

# An Indexed Financial Model for Symphony Orchestras

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This paper outlines a financial model for symphony orchestras that addresses both the Baumol Effect and allows orchestras to remain fiscally healthy despite high fixed labor costs and uncertain economic times.

The last few years have seen unprecedented turmoil amongst professional symphony orchestras in the United States. We have seen retrenchment or bankruptcy, both Chapter 7 (Honolulu Symphony) and Chapter 11 (Philadelphia Orchestra). Among others, there has been significant reorganization in the orchestras of Detroit, Louisville – even the New York City Opera Orchestra. Many others have completely ceased to exist.

Blame is easy to dole out, although generally the reasons for these failures are usually quite different than those given. Symphony orchestra musicians point blame at the administration, particularly vilifying orchestra executive directors as being ineffective or nefarious, and not fulfilling what the musicians believe their role to be: to raise money in order to pay the musicians more money. In contrast, many orchestra administrations view the musicians as being “savants” that only understand how to play music and instead make unreasonable or unrealistic demands.

Neither is correct.

The economic model of many of today’s symphony orchestras can be traced back

to the Ford Foundation matching grant system that was established and proliferated in the 1950’s.<sup>1</sup> The traditional model of orchestras being supported by the elite and wealthy still exists today, examples being the exclusive boards of directors in Lincoln Center and Carnegie Hall in New York City. However the Ford Foundation system helped subsidize the creation of orchestras in secondary markets and attracted more community giving that established a broad base for these organizations. This worked well until the Ford Foundation turned their philanthropy elsewhere, citing poor financial performance and debilitating labor disputes, leaving these orchestras to fend for themselves and compete with all other arts organizations for both private and government funding and grants.

What this did was expose the basic challenge that faced symphony orchestras once they were on their own, and has led us to the crisis that orchestras confront today: the Baumol

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<sup>1</sup> Wichterman, Catherine, The Andrew W. Mellon Foundation (1998): “The Orchestra Forum: A Discussion of Symphony Orchestras in the US”

Effect.<sup>2</sup> American economist William J. Baumol, professor of economics at New York University, first described this phenomenon in 1966 in a study performed for the performing arts sector.<sup>3</sup> Baumol and William G. Bowen observed that it takes the same number of musicians to perform a Beethoven string quartet now as were needed back in the 19<sup>th</sup> century, so there has been no increase in productivity. This is a critical point, as rising salaries in industry are normally associated with labor productivity increases. Hence we have the basic conundrum: symphony orchestras, by definition, have large fixed labor costs and little opportunity for increasing productivity, aside from cutting down the number of players, which degrades the quality of the product. Yet at the same time, the musicians have the same wants and desires as workers from other industries that have experienced productivity gains. They want to live in good neighborhoods and own homes, afford cars and the ability to send their kids to college, even though they are not returning higher productivity to their orchestras. Instead, the funding increases that have been observed in the cost of running a performing arts organization has been attributed to increased spending in entertainment by consumers due to rises in the overall cost of living in our society.<sup>4</sup>

So symphony orchestras have benefited from the general increases in the standard of living without contributing

themselves, and this is where the problem lies. With the general organization and unionization of symphony orchestra labor under the American Federation of Musicians, many symphony orchestra musicians have demanded and received multi-year labor contracts with orchestra management. Again, they have generally pushed for longer seasons, and higher salaries without contributing to the growth of the organization, beyond their artistic contributions, and have relied heavily on the orchestra's board and administration to raise more funds to pay for these contracts. The net result of this has been the growth of tremendous fixed labor costs relative to the budget of the organization, somewhere in the nature of 55-65% of total expenses.

In many ways, orchestra musician labor cost is the sensitive factor often responsible for the health of the organization, much like the cost of fuel often determines the economic health of an airline. But unlike airlines, which use commodity futures as a way of evening out price fluctuations in the cost of oil, there is no commensurate vehicle available to symphony orchestra management. Hence, the oil of a symphony orchestra – revenue from tickets sales, grants, fundraising and endowment income – is subject to the whims of the economy, with no way to weather the change in revenue stream that inevitably occurs during an economic downturn.<sup>5</sup> When the economy goes into recession, discretionary spending on items like ticket sales goes down, as does fundraising, and income from

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<sup>2</sup> Also referred to as “Baumol’s Cost Disease”

<sup>3</sup> Baumol, William J and Bowen, William G. (1966): “Performing Arts: The Economic Dilemma”

<sup>4</sup> Heilbrun, James (2003). “Baumol’s Cost Disease” in A Handbook of Cultural Economics. by R. Toowse, Ed.

