestra League. 2002. *Statistical Report for 2000-2001*. New York: ASOL.
- <sup>27</sup> Performing Arts in a New Era, xxiii.
- <sup>28</sup> *Quick Orchestra Facts for the 2000-01 Season*.
- <sup>29</sup> Cited in Performing Arts in a New Era, 89; attributed to “data provided by the ASOL.”
- <sup>30</sup> U.S. Census Bureau. Governments Division. 2002. National Totals of State and Local Tax Revenue, by Type of Tax. < <http://www.census.gov/govs/ntax/table1.html>> .
- <sup>31</sup> National Association of State Arts Agencies. 2002. *Legislative Annual Report: FY 2002*.
- <sup>32</sup> Waleson, Heidi. 2002. Downtown, Where All the Lights Are Bright... . *Symphony: July-August*, 40-49.
- <sup>33</sup> Performing Arts in a New Era, p. 74.
- <sup>34</sup> The Philadelphia Orchestra. 2002. Press release. June 11. < <http://www.philorch.org>> .
- <sup>35</sup> Dobrin, Peter. 2002. Orchestra Tops—In Ticket Prices. *The Philadelphia Inquirer* June 12: A01.
- <sup>36</sup> Baumol, Children of the Performing Arts, 196.
- <sup>37</sup> *Statistical Report for 2000-2001*.