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<sup>5</sup> Roche, Cullen (2011): “The Collapse in Discretionary Spending.” Pragmatic Capitalism (pragcap.com)

endowments suffer as well. The clash occurs when the economy falters and an orchestra is locked into a multiyear contract guaranteeing salaries and income to the musicians. When the cost of operations starts to exceed income, then the orchestra starts to lose money. When the orchestra runs out of cash or access to cash sources, they go bankrupt, as we have been seeing with increasing frequency during this current downturn.

Take the recent Philadelphia Orchestra bankruptcy filing. Here are their numbers for the years 2006 and 2007 and for 2008, when the economy went into recession (in \$ thousands):<sup>6</sup>

<b>Year</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Revenue	46,954	52,108	<b>29,484</b>
Labor	25,582	27,150	28,313
Tot Exp	43,254	46,915	48,842
Ratio: labor to expenses	59%	58%	58%
<b>Net:</b>	<b>3,700</b>	<b>6,193</b>	<b>-17,358</b>

As can be seen, revenue dropped precipitously in 2008 (highlighted), but even more significant is that their expense rate stayed the same as it was the previous two years, even though the U.S. economy had gone into deep recession.

This phenomenon has nothing to do with evil management or boards wanting to destroy the orchestra or greedy musicians demanding unrealistic salaries. The economic model of the symphony orchestra is inherently flawed and does not take the Baumol Effect into

consideration, nor does it take fixed labor costs into consideration either. Neither side is responsible for our cyclic economic downturns or recessions, yet the model itself is sufficiently inflexible that the organization itself may fail depending on the severity of the recession and the toll that it takes on orchestra income. When other industries face a significant loss of revenue, they take action and cut expenses by reducing production costs and/or implementing layoffs. In the case of the Philadelphia Orchestra, they maintained the same rate of spending even though their revenues continued to lag, and they eventually ran out of cash and filed Chapter 11.<sup>7</sup>

There are a number of ways that orchestras can and do attempt to react to increases in musician labor costs or decreases in income, including raising the cost of ticket prices, using more volunteers for administrative positions, shortening seasons and number of concerts and – as a last resort – decreasing quality. Many of these are ineffective or counterproductive. Ticket sales only represent a fraction of operational costs; shortening seasons are a visible sign of organizational retrenchment and will be vigorously opposed by musicians who base their incomes on playing concerts. Finally, cutting down on musicians or hiring less qualified musicians results in a lower quality product that will spark poor reviews by music critics and decreased attendance.

This, unfortunately, brings us back to square one: how to manage a huge fixed labor cost in an organization with income that is sensitive to changes in the

<sup>6</sup> Source: Guidestar.com; Philadelphia Orchestra Association IRS Form 990 filings. These are the most recent filings available.

<sup>7</sup> Morris, Christopher, Variety, April 18, 2011: "Philadelphia Orchestra files for bankruptcy"

economy. This can be achieved by indexing these expenses against the variable revenue that orchestras receive over time. What this entails is setting each employee's income against an index that represents the even cash flow of the organization.

Under this model, all salaries are based on a break-even orchestra run rate ("The Index"), and each employee would have a salary that is relative to that index. The index would be based on a moving average of the organizational run rate, so if expenses start to exceed revenues by 5%, for example, then all employee salaries would decline by 5% as well to keep the orchestra breaking even. If revenues increase, then salaries would increase as well. Here's how it would work:

**Individual Salary/Total Labor Cost x 100 = Percent of Labor Cost.**

For example, if an employee's salary is \$50,000<sup>8</sup> and the Total Labor Cost is \$1 million, then  $50,000/1,000,000 \times 100 = 5$ , or that employee represents 5% of the labor pool cost. That percentage should not change unless the total labor cost was to change, which would result in a recalculation of each individual's portion. Therefore, if the change in indexed revenue goes from \$1 million to \$900,000 (down 10%) then the \$50,000 salary would drop to \$45,000. If the opposite happens, then salary would rise 10% to \$55,000. Since salaries can move in both directions, this model entails both risk and reward.

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<sup>8</sup> This number would need to represent the fully loaded cost of the employee, including taxes and benefits.

In order for this model to be successful, a number of factors would need to be agreed upon:

1. This model would need to apply against all labor, not just the musicians. This includes the administration, executive director and even (and especially) the conductor. To ask the orchestra musicians to bear the weight of the orchestra's financial health solely on their backs is unreasonable and would never be accepted. Every employee in the organization would need to buy into and agree to this model.
2. Certain fixed costs would not be possible to index. For example, it may not be possible to cut down on the cost of renting a concert hall. But what this does do is focus attention on non-indexed expenses as to their relative merit and the return on investment they bring to the organization, and everyone would be highly motivated to lower those costs before they have their salary reduced. Beyond that, however, this means that changes to the expense basis not addressable through non-labor cost reductions would be borne by the entire labor pool.
3. This model would largely eliminate the need for unionization, since all employees would be equally affected when the organization finds itself dipping into the red. Musicians and management would suddenly find themselves on the same side,

so there would be nobody to negotiate against.

What this does is give everyone an incentive for the success of the overall organization. If revenue goes down, then everyone's salary would decline in order to maintain an even balance between revenue and expenses. But the change would be even more far reaching:

1. It guarantees that the organization is always breaking even, especially during challenging economic times. While it may mean lower salaries during these recessionary periods, this would certainly be preferable to the extreme draconian measures that often occur when losses are allowed to toxically accumulate during lean times, such as lockouts or strikes. To be blunt, it would be better to have a healthy balance sheet in tough times where the pain is spread across the entire organization rather than having the orchestra go bankrupt. The downside is that there is obviously some threshold below which some musicians may decide to leave. But given the extreme lack of movement of musicians between orchestras due to the dearth of openings at any given moment, it would probably be preferable to tough it out and work with one's colleagues towards the success of the organization with the hope of better times eventually, from which everyone would directly benefit.
2. The financial decisions being made in the organization would come under greater scrutiny by all of the employees. Greater accountability would be demanded, since these decisions would affect everyone's pocketbook personally. On the other hand, higher return activities would become more attractive. In other words, if "pops concerts" are very profitable, then perhaps everyone might want to do more of these, encouraging greater outreach between the orchestra and their community. Often orchestra members merely tolerate these as necessary evils. Under this model, similar profitable musical activities might be welcomed rather than resisted.
3. Similarly, higher profit activities may be used to subsidize less profitable musical activities that are perhaps more esoteric, and generate less revenue, but are more artistically satisfying to the musicians. On the other hand, it may mean fewer Mahler symphonies requiring the hiring of additional musicians and more pieces that make use of the core orchestra players, as the larger works would be more expensive and have a deleterious effect on the orchestra's index.
4. This model would spur greater entrepreneurial thinking on the part of the orchestra, as everyone would have a personal stake in coming up with ways to increase revenues or cut expenses. New models for orchestras may

emerge as musicians are motivated to apply their creativity to building financially successful organizations.

This indexed model, while allowing the financial health of the organization to be maintained during times of variable prosperity, would not solve every problem or even guarantee that the orchestra would be fully insulated from failure. Bad decisions about investments, whether financial or in the type of concert activities or repertoire that the orchestra decides to present, can still result in catastrophic financial loss. Similarly, nothing can insulate an organization from a really bad economy, or a geographic area that experiences devastation or blight.

There are a number of reasons why there may be resistance to the adoption of this index model. Many musicians have traditionally been passive about the operation of their arts organizations, and many prefer to merely show up and play rather than be involved in the larger success of the organization. The role that labor unions play would be greatly diminished or eliminated. Orchestra administrations would become much more accountable to the musicians, as would be the board of directors.

This model also doesn't apply to professional orchestras on either extreme of the spectrum. Highly funded and well established orchestras like the Chicago Symphony might not need this model, as their funding supply is able to cover them through economic declines, although even top 5 orchestras like the Philadelphia Orchestra are not immune

to bad times and bad management.<sup>9</sup> On the other end of the scale, small regional per-service orchestras can merely scale their schedules up and down depending on their financial situation.

Finally, adopting this model would be a tectonic shift in the way that orchestras have been traditionally organized and managed. Some smart financial people would be needed to set up the indexing system in a fair and effective manner. New systems of governance might need to be established given the new index model. Finally, the musicians themselves would need to be better educated in the larger operational model of an arts organization so that they can contribute to the direction and major issues at hand with their orchestra.

All of these will require some complex changes and periodic tweaking in order for the model to work efficiently and effectively. But given the massive failure of the traditional model for symphony orchestras in use today, at least this gives them a fighting chance.

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<sup>9</sup> Wakin, Daniel J, New York Times (April 20, 2011) "Details Emerge of an Orchestra's Bankruptcy Plan"